



# Energy Business Strategic Review

## Public Report

City of Medicine Hat

November 25<sup>th</sup>, 2024

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## A New Era for Energy in Medicine Hat

Medicine Hat's famed natural gas reserves, that fueled Kipling's descriptive 'hell's basement', are steadily depleting. The City's long-standing ability to self-supply gas to its customer base and for electricity generation has ended, forcing a shift towards reliance on external commodity markets. This transition, coupled with evolving environmental regulations and changes in Alberta's power market has created new financial challenges. The Natural Gas Production business unit is having a negative impact in the City's finances, due to decreased production and Asset Retirement Obligations (ARO) from depleted or abandoned wells. Meanwhile, projections indicate that market-purchased power to be more frequently less expensive than electricity generated by the City,, although there is a level of uncertainty in power projections. These changes mark a pivotal shift in Medicine Hat's energy landscape. This situation underscores the need for the City to adapt its energy strategy to maintain its competitiveness for ratepayers, shelter the taxpayer from potential financial losses, and meet the changing demands of the 21st century.

### *The era when the City was largely isolated from energy markets is ending.*

The City's Energy Business, which has long been a valuable asset, is facing new challenges that may impact its financial performance. As the landscape shifts, there is a growing possibility that the natural gas production and potentially the electricity generation sectors might require increased support from taxpayers and ratepayers to address financial shortfalls. Natural gas production is in 'harvest' mode with material cash outlay for abandonment and reclamation of non-producing wells, and the electric generation assets are forecast to face an extended period of cyclically low power prices while carbon compliance costs increase. The Natural Gas and Electricity Distribution business units are expected to continue generating revenue, but there is concern that this income may not fully offset the potential losses in other areas of the Energy Business in any given year. This evolving situation calls for careful consideration and strategic planning to ensure the long-term sustainability of the City's energy operations.

Among these challenges, Council must balance the interests of taxpayers, ratepayers, and the long-term sustainability of the Energy Business. Prioritizing the latter could yield the greatest benefits for taxpayers and ratepayers in the long run.

There is a path forward that could lead the City into a new energy era, and limit taxpayers' and ratepayers' exposure to some of the challenges facing the Energy Business.

#### The City's Energy Business includes four business areas:

- Natural gas production
- Electricity generation
- Natural gas distribution
- Electricity distribution

This document summarizes the significant challenges that the Energy Business is facing, options to address the challenges, and strategic actions to forge a new path for energy in the City.

## Background

In response to concerns raised by ratepayers about recent high electricity rates, and increasing challenges facing its Energy Business, the City of Medicine Hat (CMH) commissioned an independent strategic review (the “Review”) of its Energy Business. The objective for the Review was to determine an overall approach that provides the best value for the community. A key question that was posed by the City was whether their ‘behave as a business within a municipality’ model should continue or be altered to provide greater value to ratepayers. The current business model has generated discussion within the community primarily due to conflicting public opinions on how commodity prices and utility rates are set, especially in light of recent high electricity prices. The City engaged KPMG LLP (KPMG), a multi-disciplined professional services firm, in February 2024 to conduct the Review in support of a strategic and informed recommendation for how the Energy Business should proceed. The City intends to use the results of the Review to make informed decisions related to the Energy Business’ governance, business model, financial management, and broad approach to rate setting.

KPMG applied a systematic process to build an understanding of the City’s current state, review the changing regulatory and market landscape, identify possible strategic options, and provide a perspective on the best value option for the City.

The strategic actions and related analysis in this public report is supported by extensive analysis and research.

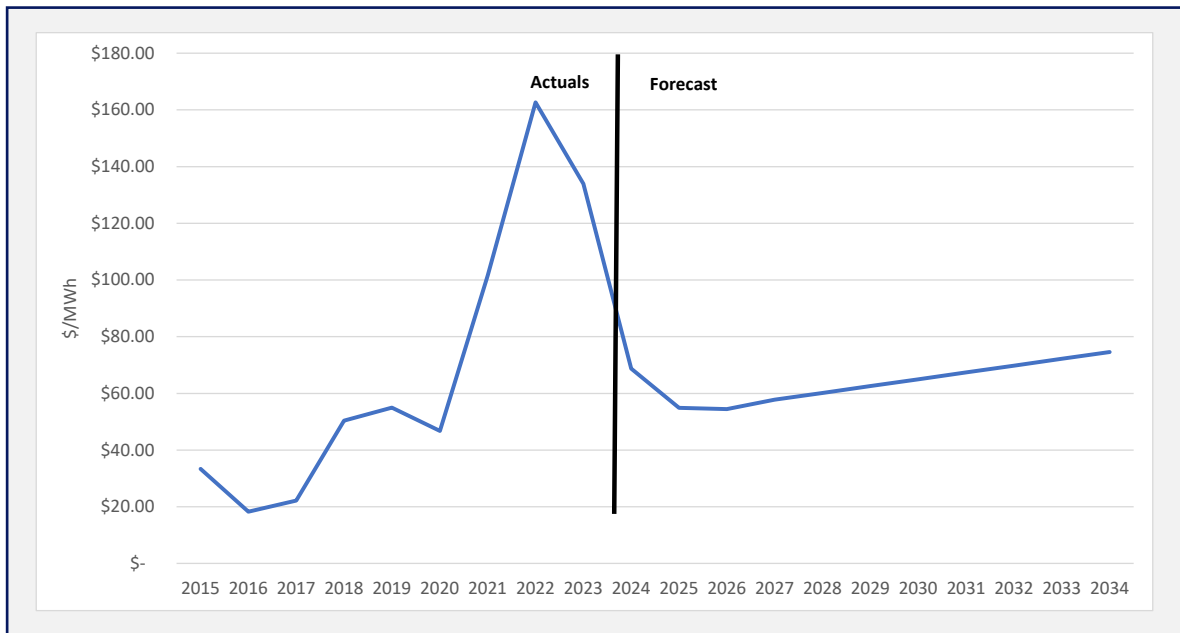
The summary presented here is consistent with that in-depth work but is designed to be more accessible to the general public. It provides a high-level overview while safeguarding the business interests in which the City has invested.

