

CLEAN ENERGY IMPROVEMENT PROGRAM AND CLIMATE MITIGATION - PRIORITY PROJECTS

RECOMMENDATION

That the September 28, 2022, Urban Planning and Economy report UPE01342, be received for information.

Requested Council Action	Information only		
ConnectEdmonton's Guiding Principle	ConnectEdmonton Strategic Goals		
CONNECTED This unifies our work to achieve our strategic goals.	Climate Resilience		
City Plan Values	PRESERVE		
City Plan Big City Move(s)	Greener as we Grow	Relationship to Council's Strategic Priorities	Climate Adaptation and Energy Transition
Corporate Business Plan	Transforming for the Future		
Council Policy, Program or Project Relationships	<ul style="list-style-type: none"> • Clean Energy Improvement Program - Pilot initiative • The City Plan • Community Energy Transition Strategy • Bylaw 19144 - Clean Energy Improvement Pilot Program Tax Bylaw 		
Related Council Discussions	<ul style="list-style-type: none"> • Community Energy Transition Strategy - Annual Update (Executive Committee, June 15, 2022) 		

Previous Council/Committee Action

At the June 15, 2022, Executive Committee meeting, the following motion was made:

That Administration provide a report to Committee outlining the process, work plan and resources required to establish a permanent Clean Energy Improvement Program for residential and non-residential properties with the intention of developing and fully implementing a permanent Clean Energy Improvement Program for the City of Edmonton by the end of 2023.

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Executive Summary

- Taking action on buildings is critically important to Edmonton's energy transition.
- The Clean Energy Improvement Program (CEIP) is a "Big Win" action within the Energy Transition Strategy and supports climate action for buildings.
- The CEIP was designed to be a two-year pilot and is currently operating residential and commercial streams. The residential stream had an overwhelming positive response and was fully subscribed, with a waiting list starting the first day the program launched. The commercial stream has had a slower response, and targeted marketing is planned to increase program participation.
- Implementing a permanent Clean Energy Improvement Program by the end of 2023 would accelerate this initiative. This could include efforts at the provincial level to consider several amendments and clarifications to the Clean Energy Improvements Regulation. At the municipal level, four imperative actions to advance a permanent CEIP include: 1) completion of an automated module within the current Taxation, Assessment and Collections System (TACS) to integrate necessary CEIP component connections and processes with assessment and taxation functions, 2) securing a funding source, 3) program development and 4) public engagement.
- A permanent CEIP could require funding between \$21 to \$80 million annually to provide financing to CEIP applicants, for fees to Alberta Municipalities, the Program Administrator, and for additional City of Edmonton staff. Calculating the greenhouse gas reduction impact is challenging however, on average similar measures have catalyzed 3 tonnes of savings in single family homes and upwards of 30 to 40 per cent reductions in commercial buildings.

REPORT

Background

The Community Energy Transition Strategy is Edmonton's plan to transition to a low carbon city by 2050. The strategy has five critical pathways for climate action, one of which is an Emission Neutral Building pathway. Existing buildings make up about 38 per cent of Edmonton's total greenhouse gas emissions. The Emission Neutral Building pathway calls for an unprecedented energy efficiency retrofit effort (over 350,000 residential buildings and over 11 million square feet (sq.ft) of commercial space retrofitted for deep energy savings by 2050). This retrofit effort would support the creation of a thriving retrofit industry and significant local job opportunities. The Community Energy Transition Strategy identifies a Clean Energy Improvement Financing Program as a "Big Win" action that supports climate action on buildings.

Clean energy improvement financing is a creative financing tool to promote privately owned building retrofit investment. This initiative was identified more than a decade ago and proven successful in numerous jurisdictions in the United States, resulting in billions of dollars in retrofit investment and thousands of jobs created (<https://www.pacenation.org>). Alberta's version of this financing tool is called the CEIP. To implement this financing tool, *An Act to Enable Clean Energy Improvements*, SA 2018, c 6 amended the *Municipal Government Act*, and an associated *Clean*

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Energy Improvements Regulation, AR 212/2018 was created; both of which came into force on January 1, 2019.

Since that time, Edmonton supported the creation of a two-year pilot of the CEIP to provide low-cost financing to Edmonton property owners to complete a minimum of three energy efficiency and/or renewable energy upgrades to their buildings (Attachment 1). The pilot was launched with two streams. The residential stream launched March 29, 2022 and was quickly fully subscribed. A waiting list was initiated (to establish a queue should any applicant withdraw) and application submission was closed on April 1, 2022. The total potential residential project value is up to \$4 million. The commercial stream launched June 7, 2022. The commercial stream, with more complex ownership and decision making, has two files to date.

