

REPORT

Development Services

To: Mayor Cote and Members of Council **Date:** September 27, 2021

From: Emilie K. Adin **File:** 09.1742.02
Director of Development Services

Item #: 2021-354

Subject: Climate Emergency: Updated Green Buildings Policy & Energy Efficient
Equipment Selection Policy

RECOMMENDATION

THAT Council endorse the updated Green Buildings Policy.

THAT Council endorse the new Energy Efficient Equipment Selection Policy.

PURPOSE

To request that Council endorse the new Energy Efficient Equipment Selection Policy and the updated Green Buildings Policy.

BACKGROUND

To support the climate emergency declared by Council on March 11, 2019 the City established a new climate action budgeting framework and 7-Bold Steps for Climate Action, with the goal of moving New Westminster towards a zero-carbon future by 2050. Through Bold Step #1 (Carbon Free Corporation), the City pledged that we will work to exceed our 2030 climate emergency target of 45% (below 2010 emissions levels) by striving to be net-zero by 2030.

In 2020, the City updated our 10-year Corporate Energy Emissions Reduction Strategy (CEERS), providing direction as to how the City can work towards achieving the targets set forth by the climate emergency declaration and Bold Step #1. Included in the CEERS are a number of initiatives and policies that have been identified as having energy saving and emissions reduction potential for the City's operations.

In relation to this report to Council, the CEERS identifies the following strategies and direction to be taken:

1. Implement the updated Green Buildings Policy for new construction and major renovations; and
2. Develop a protocol to evaluate whether proposed equipment or systems would contribute to the corporate carbon footprint or would alternatively improve energy and emissions reduction performance.

Implementing an updated Green Buildings Policy is also identified as an action item in the Environment Strategy & Action Plan.

DISCUSSION

Updated Green Buildings Policy

The purpose of a corporate policy on green buildings is to demonstrate environmental, economic, and social leadership through reducing and eliminating greenhouse gas (GHG) emissions, reducing energy consumption, protecting environmental resources, providing healthy work environments for staff and visitors, and yielding cost savings to City taxpayers through reduced operating costs. This policy is a revision to the City's LEED Gold policy that was adopted in 2009 and has been designed to achieve outcomes supportive of the goals of the 2020 Corporate Energy and Emissions Reduction Strategy (CEERS). In doing so, the policy now reflects Council's climate emergency declaration and has included the following clause to support the targets established by Bold Step #1:

- Achieve CaGBC's Zero Carbon Building Standard certification for Design (in the case of a new building) or Performance (in the case of an existing building), where it is determined by the Energy Management Committee that a significant reduction in greenhouse gases (GHGs) can be achieved.

Over the last decade of this policy's enforcement, staff have also had an opportunity to reflect on the LEED certification process. While this policy requires certification to be pursued, it has been recognized that the actual process for acquiring certification can add significant administrative costs to a project. As such, the following clause has been included to ensure that new builds and renovations, regardless of size, are completed to the standards of the LEED rating system while providing the City the flexibility to assess whether receiving certification is financially feasible.

- In the case that the minimum requirements outlined in section 4.1 of this policy are not met or the pursuit of certification is not considered to be financially feasible upon review, the design and construction of new City-owned buildings, or new additions/major building renovations shall be built with the spirit of the aforementioned certifications in mind and strive to achieve the objectives they set forth.

Attachment 1 contains the Updated Green Buildings Policy.

Energy Efficient Equipment Selection Policy

In our effort to achieve the strategic direction of Bold Step #1 (Carbon Free Corporation), the City is committed to continuously improving the energy performance of our operations. As such, a new Energy Efficient Equipment Selection Policy is being proposed to ensure that the City continues to make fiscally and environmentally responsible decisions with respect to new equipment purchases for our buildings and facilities. The objectives of this policy are to:

- Reduce absolute energy consumption and/or improve energy efficiency;
- Support an accelerated switch to renewable energy;
- Maximize energy recovery; and
- Reduce the financial risks associated with rising external carbon taxes and energy costs over the lifetime of an asset.

This policy is to be applied during the options analyses (Life Cycle Cost Analysis) and decision-making stages of new equipment purchases. Where required, staff must request vendors and/or contractors to provide them with the necessary information to abide by this policy. This includes an estimate of energy consumed by each equipment option via an energy model. Applicable equipment under the scope of this policy includes, but is not limited to:

- Appliances
- HVAC equipment
- Water using components and pumps
- Electric motors
- Office equipment and consumer electronics (computers, phones, etc.)
- Lighting, signage, and transformers

Attachment 2 contains the Energy Efficient Equipment Selection Policy.

FINANCIAL IMPLICATIONS

Updated Green Buildings Policy

Similar to LEED certification, there is a short term capital cost associated with processing and applying for CaGBC's Zero Carbon Building Standard. These costs are built into capital budgets where applicable. Meeting the Zero Carbon Building Standard, which is a higher standard than the base BC Building Code, leads to a premium on construction costs, which can generate a good return on investment over time, in terms of saving costs on operations and maintenance.

On the other hand, the updated policy will allow the City to save on LEED certification costs while still achieving the performance standards required for certification in the event that pursuing formal certification is not considered to be financially feasible.

Energy Efficient Equipment Selection Policy

While energy efficient equipment can have a larger upfront capital cost in comparison to conventional equipment, the lifecycle costs of energy efficient equipment are typically less as a result of decreased energy consumption lowering its operating costs.

INTERDEPARTMENTAL LIAISON

This report has been developed by Development Services with support from the Engineering and Finance Departments. Additional interdepartmental staff discussions have occurred at the Energy Management Committee.

OPTIONS

The following options are presented for Council's consideration:

1. That Council endorse the new Energy Efficient Equipment Selection Policy.
2. That Council endorse the updated Green Buildings Policy.
3. That Council provide staff with alternative direction.

Staff recommends Options 1 and 2.

ATTACHMENTS

Attachment 1 – Updated Green Buildings Policy

Attachment 2 – Energy Efficient Equipment Selection Policy

APPROVALS

This report was prepared by:

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This report was reviewed by:

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