## Shifting Energy Landscape

The City’s Energy Business is confronting a changing market and regulatory landscape that is likely to significantly impact its financial results, particularly for electricity generation. Certain market and regulatory scenarios may ultimately challenge the long-term viability of the electricity business.

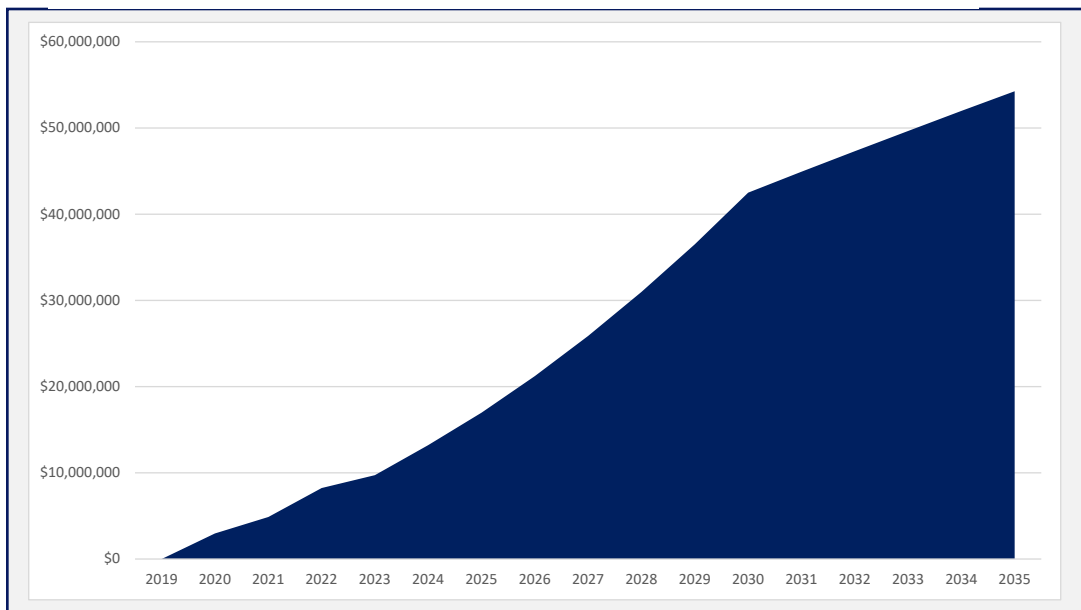
Provincially, in addition to downward price pressure from new supply entrants in the market, the Government of Alberta and the Alberta Energy System Operator are making changes to the rules and structure of the Alberta power market that are expected to reduce prices from recent highs (see Figure 1). These changes are designed to discourage power companies from limiting supply to drive up excessive prices, lower electricity costs for consumers, and also ensure sufficient supply to reduce the risk of blackouts or shortages when electricity demand is high, to advance the objectives of promoting supply reliability and increasing affordability for consumers.

**FIGURE 1 ALBERTA POWER POOL PRICES (\$/MWh)**



Additionally, proposed and existing federal and provincial greenhouse gas (GHG) emission reduction regulations continue to increase in cost and stringency. If trends continue, the City's provincial TIER compliance costs will increase around four-fold from \$9.7 to \$42.4 M annually by 2030 (see Figure 2).

**FIGURE 2 CMH PROJECTED GHG COMPLIANCE COSTS**



These changes will increase the Energy Business' costs while potentially decreasing the total annual volumes of electricity produced. Based on the current extended outlook for low power prices, KPMG projects that, by as early as 2027, the frequency of periods where it could be less expensive for the City to buy more of its electricity from the power market than to generate it with the existing natural gas power plants will be significant.

Additionally, though the natural gas production business has historically been highly profitable, it is now facing the high costs of AROs, and significantly declining production. It is not expected to return to profitability.

Within this changing landscape, the Energy Business continues to require significant capital investment to sustain its operations, meet the growth requirements of the City, and address its AROs. Over the next 10 years, the City projects that it could require nearly \$500 million to meet the Energy Business needs. If the City is required to invest in low emissions generation technology in response to environmental regulations, the Energy Business could require one to two times its projected capital needs. The City will be responsible for financing this investment, which could impact its ability to invest in other City priorities.

The changing landscape underscores the need for strong governance and accountability to safeguard taxpayers' and ratepayers' interests. The City should minimize negative financial impacts on their financial capacity and risk while maintaining competitive rates and service quality. Council may be stretched to provide appropriate oversight under the current ownership and governance model. It must juggle three conflicting roles:

1. advancing the interests of the Energy Business as its governing body,

2. representing City and taxpayer interests as the owner of the Energy Business, and
3. protecting ratepayers as the rate regulator.

