EPCOR Utilities Inc.
Management's Discussion and Analysis
December 31, 2019

This management's discussion and analysis (MD&A), dated February 13, 2020, should be read in conjunction with the audited consolidated financial statements of EPCOR Utilities Inc. for the years ended December 31, 2019 and 2018, including significant accounting policies (note 3), other financial assets (note 13), property, plant and equipment (note 15), other liabilities (note 21), related party balances and transactions (note 25) and the cautionary statement regarding forward-looking information at the end of this MD&A. In this MD&A, any reference to "the Company", "the Corporation", "EPCOR", "it", "its", "we", "our" or "us", except where otherwise noted or the context otherwise indicates, means EPCOR Utilities Inc., together with its subsidiaries. Financial information in this MD&A is based on the audited consolidated financial statements, which were prepared in accordance with International Financial Reporting Standards (IFRS), and is presented in Canadian dollars unless otherwise specified. Terms used throughout this MD&A are defined in the Glossary at the end of this document.

In accordance with its terms of reference, the Audit Committee of the Company's Board of Directors reviews the contents of the MD&A and recommends its approval by the Board of Directors. This MD&A was approved and authorized for issue by the Board of Directors on February 13, 2020.

OVERVIEW

The Corporation, through its wholly owned subsidiaries, builds, owns and operates electrical, natural gas, and water transmission and distribution networks, water and wastewater facilities and sanitary and stormwater systems and infrastructure in Canada and the United States (U.S.). The Company also provides electricity, natural gas and water products and services to residential and commercial customers. The Company provides Regulated Rate Option (RRO) and default supply electricity related services and sells electricity and natural gas to Alberta residential consumers under contracts through its Encor brand. In addition, EPCOR provides design, build, finance, operating and maintenance services for electrical, water and wastewater infrastructure for municipal and industrial customers in Canada and the U.S. EPCOR operates its business under the Water Services, Distribution and Transmission, Energy Services, U.S. Operations segments. The Company operates in Canada and the Southwestern U.S.

Net income was $59 million and $231 million for the three and twelve months ended December 31, 2019, respectively, compared with net income of $107 million and $295 million for the comparative periods in 2018, respectively. The decrease of $48 million for the three months ended December 31, 2019, was primarily due to higher income tax and depreciation expenses and lower transmission system access service charge net collections, partially offset by lower finance expenses, lower unfavorable fair value adjustments related to financial electricity purchase contracts and higher Adjusted EBITDA, as described in the following paragraph. The decrease of $64 million for the twelve months ended December 31, 2019, was primarily due to higher income tax, depreciation and finance expenses, as well as, lower transmission system access service charge net collections, partially offset by favorable fair value adjustments related to financial electricity purchase contracts and higher Adjusted EBITDA, as described in the following paragraph.

Adjusted EBITDA was $194 million and $730 million for the three and twelve months ended December 31, 2019, respectively, compared with $182 million and $700 million for the comparative periods in 2018, respectively. Adjusted EBITDA increased by $12 million for the three months ended December 31, 2019, primarily due to higher water and wastewater customer rates, customer growth and higher water consumption, higher electricity distribution and transmission rates, higher Energy Price Setting Plan (EPSP) margins and recognition of lower rent expense related to implementation of IFRS 16, which is now being recorded as depreciation on right-of-use (ROU) assets and finance expense related to lease liabilities. These increases were partially offset by lower work volumes and margins for street lighting, traffic signals and light rail transit electrical services for The City of Edmonton (the City), higher maintenance costs on water storage tanks in U.S. Operations and lower water revenues in Arizona due to a tax reform adjustment credit on customer bills. Adjusted EBITDA increased by $30 million for twelve months ended December 31, 2019, primarily due to higher water and wastewater customer rates and customer growth, higher electricity distribution and transmission rates, higher EPSP margins and recognition of lower rent expense related to implementation of IFRS 16. These increases were partially offset by lower work volumes and margins for street lighting, traffic signals and light rail transit electrical services for the City, lower water consumption resulting from lower temperatures and higher precipitation, higher maintenance costs on water storage tanks in U.S. Operations, lower water revenues in Arizona due to a tax reform adjustment credit on customer bills and higher water treatment costs due to poor water quality of the North Saskatchewan River. Adjusted EBITDA is a non-IFRS financial measure as described in Adjusted EBITDA and Net Income section on page 6 of this MD&A.

STRATEGY

EPCOR's vision is to be a premier essential services utility company in North America that attracts and retains the best employees, is trusted by our customers and valued by our stakeholders. To achieve this vision, EPCOR must excel at its utility operations and human resources development, and be successful in its pursuit of growth opportunities.

EPCOR's electricity strategy includes maintaining and developing new distribution and transmission infrastructure in its Edmonton franchise service area, maintaining and developing new distribution infrastructure in its Ontario licensed areas, as well as, the development and / or acquisition of new rate-regulated or contracted assets and operations in new markets.

EPCOR's water strategy includes maintaining and developing new regulated water treatment and distribution infrastructure, sanitary and stormwater collection and wastewater treatment infrastructure within its current franchise service areas and the development and / or acquisition of new rate-regulated or contracted assets and operations in new markets. This includes design, build, finance, operating and maintenance services for municipal water and wastewater treatment infrastructure and the provision of water and wastewater treatment services and potable and process water for industrial customers. EPCOR expects that significant capital investment will be required in its Edmonton franchise service area to address flood mitigation and other infrastructure needs related to its sanitary and stormwater systems.

We believe the long-term outlook for the North American electricity, natural gas and water and wastewater businesses remains strong. The demand for electricity, natural gas and water and wastewater infrastructure in North America is expected to increase due to population growth, aging infrastructure and water scarcity issues. Further, consumer expectations are increasing for reliable and environmentally responsible energy; safe, high quality water; and environmentally responsible wastewater treatment and disposal.

Over the next five years, we plan to invest in electricity, natural gas, water and wastewater assets where appropriate returns are expected, operational excellence can be delivered and the environmental impact of the investment is acceptable. We will seek growth opportunities within our existing geographical footprint and in new geographies such as Ontario and Texas where we have made recent acquisitions. This includes exploring additional opportunities in natural gas distribution through acquisitions and greenfield development. EPCOR also intends to invest in renewable energy generation within its geographical footprint, including solar and bio gas facilities to enhance its environmental performance.

Maintaining our investment grade credit rating remains a priority. This will ensure we have access to capital through existing and new credit facilities and public or private debt financing offerings. We recognize that we are not immune to recessionary trends and remain vigilant to maintain a prudent balance of rate-regulated and contracted operations to stay within our financial capacity.

KEY PERFORMANCE INDICATORS

Operational and financial performance is monitored through financial and non-financial measures that fall under four broad categories: health, safety and environment (HSE); people; growth (financial); and operational excellence.

Specific measures are established for each business unit and the corporate shared service group in alignment with the Company's strategy. Business unit measures are focused on customer related measures relevant to the particular business unit, such as customer satisfaction survey results and service reliability metrics.

EPCOR's 2019 total recordable injury frequency rate was favorable compared to 2019 target. We remain committed to building a culture that supports a workplace free of occupational injury and illness with minimized environmental impact. The Company met or exceeded most of its targets in 2019. Segment performance measures are discussed under Segment Results of this MD&A.

SIGNIFICANT EVENTS

Changes to the Board of Directors

On April 30, 2019, Sheila Weatherill, retired as Vice Chair of the Board of Directors after serving as Director since 2002 and serving as non-executive Vice Chair since 2007, and Margaret Bateman was appointed as Director. Richard Cruickshank was appointed as non-executive Vice Chair.

Acquisition of Rio Verde Utilities Inc.

On February 28, 2019, EPCOR acquired 100% of the stock of Rio Verde Utilities Inc. (Rio Verde) in Arizona, U.S. for cash consideration of $31 million (US$24 million).

Rio Verde is located northeast of Scottsdale and the Greater Phoenix metropolitan area and 10 miles north of the Company's Chaparral service area in Fountain Hills. Rio Verde's regulated operations include 2,220 water and 1,876 wastewater service connections along with irrigation water service for five golf courses.

For further information on the acquisition, refer to the audited consolidated financial statements of EPCOR Utilities Inc. for the years ended December 31, 2019 and 2018.

SIGNIFICANT ACCOUNTING POLICY CHANGES

Effective January 1, 2019, the Company adopted IFRS 16 - *Leases* (IFRS 16), which replaced International Accounting Standard (IAS) 17 - *Leases* (IAS 17) and related interpretations. Adoption of the new accounting standard has resulted in amendments to the accounting policy related to leases. For a detailed discussion of the impacts of this new standard on EPCOR's accounting policies, refer to note 3 of the audited consolidated financial statements for the years ended December 31, 2019 and 2018.

Prior to January 1, 2019, when the Company was the lessee under a contract, a lease was classified either as a finance or operating lease depending on whether substantially all the risks or rewards of ownership of the asset were transferred. Leases or other arrangements that transferred substantially all of the benefits and risks of ownership of property were classified as finance leases. All other arrangements that were determined to contain a lease were classified as operating leases. Rental income under arrangements classified as operating leases was recognized as lease revenue within other commercial revenue, whereas rental payments under arrangements classified as operating leases were expensed on a straight-line basis over the term of the lease. Lease incentives received were recognized as an integral part of the total lease expense, over the term of the lease.

On implementation of IFRS 16, the Company reassessed all outstanding contracts to determine whether they meet the criteria for recognition as lease contracts under IFRS 16.

As a lessor, all contracts which met the criteria for recognition as leases under IFRS 16, required no change in accounting and they continue to be recorded as finance or operating leases consistent with their respective classification under IAS 17.

As a lessee, all contracts which were classified as finance leases under IAS 17 and met the criteria for recognition as leases under IFRS 16, required no change in accounting. However, for all contracts which were classified as operating leases under IAS 17 and met the criteria for recognition as leases under IFRS 16, the Company has recognized ROU assets and lease liabilities on the consolidated statement of financial position, initially measured at the present value of unavoidable future lease payments.

The implementation of IFRS 16 on January 1, 2019, did not result in any adjustment to the opening balance of retained earnings. However, it had an impact on the consolidated statement of financial position as a result of the recognition of ROU assets and lease liabilities primarily with respect to leases for land and buildings (including office spaces), as well as, recording finance lease receivable related to a sub-lease under the Company's lease contract. On the initial application of IFRS 16, the Company recognized the ROU assets of $84 million within property, plant and equipment, finance lease receivables of $41 million within other financial assets and lease liabilities of $136 million within other liabilities. The $11 million difference between the assets and liabilities recognized on initial application of IFRS 16 is due to adjusting ROU assets for leasehold inducement and other liabilities under lease contracts, which resulted in a reduction to the opening ROU assets recognized.

The ongoing impact of the application of IFRS 16, related to the Company's lease contracts on the consolidated statements of comprehensive income is not anticipated to be material as the depreciation expense related to ROU assets and finance expenses on lease liabilities recognized under IFRS 16 will largely be offset by reduction in operating lease expense, which were recognized in net income before applying the new standard.

The Company used the modified retrospective approach to implement IFRS 16, and as a result, comparative information has not been restated and continues to be reported under the previous accounting standard.

CONSOLIDATED FINANCIAL INFORMATION

($ million) **Years ended December 31,**	**2019**	**2018**	**2017**
Revenues	$ 1,864	$ 1,758	$ 2,035
Adjusted EBITDA	730	700	588
Net income	231	295	256
Total assets	11,421	10,656	10,344
Loans and borrowings (non-current)	3,026	2,630	2,424
Other financial liabilities (non-current)	176	90	88
Common share dividends	171	166	153

Revenues

($ millions)	Three months ended December 31,		Twelve months ended December 31,	
	2019	**2018**	**2019**	**2018**
Water Services segment	$ 162	$ 149	$ 646	$ 629
Distribution and Transmission segment	110	134	441	458
Energy Services segment	129	116	485	429
U.S. Operations segment	61	58	250	242
Other	19	16	71	27
Intersegment eliminations	(7)	(7)	(29)	(27)
Revenues	**$ 474**	**$ 466**	**$ 1,864**	**$ 1,758**

Consolidated revenues were higher by $8 million and $106 million for the three and twelve months ended December 31, 2019, respectively, compared with the corresponding periods in 2018, primarily due to the net impact of the following:

- Water Services' segment revenues increased by $13 million for the three months ended December 31, 2019, compared with the corresponding period in 2018, primarily due to higher water and wastewater customer rates and customer growth, and higher water consumption.

  Water Services' segment revenues increased by $17 million for the twelve months ended December 31, 2019, compared with the corresponding period in 2018, primarily due to higher water and wastewater customer rates and customer growth, and higher commercial revenues from construction activities, partially offset by lower water consumption as a result of higher precipitation and lower temperatures, as well as, a declining water consumption trend.

- Distribution and Transmission segment revenues decreased by $24 million and $17 million for the three months and twelve months ended December 31, 2019, respectively, compared with the corresponding periods in 2018, primarily due to lower transmission system access service charge net collections and lower revenues related to lighting, traffic signals and light rail transit electrical services for the City, partially offset by higher electricity distribution and transmission rates and higher other commercial services revenues.

- Energy Services' segment revenues increased by $13 million and $56 million for the three and twelve months ended December 31, 2019, respectively, compared with the corresponding periods in 2018, primarily due to higher electricity prices, higher commercial services revenues related to billing and customer care services and Encor customer growth, partially offset by lower electricity consumption and decreases in RRO sites.

- U.S. Operations' segment revenues increased by $3 million for the three months ended December 31, 2019, compared with the corresponding period in 2018, primarily due to higher water rates, customer growth and revenues from Rio Verde, acquired in February 2019, partially offset by lower water revenues resulting from a tax reform adjustment credit on customer bills.

  U.S. Operations' segment revenues increased by $8 million for the twelve months ended December 31, 2019, compared with the corresponding period in 2018, primarily due to higher water rates, customer growth, revenues from Rio Verde and higher foreign exchange rates, partially offset by lower water revenues resulting from a tax reform adjustment credit on customer bills and lower water consumption in the mid and high tier rate blocks as a result of higher precipitation and lower temperatures.

- Other revenues increased by $3 million for the three months ended December 31, 2019, compared with the corresponding period in 2018, primarily due to higher energy prices.

Other revenues increased by $44 million for the twelve months ended December 31, 2019, compared with corresponding period in 2018, primarily due to twelve months of revenues from EPCOR's Collingwood electricity distribution operations in 2019, compared to three months of revenues in 2018, as the operations were acquired in October 2018, as well as, higher construction revenues.

Adjusted EBITDA and Net Income

We use earnings before finance expenses, income tax recovery (expense), depreciation and amortization, changes in the fair value of derivative financial instruments and transmission system access service charge net collections (collectively, Adjusted EBITDA) to discuss operating results for the Company's lines of business.

Change in fair value of derivative financial instruments represents the change in fair value of financial electricity purchase contracts between the electricity market forward prices and the contracted prices at the end of the reporting period, for the contracted volumes of electricity.

