

Blatchford Renewable Energy 2021 Supplementary Capital Budget Adjustment

Recommendation

That Utility Committee recommend to the December 9/11, 2020, City Council meeting:

That adjustments to the 2019-2022 Capital Budget for Blatchford Renewable Energy, as outlined in Attachment 1 of the December 4, 2020, Financial and Corporate Services report FCS00173, and Capital Profile 22-83-8384, set out in Attachment 3 of the December 4, 2020, Financial and Corporate Services report FCS00173, be approved.

Executive Summary

This report recommends adjustments to the Blatchford Renewable Energy 2019-2022 capital budget to manage the design and delivery of the Energy Transfer Stations in the majority of buildings in the Blatchford community, as further outlined in the Blatchford Renewable Energy Utility Bylaw 17943.

Report

Blatchford Renewable Energy was established to help achieve the City's long-term goal of 100 percent renewable energy and carbon neutrality for the Blatchford development. This new City-owned utility owns and operates an innovative District Energy Sharing System in the community.

Buildings in the Blatchford community will use renewable energy for heating and cooling and, as such, buildings will not need to be equipped with traditional systems for the production of thermal or cooling energy, such as furnaces, boilers, air conditioners or cooling towers. Certain townhouses and low-rise to mid-rise multi-family buildings will have an Energy Transfer Station (heating/cooling equipment in a utility room) to distribute the energy from the District Energy Sharing System into the individual building units.

In December 2018, City Council approved the Blatchford Renewable Energy Utility Bylaw 17943, which indicates the utility will supply and install, and subsequently own and maintain certain assets, such as the energy transfer station and energy meter for each building. The full cost for designing and construction of the Energy Transfer

Stations will be recovered from builders. By designing and constructing the Energy Transfer Stations, the Utility ensures that in its initial stages proper mechanical systems are in place, leading to the highest operational and financial efficiencies for the operation and maintenance of the District Energy Sharing System. The justification for this approach is provided in Attachment 2 of this report.

Budget/Financial Implications

As shown in Attachment 1, the Blatchford Renewable Energy 2019-2022 approved capital budget is \$11.715 million. It includes \$6.743 million for the completion of the georexchange borefield and Energy Centre One (\$19.442 million in total) as well as an additional \$4.972 million for the planning and design for the Sewer Heat Recovery Energy Centre, which is the next stage of Blatchford Renewable Energy's development.

Administration is recommending approval of capital profile 22-83-8384 (Attachment 3) in the amount of \$5 million to manage the design and delivery of the Energy Transfer Stations in the majority of buildings in the Blatchford Community. The cost of the design and construction will be fully covered by the home builders and the cost of the ongoing operation and maintenance will be funded through customer rates and fees.

Public Engagement

Key stakeholders and the general public were engaged in the Blatchford development, including the concept of Blatchford Renewable Energy. Regular updates are provided to City Council's Energy Transition Climate Resilience Committee.

Corporate Outcomes and Performance Management

Corporate Outcome(s): Edmonton is an environmentally sustainable and resilient city.			
Outcome(s)	Measure(s)	Result(s)	Target(s)
Edmonton is an environmentally sustainable and resilient city.	Community greenhouse gas emissions (million tonnes of carbon dioxide equivalents)	18.73 (2018)	11.0 by 2035 (35 percent below 2005 levels by 2035)
Corporate Outcome(s): The City of Edmonton has a resilient financial position.			
Outcome(s)	Measure(s)	Result(s)	Target(s)

The City of Edmonton has a resilient financial position.	Customer rates generate sufficient revenue to recover the annual cost (revenue requirement) to operate the Utility and begin to recover the under-recovery of costs under the levelized approach in the early years.	Operating loss: 2019 actual = \$(0.8) million 2020 forecast = \$(1.0) million	Operating profit projected to begin in 2025
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Risk Assessment

Risk Element	Risk Description	Likelihood	Impact	Risk Score (with current mitigations)	Current Mitigations	Potential Future Mitigations
Financial	Blatchford Utility is financially not sustainable. Substantial external investment is needed.	3 - Possibly	3 - Major	9 - Medium	Communicate and lobby government for external funding, update financial model forecast frequently and engage with Council for any changes.	Adjustment of capital and operating costs based on adjusted development scenario.
Financial	Energy Transfer Station costs incurred by Blatchford Utility are not recovered from the home builders.	2 - Unlikely	1 - Minor	2 - Low	As part of the sales agreement, Energy Transfer Stations are invoiced and paid by the builder prior to construction of the Energy Transfer Stations by the Utility.	Utility to work with builders to take on more responsibility for construction of Energy Transfer Stations.
Project Management	Operation of the Utility is impacted.	2 - Unlikely	1 - Minor	2 - Low	Ensure rigorous and planning steps are followed in developing the Utility and prepare for Operation.	

Attachments

1. Blatchford Renewable Energy 2019-2022 Capital Budget Adjustment
2. Energy Transfer Station Concept - Justification
3. Capital Profile 22-83-8384 Energy Transfer Station

Others Reviewing this Report

- C. Owen, Deputy City Manager, Communications and Engagement
- G. Cebryk, Deputy City Manager, City Operations

- J. Meliefste, Acting Deputy City Manager, Integrated Infrastructure Services
- S. McCabe, Deputy City Manager, Urban Form and Corporate Strategic Development
- B. Andriachuk, City Solicitor