Currently, the Energy Business is within a City division. This creates inherent conflicts in Council's role in relation to the Energy Business. Council acts as the board of directors for the Energy Business, the rate regulator on behalf of ratepayers, and the shareholder on behalf of taxpayers. Further, the composition of Council does not reflect the skills-based boards and technical expertise that are generally considered important for regulators and boards. As a result, the current governance structure may be suboptimizing value to taxpayers and ratepayers.

## A Comprehensive Review

KPMG formalized a set of Desired Outcomes for the Review after considering feedback from the City's Project Team and City Council. These Desired Outcomes help guide KPMG's independent evaluation of go-forward options (see Table 1).

**TABLE 1 ENERGY BUSINESS DESIRED OUTCOMES**

Stakeholders	Desired Outcomes
Ratepayers and Residents	<p>To have an <b>energy provider</b> that is:</p> <ul style="list-style-type: none"> <li>• Reliable</li> <li>• Financially and operationally sustainable</li> <li>• Competitive with respect to rates</li> </ul>
City and its Taxpayers	<p>The level of risk to which the Energy Business exposes the City and its taxpayers is acceptable. This includes regulatory risk associated with the energy transition.</p> <p>The City and its taxpayers receive value from their Energy Business commensurate with the investment in and the risk associated with the business.</p> <p>The Energy Business will have access to the capital it needs to be reliable, operationally sustainable and competitive.</p>

KPMG used these desired outcomes as its guiding light for the Review. KPMG developed evaluation criteria based on the Desired Outcomes and used the criteria to systematically assess potential strategic options for the Energy Business (see Table 2).

**TABLE 2 EVALUATION CRITERIA**

#	Criteria	Sub-Criteria
1	<b>Financial Value and Costs</b>	a) Capital requirement: Proposed option would enable access to capital necessary to sustain the business (i.e., capital for growth, energy transition, and sustaining capital) b) Total financial benefit for the City and its taxpayers: Measured by the net present value (NPV) or estimated NPV of cash proceeds (i.e., taxpayer and City perspective)
2	<b>Service Delivery</b>	c) Reliability: Will not negatively impact reliability d) Service Quality: Will not negatively impact service quality
3	<b>Risk</b>	e) Financial risk: Financial risk profile is acceptable to the City f) Regulatory risk: Regulatory risk profile is acceptable to the City
4	<b>Rates</b>	g) Rates will not inherently and necessarily become uncompetitive to market
5	<b>Implementation</b>	h) Cost, effort, risk: If change is considered, the cost, effort, and risk of the implementation does not negate its accepted benefits

The challenges facing the Energy Business are complex and multifaceted. The Review, therefore, considered options related to governance and ownership as they are foundational to achieving the City's desired outcomes. KPMG assessed each business unit individually, and then the Energy Business as a whole, against the following options:

- Remain as a City department/division
- Operate as a City-controlled corporation
- Explore other ownership options.

In addition, the Review considered options for the Energy Business to operate as a non-profit entity (society, regional service commission) or a rural utility association. These options were eliminated as they did not meet the City's Desired Outcomes. For example, non-profits are not able to share dividends, and rural utility associations do not contemplate urban utilities, non-residential customers, and energy production.



## A Prudent Path Forward

From the analysis, four strategic actions were identified aimed to limit the City's financial exposure to business losses, reduce its risk, manage rates in light of escalating generation costs, and maintain service quality. Collectively, the four actions provide a path forward that balances the interests of taxpayers and ratepayers in the new energy era.

### 1. Establish a rate review committee.

The City should establish a rate review committee. This City committee would have delegated responsibility (or authority) from Council to oversee utility rates. This committee would be made up of individuals with the technical and industry experience and expertise needed to apply best practices in evaluating the impact and implication of commodity and distribution rates in making informed decisions that protect the ratepayers' interests on behalf of Council.<sup>1</sup> The committee would be independent from the Energy Business given they would be advising or acting as the rate regulator. The committee would be charged with increasing transparency in the rate setting process and following industry-accepted rate design practices. Its mandate would be to recommend fair and competitive rates for ratepayers, while enabling the distribution businesses to achieve consistent and industry-appropriate returns.

The use of a rate review committee could:

- **Help to delineate Council's conflicting duties** to protect the interests of the shareholder and the interests of the City and its taxpayers and ratepayers.
- **Provide more structure and transparency to the rate setting process**, including a formal process for interveners to participate. This could increase the transparency and consistency of rate decisions.
- **Provide access to more technical expertise**. The committee would be primarily skills-based and could include individuals with utility industry experience or expertise, administrative law, and finance.

### 2. Explore divestment of the natural gas production assets.

The City should advance the sale of natural gas production assets to reduce the City's exposure to significant operating losses from these assets. If a workable sale is not achievable, the City should further accelerate abandonment and reclamation of its remaining assets.

Recent reserve analyses show that the City has wells that could stay active and productive for several decades. However, given the forecast of continuing low market prices, the operating costs compared to projected revenue from these wells render them economically unviable. The natural

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<sup>1</sup> These individuals will have financial and legal expertise and an understanding of regulatory processes.

gas business should remain as a City department while it divests or retires its assets, as it would not be financially workable as a municipally-controlled corporation. Some assets found in urban areas cannot be divested and the City will have to manage its on-going environmental obligations associated with them.