Transmission system access service charge net collections is the difference between the transmission system access services charges paid to the Alberta Electric System Operator (AESO) and the transmission system access service charges collected from electricity retailers. Transmission system access service charge net collections are timing differences, which will be collected from or returned to electricity retailers as the transmission system access service charges and customer billing determinants are finalized.

We believe that Adjusted EBITDA provides an indicator of the Company's ongoing ability to fund capital expenditures, to incur and service debt and to pay dividends to its shareholder, which may be useful for external stakeholders in evaluating the operations and performance of the Company. Adjusted EBITDA is a non-IFRS financial measure, which does not have any standardized meaning prescribed by IFRS and is unlikely to be comparable to similar measures published by other entities.

($ millions)	Three months ended December 31,		Twelve months ended December 31,	
	2019	**2018**	**2019**	**2018**
Adjusted EBITDA by Segment				
Water Services segment	$ 81	$ 71	$ 309	$ 302
Distribution and Transmission segment	64	60	223	214
Energy Services segment	17	14	52	37
U.S. Operations segment	28	29	131	131
Other	4	8	15	16
Adjusted EBITDA	**194**	**182**	**730**	**700**
Finance expenses	(27)	(30)	(125)	(121)
Income tax recovery (expense)	(3)	34	(35)	32
Depreciation and amortization	(89)	(82)	(328)	(299)
Change in fair value of financial electricity purchase contracts	-	(10)	10	(11)
Transmission system access service charge net collections	(16)	13	(21)	(6)
Net income	**$ 59**	**$ 107**	**$ 231**	**$ 295**

Changes in each business segment's Adjusted EBITDA, compared with the corresponding periods in 2018, are described in Segment Results below. Explanations of the remaining variances in net income for the three and twelve months ended December 31, 2019, compared with the corresponding periods in 2018, are as follows:

- Lower financing expenses of $3 million for the three months ended December 31, 2019, were primarily due to fair value adjustments related to revaluation of contingent consideration liabilities, partially offset by higher interest on issuance of long-term debt in 2019, as well as, finance expense on leases recognized due to implementation of IFRS 16.

Higher financing expenses of $4 million for the twelve months ended December 31, 2019, were primarily due to finance expenses on leases recognized due to implementation of IFRS 16 and issuances of long-term debt in 2018 and 2019, partially offset by fair value adjustments related to revaluation of contingent consideration liabilities.

- Higher income tax expense of $37 million for the three months ended December 31, 2019, was primarily due to an income tax recovery in 2018 on the recognition of previously unrecognized non-capital losses in Canada and higher income tax expense due to higher taxable income in 2019.

  Higher income tax expense of $67 million for the twelve months ended December 31, 2019, was primarily due to an income tax recovery in 2018 on the recognition of previously unrecognized non-capital losses in Canada, higher income tax expense in 2019 resulting from re-measurement of deferred tax assets as a result of a decrease in the Alberta corporate income tax rate and higher income tax expense due to higher taxable income in 2019.

- Higher depreciation and amortization of $7 million and $29 million for the three and twelve months ended December 31, 2019, respectively, was primarily due to depreciation expense on 2018 and 2019 asset additions, depreciation on Rio Verde assets acquired in February 2019, as well as, depreciation expense on ROU assets recognized due to implementation of IFRS 16. In addition for the twelve months ended December 31, 2019, higher depreciation due to twelve months of depreciation on Collingwood electricity distribution operations assets in 2019 compared to three months of depreciation in 2018, as the assets were acquired in October 2018.

- Lower unfavorable changes in the fair value of financial electricity purchase contracts of $10 million for the three months ended December 31, 2019, was primarily due to insignificant difference between the electricity contracted prices and market forward prices in 2019. In the corresponding period, electricity market forward prices were lower than contracted prices.

  Favorable changes in the fair value of financial electricity purchase contracts of $21 million for the twelve months ended December 31, 2019, was primarily due to electricity market forward prices being higher than contracted prices. In the corresponding period, electricity market forward prices were lower than contracted prices.

- Lower transmission system access service charge net collections of $29 million and $15 million for the three and twelve months ended December 31, 2019, respectively, were primarily due to recognition of an AESO deferral account true-up for 2017 and 2018 service costs based on a decision received in the current quarter, as described in Distribution and Transmission segment in this MD&A and higher payments to AESO for system access.

SEGMENT RESULTS

Water Services

Water Services is primarily involved in the treatment, transmission, distribution and sale of water, the collection and conveyance of sanitary and stormwater and the treatment of wastewater within Edmonton and other communities in Western Canada. This segment's water and wastewater business also includes the provision of design, build, finance, operating and maintenance services for municipal and industrial customers in Western Canada.

Water Services' primary objective is to reliably supply drinking water, industrial process water, to collect and treat wastewater and to collect and convey stormwater while ensuring that the quality exceeds public health, environmental and industrial requirements. The majority of Water Services' income is earned through a performance based rate tariff charged to its Edmonton customers. The performance based rate tariff is intended to allow Water

Services the opportunity to recover its costs and earn a fair rate of return on invested capital while providing an incentive to manage costs below inflation and other prescribed adjustments built into the tariff. Under the Performance Based Regulation (PBR) framework, customer rates are adjusted for inflation and expected efficiency improvements over the PBR term.

In October 2016, EPCOR's Water Services segment received the decision related to its 2017-2021 Edmonton water and wastewater PBR application under Bylaw 17698 EPCOR Water Services and Wastewater Treatment Bylaw (Edmonton water and wastewater Bylaw). The decision includes a 10.175% return on equity which will be in place for the full term of the PBR Bylaw. Within the PBR term a non-routine adjustment to rates for certain costs outside management's control may be allowed if they meet criteria under the Bylaw, and PBR has service quality metrics and targets for the utility to meet. For the 2017-2021 PBR term, the City approved three non-routine adjustments to the water and wastewater treatment rates for Leduc County Annexation, Light Rail Transit Relocations of water infrastructure and Lead Mitigation Strategy. These non-routine adjustments will be added to the fixed monthly service charges beginning April 1, 2020.

The City approved Bylaw 18100 EPCOR Drainage Services Bylaw (Drainage Bylaw) to cover the period from January 1, 2018 to March 31, 2022, which includes customer rates and terms and conditions for Drainage services under PBR. The Drainage Bylaw reflects EPCOR's commitment to hold average annual rate increases to 3% for the current PBR term and provides a mechanism for non-routine adjustments and service quality metrics and targets. For the 2017-2021 PBR term, the City has approved three non-routine adjustments to the sanitary and stormwater treatment rates for the Stormwater Integrated Resource Plan (SIRP), Corrosion and Odour Reduction Strategy and light rail transit Relocations of drainage infrastructure. These non-routine adjustments are added to the variable rate charges beginning January 1, 2020.

With the expiration of the Edmonton water and wastewater Bylaw and Drainage Bylaw on March 31, 2022, EPCOR is in the process preparing PBR Bylaw applications for these services. The upcoming applications are expected to be filed in early 2021. The application for water will cover the five-year period effective from April 1, 2022 to March 31, 2027. The applications for wastewater, sanitary and stormwater services will cover three-year period effective from April 1, 2022 to March 31, 2025.

In 2018, EPCOR initiated the development of the SIRP to provide a risk based approach to prioritize investments in stormwater infrastructure. The SIRP was identified by the City as one of the action items to support overall City ability to adapt to changing climate conditions and aligns with the City of Edmonton Climate Change Adaptation and Resiliency Strategy. The SIRP approach allows for a continuous and adaptable plan that incorporates traditional sanitary and stormwater infrastructure upgrades with more environmentally friendly infrastructure improvements including implementation of green infrastructure. The risk methodology of the SIRP includes a risk analysis by sub-basin on four perspectives: health and safety, environment, social and financial impacts to properties, along with detailed maps. In 2019, EPCOR presented the City's Utility Committee with various options to execute the SIRP program, with a recommended course of action being a 20 year SIRP capital plan with cost of approximately $1.6 billion. A formal non-routine adjustment application was filed by EPCOR in August 2019, and was approved on November 26, 2019. The non-routine adjustment is an interim measure to recover the costs until project costs are included in future PBR terms.

Operationally, the facilities owned or managed by Water Services generally performed according to plan in 2019. EPCOR was able to maintain the required quality of Edmonton's drinking water and wastewater discharge throughout the year. Due to changes in demand, particularly due to lower temperatures and higher precipitation in 2019, as well as, an overall declining water consumption trend, water consumption across most of the customer categories was lower than anticipated throughout the year.

Work on several significant projects within Edmonton progressed in 2019. These projects include the annual water main renewal and protection programs completed to improve Edmonton's water distribution system, annual water, sanitary and stormwater service connections programs to provide new connections throughout the city of Edmonton, upgrade and rehabilitation projects at both the Rossdale Water Treatment Plant (Rossdale) and the Gold Bar Wastewater Treatment Facility (Gold Bar), renewal of the sanitary system to address aging sewers in mature neighborhoods, stormwater dry ponds upgrades to mitigate the future risk of flooding in various communities, rehabilitation of the trunk sewers in Groat Road and new trunk sewer infrastructure to support new development.

Water Services Operating Income and Adjusted EBITDA

($ millions, including intersegment transactions)		Three months ended December 31,		Twelve months ended December 31,	
		2019	**2018**	**2019**	**2018**
Revenues	Water sales	$ 54	$ 50	$ 219	$ 218
	Provision of services	102	94	410	396
	Construction revenues	4	3	11	9
	Other commercial revenue	2	2	6	6
		162	149	646	629
Expenses	Other raw materials and operating charges	23	25	102	98
	Staff costs and employee benefits expenses	32	29	140	134
	Depreciation and amortization	41	41	151	144
	Franchise fees and property taxes	8	7	33	32
	Other administrative expenses	9	8	30	30
		113	110	456	438
Operating income before corporate charges		49	39	190	191
Corporate charges		(9)	(9)	(32)	(33)
Operating income		**40**	**30**	**158**	**158**
Exclude depreciation and amortization		41	41	151	144
Adjusted EBITDA		**$ 81**	**$ 71**	**$ 309**	**$ 302**

	Three months ended December 31,	Twelve months ended December 31,
Adjusted EBITDA for the periods ended December 31, 2018	**$ 71**	**$ 302**
Higher water and wastewater rates and customer growth	6	22
Higher (lower) water volumes	5	(12)
Higher water treatment costs	-	(4)
Other	(1)	1
Increase in Adjusted EBITDA	10	7
Adjusted EBITDA for the periods ended December 31, 2019	**$ 81**	**$ 309**

Water Services' Adjusted EBITDA increased by $10 million for the three months ended December 31, 2019, compared with the corresponding period in 2018, primarily due to higher water and wastewater customer rates and customer growth, and higher water consumption.

Water Services' Adjusted EBITDA increased by $7 million for the twelve months ended December 31, 2019, compared to corresponding period in 2018, primarily due to higher water and wastewater customer rates and customer growth, partially offset by lower water consumption due to higher precipitation, lower temperatures and a declining water consumption trend, and higher water treatment costs due to poor water quality of the North Saskatchewan River.

Year ended December 31,	2019	2018
Water sales volumes (megalitres)		
Water sales for Edmonton and surrounding region	122,473	126,045

Water sales decreased in 2019, compared with 2018, primarily due lower volumes for residential, commercial and regional customers in Edmonton resulting from higher precipitation, lower temperatures and a declining water consumption trend, partially offset by customer growth and higher volumes for multi-residential customers.

Year ended December 31,	2019	2018
Sanitary volumes (millions of cubic metres)		
Sanitary volumes for Edmonton and surrounding region	85,356	86,749

Edmonton and surrounding region sanitary volumes are lower in 2019, compared with 2018, primarily due to lower volumes resulting from higher precipitation, lower temperatures and a declining water consumption trend, partially offset by customer growth and higher volumes for multi-residential customers.

Distribution and Transmission

Distribution and Transmission is involved in the transmission and distribution of electricity within Edmonton. The segment also provides commercial services including the design, construction and maintenance of street lighting, traffic signal and light rail transit electrical infrastructure for the City and other municipal and commercial customers in Alberta.

Distribution and Transmission's priority is to be a trusted provider of safe and reliable electricity, known for operational excellence through innovative and practical solutions. Distribution and Transmission earns income principally by transmitting high-voltage electricity through its facilities that form part of the Alberta Interconnected Electrical System to points of distribution, and from there, distributing lower voltage electricity to end-use customers. The transmission services are provided to the AESO. The distribution services are provided to retailers within its distribution service area in Edmonton. Distribution and Transmission's assets are located in and around Edmonton and are rate-regulated by the Alberta Utilities Commission (AUC). Transmission charges a regulated rate tariff (RRT) intended to allow recovery of prudent costs and earn a fair rate of return on invested capital. Distribution earns income through a performance based rate tariff charged to its customers. The performance based rate tariff is intended to allow Distribution the opportunity to recover its costs and earn a fair return on capital while providing an incentive to manage costs below inflation and other prescribed adjustments built into the tariff.

Transmission filed its 2020-2022 Transmission Facility Owner Tariff Application with the AUC on July 31, 2019. The decision on the tariff application is expected in second quarter of 2020.

Distribution rates for 2019 have been approved by the AUC on an interim basis. A decision was received on the 2017 Capital Tracker True-Up Application with the majority of the true-up recovered in 2019 and the remaining true-up to be collected in 2020. The AUC initiated a review of the 2018-2022 PBR decision that will consider the criteria of what constitutes an anomaly which may factor into future rates. A decision on the anomaly criteria was received in January 2020. An anomaly review proceeding will commence and allow utilities, including EPCOR to submit anomalies for approval.

In the first quarter of 2019, two new agreements were executed with the City to provide electrical services related to installation, maintenance, and repair of street lighting, traffic signals and light rail transit, which were effective from April 1, 2019 and replace the previous sole-source Transportation System Electricity Services agreement with the City. The new agreements are master service agreements with an initial term of two years and are renewable at the City's option for an additional two years. The primary contract is the Electrical Services Agreement which assigns sole-source work and is based on unit pricing and fixed fee for a set project scope instead of the time and materials fee structure that was followed under the previous agreement. The Electrical Contractor, Traffic Signals and Street Lighting Agreement provides the City commercial flexibility to tender work. EPCOR is one of five pre-approved vendors able to compete on projects as they are released for bid. EPCOR has been awarded work under both of the new agreements. Overall, EPCOR has received less work from the City under the new agreements.

On September 27, 2019, the AESO filed an application with the AUC requesting approval for its 2017 and 2018 deferral account reconciliation and for changes to deferral account balances from 2006 to 2016, representing the reconciled variances arising between the actual costs the AESO has incurred in providing system access services and the forecast amounts recovered in rates charged to market participants for those years. In December 2019, the AUC provided its decision to settle the net deferral account shortfall with market participants. As a result, Distribution recorded a $19 million payable to the AESO representing its share of the total decision costs. EPCOR will recover this cost and record revenue in future periods as the amounts are ultimately billed to customers.

