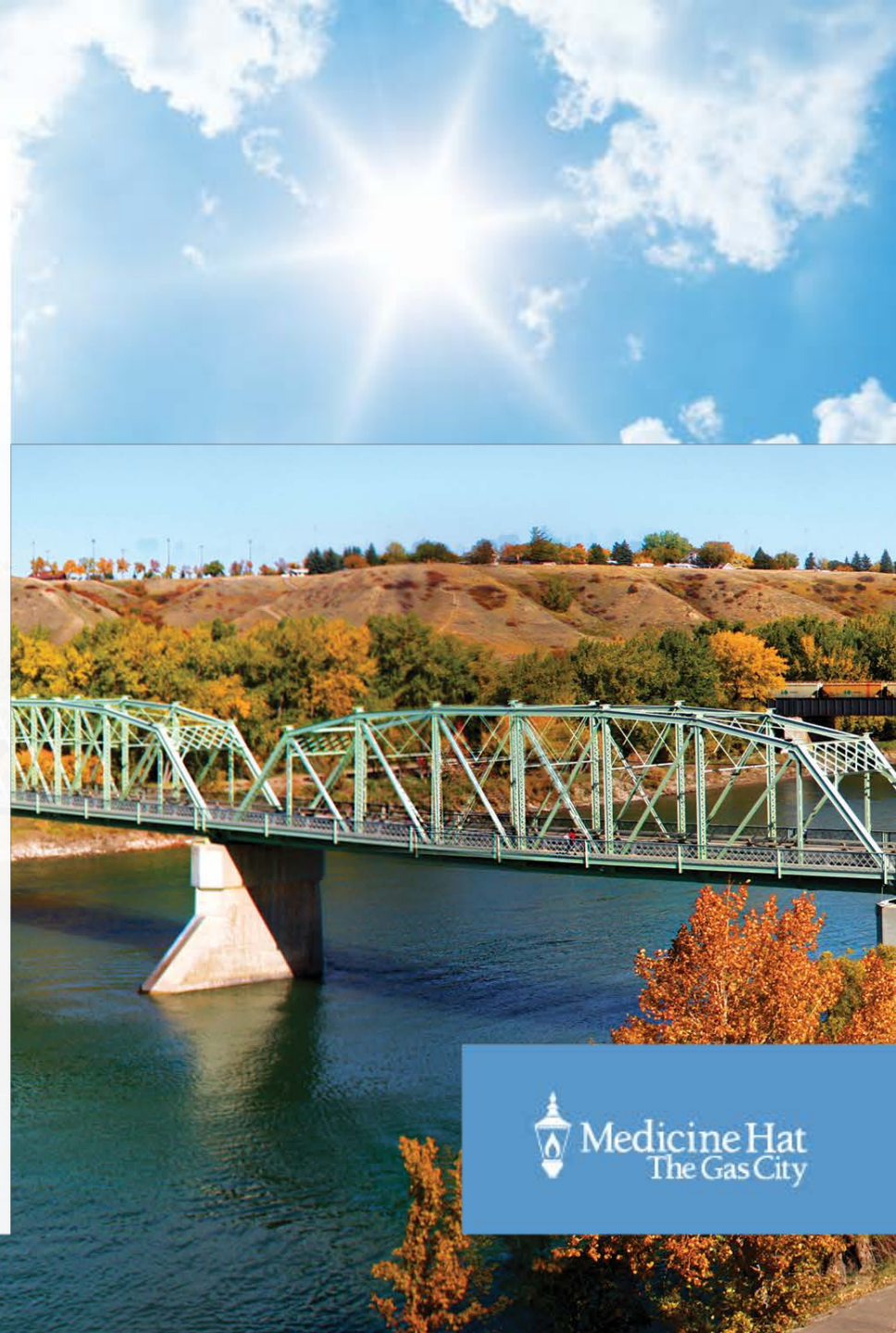


# Energy & Utilities Division 2019-2022 Budget

Operating and Capital  
Business Plans

Energy & Utilities Division  
December 3, 2018



# Vision

- Provide **safe, reliable, cost effective** services to our customers
- Commitment to **safety** and **regulatory compliance**
- Manage our **assets** to provide long term **sustainable infrastructure**
- **Proactively plan** for the future and be well **positioned to adapt** to market changes and opportunities as they occur

# Guiding Principles

## Sustainable

- System remains safe, reliable and robust
- Fits with Municipal Development Plan