### 3. Establish a municipally-controlled corporation (MCC).

The City should form an independently-governed MCC that would own and operate the Distribution (both electricity and natural gas) and Electricity Generation business units. An MCC is distinct from the current state where the Energy Business is an internal Municipal Department/Division.

The Review found that an MCC could increase the transparency and oversight of these business units and enable them to access more financing sources that are independent of the City. This would enable the City to concentrate its capital expenditures on municipal services instead of having to choose between a potentially revenue-generating investment in the Energy Business and a municipal services project, such as a recreation center. The significant projected financing requirements of these business units could challenge the City's ability to finance core municipal projects, such as investments in infrastructure and facilities. The MCC would open up other mechanisms for financing these investments.

This action is premised on:

- **Improving the level and independence of oversight.** These business units are currently governed by Council, which has conflicting roles as the shareholder and the rate regulator. As an MCC, the business units would adopt corporate governance arrangements that align with private sector standards, such as the ability to appoint experienced business executives to the Board of Directors.
- **Increasing the financial accountability.** As a City department, the Energy Business' financial performance is not as clear as it would be if it had its own financial statements that followed private sector practices. Transparent financial performance could support increased accountability to Council and ratepayers and help demonstrate the value generated by the business units. It would allow taxpayers and ratepayers to clearly see the size and scope of the business units' operations and staff.<sup>2</sup>
- **Improving the financial transparency.** An MCC structure could improve financial transparency and benchmarking by introducing separate financial accounting for the business units and supporting clearer reporting on energy business revenues and expenses.
- **Supporting the capital requirements.** Capital priorities and planning would be the responsibility of the MCC and its independent Board, and decisions would be made based on the needs of the business units to deliver reliable service, and to generate a return for

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<sup>2</sup> However, commercially sensitive information would remain confidential.

the City. Capital decisions would be made with consideration to the MCC's ability to access financing, including potential investments from the City.

- **Accessing other sources of financing.** An MCC would be able to access financing sources that the City cannot, and could more easily enter joint-venture arrangements. While some financing sources may still impact the City's debt capacity (e.g., through direct loans, investments or guarantees), it is expected that the MCC would be able to access added sources that would be independent from the City.
- **Maintaining competitive rates.** If the City formed an MCC, its ratepayers are expected to continue to benefit from sections in the *Alberta Electric Utilities Act* that exempt the City from charging transmission tariffs based on its full electricity demand.

A separate, Independent Board of Directors made up of experts would govern the Energy Business, address the growing complexity of the respective industries, handle mitigating risks, and be accountable to the City. With an independent board, there is still a possibility to have representatives from Council if the City desired, including on a temporary basis to support the transition to the new organizational structure.

A practical approach would be for the MCC to continue to use and pay for City services related to facilities, fleet management, and corporate services. For instance, billing services would remain a shared service with the City allowing a continued integrated energy and utility billing system. As the MCC internalizes some services provided by the City, the associated operating costs would be offset by reductions in shared service costs. It is anticipated there would be limited added costs to create and run the MCC.

The MCC, with a focused, skills-based board of directors, would be better positioned to find options to improve the value of the generation business as market and regulatory changes unfold. Similarly, the board of directors would promote value in the distribution businesses by monitoring the consistency of their returns and supporting rate base growth.

As the owner of the MCC, the City, and ultimately its taxpayers, would benefit from any dividends generated by the businesses. The more successful the MCC, the more the City, and ultimately its taxpayers, will benefit. The City may continue to charge a municipal consent access fee (MCAF) at its sole discretion.

The proposed approach would enable the City to manage its generation and distribution business units for the benefit of its residents while keeping its current Electric Utilities Act exemption. This would provide value for both taxpayers and ratepayers. It will help the City to navigate the evolving and increasingly complex energy landscape while safeguarding the interests of its residents and businesses.

To establish an MCC, the City would need to develop a business plan, advertise and hold a public hearing per the *Municipally Controlled Corporations Regulation*, and then pass a council resolution if Council chose to proceed. The MCC would then be incorporated as an entity.

#### **4. Develop an MCC dividend policy**

The City should develop a new dividend policy for the MCC. This policy would establish guidelines for dividend determinations. The policy would protect the financial sustainability of the MCC while providing the City with a predictable dividend. The policy should be flexible enough to adapt to changing market conditions and should consider the expected financial requirements of the MCC over a period of three to five years.

## Concluding Summary

The current outlook for the City's electricity generation business unit, which currently accounts for most of the City's earnings from the Energy Business, is uncertain, with certain scenarios challenging its long-term viability. The City needs the use of all available levers to navigate these challenging times and ensure the long-term viability of the business for the benefit of the City and the community as a whole.

The strategic actions set forth have the potential to create value for the community compared to the status quo, by minimizing losses, promoting investment decisions that reflect the sustainability and growth of the Energy Business, and by using new sources of financing.

Moving to an MCC structure would also provide added checks and balances through strengthened governance and oversight from an independent board. This provides more focused and informed oversight over the direction, risks, and performance of the business units. An independent board would also help delineate the governance responsibilities to each of the business units, the ratepayer and the taxpayer.

These strategic actions allow Medicine Hat to keep local control over its energy future while keeping the unique benefits of its *Alberta Electric Utilities Act* exemption, and also mitigating risks associated with market, regulatory, and technological changes. By acting now, the City can position itself to adapt to the evolving energy landscape and preserve its ability to provide reliable, competitive and compliant energy to businesses and residents.