Work on several significant capital projects proceeded in 2019. These projects include the new southwest Edmonton substation and duct bank under the North Saskatchewan river for two new 25 kV circuits which are needed to meet demand in south-west Edmonton, ongoing work to connect new residential and industrial customers to EPCOR's distribution system, the annual underground Distribution cable life cycle replacement program to address system reliability, continuation of work on Distribution aerial and underground line reconfigurations, the Strathcona capacity increase project which is needed to comply with the AESO operating and reliability requirements, and providing development rebates to land developers who construct underground primary and secondary distribution infrastructure for new residential lot developments within the city of Edmonton.

Distribution and Transmission Operating Income and Adjusted EBITDA

($ millions, including intersegment transactions)		Three months ended December 31, 2019	Three months ended December 31, 2018	Twelve months ended December 31, 2019	Twelve months ended December 31, 2018
Revenues	Provision of services				
	Distribution	$ 60	$ 84	$ 264	$ 264
	Transmission	25	25	102	99
	Commercial and other	25	25	75	95
		110	134	441	458
Expenses	Other raw materials and operating charges	15	12	44	48
	Staff costs and employee benefits expenses	18	20	78	86
	Depreciation and amortization	24	23	93	88
	Franchise fees and property taxes	20	19	80	78
	Other administrative expenses	4	5	15	16
		81	79	310	316
Operating income before corporate charges		29	55	131	142
Corporate charges		(5)	(5)	(22)	(22)
Operating income		**24**	**50**	**109**	**120**
Exclude depreciation and amortization		24	23	93	88
Exclude transmission system access service charge net collections		16	(13)	21	6
Adjusted EBITDA		**$ 64**	**$ 60**	**$ 223**	**$ 214**

	Three months ended December 31,	Twelve months ended December 31,
Adjusted EBITDA for the periods ended December 31, 2018	**$ 60**	**$ 214**
Higher distribution customer rates	4	14
Higher transmission customer rates	1	3
Higher work volumes and margins on other commercial services	2	3
Lower work volumes and margins on commercial services provided to the City	(3)	(13)
Other	-	2
Increase in Adjusted EBITDA	4	9
Adjusted EBITDA for the periods ended December 31, 2019	**$ 64**	**$ 223**

Distribution and Transmission's Adjusted EBITDA increased by $4 million and $9 million for the three and twelve months ended December 31, 2019, respectively, compared with the corresponding periods in 2018, primarily due to higher electricity distribution and transmission customer rates, and higher work volumes and margins for other commercial services revenues, partially offset by lower work volumes and margins for street lighting, traffic signals and light rail transit electrical services provided to the City.

Year ended December 31,	**2019**	**2018**
Distribution reliability and electricity volumes		
Reliability (system average interruption duration index in hours)	0.78	0.89
Electricity distribution (gigawatt hours)	7,460	7,743

Distribution and Transmission's primary measure of distribution system reliability is the System Average Interruption Duration Index (SAIDI), which it focuses on minimizing. This measure captures the annual average number of hours of interruption experienced by Distribution and Transmission's customers, including scheduled and unscheduled interruptions to its primary distribution circuits. In 2019, the SAIDI was 0.78 hours which is an improvement from the 2018 value of 0.89 hours. Distribution and Transmission will continue with its reliability improvement programs to help maintain and improve overall system reliability. Electricity distribution volumes in 2019 decreased by 4% compared to 2018.

Energy Services

Energy Services is primarily involved in the provision of the RRO electricity service and default supply electricity services to customers in Alberta. The segment also provides competitive electricity and natural gas products under the Encor brand.

Energy Services' business focuses on providing cost effective retail electricity service and efficient customer care through a highly skilled, knowledgeable, caring and engaged customer service team. Energy Services earns income from selling electricity to residential, farm and small commercial customers under a RRT and default rate (customers with higher electricity volumes that are not under a competitive contract) in the EPCOR Distribution and Transmission Inc. and FortisAlberta Inc. service areas and several Rural Electrification Association service territories. The RRT is intended to allow Energy Services to recover its prudent costs and earn a return margin. Energy Services also provides billing, collection, and contact center services for EPCOR Water Services Segment in Edmonton and the City waste department. Energy Services focuses on providing excellent service experiences for its customers and measures call answer performance, billing performance, and customer satisfaction. These results are reported to the AUC on a quarterly basis.

EPCOR has the exclusive right to provide RRO electricity services to customers in the EPCOR Distribution and Transmission Inc. electrical distribution service area. EPCOR also has the exclusive right to provide RRO electricity services to customers in FortisAlberta Inc.'s electricity distribution service area under a contract through the year

2020. A new agreement with FortisAlberta Inc. which extends the exclusive rights to these customers for a maximum period of up to 20 years has been executed by both parties and approved by the AUC. For more details refer to Capital Requirements and Contractual Obligations section of this MD&A.

Energy Services' allowed electricity revenue is determined in accordance with an EPSP approved by the AUC. Under the EPSP, Energy Services manages its exposure to customer load and fluctuating wholesale electricity spot prices by entering into financial electricity purchase contracts in advance of the month of consumption under a well-defined risk management process. On March 16, 2018, Energy Services received approval for the 2018-2021 EPSP, including approval of market based mechanism to set EPCOR's risk compensation, which further increases the alignment between changes in wholesale market conditions and EPCOR's commodity risk compensation. Energy Services has been operating under the new EPSP as of April 1, 2019.

Energy Services also serves the competitive retail market by offering electricity and natural gas contracts to Alberta consumers under the Encor brand, which mitigates the impact of RRO customer attrition. The service offering which includes green energy options, provides customers wishing to move from the RRO to a competitive contract with an Encor offering.

Energy Services Operating Income and Adjusted EBITDA

($ millions, including intersegment transactions)		Three months ended December 31,		Twelve months ended December 31,	
		2019	**2018**	**2019**	**2018**
Revenues	Electricity and natural gas sales	$ 119	$ 107	$ 446	$ 394
	Provision of services	10	9	39	35
		129	116	485	429
Expenses	Energy purchases and system access fees	94	97	355	341
	Staff costs and employee benefits expenses	8	7	30	29
	Depreciation and amortization	3	1	8	6
	Other administrative expenses	7	7	28	25
		112	112	421	401
Operating income before corporate charges		17	4	64	28
Corporate charges		(3)	(1)	(10)	(8)
Operating income		**14**	**3**	**54**	**20**
Exclude depreciation and amortization		3	1	8	6
Exclude change in fair value of financial electricity purchase contracts		-	10	(10)	11
Adjusted EBITDA		**$ 17**	**$ 14**	**$ 52**	**$ 37**

	Three months ended December 31,	Twelve months ended December 31,
Adjusted EBITDA for the periods ended December 31, 2018	**$ 14**	**$ 37**
Higher EPSP margins	3	16
Higher commercial services revenue	1	2
Higher competitive business margins	1	2
Higher electronic bill credits to customers	-	(2)
Other	(2)	(3)
Increase in Adjusted EBITDA	3	15
Adjusted EBITDA for the periods ended December 31, 2019	**$ 17**	**$ 52**

Energy Services' Adjusted EBITDA increased by $3 million and $15 million for the three and twelve months ended December 31, 2019, respectively, compared with the corresponding periods in 2018, primarily due to higher EPSP margins, higher commercial services revenues related to billing and customer care services and Encor customer growth, partially offset by higher electronic bill credits to customers.

Energy Services' retail sales volumes were as follows:

Year ended December 31,	2019	2018
Retail electricity sales (gigawatt hours)		
RRO	4,700	4,931
Default and competitive supply	974	900
Total	5,674	5,831

Energy Services' RRO sales volumes were lower in 2019, compared with 2018, primarily due to decrease in customer sites. The increased default and competitive supply sales volume was primarily due to increase in the number of competitive customer sites, partially offset by decrease in default customer sites.

U.S. Operations

U.S. Operations is primarily involved in the treatment, transmission, distribution and sale of water, the collection and treatment of wastewater, and operating and maintenance services within the Southwestern U.S. This segment also provides natural gas distribution and transmission services in Texas. All of the Company's operations conducted in the U.S. are included in this segment.

On February 28, 2019, the company completed the acquisition of Rio Verde, a water and wastewater utility located northeast of the Greater Phoenix metropolitan area. The operations of Rio Verde are included in the Arizona water and wastewater operations.

Customer rates in Arizona and New Mexico are subject to approval by the Arizona Corporation Commission (ACC) and the New Mexico Public Regulation Commission respectively. Customer rates are intended to allow EPCOR the opportunity to recover costs and earn a reasonable rate of return under a historical cost-of-service framework.

At December 31, 2019, in Arizona and New Mexico, EPCOR owned operations in 15 water utility districts, each containing one or more water treatment and / or distribution facilities, and three wastewater utility districts, each containing one or more wastewater treatment and / or collection facilities. In the first quarter of 2019, the ACC considered U.S. Operation's rate application for consolidation of all 11 Arizona water utility districts, which resulted in a tie vote with no decision being rendered. The Company filed for interim rates for all 11 Arizona water utility districts, which were approved by the ACC in March 2019. The ACC has ordered the Company to file a new rate application for all 11 Arizona water utility districts that may include regional consolidation options. The application is due to be filed by May 1, 2020. In late March 2019, the ACC approved the Company's request to provide a $5 million (US$4 million) bill credit related to income tax expense previously collected from the Company's residential and commercial water customers being too high as a result of the changes in corporate income tax rates under tax reform. The amount was credited to the customer bills during the second quarter of 2019. In December 2019, the ACC approved an additional $2 million (US$1 million) bill credit related to the same issue. The amount was credited to the customer bills in January 2020.

U.S. Operations also operates non-regulated water services in the state of Texas. The EPCOR 130 Pipeline delivers water through a 30 inch pipeline to four municipal customers near Austin, Texas under long-term contracts. While these wholesale water contracts are technically subject to Texas Public Utilities Commission appellate review, they are considered to be effectively unregulated.

EPCOR Gas Texas Inc. provides natural gas distribution and transmission services to customers in Texas. Natural gas customer rates in Texas are subject to approval by the Railroad Commission of Texas.

U.S. operations is also involved in providing operating, maintenance and management services to various water and wastewater utilities.

Work on several significant capital projects within the U.S. progressed satisfactorily in 2019. These projects include the Luke 303 Water Reclamations Facility, expansion of the White Tanks Water Treatment Facility and a sewer main trunk line that will facilitate growth and development in the Luke 303 corridor in Phoenix.

U.S. Operations Operating Income and Adjusted EBITDA

($ millions, including intersegment transactions)		**Three months ended December 31,**		**Twelve months ended December 31,**	
		2019	**2018**	**2019**	**2018**
Revenues	Natural gas and water sales	$ 43	$ 41	$ 182	$ 180
	Provision of services	18	17	68	62
		61	58	250	242
Expenses	Energy purchases and system access fees	1	2	4	6
	Other raw materials and operating charges	16	12	52	46
	Staff costs and employee benefits expenses	8	8	34	32
	Depreciation and amortization	15	12	54	46
	Franchise fees and property taxes	2	3	8	8
	Other administrative expenses	5	3	15	13
		47	40	167	151
Operating income before corporate charges		14	18	83	91
Corporate charges		(1)	(1)	(6)	(6)
Operating income		**13**	**17**	**77**	**85**
Exclude depreciation and amortization		15	12	54	46
Adjusted EBITDA		**$ 28**	**$ 29**	**$ 131**	**$ 131**

	Three months ended December 31,	Twelve months ended December 31,
Adjusted EBITDA for the periods ended December 31, 2018	**$ 29**	**$ 131**
Higher water customer rates	2	8
EBITDA for Rio Verde Operations	-	1
Tax reform adjustment on water customer bills	(2)	(7)
Higher (lower) sales volume	1	(2)
Higher maintenance costs	(4)	(3)
Other	2	3
Decrease in Adjusted EBITDA	(1)	-
Adjusted EBITDA for the periods ended December 31, 2019	**$ 28**	**$ 131**

U.S. Operations' Adjusted EBITDA decreased by $1 million for the three months ended December 31, 2019, compared with the corresponding period in 2018, primarily due to lower water revenues due to a tax reform adjustment on customer bills, and higher maintenance costs on water storage tanks, partially offset by higher water customer rates, customer growth and higher water sales volumes in the mid and high tier rate blocks.

U.S. Operations' Adjusted EBITDA had no change for the twelve months ended December 31, 2019, compared with the corresponding period in 2018, primarily due to lower water revenues due to a tax reform adjustment on customer bills, lower water sales volumes in the mid and high tier rate blocks as well as higher precipitation and lower temperatures and higher maintenance costs on water storage tanks. These decreases were fully offset by higher water customer rates, customer growth, Adjusted EBIDTA from Rio Verde operations, acquired in February, 2019, and higher foreign exchange rates.

Year ended December 31,	**2019**	**2018**
Water sales volumes (megalitres)		
Water sales for Arizona and New Mexico	85,427	87,097
Wholesale (by EPCOR 130)	2,942	2,888
Total	88,369	89,985

Arizona and New Mexico water sales volumes decreased in 2019 compared with 2018 primarily due to higher precipitation and below average temperatures in 2019. EPCOR 130 water volumes increased in 2019, compared to 2018 due to increased volumes related to take or pay wholesale customer contracts.

Year ended December 31,	**2019**	**2018**
U.S. natural gas distribution volumes (thousands of cubic feet)		
Natural gas distribution volumes	297,851	311,681

Natural gas distribution volumes decreased in 2019, compared with 2018, primarily due to higher average temperatures in Houston resulting in lower average heating days.

Capital Spending and Investment

($ million) **Years ended December 31,**	**2019**	**2018**	**2017**
Water Services segment	$ 333	$ 290	$ 210
Distribution and Transmission segment	237	175	241
Energy Services segment	2	2	4
U.S. Operations segment	103	120	101
Other	80	29	10
Total capital spending	755	616	566
Rio Verde acquisition	31	-	-
Collingwood PowerStream Utility Corp. (Collus) acquisition	-	25	-
Hughes Gas Resources, Inc. (Hughes) acquisition	-	-	46
Investment in Vista Ridge LLC (Vista Ridge) project	-	12	-
Natural Resource Gas Limited asset acquisition	-	-	22
Total acquisitions and investment	31	37	68
Total capital spending and investment	**$ 786**	**$ 653**	**$ 634**

We continued to invest in our infrastructure assets to improve reliability and meet increasing electricity, natural gas, treated water, sanitary and stormwater collection and wastewater treatment demands. Total capital spending and investment increased by $133 million for the twelve months ended December 31, 2019, compared with the corresponding period in 2018, primarily due to higher capital spending in most of the Company's operating segments with the exception of U.S. Operations segment where capital spending was lower. Explanations of the variances in capital spending in each business segment for the year ended December 31, 2019, compared with the corresponding periods in 2018, are as follows:

- The Water Services segment had higher spending primarily on the Groat Road Sewer Trunk line rehabilitation, private water transmission main development projects, Gold Bar Sludge Line Replacement projects, light rail transit transmission main and sewer relocations projects. This was partially offset by lower spending on South-Edmonton Sanitary Sewer project, West Jasper Place Sanitary project and Gold Bar Digester 3 Upgrade project as these projects were substantially complete in 2018.
- The Distribution and Transmission segment had higher spending primarily on a new substation in southwest Edmonton, duct bank under the North Saskatchewan River for 25 kV circuits, a transmission line in the Norwood community of Edmonton, Strathcona capacity enhancement project and various lifecycle and growth projects. This was partially offset by lower spending on new underground and aerial distribution lines and Rossdale Switchgear Addition project.
- The U.S. Operations segment had lower spending on the White Tanks Water Treatment Plant Expansion project, which was substantially complete in 2018, partially offset by higher spending on various growth and lifecycle replacement projects and higher foreign exchange on capital spending.
- In Other, higher spending was due to the Southern Bruce Design and Construction project, the Customer Information System Replacement project, which is a new customer billing system for customers from various segments who are served by Energy Services, as well as, higher spending on Collus lifecycle projects which was acquired in October, 2018.

