High Performance Civic Building Policy

ISSUE

The City of Saskatoon (City) is committed to actions which create co-benefits for greenhouse gas (GHG) emissions reductions, climate adaptation, social benefits and economic resiliency. The High Performance Civic Building Policy (Policy) improves triple bottom line outcomes in new City buildings, with a focus on reducing building energy consumption.

RECOMMENDATION

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council that the High Performance Civic Building Council Policy, contained in Appendix 1 of this report, be approved.

BACKGROUND

At its meeting held on January 29, 2018, City Council received the Principles for a High Performance Civic Building Policy report and approved the recommendations, in part:

> "1. That the Administration continue to develop a High Performance Civic Building Policy utilizing the principles outlined in this report; and
> 2. That until a High Performance Civic Building Policy is approved by City Council, the Administration document how the design and construction of all new City-owned facilities respond to these principles, with the goal of compliance unless a documented lifecycle cost analysis demonstrates this is uneconomic."

Access to water is being included in the Policy as per the recommendation from the May 4, 2020 meeting of the Standing Policy Committee on Environment, Utilities, and Corporate Services (Water Access Considerations for Phasing out Bottled Water Sales at City of Saskatoon Facility – Blue Community Feasibility):

> "1. That the Administration bring forward the business case for the inclusion of drinking water access considerations, fountains, fill stations and sinks, in the development of the City's High Performance Building Policy for the 2022-2023 Budget deliberations."

At its meeting held on June 28, 2021, City Council received the High Performance Civic Building Approach report and approved the recommendations:

> "1. That Option 1B – LEED Silver Certification is defined as the minimum standard for the design and construction and major renovation of applicable buildings in the High Performance Civic Building Policy;
> 2. Mandatory LEED credits for the construction of new civic buildings are permitted in the High Performance Civic Building Policy; and

3. The energy and air tightness targets and timeline recommended in Option 3D are included in the High Performance Civic Building Policy."

DISCUSSION/ANALYSIS

The purpose of the Policy is to establish a standard so that positive outcomes of the triple bottom line approach are achieved for the construction of new civic buildings, renovations, and building additions. The goal of the policy is to improve energy efficiency, reduce GHG emissions, improve occupant comfort and productivity, and construct resilient and adaptable buildings.

The proposed policy requires new City-owned buildings, additions, or major renovations to meet criteria that would ensure a high standard of environmental sustainability. Specific criteria includes:

- Projects need to attain LEED Silver Certification, as well as City-specific, mandatory LEED credits.
- Projects need to be built as Net-Zero Energy Ready and designed to achieve a maximum air leakage rate.
- Projects need to provide accessibility to drinking water – the Policy addresses this through the inclusion of a minimum requirement for drinking water fountains and water bottle filling stations.
- Projects need to comply with the City's Accessibility Action Plan.

The proposed policy applies to all new City-owned buildings, additions, and major renovations. New buildings that are constructed on City-owned land or in partnership with the City will be held to the same minimum standards as new City-owned buildings. Specific criteria relating to applicability can be found in Appendix 1 of the proposed policy.

There are exceptions to the proposed policy, which include the exemption of statutory boards as they have their own governance structures and policies. Existing City-owned, leased, or operated facilities are also exempt, including new facilities acquired or purchased by the City.

FINANCIAL IMPLICATIONS

The June 28, 2021 City Council report includes the detailed financial implications of adopting the proposed policy. A range is provided for the incremental cost based on the proposed recommendations. The approved recommendations are estimated to increase the capital cost of future projects by up to 15%. This increase will be offset by reduced risks and operational savings associated with increasing utility rates and carbon charges. Energy consumption is directly linked to the expense of carbon charges since it is a volumetric charge and reducing energy consumption reduces the impact of the rising charges.

Application of the City's Accessibility Action Plan (Plan) may also increase the capital cost of projects. The incremental costs will be dependent on the standard adopted by the Plan and the size of facility. The Accessibility Advisory Committee is currently in the

processes of reviewing and updating the standards within the Plan. Once a standard is adopted, the financial implications can be assessed.

OTHER IMPLICATIONS

Triple Bottom Line

The project team completed a Triple Bottom Line Assessment, using the City's *Triple Bottom Line (TBL) Decision Making Tool* to comply with *Council Policy C08-001-Triple Bottom Line*. Results from the full TBL analysis are included in Appendix 2 - Triple Bottom Line Review.

The proposed policy met or exceeded expectations for all principles except Social Equity and Cultural Wellbeing. Many of the indicators listed under this principle were considered out of scope for the policy, however each specific construction project will need to complete their own TBL analysis if required.

Environmental Benefits

The proposed policy provides improvements and reduced GHG emissions since the current electrical grid and heating sources primarily rely on fossil fuels. The Low Emissions Community (LEC) Plan sets out 40 emission-reduction actions that are based on the sequence stages of:

(1) Reduce Energy Consumption;
(2) Improve Energy Efficiency; and
(3) Switch to Renewable Energy Supply.

The proposed policy provides a direct link to LEC Action 1 to apply energy efficiency standards to all new municipal buildings. New buildings that are net-zero energy ready will consume less energy than existing buildings and benefit from lower utility costs over the life of the building. Reducing consumption is important for future renewable energy systems since buildings with lower energy consumption will be able to install smaller renewable energy systems.

NEXT STEPS

An Administrative Procedure (Procedure) is being developed to accompany and implement the proposed policy. It will assist project managers with the implementation of the policy, outline the mandatory LEED credits, and include recommendations on other environmental best practices. If approved by City Council, the Administration will continue developing the procedure and other required documents and support for implementation of the proposed policy.

Future program development for a performance standard for existing buildings is included as the Integrated Civic Energy Management Program and Performance Standards for Existing Buildings business plan option in the 2022-2023 Multi-year Budget and Business Plan. The goal of the integrated plan is for continuous improvement of both technical and organizational actions, which complements the implementation of the High Performance Civic Building policy by focusing on operations beyond initial construction.

Other work that aligns with the proposed policy is the University of Saskatchewan/City Research Junction Heat Pump Feasibility Study, currently underway, and the 2022-2023 Multi-year Budget and Business Plan options for Site-Scale Municipal Solar Pilot and Deep Energy Civic Building Feasibility Study. These projects improve Administration knowledge and experience in improving environmental performance of buildings.

APPENDICES

1. High Performance Civic Building Policy
2. Triple Bottom Line Review

Report Approval

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