The strategic actions focus on governance, structure, and financial considerations. Should Council choose to continue, a detailed and costed implementation plan would need to be developed to ensure a smooth transition with maximum benefits for the community. A detailed and costed implementation plan can then further inform Council before any implementation decisions are made. This proactive approach helps to safeguard the City's energy heritage while paving the way for a resilient and prosperous future for Medicine Hat.

## Appendix

The following summary encapsulates some of the key analyses and information used to evaluate various options and formulate strategic actions, providing a foundation for informed decision-making and strategic planning. This is only a segment of the comprehensive analysis conducted and does not encompass the entirety of the analysis completed.

### Emission Reduction Regulation Summary

The projected trajectory for the City's GHG compliance cost paints a challenging picture. Compounding this issue is the City's restricted ability to mitigate fleet emissions and the consequent financial burden within this timeframe. The City has limited<sup>3</sup>, if any, means of reducing the fleet emissions intensity in the near-term, and in the long-term absent a substantial capital investment in either:

- Uncertain (as-yet) unproven carbon capture and sequestration technology applied to the existing fleet, or
- renewable generation, most likely wind or solar, to replace a substantial portion of generation from the existing fleet.

### Emissions Performance Trends

The City's generation assets are currently subject to compliance with Alberta's Technology Innovation and Emissions Reduction (TIER) regulation. The generation fleet consists entirely of natural gas assets, a combination of combined cycle and peaking units, with an average fleet emissions intensity of 0.44 tCO<sub>2</sub>e/MWh. TIER compliance is based on owned and operated assets, so the Box Springs and CanCarb PPA generation is not factored into the City's TIER compliance obligation calculation. The TIER performance threshold, against which compliance is decided, is declining annually from 0.370 tCO<sub>2</sub>e/MWh in 2022 to 0.3108 tCO<sub>2</sub>e/MWh in 2030. In addition, the TIER Fund annual compliance price will increase by \$15.00/tCO<sub>2</sub>e annually from \$50.00/tCO<sub>2</sub>e in 2022 to \$170.00/tCO<sub>2</sub>e in 2030. While offsets and emission performance credits (EPCs) can be used for compliance, it is expected that most of the City's compliance will be through the TIER Fund given the limited supply of offsets and EPCs, and because the opportunity cost of those compliance options tend to converge to the TIER Fund price.

Because the fleet intensity is higher than the performance threshold, the City's annual compliance obligation increases every year as the threshold becomes more stringent. The fleet's emissions intensity compliance gap, the difference between expected actual fleet intensity of 0.44

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<sup>3</sup> Converting the remote site to NGCC is one option. The natural gas assets that will be much higher heat rate than the rest of the NGCC fleet in the province and there is an overarching risk of investing in thermal assets with potentially more stringent than GHG regulations being implemented.

tCO<sub>2</sub>e/MWh and the annual performance threshold, is projected to increase from 0.07 tCO<sub>2</sub>e/MWh in 2022 to 0.13 tCO<sub>2</sub>e/MWh in 2030. Assuming the City's generation fleet remains static – that no assets are removed through retirement or divestiture and no assets are added to the fleet, and also assuming that the City does not look to imports to satisfy (all or part of) local load, the City's annual compliance obligation is forecast to increase 2.8 to 4.3 times by 2030 compared to 2022, to between \$28 and \$43 million, with the low end of the range assuming zero exports to the Alberta grid and the high end of the range assuming exports remain at 2023 levels (see Figure 3 in section Shifting Energy Landscape on page 2).

## Performance Threshold Emissions Compliance

Beyond 2030, there is less certainty surrounding carbon emissions compliance obligations. From 2031 until 2035, when the proposed federal Clean Electricity Regulations (CER) would take effect, it is most likely that a provincial framework, TIER or something similar, will continue to be in effect. While not certain, it is reasonable to assume that compliance obligations under such a framework will continue to increase, creating a greater financial liability for the City.

The Clean Electricity Regulations (CER) represent the federal government's draft proposal for achieving net-zero electricity by 2035. However, with a pending election, these regulations may change. Industry experts generally anticipate that large final emitter decarbonization requirements will persist regardless of the governing party, albeit potentially with extended timelines or moderated carbon pricing strategies. The industrial approach will likely differ from consumer-level carbon levy. For scenario planning purposes, details of the current draft CER are provided below, as they represent an important potential future scenario. Despite potential political shifts, the CER offers valuable insight into the regulatory direction for the electricity sector's decarbonization efforts.

Under the currently proposed CER, all the City's generation assets at the main plant would be subject to CER in 2035. Units 16 and 17, at the remote plant, would be subject to CER in 2038 and 2042, respectively. Despite the uncertainty around where the CER physical performance standard will ultimately be set, it is nearly certain that none of the City's generation assets will meet the proposed CER standard. Based on the most recent information on CER from February 2024, the performance standard will be set higher than the originally proposed 0.030 tCO<sub>2</sub>e/MWh. However, it is reasonable to assume the performance standard will also be significantly lower than the emissions intensity of the best available unabated Natural Gas Combined Cycle (NGCC) technology, which is currently in the 0.33 tCO<sub>2</sub>e/MWh range. As a result, even with fleet pooling as proposed by the federal government recently and outlined in our Current State report, the City's generation fleet intensity will be significantly above the standard. Current analysis shows that the standard would need to be set at 0.33 tCO<sub>2</sub>e/MWh for the City's fleet to be compliant assuming the City continues to export power to the provincial market for financial gain. If the City were to cease exports, and only serve its customer base, the emissions intensity of the City's fleet would need to be in the 0.22 tCO<sub>2</sub>e/MWh range or lower to support compliance.