Administration secured funding for the CEIP pilot from the Federation of Canadian Municipalities (FCM) and City Council approval of Bylaw 19144, the Clean Energy Improvement Pilot Program Tax Bylaw on August 19, 2021. Funding for this pilot program (totalling \$12,263,900 from the FCM Green Municipal Fund and the City of Edmonton) will support an estimated 80 residential and 20 commercial projects (breakdown available below).

- FCM Loan \$8,434,400
- FCM Grant \$1,264,500
- CoE Rebates \$1,551,100
- CoE Operating Budget \$1,013,900

Work Plan and Resources for Moving to a Permanent Clean Energy Improvement Program

The CEIP pilot was designed to occur over two years with both residential and commercial buildings participating. The pilot provides an opportunity to understand operational processes and program design factors impacting applicant success. Lessons learned from this pilot program and similar Canadian initiatives will inform the development of a permanent program.

During program design and the pilot program to date, several amendments and clarifications to the provincial *Clean Energy Improvements Regulation* have been identified and shared with the Program Administrator. Identified program improvements such as expansion of the list of eligible upgrades, increase of financing limit, expanding allowable multi residential high rises and range of building types, as well as making CEIP borrowing by municipalities eligible under the provincial "Loans to Local Authorities" (to keep borrowing expenses as low as possible for applicants) would require regulatory changes that are at the discretion of the Government of Alberta. Currently the province does not provide financing for this program. Although the suggested improvements have been previously shared with the Government of Alberta, additional advocacy may be required to convey the importance of the identified improvements in realizing an equitable and successful permanent CEIP.

Implementing a permanent CEIP by the end of 2023 accelerates this work and requires additional efforts. The work plan and resources necessary to develop a permanent CEIP program by the end of Q4 2023 includes four steps, some of which can be actioned concurrently (see Attachment 2). The steps include: 1) automation of tax accounting software, 2) securing a funding source, 3) program development and implementation and 4) public engagement. This resource estimate is

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for accelerated program development, and does not include additional resources needed to implement the program.

1) Automation of Tax Accounting Software (TACS)

The City of Edmonton uses TACS (Taxation, Assessment and Collections System) software to support property assessment, tax levy and tax collection processes. In the long-run, this system will need to be able to integrate CEIP processes directly with other property assessment and taxation functions; however, this module does not presently exist. In the meantime, in order to process the City's current pilot program, Administration will rely on manual processing; however this is not viable for a scaled up, permanent program. An automated solution is required to meet the demand of a permanent program in a timely manner and decrease the potential for errors. An information technology solution to automate applicant eligibility, CEIP calculations, and the addition of the charges to tax accounts was identified early in the pilot.

As well, project timelines are estimated to extend into 2024, and there is a possibility that the module will not be operational in time for the 2024 tax season. In such a case, if the permanent program were to proceed by the end of 2023, repayment charges cannot be applied to the tax accounts of permanent program participants until the following tax year (2025). This will require the City to carry the borrowing costs of these loans for an additional year. To avoid this additional financial burden, the implementation of the permanent program needs to align with the completion of the CEIP module within TACS.

2) Securing a Funding Source

Funding for a permanent program is not in place. Based on early indications from pilot applications and an early estimate on program capacity, to support a lower to a highly scaled permanent CEIP could range from \$20 to \$75 million per year to support 500 to 1,875 residential projects or 20 to 150 non-residential projects or a combination of both. The province does not currently provide borrowing to municipalities for CEIPs. Through intergovernmental conversations, Administration will continue to request policy and financial support for clean energy from the federal and provincial governments. At Council's direction, Administration would explore options for low-cost financing for long-term repayment (up to 25 years) to support a permanent CEIP.

3) Program Development

Program development would include formalizing file management processes, coordinating cross departmental intersecting activities, program administration fee negotiation (for capacity increase), and maintaining project transfers with the program administrator. In addition, a GBA+ approach would be included in program development to provide more inclusivity in the design for a broader range of program participants. As well, implementation of the permanent program will require a new Borrowing Bylaw to be passed.

4) Public Engagement

The pilot program has been active for five of the projected 24 months with no projects completed at this time (currently 15 residential and two commercial have been initiated). A public engagement plan will be executed to better understand Edmontonian perspectives and concerns related to a

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permanent program. Reaching out to current CEIP pilot applicants will also provide valuable information as to ease of application, program requirements and timelines.

Permanent Program

Once the permanent program has been developed, ongoing implementation based on 500 to 1,875 projects per year could range from \$20 to \$75 million per year for annual financing. The estimated administration costs associated would be in the range of \$1.1 million and \$3.8 million per year. It is also anticipated additional resources would be required including two permanent staff and three temporary staff. The temporary staff would be required for the first two years of program implementation.