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION – ASSETS

($ millions)	December 31, 2019	December 31, 2018	Increase (decrease)	Explanation of material changes
Cash and cash equivalents	$ 33	$ 32	$ 1	Refer to Consolidated Statements of Cash Flows section.
Trade and other receivables	473	431	42	Increase primarily due to higher receivables from the City relating to construction work and higher electricity and natural gas accruals resulting from higher prices and volumes.
Inventories	18	19	(1)	
Other financial assets	127	94	33	Increase primarily due to the recognition of finance lease receivables on the implementation of IFRS 16 ($41 million), partially offset by payments received on long-term receivables and finance lease receivables.
Deferred tax assets	102	130	(28)	Decrease primarily due to a reduction in the carrying value of deferred tax assets as a result of a decrease in the Alberta corporate tax rate and the use of deferred tax assets against income subject to tax.
Property, plant and equipment	10,280	9,582	698	Increase primarily due to capital expenditures, the recognition of ROU assets on the implementation of IFRS 16 ($84 million) and acquisition of Rio Verde, partially offset by depreciation expense, unfavorable foreign currency valuation adjustments and asset disposals and retirements.
Intangible assets and goodwill	388	368	20	Increase primarily due to capital expenditures and the acquisition of Rio Verde, partially offset by amortization and unfavorable foreign currency valuation adjustments.

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION – LIABILITIES AND EQUITY

($ millions)	December 31, 2019	December 31, 2018	Increase (decrease)	Explanation of material changes
Trade and other Payables	$ 431	$ 417	$ 14	Increase due to higher accrued interest on long-term debt, higher capital accrued liabilities and holdbacks, and higher accrued electricity and natural gas costs, partially offset by a decrease in payables to AESO for electricity costs, due to timing of payments.
Loans and borrowings (including current portion)	3,081	2,700	381	Increase primarily due to issuance of long-term debt ($450 million), partially offset by principal repayments of long-term debt, partial repayment of short-term debt and favorable foreign currency valuation adjustments on U.S. dollar denominated debt.
Deferred revenue (including current portion)	3,778	3,532	246	Increase primarily due to customer and developer contributions received and receivables, and the acquisition of Rio Verde, partially offset by deferred revenue recognized and favorable foreign currency valuation adjustments.
Provisions (including current portion)	130	119	11	Increase primarily due to provisions assumed on acquisition of Rio Verde and current year accruals in excess of payments of employee benefits.
Other liabilities (including current portion)	241	144	97	Increase primarily due to recognition of lease liabilities on the implementation of IFRS 16 ($136 million) and liabilities for new leases executed in 2019, partially offset by Drainage transition cost compensation payments, fair value adjustment related to contingent consideration, payments against lease liabilities and favorable foreign currency valuation adjustments.
Deferred tax liabilities	56	53	3	Increase primarily due to the deferred tax liabilities assumed on the acquisition of Rio Verde.
Equity attributable to the Owner of the Company	3,704	3,691	13	

CONSOLIDATED STATEMENTS OF CASH FLOWS

($ millions) **Cash inflows (outflows)** **Three months ended December 31,**	**2019**	**2018**	**Increase (decrease)**	**Explanation**
Operating	$ 118	$ 186	$ (68)	Decrease primarily due to lower funds from operations, as well as, lower funds from changes in non-cash operating working capital.
Investing	(269)	(263)	(6)	Decrease primarily due to higher capital expenditures, partially offset by higher funds from changes in non-cash investing working capital, acquisition of Collus and investment in Vista Ridge in 2018 with no corresponding amounts in 2019.
Financing	(36)	87	(123)	Decrease primarily due to proceeds from issuance of long-term debt in 2018 with no issuance in 2019, payments of lease liabilities and higher dividend payments to the City, partially offset by proceeds from issuance of short-term debt in 2019 compared to repayment of short-term debt in 2018 and lower repayments of long-term debt.
Opening cash and cash equivalents	220	22	198	
Closing cash and cash equivalents	$ 33	$ 32	$ 1	

($ millions) **Cash inflows (outflows)**				
Twelve months ended December 31,	**2019**	**2018**	**Increase (decrease)**	**Explanation**
Operating	$ 553	$ 546	$ 7	Increase primarily due to higher net cash flows from operating activities, partially offset by lower funds from the changes in non-cash operating working capital.
Investing	(770)	(478)	(292)	Decrease primarily due to no payments received on long-term loans receivable from Capital Power Corporation (2018 - $174 million), acquisition of Rio Verde in 2019 ($31 million) compared with acquisition of Collus in 2018 ($25 million) and higher capital expenditures, partially offset by higher funds from the changes in non-cash investing working capital, investment in the Vista Ridge project in 2018 with no corresponding amount in 2019 and lower payment of Drainage transition cost compensation.
Financing	218	(374)	592	Increase primarily due to higher proceeds from issuance of long-term debt and lower repayment of long-term debt, partially offset by net repayment of short-term debt in 2019 compared to net proceeds from short-term debt in 2018, payments of lease liabilities and higher dividend payments to the City.
Opening cash and cash equivalents	32	338	(306)	
Closing cash and cash equivalents	$ 33	$ 32	$ 1	

Operating Activities and Liquidity

The Company maintains its financial position through rate-regulated utility and contracted operations, which generate stable cash flows.

The Company expects to have sufficient liquidity to finance its plans and fund its obligations, including current liabilities in excess of current assets, in 2020 with a combination of cash on hand, cash flow from operating activities, the issuance of commercial paper, public or private debt offerings and availability of committed credit facility described below under Financing.

Cash flows from operating activities would be impaired by events that cause severe damage to our facilities and would require unplanned cash outlays for system restoration repairs. Under those circumstances, more reliance would be placed on our credit facilities for working capital requirements until a regulatory approved recovery mechanism or insurance proceeds are put in place.

Capital Requirements and Contractual Obligations

EPCOR's projected cash requirements for capital spending and investment in 2020 include $825 million to $1,025 million for investment in existing businesses and new business development.

The following table represents the Company's contractual obligations by year:

($ millions)	2020	2021	2022	2023	2024	2025 and thereafter	Total
Distribution and Transmission segment capital projects[1]	$ 45	$ 12	$ 6	$ -	$ -	$ -	$ 63
Developer funded sanitary and stormwater capital projects[2]	18	31	-	-	-	-	49
Drainage other capital projects[3]	33	20	5	2	-	-	60
U.S. Operations Water purchase and transportation of water agreements[4]	9	3	3	3	3	-	21
South Bruce Natural Gas Infrastructure project[5]	21	16	-	-	-	-	37
Renewable electricity credits purchase contract[6]	-	-	1	1	1	26	29
Energy Services agreement for rights to supply RRO and Default Services[7]	50	-	-	-	-	-	50
Loans and borrowings[8]	55	213	135	32	33	2,629	3,097
Interest payments on loans and borrowings	132	131	123	119	118	1,815	2,438
Drainage transition cost compensation[9]	13	10	6	-	-	-	29
Contingent consideration[10]	1	1	5	46	-	-	53
Lease liabilities[11]	17	16	14	13	13	83	156
Other	18	6	-	-	-	-	24
Total contractual obligations	**$ 412**	**$ 459**	**$ 298**	**$ 216**	**$ 168**	**$ 4,553**	**$ 6,106**

1 The Company has commitments for several Distribution and Transmission projects as directed by the AESO.

2 The Company has commitments for several developer funded new sanitary and stormwater infrastructure projects throughout the city of Edmonton.

3 The Company has executed various non-cancellable purchase commitments related to sanitary and stormwater related Master Service Agreements for engineering services and construction contractors for various capital projects, as well as, commitment related to rehabilitate and upgrade of the sanitary sewers at the Groat Road area of the city of Edmonton.

4 Water Arizona maintains agreements with the Central Arizona Water Conservation District for the purchase and

transportation of water. These agreements are for terms of 100 years expiring at the end of 2107. Under the terms of these agreements, the Company is committed for the amount of water ordered in the fall of each year to be purchased and transported the following year.

5 The Company has entered into a design and build agreement for construction of natural gas infrastructure to connect new customers in the Southern Bruce area. For more details refer to outlook section of this MD&A.

6 The Company has entered into a contract with Renewable Energy Systems Canada Inc. to acquire renewable electricity credits (RECs) sourced from a new wind farm in southern Alberta for a term of 20 years. The procurement of RECs is sized to match EPCOR's grid electricity consumption for all of its operations within the city of Edmonton, net of expected generation from the E.L. Smith Solar Farm. The construction of the new wind farm is proposed to be completed by the end of 2022.

7 The Company entered into an arrangement with FortisAlberta Inc. whereby, the Company will continue with exclusive rights to serve as a RRO and Default Supplier of electricity in the Fortis service area for an initial term of eight years following expiry of the existing agreement in December 2020. The new Customer Rights Agreement will be effective from January 2021, with automatic renewal for subsequent periods of three years subject to non-renewal notice by either party up to maximum period of 20 years.

8 During the year, the Company issued $450 million of dual-tranche long-term unsecured public debentures, consisting of a $100 million three year note with a coupon rate of 1.949% and an effective interest rate of 2.096%, and a $350 million 30 year note with a coupon rate of 3.106% and an effective interest rate of 3.163%. The interest is payable semiannually and the principal is due at maturity for both the notes. For additional information on loans and borrowing refer the audited consolidated financial statements of EPCOR Utilities Inc. for the years ended December 31, 2019 and 2018.

9 The Company has a commitment to compensate the City for stranded costs, including liabilities retained by the City, related to the transfer of Drainage operations to EPCOR by the City on September 1, 2017. Out of the total $75 million commitment, the Company has paid $46 million to the City, with the remaining $29 million due over the next three years.

10 On acquisition of the Blue Water and Cross County Water Supply Corporation assets, the Company committed to pay the previous owners of Blue Water a fee which is contingent on securing new long-term contracts for the supply of water. This fee is capped at US$32 million with no time limit for payment of the fee. In addition, on the acquisition of Hughes, the Company committed to pay a fee to the previous owners of Hughes based on the addition of new customer connections above a minimum of 600 incremental customer connections over the period of six years from the date of acquisition. The fee is capped at US$8 million.

The Company is reasonably certain that it will be required to settle the obligation, by way of cash payment, and has accordingly recognized the liability for contingent consideration in the consolidated statements of financial position.

11 The Company has entered into various agreements for lease of land and buildings (including office space). For additional information on lease liabilities refer the audited consolidated financial statements of EPCOR Utilities Inc. for the years ended December 31, 2019 and 2018.

As at February 13, 2020, there were three common shares of the Company outstanding, all of which are owned by the City. EPCOR's dividend to the City will remain at $171 million in 2020 and beyond until such time as the EPCOR Board recommends that it be changed.

In the normal course of business, EPCOR provides financial support and performance assurances, including guarantees, letters of credit and performance bonds, to third parties in respect of its subsidiaries. At December 31, 2019, total guarantees of $442 million (2018 - $455 million) have been issued to various third parties.

Financing

Generally, our external financing is raised at the corporate level and invested in the operating business units. Our external financing has consisted of commercial paper issuance, bank loans under credit facilities, debentures payable to the City related to utility assets transferred from the City, debentures payable to the other municipalities, publicly issued medium-term notes and U.S. private debt notes.

The Company has bank credit facilities which are used principally for the purpose of backing the Company's commercial paper program, issuance of bank loans for operational requirements and providing letters of credit, as outlined below:

($ millions) **December 31, 2019**	**Expiry**	**Total facilities**	**Letters of credit issued**	**Banking Commercial paper issued**	**Net amounts available**
Committed					
Syndicated bank credit facility[1]	November 2024	$ 600	$ -	$ 22	$ 578
Uncommitted					
Bank credit facilities[2]	No expiry	200	99	-	101
Bank credit facility	No expiry	25	-	-	25
Bank credit facility	November 2020	13	-	-	13
Total uncommitted		238	99	-	139
Total credit facilities		**$ 838**	**$ 99**	**$ 22**	**$ 717**

($ millions) **December 31, 2018**	**Expiry**	**Total facilities**	**Letters of credit issued**	**Banking Commercial paper issued**	**Net amounts available**
Committed					
Syndicated bank credit facility[1]	November 2023	$ 600	$ -	$ 38	$ 562
Uncommitted					
Bank credit facilities[2]	No expiry	200	80	-	120
Bank credit facility	No expiry	25	-	-	25
Bank credit facility	November 2019	14	-	-	14
Total uncommitted		239	80	-	159
Total credit facilities		**$ 839**	**$ 80**	**$ 38**	**$ 721**

[1] The Company's $600 million committed syndicated bank credit facility is available and primarily used for backstopping EPCOR's commercial paper program. The committed syndicated bank credit facility cannot be withdrawn by the lenders until expiry, provided that the Company operates within the related terms and covenants. The extension feature of EPCOR's committed syndicated bank credit facility gives the Company the option each year to re-price and extend the terms of the facility by one or more years subject to agreement with the lending syndicate. The Company regularly monitors market conditions and may elect to enter into negotiations to extend the maturity dates. On November 27, 2019, the syndicated bank credit facility was extended for a period of one year to November, 2024. At December 31, 2019, commercial paper totaling $22 million was issued and outstanding (December 31, 2018 - $38 million).

[2] The Company's uncommitted bank credit facility consists of five bilateral credit facilities (totaling $200 million) which are restricted to letters of credit. At December 31, 2019, letters of credit totaling $99 million have been issued and outstanding (December 31, 2018 - $80 million) to meet the credit requirements of electricity market

participants and to meet conditions of certain service agreements.

The Company has a Canadian base shelf prospectus under which it may raise up to $2 billion of debt with maturities of not less than one year. At December 31, 2019, the available amount remaining under this base shelf prospectus was $2 billion (December 31, 2018 - $1.80 billion). The Canadian base shelf prospectus expires in December 2021.

If the economy were to deteriorate in the longer term, particularly in Canada and the U.S., the Company's ability to extend the maturity or revise the terms of bank credit facilities, arrange long-term financing for its capital expenditure programs and acquisitions, or refinance outstanding indebtedness when it matures could be adversely impacted. We believe that these circumstances have a low probability of occurring. We continually monitor our capital programs and operating costs to minimize the risk that the Company becomes short of cash or unable to honor its debt servicing obligations. If required, the Company would look to reduce capital expenditures and operating costs.