As a result of the expectation that emissions in a business-as-usual case will exceed the City's fleet emissions limit, CER compliance would require a material change in the City's generation and power procurement operations or a substantial capital investment. Given the proposed fleet pooling

approach to CER, there may be options for the City to achieve CER compliance by keeping its existing natural gas fleet capacity, while materially reducing generation by cutting opportunistic exports and serving a large portion of its load through imports, either through a long-term PPA or from the Alberta market.

The February 2024 update to the proposed CER includes allowing limited use of offsets for compliance. The use of offsets or EPCs provides the City an added TIER and/or CER compliance option, however this option is expected to be of limited value in the long term. The City currently holds approximately 130,000 tCO<sub>2</sub>e of offsets and EPCs and is deploying the strategy of deferring surrendering them for compliance as long as possible, to maximize the value of these credits as TIER carbon compliance costs rise. If the City held all the current inventory until 2030 and added annual offsets and credits from Box Springs and the Environmental Utilities (EU) composting project, if approved in the 2025-2026 budget, the total inventory available would be approximately 330,000 tonnes in 2030. This would be sufficient to cover one to one and a half years of compliance in the 2030 timeframe, as the compliance obligation also grows as the benchmark becomes more stringent. The City could explore buying more offsets or EPCs from the market, however the market for these instruments is expected to become more supply-constrained over time, as demand rises, with the price of the instruments converging with the TIER Fund price, limiting the efficacy of this type of strategy. The longer the timeframe between purchase and use of the offsets or EPCs also introduces increased political and regulatory risk to their usability since they are defined by regulation and subject to change. The City should continue to pursue its current strategy, while considering alternate long-term solutions to manage TIER and CER compliance.

## Governance Models Review

A governance model review initially examined three organizations most relevant to the CMH – EPCOR, ENMAX, and the City of Red Deer. (See Table 3 below). EPCOR and ENMAX are municipally-owned corporations owned by their shareholders, the City of Edmonton and the City of Calgary respectively. Historically, ENMAX and EPCOR evolved from city departments. The City of Red Deer's electric utility is a city department; however, the City of Red Deer is proposing to move it into a municipally-controlled corporation as well.

**TABLE 3 GOVERNANCE AND OWNERSHIP SUMMARY OF EPCOR, ENMAX, AND RED DEER UTILITY**

		EPCOR	ENMAX	RED DEER*
<b>Corporate Structure</b>	<b>MCC</b>	✓	✓	
	<b>City Department</b>			✓
<b>Rate Regulator</b>	<b>AUC</b>	✓	✓	
	<b>Council</b>			✓
<b>Electricity Retail Model</b>	<b>Regulated and Competitive</b>	✓	✓	
	<b>Regulated Only</b>			✓
<b>Governance</b>	<b>Independent Board</b>	✓	✓	
	<b>City Council</b>			✓
<b>Operate Outside Municipality</b>	<b>Yes</b>	✓	✓	
	<b>No</b>			✓
<b>Ownership</b>	<b>City</b>	✓	✓	✓

\*Red Deer Electric Utility (note: the gas utility is under a franchise agreement with ATCO Gas)

**Note: The City of Red Deer made a recommendation to create a transition plan and budgetary requirements to establish an MCC.**

At one point, and much like Medicine Hat, each of these municipalities decided to reassess the ownership, operations, and governance models of their utility businesses.

EPCOR Utilities Inc. was formed in 1996, marking the first merger of natural gas, power, and water utilities in Canada. It has since expanded in Alberta and into BC, Saskatchewan, Ontario and three states in the United States. EPCOR operates as a municipally-owned corporation with the City of Edmonton as the sole shareholder who is responsible for board appointments.

Calgary-based ENMAX was formed in 1998 and, like EPCOR, is a municipally-controlled corporation. The City of Calgary is its sole shareholder. Initially ENMAX's mandate was to own, operate, and maintain the electric and transmission utility operations previously directed by the Calgary Electricity system. Since then, its operations have grown to include electricity generation, commercial and residential solar, and electricity and natural gas retail.

The City of Red Deer's Council currently governs its utility, focusing on community interest and compliance with provincial or federal legislation and regulations. To date, the City of Red Deer has found operations have been effective and efficient; however, with an increasingly complex regulatory environment and advancements affecting energy utilities, the City of Red Deer



conducted a review to decide how the utilities should be governed. The Review found that the City of Red Deer should consider creating a municipally-controlled corporation to operate its utilities. City Council unanimously accepted a recommendation to create a transition plan and confirm budgetary requirements to establish the MCC.<sup>4</sup>

The triggers for the organizational reviews are summarized in Table 4 below.

**TABLE 4: MUNICIPAL UTILITY ORGANIZATIONAL REVIEW TRIGGERS**

<b>Organization</b>	<b>Reasons for Change (Historical or Current)</b>
<b>ECPOR (MCC)</b>	Need to generate more capital for investments & focus on core utility operations.
<b>ENMAX (MCC)</b>	Entity needed to engage in growth and respond more quickly to advancements in Alberta's energy market
<b>City of Red Deer (City Department)</b>	A recommendation was made to create a transition plan and budgetary requirements to establish an MCC. The intention of the review was to strengthen their governance or decision-making.