## Cost Effective

- Utilizes existing infrastructure first
- Supports Economic Development and Financially Fit

## Balanced

- Pragmatic, risk-based approach
- Acknowledges diverse needs of stakeholders

# Utilities Strat Plan – Introduced 2017 and Continued on Through 2018

- Infrastructure continues to be safe, reliable and robust – asset management plans leave the next generation well positioned
- Organizational restructure and focus leading to significant dividend contribution in 2018
  - Maximizing existing assets before adding new
  - Two significant energy contracts established
  - Absorbing new infrastructure build and growth with existing resources
- Continue to be cost competitive
  - Spending control both in capital and O&M balanced against risk/reward
- Brought Energy and Utilities together in 2018
  - Next evolution in optimizing assets and resources



# Energy and Utilities Budget Highlights

- Focus on operational excellence as it relates to service delivery, efficiencies, cost controls, regulatory requirements and health and safety factors
- Division absorbing current and future growth with no increase to staff complement – synergies where able
- Maintaining infrastructure at a slow and steady pace to ensure future reliable service and robust systems while being cognizant of utility rate impacts
- Deliver our Strategic Plans - adapting and evolving business plans and processes in changing market environments ensures the overall performance of the Division strives to improve and benefits the City of Medicine Hat
- NGPR focus 2019 – complete growth program and then re-evaluate

# ENERGY PORTFOLIO

2019-2022 Budget  
Energy & Utilities Division

City of Medicine Hat

# NGPR – Through The Good Times And The Bad

- Price fluctuations are inherent in commodity based businesses
- NGPR directly contributed \$568 million to the City in over a 15 year period (1999 to 2014)
- A systemic prolonged collapse of Western Canada dry gas is occurring
- Western Canada heavy oil is severely depressed but will rebound in years to come
- Loss of a long term fixed price contract affected NGPR historic cushion to low natural gas prices
- Heavy regulatory focus on abandonment and reclamation
- Low gas prices means higher electricity revenue

# NGPR – 2019

- NGPR will continue to actively reclaim our abandoned work sites
- New technology trials in 2019 will address fugitive methane
- NGPR will continue to excel on urban well management
- Growth Strategy Second Stage will occur over the next couple of months
- NGPR hedges commodities when hurdles are met



# NGPR – Going Forward

- NGPR needs to evolve to reflect the new economic reality
- Growth Strategy will be reviewed Q1 2019
- Series of step changes will come forward through 2019
- Combination of NGPR and Utilities creates opportunity
- CMH will continue as the “Gas City”
- We have a plan

# UTILITIES PORTFOLIO

**2019-2022 Budget**  
Energy & Utilities Division

City of Medicine Hat

# Utilities – Key Focus Areas

- Operational Excellence
  - Cost controls while maintaining service delivery levels
  - Asset Management Plans - reliability / availability
- Safety and Regulatory Compliance
  - Inspections and audits
  - Carbon credit management
  - Water treatment plant master plan
- Long Term Asset Management
  - Capital project planning
  - Preventative maintenance
  - Infrastructure renewal
- Growth and Revenue Generation
  - Commodity price hedging program

# Utilities – Going Forward

- Capacity Market
  - Revenue considerations
- Regulatory Compliance
  - Emissions management – carbon levy
  - Water Treatment Plant Residuals Handling Facility
- Operational Excellence
  - Technology – emerging trends
- Infrastructure
  - Maintain service levels through utilization of existing resources
  - Emergency preparedness
  - Asset life span
- Strategic Planning / Synergies
  - Benchmarking
  - Financial asset models

# Utility Rate Increase Drivers

- Rates established based on **regulated rate design principles**; cost recovery based on OM&A, depreciation and a return on WACC
  - Excludes interest from debt;
  - Ignores revenue variances as revenue is defined by the rate
- **Non-Cash revenue requirements (Depreciation and Return on Capital)** comprise the majority of revenue requirement increases. This reflects the cumulative historic capital spend since these are **long life (decades) assets**
- Rates reflect ongoing operational costs plus past and forecast capital plan including renewed focus on **Asset Management and recent flood mitigation plan**
- Rate increases depend on the **number of customers** and their **consumption levels** – introduction of large customer in 2020 helps reduce UDS rate increases