Credit Ratings

Years ended December 31,	**2019**	**2018**	**2017**
Credit ratings			
Standard & Poor's Rating Services:			
Long-term debt	A-	A-	A-
DBRS Limited:			
Short-term debt	R-1 (low)	R-1 (low)	R-1 (low)
Long-term debt	A (low)	A (low)	A (low)

In September 2019, DBRS confirmed its A (low) / stable senior unsecured debt and R-1 (low) / stable short-term debt ratings for EPCOR.

In October 2019, Standard & Poor's Ratings Services confirmed its A- / stable long-term corporate credit and senior unsecured debt ratings for EPCOR.

These credit ratings reflect the Company's ability to meet its financial obligations given the stable cash flows generated from the rate-regulated water, wastewater, natural gas and electricity businesses. A credit rating downgrade for EPCOR could result in higher interest costs on new borrowings and reduce the availability of sources and tenor of investment capital.

Financial Covenants

EPCOR is currently in compliance with all of its financial covenants in relation to its syndicated bank credit facility, Canadian public medium-term notes and U.S. private debt notes. Based on current financial covenant calculations, the Company has sufficient borrowing capacity to fund current and long-term requirements. Although the risk is low, breaching these covenants could potentially result in a revocation of EPCOR's credit facilities causing a significant loss of access to liquidity or resulting in the Company's publicly issued medium-term notes and private debt notes becoming immediately due and payable causing the Company to find a means of funding which could include the sale of assets.

The key financial covenants and their thresholds, as defined in the respective agreements and EPCOR's actual measures at December 31, 2019 and 2018 were as follows:

	Actual 2019	Financial Covenant 2019	Actual 2018	Financial Covenant 2018
Modified consolidated net tangible assets to consolidated net tangible assets[1]	100%	> or = 80%	100%	> or = 80%
Consolidated senior debt to consolidated capitalization ratio[2]	46%	< or = 75%	42%	< or = 75%
Interest coverage ratio[3]	4.95	> or = 1.75:1.00	5.02	> or = 1.75:1.00
Debt issued by subsidiaries to consolidated net tangible assets[4]	0.1%	< or = 12.5%	0.1%	< or = 12.5%

1 Modified consolidated net tangible assets to consolidated net tangible assets refers to the total assets of the material subsidiaries of the Company on a consolidated basis, less intangible assets expressed as a percentage of the total assets of the Company on a consolidated basis, less intangible assets.

2 Consolidated senior debt to consolidated capitalization refers to the Company's total unsubordinated long-term debt expressed as a percentage of total unsubordinated long-term debt plus shareholder's equity. This excludes subordinated debt which has a lower ranking for repayment.

3 Interest coverage ratio refers to the Company's ability to pay the interest that arises on outstanding debt. It is calculated by dividing the Company's operating income before interest income and depreciation and amortization expense by the Company's interest expense on loans and borrowings. The interest coverage ratio is not applicable if the Company has an investment grade credit rating.

4 Limitation of debt issued by subsidiaries refers to the total debt held by the Company's subsidiaries that is not guaranteed by the Company plus total debt held by material subsidiaries which is secured by the subsidiaries' assets, expressed as a percentage of the Company's total assets less any intangible assets.

OUTLOOK

In 2020, EPCOR will focus on continuing natural gas pipeline construction in the Southern Bruce region of Ontario, construction of a renewable natural gas facility within Edmonton and continuing to target growth in rate-regulated and contracted water, wastewater, electricity and natural gas infrastructure. We expect much of this investment to come from new infrastructure to accommodate customer growth and lifecycle replacement of existing infrastructure primarily related to the Edmonton and U.S. based operations. We intend to expand our water and electricity commercial services activities and to invest in renewable energy generation, including solar and biogas facilities, which will be ancillary to our existing operations and will enhance our environmental performance.

EPCOR is proposing to build a new renewable natural gas facility within the footprint of its existing Gold Bar. The proposed facility will reduce flaring and greenhouse gas emissions while creating a green energy product for re-sale. The facility is proposed to be constructed and operational in early 2021 and is expected to produce 230,000 GJs of renewable natural gas per year.

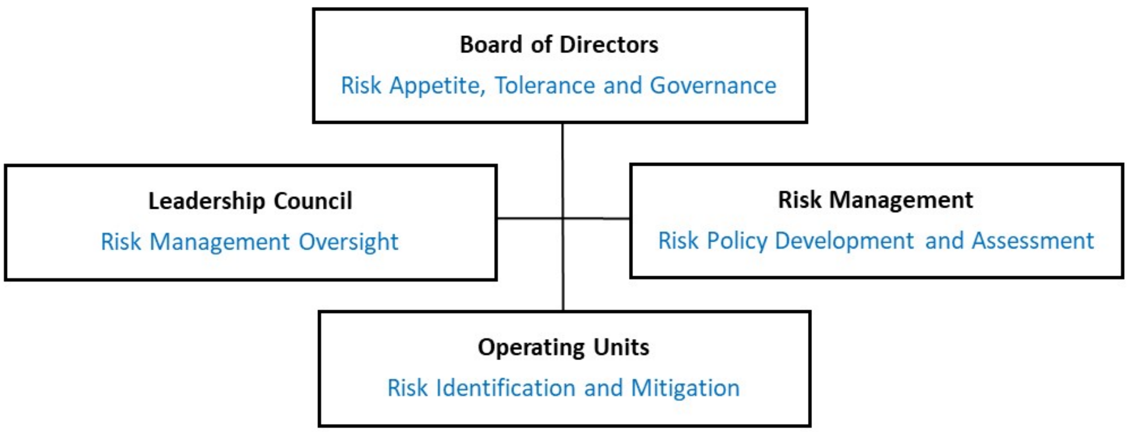
On November 5, 2019, voters in Bullhead City, a U.S. municipality where EPCOR owns a water utility system, passed Proposition 415, authorizing local government to take steps to acquire EPCOR's Mohave and North Mohave water systems and operations using powers of eminent domain, which is the right of a government to expropriate private property for public use, with payment of compensation. The passage of Proposition 415 allows the Bullhead City to pursue the purchase of EPCOR's assets through a legal process and failing agreement between the parties, ultimately allow the courts to decide the purchase price. EPCOR will pursue all avenues to ensure we receive fair market value. To date, no value has been determined as the process is ongoing. The financial impact of the water utility system operations is not considered material to EPCOR's operations.

EPCOR was previously awarded franchises by two municipalities and one township in the Southern Bruce region of Ontario near Kincardine to use municipal rights-of-ways to build, own and operate a natural gas distribution system. On April 12, 2018, EPCOR received an Ontario Energy Board (OEB) decision awarding conditional certificates of public convenience and necessity related to these franchise areas. On July 11, 2019, EPCOR received OEB approvals of its leave-to-construct application and the franchise agreements, and in January 2020, EPCOR received OEB approval of its application for the rates to be applicable in the distribution system area. EPCOR entered into an agreement with a design-builder who has started construction of the gas distribution system in July 2019 and it is expected that EPCOR's Southern Bruce natural gas distribution system will be connected to customers in the Municipality of Kincardine in the second half of 2020, with the remaining portion of the system substantially complete in 2021.

EPCOR is proposing to build a new solar farm just south of its existing E.L. Smith Water Treatment Plant (E.L. Smith WTP). The proposed solar farm will generate "green" energy to help power the existing E.L. Smith WTP and its water treatment and distribution processes, while reducing its greenhouse gas emissions. The solar farm is expected to have a peak generation capacity of 12 megawatts. EPCOR anticipates receiving all significant government approvals in 2020, which will allow the solar farm construction to start in 2020 or 2021. Prior to rendering a decision on a required rezoning application, Edmonton City Council has asked for further engagement to be conducted with the Enoch Cree Nation, and for additional reporting on whether the river valley location should be deemed essential by Edmonton City Council.

RISK FACTORS AND RISK MANAGEMENT

Approach to risk management



Our approach to Enterprise Risk Management (ERM) is to manage the key controllable risks facing the Company and consider appropriate actions to respond to uncontrollable risks. ERM includes the controls and procedures implemented to reduce controllable risks to acceptable levels and the identification of the appropriate management actions in the case of events occurring outside of management's control. EPCOR's ERM framework is aligned with the Committee of Sponsoring Organizations 2017 Integrated ERM Framework and the ERM process follows CAN / CSA ISO 31000-10 Risk Management – Principles and Guidelines. EPCOR's ERM program and the risk management framework and process it supports is designed to identify, assess, measure, mitigate and report on EPCOR's significant risks. The goal is to create and sustain business value by helping the Company achieve its business objectives and strategies through better management of risk. The program promotes a common framework and language for managing risk across EPCOR.

Acceptable levels of risk appetite and risk tolerance for EPCOR are established by the Board of Directors and are embodied in the decisions and Board-approved corporate policies associated with risk management. Oversight of the Company's general ERM framework and strategy, controls and procedures associated with mitigating EPCOR's top risks is provided by the Company's senior executive body, Leadership Council. The corporate Director, Audit and Risk Management is responsible for developing the framework and assessing risk at an enterprise level and monitors effectiveness of risk mitigating controls and conformance with risk management policies through the internal audit function. The Director, Audit and Risk Management provides the Board of Directors with an enterprise risk assessment quarterly. The Company's operating units, comprised of business units and shared service units, are responsible for identifying risks and developing and performing the activities associated with mitigating the risks in their respective operations. These risk management activities are integral aspects of the business units' and shared service units' operations.

EPCOR believes that risk management is a key component of the Company's culture and that we have cost-effective risk management practices in place. At the same time, EPCOR views risk management as an ongoing process and we continually review our risks and look for ways to enhance our risk management processes.

Large scale emergencies resulting from various events discussed below may have a significant impact on the Company's ability to provide services that are considered essential to the public. Maintaining essential services is critical to EPCOR's customers and EPCOR's reputation. The Company manages its ability to continually deliver services with emergency response protocols and business continuity plans which are periodically tested through various exercises and scenarios. These procedures provide assurance that the Company has the coordination, capacity and competence to respond appropriately to emergency situations arising from various forms of risk.

The Company's Ethics Policy includes procedures which provide for confidential disclosure of any wrong-doing relating to accounting, financial reporting and auditing matters. The policy prohibits retaliation against any person making a complaint. During 2019, no significant substantiated complaints with respect to accounting, financial reporting or auditing matters were received.

The Company's principal risks are outlined below in order of most to least serious, as assessed at December 31, 2019. Since the end of 2018, the relative ranking of certain risks has been revised and commentaries have been amended, reflecting the evolving nature of the risks.

Political and Legislative Risk

EPCOR is subject to risks associated with changing political conditions and changes in federal, provincial, state, or municipal laws, regulations and permitting requirements in Canada and the U.S. It is not always possible to predict changes in laws or regulations that could impact the Company's operations, income tax status or ability to renew permits and licenses as required.

The Company owns utilities that provide services to municipalities in Canada and the U.S. Although the Company is granted exclusive rights to operate in the municipalities through franchise agreements and certificates of convenience and necessity, the municipalities may exercise their rights under legislation to expropriate the utilities at fair value, subject to a special vote to do so.

In December 2016, the Government of Alberta enacted *Bill 21: the Modernized Municipal Government Act* (MGA), which could restrict the ability of a municipally controlled corporation (MCC) to conduct its business. EPCOR, which is an MCC of the City, was previously exempt from the MGA and a similar exemption is not present in the new MGA. On July 1, 2018, however, the Government of Alberta declared the Municipally Controlled Corporations Regulation (MCC Regulation) into force, exempting EPCOR from the provisions of the MGA. The MCC Regulation will expire on June 30, 2021. In advance of the MCC Regulation's expiry, EPCOR will work with the Government of Alberta to extend the exemption past June 30, 2021, or to permanently exempt EPCOR from the MGA, as failing to have the exemption could impair EPCOR's ability to achieve its strategic objectives.

EPCOR maintains an open dialogue with all levels of government in order to stay abreast of emerging issues including, but not limited to, proposed changes in legislation or government sentiment towards utility ownership in order to mitigate the Company's exposure to political and legislative risk.

Regulatory Risk

The majority of EPCOR's operations are subject to risks associated with the regulation of utility rates. Such processes can result in significant lags between the time when customer rates or tariffs are applied for and the time that regulatory decisions are received. Furthermore, the regulator may deny or alter the applied-for customer rates or tariffs.

EPCOR's water treatment and distribution services and wastewater treatment services to customers within Edmonton are rate regulated by Edmonton City Council pursuant to the EPCOR Water Services and Wastewater Treatment Bylaw. EPCOR's sanitary and stormwater collection services to customers within Edmonton are rate regulated by Edmonton City Council pursuant to the EPCOR Drainage Services Bylaw. Our ability to fully recover operating and capital costs and to earn a fair return is dependent upon achieving the performance targets prescribed in the bylaws, maintaining cost increases at or below inflation, managing operational risks and not exceeding approved capital additions. Rates for water sales to regional water commissions surrounding Edmonton are regulated by the AUC on a complaints-only basis. EPCOR sets the rates it charges to the regional water commissions to recover actual operating and capital costs plus earn a fair rate of return.

The AUC utilizes a PBR structure for electricity distribution utilities in Alberta. Under the PBR framework, which was revised effective January 1, 2018, EPCOR's annual electricity distribution rates are set by a formula that is generally equal to last year's rates plus an inflation factor less a productivity factor plus a provision for additional approved capital additions. Certain additional capital projects may be applied-for annually in a separate capital application; however, the criteria for qualifying projects is stricter than under the previous PBR framework. Our ability to recover the actual costs of providing service and to earn a fair return is dependent upon EPCOR's ability to manage cost increases at or below inflation, achieve the productivity factor and not exceed the approved capital additions, all as defined by the PBR formula or approved in a separate capital application.

The AUC sets rates intended to permit EPCOR's regulated electricity transmission business to recover forecast costs of providing service plus earn a fair return on capital invested in the business. The AUC sets rates intended also to permit the regulated Energy Services' RRO customer services business to recover forecast costs of providing service plus earn a fair return margin.

Water, wastewater and natural gas services provided by EPCOR's U.S. subsidiaries are regulated by the state regulatory commissions within Arizona, New Mexico and Texas. Our ability to fully recover operating and capital costs and earn a fair return is dependent upon EPCOR's ability to achieve our capital and operating cost, and customer growth and consumption targets built into customer rates. Since customer rates are established on a historical cost basis, any new capital additions for water, wastewater or natural gas infrastructure must be carefully planned and evaluated before commencement, since the addition of such costs to the regulatory rate base for subsequent recovery will only take place after the new infrastructure is built and the regulator approves the rate base additions through the rate application process.

Health and Safety Risk

The Company is responsible for ensuring that the potable water it sells to customers is safe to drink. The ability of the water treatment plants to meet potable water quality standards is dependent on continuous water testing in order to ensure that the prescribed requirements under regulation or conventional industry standards are met. EPCOR operations performs continuous and rigorous quality control testing of water purification, consistent with government and industry standards, to prevent public health issues due to inadequately treated, stored or distributed drinking water. Failure to properly maintain fully functioning treatment and measurement systems could result in regulatory fines or the occurrence of public health issues.