During the course of the Review, the City expressed an interest in reviewing other organizations to ensure that all possible models were considered. In response, four more organizations were highlighted. A summary of these organizations is included in Table 5 below. No other workable models were introduced as part of this additional analysis.

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<sup>4</sup> [The City of Red Deer – City Council Meeting Agenda- July 22, 2024](#)

**TABLE 5 ADDITIONAL ORGANIZATIONAL REVIEW**

<b>Entity</b>	<b>Saskatoon Light &amp; Power</b>	<b>Hydro Ottawa</b>	<b>Alectra Inc.</b>	<b>Peninsula Clean Energy Joint Power Authority</b>
<b>Location</b>	Saskatoon, Saskatchewan	Ottawa/ Casselman, Ontario	Golden Horseshoe, Ontario	Redwood City, California
<b>Entity Type</b>	Municipally- Owned Corporation	Municipally- Owned Corporation	Municipally- Owned Corporation	Not-for-profit public, locally- controlled agency
<b>Who Owns the Entity</b>	City of Saskatoon	City of Ottawa	Owned by multiple municipalities <sup>1</sup>	Stand-alone public agency
<b>Who Governs the Entity</b>	City Council	Independent Board of Directors	Independent Board of Directors	Board (municipal representatives)
<b>Who Regulates the Entity</b>	City Council through bylaw	Ontario Energy Board	Ontario Energy Board	California Public Utilities Commission
<b>How is the Entity Financed</b>	Self-financed and able to raise debt	Self-financed and able to raise debt	Self-financed and able to raise debt	Self-financed and able to raise debt

Other models that were considered but not included as options are outlined below along with the reasons for exclusion from the options analysis:

- Regional Services Commission Model (RSC)<sup>5</sup>: An RSC is one of the regional service delivery options available to municipalities in Alberta and is governed by the Municipal Government Act. An RSC is a separate legal entity that enables municipal authorities to

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<sup>5</sup> [Regional Services Commissions - Establishing New Commissions, Alberta Government](#)

jointly deliver effective services to their communities. Examples of local services currently delivered through RSC model include municipal utilities, such as water services, wastewater treatment and solid waste management, land-use planning, administration, assessment, emergency and transit services.

This model was ruled out due to the inability to operate for the purpose of making a profit or to reinvest surpluses back into the municipality. This contradicts the desired outcomes of the analysis, which emphasizes the best interests of the ratepayer, residents, and the CMH. Moreover, this type of entity is intended to serve other municipalities, not the ratepayers.

- Society<sup>6</sup>: Refers to a society incorporated under the Societies Act. Five or more persons may become incorporated as a society under this Act for any benevolent, philanthropic, charitable, provident, scientific, artistic, literary, social, educational, agricultural, sporting or other useful purpose, but not for the purpose of carrying on a trade or business. If an Act other than the Companies Act provides for the incorporation of persons for a special purpose, no society shall be incorporated for that purpose under this Act.

This model was ruled out due to the inability to reinvest profits back into the municipality. This contradicts the Desired Outcomes of the analysis, which emphasizes the best interests of the ratepayer, residents, and the CMH. Moreover, the Energy Business would not qualify as a society since they are restricted to any benevolent, philanthropic, charitable, provident, scientific, artistic, literary, social, educational, agricultural, and sporting activities. The Desired Outcomes used in the analysis highlight a focus on the best interests of the ratepayer, residents, and the CMH.

Rural Utilities Association: A rural utility association is an incorporated entity of five or more persons, of which its main purpose is to supply to its members utility services primarily in a rural area for electricity, natural gas, water that is used primarily for domestic purposes, and sewage. The Rural Utilities Act enables rural utility associations to finance borrowings through a loan guarantee for provision of electrical services in rural areas.<sup>7</sup> This model was ruled out as the Energy Business does not qualify as a rural utility.

## Approach

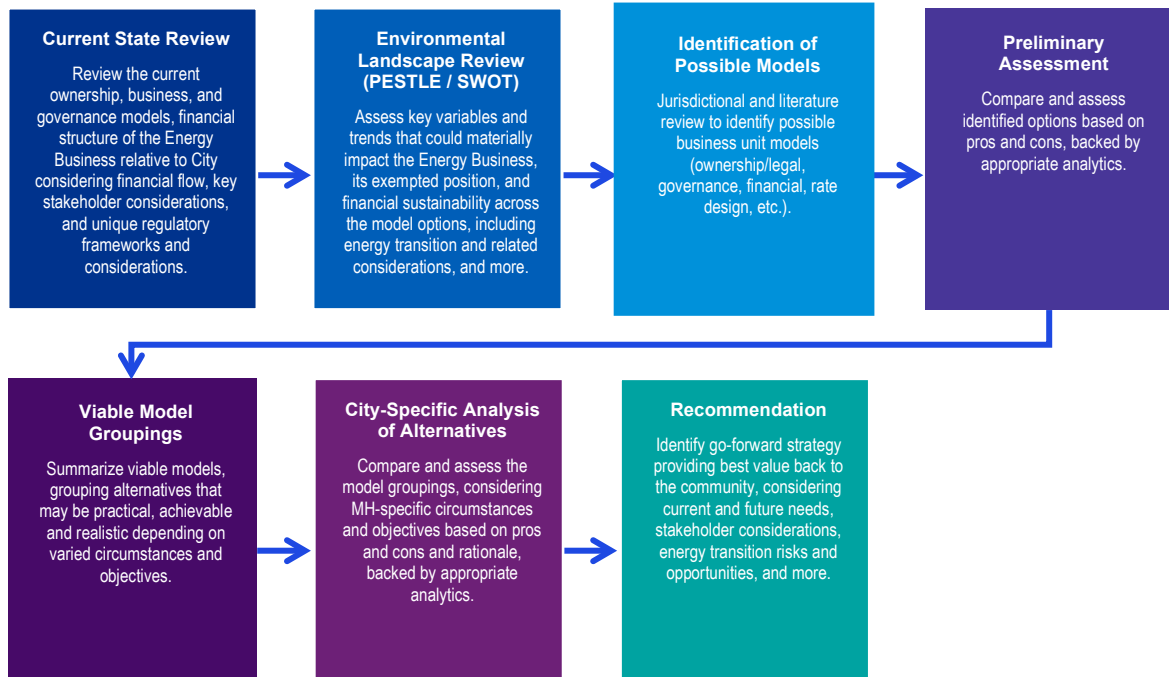
KPMG's approach to delivering the work is documented in the Project Charter agreed-to with the City Project Team at the outset of the work. Work was delivered in seven stages, as highlighted in Figure 3, below.