# Electric Distribution Monthly Rates

Rate Class	Application		2019 Impact
<b>Residential</b>	Individual Residence or apartment suite through a single meter	+ \$	<b>1.83</b> <b>655 kWh</b>
<b>Small Commercial</b>	< 5,000 kWh / month < 25 kVA / month	+ \$	<b>1.34</b> <b>1,364 kWh</b>
<b>Medium Commercial</b>	< 5,000 kWh / month > 25 kVA / month but < 2,000 kVA / month	+ \$	<b>40.70</b> <b>17,166 kWh</b>

- Impact presented is indicative for the rate class and consumption level indicated; actual impacts will vary
- Rates exclude commodity value

# Gas Distribution Monthly Rates

Rate Class	Application	2019 Impact
<b>Rate Class A</b> Residential	≤ 5,000 GJs in one year	+ \$ <b>1.55</b>  <b>11 GJs</b>
<b>Rate Class A</b> Commercial and Industrial	≤ 5,000 GJs in one year	+ \$ <b>8.41</b>  <b>40 GJs</b>
<b>Rate Class B</b> Commercial and Industrial	> 5,000 GJs in one year	+ \$ <b>9.55</b>  <b>420 GJs</b>

- Impact presented is indicative for the rate class and consumption level indicated; actual impacts will vary
- Rates exclude commodity value

# Environmental Utilities Monthly Rates

Rate Class	Application			2019 Impact
<b>Water</b>				
Residential	Metered water consumption (26 m <sup>3</sup> )	+	\$	<b>2.15</b>
Commercial and Industrial	Based on water consumption (229 m <sup>3</sup> )	+	\$	<b>13.38</b>
<b>Sewer</b>				
Residential	Monthly service charge	+	\$	<b>3.61</b>
Commercial and Industrial	Based on water consumption (229 m <sup>3</sup> )	+	\$	<b>27.92</b>
<b>Solid Waste</b>				
Residential	Service charge	+	\$	<b>0.16</b>
	Recycling program	+	\$	<b>0.19</b>
Commercial and Industrial	Monthly service charge (3 cubic yard bin)	+	\$	<b>1.99</b>
<b>Landfill</b>				
	General Disposal (fee per tonne)	+	\$	<b>5.00</b>
<b>Waste Diversion (Recycle)</b>				
	Service Charge	+	\$	<b>0.05</b>

# 2019 Average Monthly Comparison (Alberta)

## Residential Utility Charges

	Low Comparator (2018 Rate)	High Comparator (2018 Rate)	Medicine Hat (2018 Rate)	Medicine Hat (2019 Rate)
Electric (655 kWh)*	53.32 (Edmonton)	74.00 (Lethbridge)	41.70	43.52
Gas (11 GJs)*	45.40 (Calgary; Leth')	47.29 (Edm'n; Red Deer)	38.41	39.96
Water (15.3 m <sup>3</sup> )	29.07 (Lethbridge)	40.81 (Calgary)	42.41	44.10
Sewer	17.75 (Edmonton)	47.48 (Calgary)	40.09	43.69
Solid Waste	13.40 (Calgary)	45.93 (Edmonton)	24.67	25.07
Monthly Utility Statement	<b>\$199.60</b> <b>(Lethbridge)</b>	<b>\$208.02</b> <b>(Red Deer)</b>	<b>\$187.27</b>	<b>\$196.34</b>
MCAF	\$12.97 (Calgary)	\$20.24 (Red Deer)	\$0	\$2.30

(\*excludes natural gas and electricity commodity)

# EU Landfill and Collection Comparison (Alberta)

## Average Tipping Fees and Commercial Collection Charges

City	Landfill Tipping Fees	
Calgary – 2018	\$113.00	/ tonne
Edmonton – 2018	\$94.00	/ tonne
Lethbridge – 2018	\$95.00	/ tonne
Redcliff – 2018	\$72.00	/ tonne
<b>Medicine Hat – 2019</b>	<b>\$80.00</b>	/ tonne



# SUMMARY

**2019-2022 Budget**  
Energy & Utilities Division

City of Medicine Hat

# Energy & Utilities Snap Shot – Capital

CAD \$M	2018 Est.	2019	2020	2021	2022
Environmental Utilities	32.9	15.3	33.6	25.1	39.2
Gas Distribution	4.2	3.9	2.4	3.2	4.4
Electric Distribution	8.6	12.4	3.3	2.9	2.9
<b>Rate Based Utilities</b>	<b>45.7</b>	<b>31.6</b>	<b>39.3</b>	<b>31.2</b>	<b>46.5</b>
Electric Generation	6.5	8.9	0.1	0.2	0.2
NGPR	26.2	26.3	18.3	21.7	24.3
<b>Commodity Businesses</b>	<b>32.7</b>	<b>35.2</b>	<b>18.4</b>	<b>21.9</b>	<b>24.5</b>
<b>Utilities Division</b>	<b>78.4</b>	<b>66.8</b>	<b>57.7</b>	<b>53.1</b>	<b>71.0</b>