Drinking water quality for EPCOR's Alberta operations is regulated by the provincial *Environmental Protection and Enhancement Act* (EPEA). Regulation under the EPEA takes the form of an "Approval to Operate" which, among other things, specifies the quality of the treated water, the number, frequency and form of water quality testing, as well as, mandatory standards for the water treatment process. The drinking water quality requirements in Alberta meet or exceed the National Guidelines for Canadian Drinking Water Quality recommended by Health Canada.

Raw water quality is an important factor in the treatment of potable water. In Edmonton, we obtain source water from the North Saskatchewan River to treat and sell to customers in the greater Edmonton area. The North

Saskatchewan Watershed Alliance, among other things, aims to protect and improve North Saskatchewan River water quality by developing and sharing knowledge and facilitating workshops with members and interested parties.

Drinking water quality and wastewater standards for EPCOR's U.S. operations are regulated by the U.S. Environmental Protection Agency (U.S. EPA) under the Safe Drinking Water Act and Clean Water Act, respectively. Among other things, the U.S. EPA sets drinking water standards specifying the treatment, source water protection, operator training and funding for water system improvement and relies on the states and localities to carry out the standards. Oversight of water and wastewater systems is conducted by state and county authorities to the degree that they establish standards at least as stringent as the U.S. EPA.

In Arizona, we obtain source water from surface and ground water sources to treat and sell to customers. Surface water primarily comes from the Central Arizona Project. The Central Arizona Project conducts water quality testing upstream of the take-off points and has a formal process in place to notify our Arizona operations of any water quality issues that may arise. Process and compliance sampling results are stringently analyzed and trended for all groundwater and surface water systems in Arizona and New Mexico to ensure systems continue to meet all regulatory standards. Each system in Arizona and New Mexico has an emergency operations plan which addresses water quality issues and provides further risk mitigation.

There are no formal watershed protection groups in the Arizona and New Mexico service areas. The Arizona Department of Environmental Quality and New Mexico Environment Department oversee the water systems in their respective states. In Texas, the Texas Commission on Environmental Quality and the Texas State Soil and Water Conservation Board support the development and implementation of watershed protection plans. Water wells in Arizona, New Mexico and Texas are protected from contamination by proper well construction and system operation and management.

Our operations have hazardous chemicals, high voltage electricity and natural gas transmission and distribution systems located in close proximity to populated areas and a significant incident could result in injury to the public, our employees or on-site suppliers.

We manage HSE risks through a management system and measure HSE performance against recognized industry and internal performance measures. We conduct external compliance and internal conformance audits to verify that we meet or exceed all regulatory requirements. We are committed to working with industry partners to share and improve health, safety and environment practices within the industry. At the end of 2019, all of our Edmonton water, wastewater and electricity transmission and distribution operations remain OHSAS 18001 registered.

Weather and Climate-change Risk

Weather can have a significant impact on our operations. Melting snow, freeze / thaw cycles and seasonal precipitation in the North Saskatchewan River watershed affect the quality of water entering our Edmonton water treatment plants and the resulting cost of purification. Seasonal weather events can cause damage to electricity transmission and distribution equipment and wires, temporarily disrupting the reliable supply of power to customers and can cause unpredictability in the demand for power or natural gas. Unseasonal temperature changes can cause water main breaks, temporarily disrupting the reliable supply of water to customers. Severely cold temperatures can cause natural gas distribution lines to freeze if moisture is present in the natural gas or the main pipelines, disrupting service to customers.

Climate-change could cause extreme weather events such as urban flooding, ice and electrical storms, and high winds resulting in damage to the Company's electricity transmission and distribution system assets in Edmonton. In Edmonton, urban flooding could also result in damage to the Company's reputation and increase exposure to legal action, where EPCOR is responsible for stormwater management. EPCOR is developing a long-term SIRP for Edmonton that will prioritize infrastructure investments to help mitigate the impact of urban flooding events.

Flooding of the North Saskatchewan River valley could damage electrical equipment associated with our three large treatment plants and two electricity substations and result in the facilities being inoperable for up to several months to perform repairs. A 1:500 year flood event of the North Saskatchewan River could result in damage to EPCOR property and loss of income. EPCOR is in the process of reviewing options to mitigate the Company's exposure to flooding of the North Saskatchewan River valley including engineered solutions, some of which have already been employed.

Climate-change in the form of long-term / permanent shifts in weather patterns could result in drought conditions reducing source water supply, particularly in the desert region of the Southwestern U.S. where EPCOR's water sales comprise 9% of the Company's total revenues. In August 2019, under a Lower Basin Drought Contingency Plan involving Arizona, Nevada and California, the United States Bureau of Reclamation activated mandatory reductions in water deliveries in which Arizona will see a 12% reduction in the total water supply to the Central Arizona Project which delivers water by canal to Phoenix, Tucson and other areas. In Arizona, a number of water management and supply augmentation strategies are employed to mitigate the risk of water supply shortage including enacting some very progressive policies to protect groundwater supplies. EPCOR actively manages its sources of water including replenishing reserves by injecting water into its wells when opportunity arises and working with regulators on rate rebalancing to mitigate the effects of declining consumption should it occur.

Climate-change could also result in increased precipitation and cooler temperatures during summer months, reducing customer demand for water and electricity, or increased temperatures during winter months reducing customer demand for natural gas. Increased precipitation could also adversely affect turbidity levels in the North Saskatchewan River and impact EPCOR's ability to produce potable water in an economic and sustainable manner. High temperatures during summer months could result in wildfires, damaging assets and disrupting services to customers, although the majority of the Company's operations are in urban municipalities rather than heavily forested rural areas more exposed to wildfires.

Climate-change could lead to government policy decisions and the development of new technology to promote water conservation or future adoption of electric vehicles, for example. Water conservation could lead to lower EPCOR revenues initially, but could also result in an opportunity for the Company to invest in water re-use infrastructure in the longer term. Rapid adoption of electric vehicles could strain the reliability of the Company's electricity transmission and distribution system in the short term, but provide an opportunity in the longer term to invest in infrastructure to increase the capacity of EPCOR's electricity transmission and distribution systems.

Financial exposures associated with climate-related events are partly mitigated through our insurance programs, however there is no guarantee that insurance covering climate-related events will continue to be available to the Company. Due to the number of catastrophic events in the past few years and the magnitude of losses incurred by the insurance industry, insurers have begun to consider limiting or eliminating coverage for high risk climate-related or climate-change related events such as flooding, wildfires, etc.

Environmental Risk

There are a variety of environmental risks associated with EPCOR's water, wastewater, electricity, natural gas, sanitary and stormwater operations. EPCOR's operations are subject to laws, regulations and operating approvals which are designed to reduce the impacts on the environment. An environmental event could materially and adversely impact EPCOR's business, prospects, reputation, financial condition, operations or cash flow. Furthermore, such incidents could result in spills or emissions in excess of those permitted by law, regulations or operating approvals.

Environmental risks associated with water and wastewater treatment and sanitary and stormwater collection operations include wastewater discharge, biogas release and residuals management. EPCOR's wastewater treatment operations are regulated by stringent wastewater treatment standards and controls covering quality of treated wastewater effluent. Water and wastewater treatment technologies and supporting processes are continuing to evolve and are influenced by more stringent regulation and environmental challenges. Failure to identify and deploy viable new technologies to meet these regulations and challenges could undermine the competitiveness of EPCOR's market position and exclude it from some market opportunities.

Risks associated with electricity transmission and distribution operations include the unintended environmental release of substances such as oil from its oil-filled pipe-type cable and polychlorinated biphenyl transformer fluid from transformers.

To the best of our knowledge we comply, in all material respects, with the laws, regulations and operating approvals affecting our facilities, and we minimize the potential for environmental incidents by applying an environmental management system based on the ISO 14001 standard. The scope of the environmental management system encompasses the Company's environmental policy, objectives, processes, procedures, training and stewardship of our environmental responsibility. We require each facility to have an environmental emergency response plan. Each plant and facility is also subject to third party environmental audits to help ensure conformance with the EPCOR HSE management system and compliance with all regulations. The Edmonton waterworks system (including the Rossdale and E.L. Smith WTP) achieved EnviroVista Champion status as of June 2011. At the end of 2019, our Regina wastewater and Britannia mine water run-off operations in addition to all of our Edmonton water, wastewater, sanitary and stormwater, electricity transmission and distribution and transportation services operations, remain ISO 14001 registered.

The primary sources of EPCOR's greenhouse gas emissions relate to powering and heating our treatment plants and building facilities, and operating our vehicle and equipment fleet. The Company is proactive in seeking ways to reduce its greenhouse gas footprint and is currently considering constructing a solar farm to power its E.L. Smith WTP in southwest Edmonton as an environmentally friendly alternative to using electricity generated from fossil fuels.

Compliance with future environmental legislation may require material capital and operating expenditures. Failure to comply could result in fines and penalties or the regulator could force the curtailment of operations. There can be no assurances that compliance with or changes to environmental legislation will not materially and adversely impact EPCOR's business, prospects, financial condition, operations or cash flows.

New Business Integration Risk

EPCOR plans to grow its utility infrastructure business across various investment types and North American geographies. The Company has been accomplishing this through expansion into the natural gas distribution and sanitary and stormwater collection utility businesses, as well as, entry into new geographies. Expanding its utility infrastructure offerings and geographies will help diversify the Company's investments and thereby reduce investment risk.

While EPCOR has experience and expertise in linear utility infrastructure, natural gas distribution and large sanitary and storm water collection systems are new to us. This introduces risk to the Company due to potential unfamiliarity with the associated operational, safety and regulatory aspects of these businesses in addition to the risks associated with integrating these businesses into EPCOR.

Integration of the Drainage business, which was transferred to EPCOR from the City in 2017, the Company's new electricity distribution business located in Collingwood, Ontario, which was acquired in 2018 and the new water and wastewater business located in Rio Verde, Arizona, which was acquired early in 2019, were completed in 2019. Failing to successfully integrate new businesses could have long-term adverse effects on the Company, including reputational impact.

Strategy Execution Risk

Our growth strategy is dependent on the Company's ability to invest in development opportunities or acquisitions, the amounts of capital investments and the contracted operation of infrastructure for municipal, commercial and industrial customers in Canada and the U.S. Opportunities may be impacted by depressed oil prices and any weakening of Canadian and U.S. economies in the future. This could slow or delay the Company's growth plans.

Such growth is dependent on opportunities in the marketplace which will be impacted by the willingness of parties to sell such assets, political and public sentiment regarding third party ownership and competitiveness of EPCOR's cost of capital. These risks could result in delays or curtailment of EPCOR's growth plans.

Business development projects, including acquisitions, can take a relatively long period of time to execute, exposing such projects to event and external factor risks that may emerge and thereby alter project economics or completion.

For each new business development project, EPCOR seeks to ensure project success by addressing project risks, including events and external factors, as part of its due diligence process and project execution.

Competitive Risk

EPCOR is largely comprised of rate-regulated utilities but does also provide commercial water and wastewater operations and maintenance services to commercial, industrial and municipal customers in Alberta, British Columbia and Saskatchewan, sells competitive electricity and natural gas contracts to Alberta consumers under the Encor brand, sells and delivers water under long-term wholesale water supply contracts in Alberta and Texas, and provides street lighting and light rail transit services to the City and other municipal and commercial customers through its Technologies division of the Distribution and Transmission business segment. EPCOR competes with other companies that provide similar services.

In 2019, under a new electrical services agreement, the base level of traffic signal, street lighting and light rail transit construction and maintenance services committed to the Company by the City was reduced. The Company is reviewing opportunities to expand its competitive service offerings to replace the work no longer committed to it by the City. There is no guarantee the Company will be successful in obtaining replacement work which could result in a reduction of revenues and having to incur employee termination and other costs associated with any required downsizing or restructuring on the related EPCOR division.

Cybersecurity Risks

We use several key information technology systems to support our core operations, including industrial control systems and electricity settlement and utility billing systems. These systems and the associated hardware are vulnerable to malfunction and unauthorized access including cyber-attacks, which could lead to loss or unauthorized disclosure of sensitive customer or EPCOR information, extortion or otherwise disrupt operations. We take measures to reduce the risk of malicious attack or failure of these systems including the data, hardware and network infrastructure on which the systems operate. EPCOR's security program is based on the ISO 27002 control framework. In applying this framework, EPCOR has implemented a series of complementary defense mechanisms, starting from the external information technology perimeter down to the end user. Each layer is designed to prevent, detect and report on malicious activity.

We regularly monitor our information technology protection systems and periodically employ third-party security providers to test their effectiveness and to strengthen the systems as new cyber threats arise.

Financial exposures associated with cyber-attacks are partly mitigated through our insurance programs.

Reputational Damage and Stakeholder Activism

The Company is exposed to a number of risks that could damage its reputation as a safe, trusted and reliable utility operator and provider of utility products and services, as well as, a safe, respectful employer. A damaged reputation could impair the Company's ability to sell its competitive products and services and to attract and retain employees.

Utilities are increasingly being challenged by external stakeholder activists on climate change, utility rates, environmental matters, etc. leading to public opposition to infrastructure projects, which could impair the Company's ability to execute its capital expenditure programs necessary for the continued provision of safe, reliable utility services or achievement of strategic objectives.

Risk of reputational damage and stakeholder activism is exacerbated by social media and the speed at which news stories and rumors can be spread or public opposition can develop.

EPCOR has controls and strategies in place to mitigate the exposure to the various risks that could result in damage to EPCOR's reputation should an event occur. The Company proactively maintains positive and transparent interactions with stakeholders. In addition, EPCOR communicates with stakeholders and the media when issues first arise and actively monitors social media in order to address reputational matters before they escalate.

Actual Performance Compared to Approved Revenue Requirement

The majority of EPCOR's businesses are rate-regulated. The rate-setting process requires the Company to forecast its revenue requirement for each business' test period based on factors such as projected water and electricity sales volumes, operating expense, financing expense, etc. If the business is unable to achieve its forecasts, due to lower than projected water volumes or higher operating expenses for example, then the Company's actual financial results could be adversely affected, resulting in lower net income and cash flow, and reduced financial condition, causing the business to perform below the regulator-allowed return on equity until the business' revised revenue requirement is approved by the regulator for the next test period, which could be up to several years in the future.

The Company's rate-regulated businesses monitor their actual performance against the various factors forecast in their approved revenue requirements and make operating decisions that results in cost reductions, where it is safe and prudent to do so in order to recover or offset any shortfall between actual and forecast revenues and / or expenses. It is not always possible to achieve the regulator-allowed return.

Billing Error Risk

The customer consumption data used to bill utility customers is voluminous and the sources and types of customer billing data are varied, requiring large, complex systems to process customer billings. In addition, the Company relies on third parties to provide customer meter data in certain circumstances and to produce bills for its U.S. customers. All of this contributes to the potential for billing errors caused by poor customer consumption data quality, billing system computational errors, incorrect customer rates being used or transactions and adjustments being applied incorrectly to customer accounts. The Company applies numerous manual and automated controls to ensure the quality of customer billings including a routine to identify various exceptions in the electricity meter data used to produce customer bills.