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<sup>6</sup> [Canadian Legal Information Institute](#)

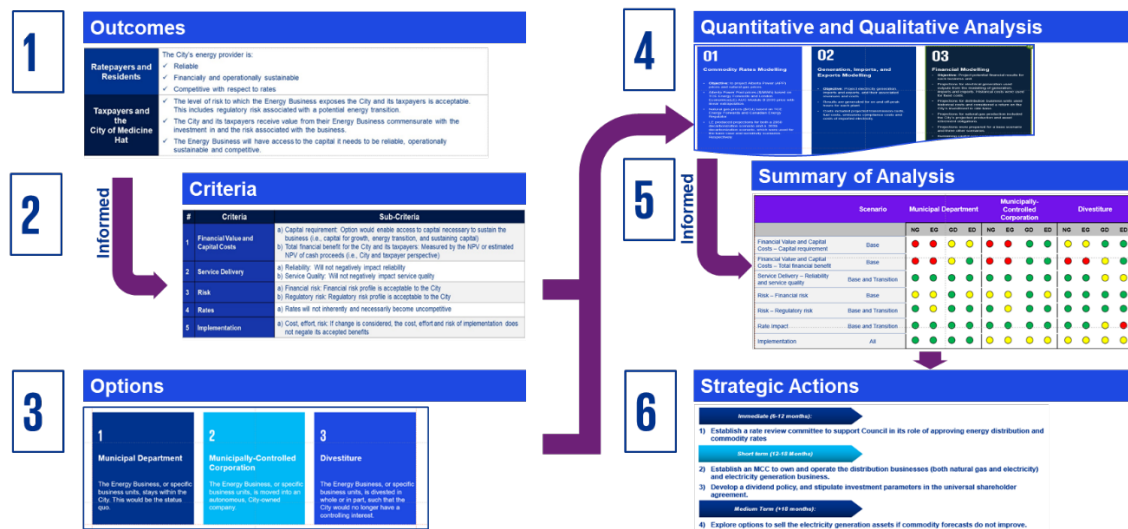
<sup>7</sup> [Government of Alberta](#)

**FIGURE 3 APPROACH FOR THE REVIEW**



In preparing for and conducting the options analysis, six stages were completed (see Figure 4 below). The Desired Outcomes were used to generate criteria to be applied in the options analysis. Many options were reviewed in the governance models review and narrowed down to three options. Quantitative and qualitative analysis was conducted (see Figure 5 for the three stages of quantitative analysis) to generate a summary of analysis and strategic actions.

**FIGURE 4 OPTIONS ANALYSIS METHODOLOGY**



**FIGURE 5 THREE STAGES OF QUANTITATIVE ANALYSIS**

## **1. Commodity Rates Modelling**

- **Objective: to project Alberta Power (APP) prices and natural gas prices.**
- APP and natural gas prices from publicly available sources.
- APP (\$/MWh) based on TCE Energy Forwards and London Economics(LE) AUC Module B 2035 price with linear extrapolation.
- Natural gas prices (\$/GJ) based on TCE Energy Forwards and Canadian Energy Regulator.
- LE produced projections for both a 2050 decarbonization scenario and a 2035 decarbonization scenario, which were used for the base case and sensitivity scenarios, respectively.

## **2. Generation, Imports, and Exports Modelling**

- **Objective: Project electricity generation, imports and exports, and their associated revenues and costs.**
- Results are generated for on and off-peak hours for each plant.
- Costs included projected transmission costs, fuel costs, maintenance costs, emissions compliance costs, costs of imported electricity and price of exported electricity.

## **3. Financial Modelling**

- **Objective:** Project potential financial results for each business unit.
- Projections for electrical generation used outputs from the modelling of generation, imports and exports. Historical costs were used for fixed costs.
- Projections for distribution business units used historical costs and considered a return on the City's investment in rate base.
- Projections for natural gas production included the City's projected production and asset retirement obligations.
- Projections were prepared for a base scenario and three other scenarios.
- Sustaining capital was projected for each business unit based on City estimates.
- Illustrative projections for new generation capacity were included in the analysis.



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