- **EU capital spend** largest across Utilities with bulk of spend focused on Asset Management Program, Water Treatment residuals handling, Downtown Redevelopment
- **NGPR capital spend** focused on Growth Strategy, maintenance of base assets and abandonment and reclamation activities
- Capital spend **funded by both operational proceeds and debt**

# Energy & Utilities Snap Shot – Net Income

CAD \$M	2018 Est.	2019	2020	2021	2022
Environmental Utilities	9.1	9.1	8.0	8.4	10.6
Gas Distribution	3.3	1.3	1.4	1.6	1.5
Electric Distribution	2.2	1.4	3.7	4.0	4.5
Rate Based Utilities	14.6	11.8	13.1	14.0	16.6
Electric Generation	35.6	28.3	30.8	25.6	16.6
NGPR	(33.2)	(33.0)	(31.9)	(27.8)	(26.9)
Commodity Businesses	2.4	(4.7)	(1.1)	(2.2)	(10.3)
Utilities Division	17.0	7.1	12.0	11.8	6.3

- Favourable outlook driven by **continued strength of Electric Generation**; outlook highly dependent on **market pricing** and on future **carbon** compliance costs
- **NGPR** path forward will be **revisited Q1 2019**

# Energy & Utilities Division Dividend

CAD \$M	2018 Est.	2019	2020	2021	2022
Environmental Utilities	2.2	2.3	2.3	2.4	2.4
Gas Distribution	1.4	1.5	1.5	1.5	1.5
Electric Distribution	1.2	1.2	1.3	1.4	1.5
<b>Rate Based Utilities</b>	<b>4.8</b>	<b>5.0</b>	<b>5.1</b>	<b>5.3</b>	<b>5.4</b>
Electric Generation	34.3	48.1*	38.2	32.9	22.3
NGPR	0	0	0	0	0
<b>Commodity Businesses</b>	<b>34.3</b>	<b>48.1*</b>	<b>38.2</b>	<b>32.9</b>	<b>22.3</b>
<b>Utilities Division</b>	<b>39.1</b>	<b>53.1*</b>	<b>43.3</b>	<b>38.2</b>	<b>27.7</b>

- Rate based utilities dividend sees stable growth; Genco subject to market and policy volatility
- Dividend policy under review: Genco and NGPR based on distributable cash; UDS based on 6.25% of equity
- \*Includes transfer of \$25M to Tax Rate Stabilization Reserve

# Medicine Hat Advantage

- Continued evaluation and analysis of assets in changing market environment – utilizing combined energy and utilities portfolio to maximize opportunities
  - Slow and steady revenue growth – mitigation of losses
- Long term fiscal sustainability
  - Residents will continue to see comparatively lower rates
  - Assets managed for sustainability – operational excellence
- Predictable cost recovery
  - Income to safeguard the ability to deliver on safety, infrastructure upgrades and infrastructure investments
- Infrastructure management key to maintaining a robust utilities system for the future in order to lessen utility rate impacts



# Recommendation – Budgets

## That City Council approve:

- 2019-2022 NGPR Operating Budget
- 2019-2022 NGPR Tangible Capital Asset Budget
- 2019-2022 Electric Generation Operating Budget
- 2019-2022 Electric Generation Tangible Capital Asset Budget
- 2019-2022 Electric Distribution Operating Budget
- 2019-2022 Electric Distribution Tangible Capital Asset Budget
- 2019-2022 Gas Distribution Operating Budget
- 2019-2022 Gas Distribution Tangible Capital Asset Budget
- 2019-2022 Environmental Utilities Operating Budget
- 2019-2022 Environmental Utilities Tangible Capital Asset Budget
- 2019-2022 Utilities Business Development and Support Operating Budget

# By-laws

## Recommendation that City Council approve:

- 2019 Water, Sewer and Solid Waste rates subject to passing of the Rate By-laws
- 2019 Gas Distribution rates subject to passing of the Rate By-laws\*
- 2019 Electric Distribution rates subject to passing of the Rate By-laws\*

\*Bylaws to include Municipal Consent and Access Fee – effective January 1, 2019 and Micro-generation change from 1 MW to 5 MWs