The Company is planning on replacing its main customer billing system in 2020. While the replacement project will include various procedures and controls to check the new system's accuracy, billing accuracy will be a key implementation risk of this large, complex system.

Business Interruption Risks

A variety of intentional, accidental or natural occurrences could cause interruption of EPCOR's operations including failure of plant equipment, electricity transmission or distribution lines, water, sanitary and stormwater collection systems or natural gas pipelines, or any of the industrial control systems utilized throughout operations. In addition, the quality of raw source water can be affected by such things as hydrocarbons and other inorganic or organic contaminants entering water ways and aquifers. Depending on the type and concentration of the contaminant, their removal may be beyond the capabilities of water treatment plant processes, resulting in the water treatment plant being shut down until the contaminants become diluted to the point where they can be treated within the water treatment plant capabilities.

An extended outage could result in lost revenues or additional costs to resume operations, including repair costs.

This risk is managed through inherent redundancy and sound maintenance practices. Our maintenance practices are augmented by an inventory of strategic spare parts, which can reduce down-time considerably in the event of equipment failure. We also have emergency response and business continuity plans which we exercise regularly.

Maintenance and capital plans are determined annually based on rigorous assessment of equipment and by continually monitoring the condition of assets.

Although all of our operations have historically performed in accordance with expectations, there can be no assurance that they will continue to do so. The Company's business continuity plans aim to enable EPCOR to continue providing critical services to customers in the event of a crisis. The Company's emergency response protocols are designed to ensure EPCOR can expeditiously resume operations following a business interruption. Financial exposures associated with business interruption are partly mitigated through our insurance programs.

Failure to Attract, Retain or Develop Top Talent

Our ability to successfully operate and grow the business is dependent upon attracting, retaining and developing sufficient labor and management resources. As with most organizations, the Company is facing a demographic shift where a large number of employees are expected to retire over the next few years. Failure to secure sufficient qualified technical and leadership talent may impact EPCOR's operations or increase expenses.

We believe that we employ good human resource practices and in 2019, we were again named a top 75 employer in Alberta and one of Canada's Top Employers for Young People, by Mediacorp Canada Inc. and U.S. Operations was selected by The Phoenix Business Journal as one of the best places to work. We continue to monitor developments and review our human resource strategies so that we have an adequate supply of labor and management.

Electricity Price and Volume Risk

EPCOR sells electricity to RRO customers under a RRT. All electricity for the RRO customers is purchased in real time from the AESO in the spot market. Under the RRT, the quantity of electricity consumption, the method used to reduce the risk of adverse price movement for expected electricity consumption, and the electricity selling prices to be charged to these customers is determined by the EPSP. Under the EPSP, the Company uses financial contracts to mitigate the risk of adverse price movement of electricity under the RRO requirements and incorporate the price into customer rates for the applicable month. The Company enters into financial contracts-for-differences for forecasted volumes of electricity to mitigate the risk of adverse price movement up to 120 days in advance of the month in which the electricity (load) is expected to be consumed by the RRO customers. The volume of electricity is based on load (usage) forecasts for the consumption month. When consumption varies from forecast consumption patterns, EPCOR is exposed to prevailing market prices on fifty percent of the load when the volume of electricity contracted under the financial contracts-for-differences is short of actual load requirements or greater than the actual load requirements (i.e. long). Exposure to variances in electricity volume can be exacerbated by other events such as unexpected generation plant outages and extreme weather patterns which could impact electricity spot market prices.

Under contracts-for-differences, the Company agrees to exchange, with a counterparty meeting the Company's credit risk parameters, the difference between the AESO electricity spot market price and the fixed contract price for a forecasted volume of electricity, all in accordance with the EPSP. The contracts-for-differences are referenced to the AESO electricity spot price and any movement in the AESO price results in changes in the contract settlement amount.

If the risks of the EPSP were to become untenable, EPCOR could test the market and potentially re-contract the procurement risk under an outsourcing arrangement at a certain cost that would likely increase procurement costs and reduce margins. The Company may enter into additional financial electricity purchase contracts outside the EPSP to further economically hedge the price of electricity.

Project Risk

Development, construction and acquisition of water and wastewater treatment facilities, sanitary and stormwater, electricity transmission and distribution, and natural gas infrastructure are subject to various engineering, construction, stakeholder, government, environmental and valuation risks. These risks can translate into performance issues, delays and cost overruns. Project delays may defer expected revenues, and project cost overruns could make projects uneconomic. Many of the water, wastewater and natural gas growth projects currently pursued by the Company require design and construction capabilities that are provided by third parties. In order to pursue these projects, strategic partnerships have been established with reputable firms that have an established track record of infrastructure design and construction. Should these partnerships dissolve or no longer be recognized by the market as a viable approach, the Company's growth plans could potentially be curtailed.

We attempt to mitigate project risks by performing detailed project analysis and due diligence prior to and during development, construction or acquisition, and by entering into appropriate contracts for various services to be provided as required. Our ability to complete projects successfully depends upon numerous factors such as weather, availability of skilled labor, strikes and regulatory matters.

Credit Risk

Credit risk is the possible financial loss resulting from the inability of counterparties to satisfy their contractual obligations to EPCOR.

Exposures to credit risk in our rate-regulated and non-rated-regulated businesses are generally limited to amounts due from customers for services provided but not yet paid for.

Exposure to credit risk for residential RRO customers and commercial customers under default electricity supply rates are generally limited to amounts due from customers for electricity consumed but not yet paid for. This portfolio is reasonably well diversified with no significant credit concentrations. Historically, credit losses in these customer segments have not been significant and depend in large part on the strength of the economy and the ability of the customers to effectively manage their financial affairs through economic cycles.

EPCOR's exposure to RRO and default customer credit risk is summarized below. The exposure represents the accounts receivable value for this portfolio, which is managed at the gross exposure level rather than by individual customer account.

($ millions) **December 31,**	**2019**	**2018**
RRO and default supply customers[1]	$ 152	$ 155

1 EPCOR monitors credit risk for this portfolio at the gross exposure level rather than by individual customer account.

The year-over-year decrease in exposure primarily relates to lower site counts and higher collection from customers, partially offset by higher customer rates.

EPCOR is also exposed to the risk of non-payment for water, electricity transmission and distribution, natural gas, sanitary and stormwater services provided to rate-regulated and non-rate regulated customers, as summarized below. Exposures represent the accounts receivable value for this portfolio, which is managed at the gross exposure level rather than by individual customer account, excluding receivables related to electricity transmission and distribution which are managed at individual customer level.

($ millions) **December 31,**		**2019**		**2018**
Unrated customers	$	196	$	176
Rated customers[1]		49		44

1 Rated customers have investment grade credit ratings which are based on the Company's internal criteria and analyses, which take into account, among other factors, the investment grade ratings of external credit rating agencies when available.

EPCOR's credit risks are governed by a Board-approved credit risk management policy, which is administered by EPCOR's Treasurer.

We manage credit risk and limit exposures through our credit policies and procedures. These include an established credit review, rating and monitoring process, specific terms and limits, appropriate allowance provisioning and use of credit mitigation strategies, including collateral arrangements.

Electricity is considered an essential service and regulations limit what actions the Company can apply to address delinquent accounts and therefore, EPCOR may experience credit losses in the future should economic conditions deteriorate.

Financial Liquidity Risk

EPCOR's cash flows from operating activities do not provide sufficient capital to undertake or complete ongoing or future development, enhancement opportunities or acquisition plans and accordingly, the Company requires additional financing from time to time. The ability of the Company to arrange such financing will depend in part upon prevailing market conditions at the time and the Company's business performance. There can be no assurance that debt or equity financing will be available or sufficient to meet these requirements or for other corporate purposes. Furthermore, if financing is available, there can be no assurance that it will be on terms acceptable to the Company. EPCOR's inability to access sufficient capital for its operations could have a material adverse effect on the Company's business, prospects and financial condition. Detailed discussion of EPCOR's sources of liquidity is included in Operating Activities and Liquidity section of this MD&A.

The Company manages liquidity risk through regular monitoring of cash and currency requirements by preparing short-term and long-term cash flow forecasts and also by matching the maturity profiles of financial assets and liabilities to identify financing requirements. EPCOR's financial risks are governed by a Board-approved financial exposure management policy, which is administered by EPCOR's Treasurer.

Foreign Exchange Risk

The Company is exposed to foreign exchange risk on foreign currency denominated transactions, firm commitments, monetary assets and liabilities denominated in a foreign currency and on its net investments in foreign entities.

The Company's financial exposure management policy attempts to minimize economic and material transactional exposures arising from movements in the Canadian dollar relative to the U.S. dollar or other foreign currencies. The Company's direct exposure to foreign exchange risk arises from its U.S. operations and on Canadian capital expenditure commitments denominated in U.S. dollars or other foreign currencies. The Company coordinates and manages foreign exchange risk centrally, by identifying and measuring movements in normally opposing cash flows (i.e. revenues versus expenses) or balances (i.e. assets versus liabilities) and then dealing with any material residual foreign exchange risks. The Company's exposure to foreign exchange risk on its investment in foreign entities is partially mitigated by foreign-currency denominated financing.

The Company may use foreign currency forward contracts to fix the functional currency of its non-functional currency cash flows, thereby reducing its anticipated U.S. dollar-denominated transactional exposure. The Company looks to limit foreign currency exposures as a percentage of estimated future cash flows.

Conflicts of Interest

Certain conflicts of interest could arise as a result of EPCOR's relationship with the City, EPCOR's sole common shareholder and regulator for water and wastewater treatment, and sanitary and stormwater collection utility rates in Edmonton.

General Economic Conditions, Business Environment and Other Risks

In addition to the risks described above, the following factors could materially and adversely impact EPCOR's business, prospects, financial condition, results of operations or cash flows: fluctuations in interest rates, product supply and demand, risks associated with technology, general economic and business conditions, risks associated with existing and potential future lawsuits and other regulations, assessments and audits (including income tax) against EPCOR and its subsidiaries and such other risks and uncertainties described from time to time in EPCOR's reports and filings with the Canadian Securities authorities.

The following table outlines our estimated sensitivity to specific risk factors as at December 31, 2019. Each sensitivity factor provides a range of outcomes assuming all other factors are held constant and current risk management strategies are in place. Under normal circumstances, such sensitivity factors will not be held constant but rather, will change at the same time as other factors are changing. In addition, the degree of sensitivity to each factor will change as the Company's mix of assets and operations subject to these factors changes.

($ millions, except as otherwise noted)	**Change**	**Annual cash flow**	**Annual net income**
Increase in RRO customers	+2.0%	+1	+1
Decrease in RRO customers	-2.0%	-1	-1
Increase in Water Services segment water volumes	+5.0%	+16	+16
Decrease in Water Services segment water volumes	-5.0%	-16	-16
Increase in U.S. Operations segment water volumes	+5.0%	+4	+4
Decrease in U.S. Operations segment water volumes	-5.0%	-4	-4

Litigation Update

The Company is not involved in any material litigation at this time.

CONTROLS AND PROCEDURES

For purposes of certain Canadian securities regulations, EPCOR is a venture issuer. As such, it is exempt from certain of the requirements of National Instrument 52-109 Certification of Disclosure in Issuers' Annual and Interim Filings. The Chief Executive Officer and Chief Financial Officer have reviewed the annual information form, annual consolidated financial statements and annual MD&A, for the year ended December 31, 2019. Based on their knowledge and exercise of reasonable diligence, they have concluded that these materials fairly present in all material respects the financial condition, results of operations and cash flows of the Company for the periods presented.

FUTURE ACCOUNTING STANDARD CHANGES

A number of new standards, amendments to standards and interpretations have been issued by the International Accounting Standards Board and the International Financial Reporting Interpretations Committee, the application of which is effective for periods beginning on or after January 1, 2020. The Company does not expect the implementation of these new accounting pronouncements to have a significant impact on its accounting policies.

CRITICAL ACCOUNTING ESTIMATES

In preparing the consolidated financial statements, management necessarily made estimates in determining transaction amounts and financial statement balances. The following are the items for which significant estimates were made in the consolidated financial statements.

Electricity Revenues, Costs and Unbilled Consumption

Due to the time lag between customer electricity consumption and receipt of final billing consumption information from the load settlement agents, the Company must use estimates for determining the amount of electricity consumed and the distribution services provided to customers but not yet billed. These estimates affect accrued revenues and accrued electricity costs of the Energy Services segment and accrued revenues of the Distribution and Transmission segment. There are a number of variables and judgments required in the computation of these significant estimates, and the underlying electricity settlement processes within EPCOR and the Alberta electric systems are complex. Such variables and judgments include the number of unbilled sites, the amount of and rate classification of the unbilled electricity consumed and the amount of electricity distributed to customers. Owing to the factors above and the statutory delays in final load settlement determinations and information, adjustments to previous estimates could be material. Estimates for unbilled electricity consumption and distribution services provided to customers averaged approximately $58 million at the end of each month in 2019 (2018 - $49 million). These estimates varied from $46 million to $67 million (2018 - $40 million to $58 million). Adjustments of estimated revenues to actual billings were not material for any month in 2019 and 2018.

Fair Values

We are required to estimate the fair value of certain assets or obligations for determining the valuation of certain financial instruments, asset impairments, asset retirement obligations and purchase price allocations for business combinations, and for determining certain disclosures. Significant judgment is applied in the determination of fair values including the choice of discount rates, estimating future cash flows, and determining goodwill. Following are the descriptions of the key fair value methodologies relevant for 2019.

Fair values of financial instruments are based on quoted market prices when these instruments are traded in active markets. In illiquid or inactive markets, the Company uses appropriate price modeling to estimate fair value. Fair values determined using valuation models require the use of assumptions concerning the amounts and timing of future cash flows and discount rates.

The Company reviews the valuation of long-lived assets subject to amortization when events or changes in circumstances may indicate or cause a long-lived asset's carrying amount to exceed the total discounted future cash flows expected from its use and eventual disposition. An impairment loss, if any, will be recorded as the excess of the carrying amount of the asset over its fair value, measured by either market value, if available, or estimated by calculating the present value of expected future cash flows related to the asset.

Estimates of fair value for long-lived asset impairments are mainly based on depreciable replacement cost or discounted cash flow techniques employing estimated future cash flows based on a number of assumptions, including the selection of an appropriate discount rate. The cash flow estimates will vary with the circumstances of the particular assets or reporting unit and will primarily be based on the lives of the assets, revenues and expenses, including inflation, and required capital expenditures.

Income Taxes

EPCOR follows the asset and liability method of accounting for income taxes. Income taxes are determined based on estimates of our current taxes and estimates of deferred taxes resulting from temporary differences between the carrying values of assets and liabilities in the financial statements and their tax values. Deferred tax assets are assessed and significant judgment is applied to determine the probability that they will be recovered from future taxable income. For example, in estimating future taxable income, judgment is applied in determining the Company's most likely course of action and the associated revenues and expenses. To the extent recovery is not probable a deferred tax asset is not recognized. Estimates of the provision for income taxes and deferred tax assets and liabilities might vary from actual amounts incurred.

Estimated fair values and useful lives are used in determining potential impairments for each long-lived asset, which will vary with each asset and market conditions at the particular time. Similarly, income taxes will vary with taxable income and, under certain conditions, with fair values of assets and liabilities. Accordingly, it is not possible to provide a reasonable quantification of the range of these estimates that would be meaningful to readers.

Impact of Current Market Conditions on Estimates

Although the current condition of the economy has not impacted our methods of estimating accounting values, it has impacted the inputs in those determinations and the resulting values. Future cash flow estimates for assessing the value-in-use of long-lived assets (cash generating units or CGUs) for impairment were updated to reflect any increased uncertainties of recoverability. The assessments did not result in any impairment losses because a large portion of the Company's operations within various CGU's are subject to rate-regulation. Our valuation models for estimating the value-in-use for various CGU's depend partly on discount rates which were updated to reflect changes in credit spreads and market volatility. Our methods for determining the expected credit loss allowance is based on a provision matrix which uses historical rates of bad debts in relation to the aged accounts receivable balances by customer group for RRO and default customer bases and current economic conditions (including forward looking information). These analyses did not reveal any significant changes in our assessment of the recoverability of accounts receivable at December 31, 2019.

OTHER COMPREHENSIVE INCOME

For the three and twelve months ended December 31, 2019 and 2018, the Company's transactions in other comprehensive income included the following:

($ millions)	Three months ended December 31,				Twelve months ended December 31,			
		2019		**2018**		**2019**		**2018**
Re-measurement of net defined benefit plans	$	(10)	$	6	$	(10)	$	6
Loss on cash flow hedges		-		-		(9)		-
Unrealized gain (loss) on foreign currency translation		(11)		28		(28)		43
Other comprehensive income (loss)	**$**	**(21)**	**$**	**34**	**$**	**(47)**	**$**	**49**

In anticipation of the issuance of long-term debentures during the year, the Company in the first quarter of 2019, entered into bond forward contracts with a notional value of $100 million, to manage its interest rate risk associated with movements in long-term Government of Canada bond rates related to the planned long-term debenture issuance. These financial instruments were classified as cash flow hedges. The Company closed the bond forward contracts concurrently with the issuance of long-term debentures during the year and paid the outstanding balance of $10 million to the counterparties. Of the $10 million loss incurred on the bond forward contracts, $1 million related to the ineffective portion of the hedges was recognized in net income, whereas the $9 million related to effective portion of the hedges was recorded in other comprehensive income. The loss related to effective portion of the hedges is being reclassified and recognized in net income over a period of 30 years, as the interest expense related to the long-term debentures is incurred.

RELATED PARTY BALANCES AND TRANSACTIONS

The Company provides utility services to key management personnel as it is the sole provider of certain services. Such services are provided in the normal course of operations and are based on normal commercial rates, as approved by regulation.

The Company is 100% owned by the City. The Company provides maintenance, repair and construction services, customer billing services to the City, and purchases printing services and supplies, mobile equipment services, public works and various other services pursuant to service agreements. Sales between the Company and the City are in the normal course of operations, and are generally based on normal commercial rates, or as agreed to by the parties.

For further information on related party balances and transactions refer to the audited consolidated financial statements for the years ended December 31, 2019 and 2018.

QUARTERLY RESULTS

(Unaudited, $ millions)

Quarters ended	Revenues	Net income
December 31, 2019	$ 474	$ 59
September 30, 2019	493	76
June 30, 2019	439	40
March 31, 2019	458	56
December 31, 2018	466	107
September 30, 2018	465	55
June 30, 2018	426	68
March 31, 2018	401	65

Events for the past eight quarters compared to the same quarters of the prior years that have significantly impacted net income included:

- December 31, 2019, fourth quarter results included lower work volumes related to street lighting, traffic signals and light rail transit electrical services for the City, lower water revenues due to a tax reform adjustment on customer bills, higher maintenance costs on water storage tanks in U.S. Operations, lower transmission system access service charge net collections, as well as, higher depreciation and income tax expenses. Partially offsetting these decreases were higher water and wastewater rates and customer growth, higher electricity distribution and transmission rates, higher EPSP margins, higher water volumes, higher commercial services revenues, lower unfavorable fair value adjustments related to financial electricity purchase contract and lower financing expenses.
- September 30, 2019, third quarter results included higher water and wastewater rates and customer growth, higher electricity distribution and transmission rates, higher EPSP margins, higher transmission system access service charge net collections and lower unfavorable fair value adjustments related to financial electricity purchase contracts. Partially offsetting these increases were lower work volumes related to street lighting, traffic signals and light rail transit electrical services for the City, lower water consumption resulting from lower temperatures and higher precipitation for operations in the city of Edmonton, higher water treatment costs due to poor water quality of North Saskatchewan River and higher depreciation, finance and income tax expenses.
- June 30, 2019, second quarter results included lower water consumption due to low temperatures and high precipitation, lower Arizona water revenues due a tax reform adjustment credit on customer bills, lower work volumes related to street lighting, traffic signals and light rail transit electrical services for the City, higher depreciation expense due to 2018 asset additions and ROU asset additions in 2019, higher deferred income tax expense due to a decrease in the Alberta corporate income tax rate and unfavorable fair value adjustments related to financial electricity purchase contracts. Partially offsetting these decreases were higher EPSP margins, higher electricity distribution and transmission revenues due to higher rates, higher water and wastewater customer rates, higher Encor customer growth and higher transmission system access service charge net collections.
- March 31, 2019, first quarter results included lower EPSP margins, lower water consumption due to low temperatures and high precipitation, higher water treatment costs due to an early spring run-off in 2019, higher depreciation expense due to 2018 additions and ROU asset additions, and higher income tax expense. Partially

offsetting these decreases were higher electricity distribution customer revenues due to higher rates, favorable fair value adjustments related to financial electricity purchase contracts, higher Encor customer growth and higher transmission system access service charge net collections.

- December 31, 2018, fourth quarter results included higher income tax recovery due to recognition of non-capital loss carry-forward balances, higher distribution revenues due to higher customer rates, higher EPSP margins, higher transmission system access service charge net collections, lower finance expense due to lower average debt outstanding and lower interest rates, and no losses on sale of surplus land. Partially offsetting these increases were lower water and wastewater revenues, unfavorable fair value adjustments related to financial electricity purchase contracts and higher depreciation expense due to asset additions for 2018.
- September 30, 2018, third quarter results included lower EPSP margins, higher unfavorable fair value adjustments related to financial electricity purchase contracts, lower transmission system access service charge net collections, higher finance expense due to the additional debt assumed upon the transfer of Drainage, as well as, higher depreciation expense due to the transfer of Drainage and asset additions for 2017 and 2018. Partially offsetting these decreases were three months of income from Drainage in 2018 compared to one month in 2017, higher water and wastewater revenues, higher electricity distribution customer rates and no losses on sale of surplus land in 2018.
- June 30, 2018, second quarter results included income from Drainage and Hughes, higher water and wastewater revenues, lower water treatment costs for operations in the city of Edmonton, higher electricity distribution customer rates, higher favorable fair value adjustments related to financial electricity purchase contracts. Partially offsetting these increases were lower EPSP margins, lower transmission system access service charge net collections, higher interest expense due to the additional debt assumed upon the transfer of Drainage, as well as, higher depreciation expense due to the transfer of Drainage and asset additions for 2017 and 2018.
- March 31, 2018, first quarter results included income from Drainage and Hughes, higher water and wastewater revenues, lower water treatment costs for operations in the city of Edmonton, Encor customer growth, unfavorable fair value adjustments related to financial electricity purchase contracts in 2017 and higher transmission system access service charge net collections. Partially offsetting these increases were lower EPSP margins, higher interest expense due to the additional debt assumed upon the transfer of Drainage, as well as, higher depreciation expense due to the transfer of Drainage and 2017 asset additions.

Fourth Quarter Business Segment Information

Three months ended December 31, 2019

	Water Services	Distribution & Transmission	Energy Services	U.S. Operations	Other	Intersegment Elimination	Consolidated
External revenues	$ 162	$ 107	$ 125	$ 61	$ 19	$ -	$ 474
Inter-segment revenue	-	3	4	-	-	(7)	-
Total revenues	162	110	129	61	19	(7)	474
Energy purchases and system access fees	-	-	94	1	13	-	108
Other raw materials and operating charges	23	15	-	16	2	(1)	55
Staff costs and employee benefits expenses	32	18	8	8	12	(2)	76
Depreciation and amortization	41	24	3	15	6	-	89
Franchise fees and property taxes	8	20	-	2	1	-	31
Other administrative expenses	9	4	7	5	5	(4)	26
Operating expenses	113	81	112	47	39	(7)	385
Operating income (loss) before corporate charges	49	29	17	14	(20)	-	89
Corporate income (charges)	(9)	(5)	(3)	(1)	18	-	-
Operating income (loss)	40	24	14	13	(2)	-	89
Finance recoveries (expenses)	(19)	(14)	-	(6)	12	-	(27)
Income tax expense	-	-	-	-	(3)	-	(3)
Net income	$ 21	$ 10	$ 14	$ 7	$ 7	$ -	$ 59
Capital additions	$ 118	$ 79	$ -	$ 44	$ 35	$ -	$ 276

Three months ended December 31, 2018	Water Services	Distribution & Transmission	Energy Services	U.S. Operations	Other	Intersegment Elimination	Consolidated
External revenues	$ 149	$ 131	$ 112	$ 58	$ 16	$ -	$ 466
Inter-segment revenue	-	3	4	-	-	(7)	-
Total revenues	149	134	116	58	16	(7)	466
Energy purchases and system access fees	-	-	97	2	10	-	109
Other raw materials and operating charges	25	12	-	12	2	1	52
Staff costs and employee benefits expenses	29	20	7	8	5	(1)	68
Depreciation and amortization	41	23	1	12	5	-	82
Franchise fees and property taxes	7	19	-	3	-	-	29
Other administrative expenses	8	5	7	3	7	(7)	23
Operating expenses	110	79	112	40	29	(7)	363
Operating income (loss) before corporate charges	39	55	4	18	(13)	-	103
Corporate income (charges)	(9)	(5)	(1)	(1)	16	-	-
Operating income	30	50	3	17	3	-	103
Finance recoveries (expenses)	(18)	(16)	(1)	(10)	15	-	(30)
Income tax recovery (expense)	1	-	-	(3)	36	-	34
Net income	$ 13	$ 34	$ 2	$ 4	$ 54	$ -	$ 107
Capital additions	$ 102	$ 54	$ 1	$ 56	$ 19	$ -	$ 232

FORWARD - LOOKING INFORMATION

Certain information in this MD&A is forward-looking within the meaning of Canadian securities laws as it relates to anticipated financial performance, events or strategies. When used in this context, words such as “will”, “anticipate”, “believe”, “plan”, “intend”, “target”, and “expect” or similar words suggest future outcomes.

The purpose of forward-looking information is to provide investors with management’s assessment of future plans and possible outcomes and may not be appropriate for other purposes. Material forward-looking information within this MD&A, including related material factors or assumptions and risk factors, are noted in the table below:

Forward-looking Information	Material Factors or Assumptions	Risk Factors
The Company expects to have sufficient liquidity to finance its plans and fund its obligations in 2020.	EPCOR is able to generate the expected cash flow from operations and various means of funding remain available to the Company.	EPCOR’s operations do not generate the expected level of cash flow and / or circumstances arise limiting or restricting the Company’s ability to access funds through the various means otherwise available.
EPCOR’s projected cash requirements for capital spending and investment projects for 2020 include $825 million to $1,025 million for investment in existing businesses and new business development.	EPCOR is able to complete its 2020 capital expenditure program on time and on budget and no material unplanned business or asset acquisitions are closed in the year.	EPCOR is successful in closing a material, unplanned acquisition or unforeseen circumstances result in construction or acquisition delays.
EPCOR’s projected cash requirements for 2020 include $171 million for common share dividends.	EPCOR is able to generate the expected cash flow from operations and various means of funding remain available to the Company. There is no revision to the dividends to be paid to the City.	EPCOR is not able to generate the expected cash flow from operations and various means of funding are not available to the Company. There is a revision to the dividends to be paid to the City.

The following table provides a comparison between actual results and future-oriented-financial information previously disclosed:

Material 2019 Objectives Previously Disclosed		**Actual Result**	**Explanation of Material Differences from Objectives**
EPCOR’s projected cash requirements for capital spending and investment projects for 2019 include $750 million to $950 million for investment in existing businesses and new business development.	$750 million to $950 million	$755 million capital expenditures and $31 million business acquisitions and investment	Within the range
EPCOR’s projected cash requirements for 2019 include $171 million for common share dividends.	$171 million	$171 million	No change

Whether actual results, performance or achievements will conform to the Company’s expectations and predictions is subject to a number of known and unknown risks and uncertainties, which could cause actual results to differ from expectations and are discussed in the Risk Factors and Risk Management section above.

Readers are cautioned not to place undue reliance on forward-looking statements as actual results could differ materially from the plans, expectations, estimates or intentions expressed in the forward-looking statements. Except as required by law, EPCOR disclaims any intention and assumes no obligation to update any forward-looking statement even if new information becomes available, as a result of future events or for any other reason.

GLOSSARY

ACC means Arizona Corporation Commission	**IAS** means International Accounting Standard(s)
Adjusted EBITDA earnings before finance expenses, income tax recovery (expense), depreciation and amortization, changes in the fair value of derivative financial instruments and transmission system access service charge net collections	**MCC** means Municipally Controlled Corporation
AESO means Alberta Electric System Operator	**MCC Regulations** means Municipally Controlled Corporations Regulation
AUC means the Alberta Utilities Commission	**MGA** means Bill 21: the Modernized Municipal Government Act
Collus means Collingwood PowerStream Utility Services Corp.	**OEB** means Ontario Energy Board
DBOMT means design, build, own, maintain and transfer	**PBR** means Performance Based Regulation
Drainage means drainage utility services within the city of Edmonton	**Rio Verde** means Rio Verde Utilities Inc.
Drainage Bylaw means Bylaw 18100 EPCOR Drainage Services Bylaw	**Rossdale** means Rossdale Water Treatment Plant
E.L. Smith WTP means E.L. Smith Water Treatment Plant	**ROU** means right-of-use
Edmonton water and wastewater Bylaw means Bylaw 17698 EPCOR Water Services and Wastewater Treatment Bylaw	**RRO** means Regulated Rate Option
EPEA means Environmental Protection and Enhancement Act	**RRT** means regulated rate tariff
EPSP means Energy Price Setting Plan	**SAIDI** means System Average Interruption Duration Index
ERM means Enterprise Risk Management	**SIRP** means Stormwater Integrated Resource Plan
Gold Bar means Gold Bar Wastewater Treatment Facility	**U.S. EPA** means U.S. Environmental Protection Agency
HSE means Health, Safety and Environment	**Vista Ridge** means Vista Ridge LLC
Hughes means Hughes Gas Resources, Inc.	**the City** means The City of Edmonton
IFRS means International Financial Reporting Standard(s)	

ADDITIONAL INFORMATION

Additional information relating to EPCOR, including the Company's 2019 Annual Information Form, is available on SEDAR at www.sedar.com.