Community Insights

Awareness and interest in CEIP was gauged by including a few questions in the July 2022 mixed topic survey for The Edmonton Insight Community, an inclusive and accessible online panel made up of diverse Edmontonians who provide feedback on City policies, initiatives and issues. The survey asked members to explain why they were interested or not interested in participating in the CEIP program (Attachment 3). The following themes emerged:

- Cost is seen as a factor and/or an obstacle. For example, some respondents include: budgetary concerns, some are concerned about incurring more debt, some see this as a high cost and low return/reward investment.
- Respondents also mentioned a need for more information to determine their interest to participate. Some questions include how this program works and what the process entails.
- For respondents who have expressed interest and support for this program; adding solar panels to their home is one upgrade that is mentioned.
- There are several other factors that influence interest in participation - some respondents own a newer home that is energy efficient, some have already completed home upgrades, and some either rent or live in a condo, which do not apply to this program.

Administration will conduct a deeper analysis of the survey results to identify broad themes that may include barriers to the program. This will inform the strategy and approach of the engagement plan. The plan will be finalized in fall 2022 with the anticipation of starting public engagement shortly after.

Budget/Financial Implications

During the Fall 2021 Supplemental Capital Budget Adjustment, City Council approved funding for \$500,000 to begin the development of the CEIP module within TACS. Based on the business requirements identified so far, it is projected that an additional \$250,000 in funding will be required to complete the CEIP module. A permanent program cannot be fully administered without this additional investment. Administration is assessing the total funding requirement and capacity opportunities within the existing capital budget. If new funding is required, Administration will return to City Council with a funding request through the upcoming 2023-2026 budget deliberations or future supplemental capital budget adjustments.

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A permanent CEIP is currently unfunded and could require up to \$75 million per year for annual financing. At Council's direction, Administration will explore options for low-cost financing for long-term repayment (up to 25 years) to support a permanent CEIP. The province does not currently provide borrowing to municipalities for CEIP programs. Through intergovernmental conversations, Administration will continue to request policy and financial support for clean energy from the federal and provincial governments.

CEIP funding is defined under the *Municipal Government Act* (MGA) and indicates that it does not count towards the debt limit or the debt service limit of a municipality (Section 252 (2)). Administration will be updating the City's internal Debt Management Fiscal Policy - C203C, this fall and similar to the MGA will be considering exempting programs such as CEIP from its debt and debt servicing limits. The amount borrowed for the two year pilot program is considered to be self-liquidating debt (similar to a local improvement) as the debt servicing payments are ultimately paid for by the benefitting property owner through their property taxes. The costs related to program implementation, including administrative fees and additional staff are being assessed. If additional funding is required, Administration will bring forward a funding request at a later time.

Legal Implications

A new bylaw is required to allow the City to set up a new or permanent CEIP program. This Bylaw must meet the requirements of Section 390.3 of the MGA and section 5 of the *Clean Energy Improvements Regulation*. The Bylaw must be advertised and would have to be presented at a public hearing before second reading. Administration is prepared to bring this bylaw forward to Council when the time is appropriate.

GBA+

In its effort to become a more inclusive and diverse city, the City of Edmonton has embraced GBA+ as a tool to understand how our work might impact diverse groups of people. Incorporating GBA+ approaches in public engagement plans ensures engagement processes are reflective of an approach to accommodate diverse voices.

GBA+ Considerations

- Low income households do not have access to the significant capital needed to invest in renewable energy systems and energy efficiency upgrades. The CEIP pilot does allow homeowners to finance home retrofits and pay for them over years instead of up front. However, participants do require a certain percentage of equity in their home for mortgage lender approval and a five-year clean tax history. Participants are required to make payments for the expected useful life of the retrofits installed, in addition to their property tax.
- Racialized populations disproportionately live in poverty, therefore Property Assessed Clean Energy models and the current CEIP aimed at individual, private homeowners often excludes racialized groups because of the home equity required to participate in the program. Additionally CEIP does not currently support condo and co-op ownership models.
- Renters who pay their utility bills are more likely to be in energy poverty, but they are ineligible for the CEIP residential program because they are not homeowners. Multi-unit residential

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buildings are not included in the current commercial stream of the program in the provincial regulations.

- People with disabilities often have higher electricity demands and are more likely to live in energy poverty.
- The City has not, at the time of this report, requested information on what demographics are accessing the energy transition rebate programs and the CEIP, therefore participant characteristics cannot be analyzed for diversity and equity measures cannot be evaluated until this data is collected.

Potential Equity Measures

- Collect demographic data on race, income, gender and ownership status from CEIP pilot participants in the residential and commercial pilot from the FCM survey, the July 2022 Insight Mixed Topic Survey and upcoming CEIP-targeted survey.
- Evaluate individual survey results and disaggregate data to develop further equity measures that address underrepresentation of certain groups.
- Partner with and support organizations to make the CEIP more accessible to diverse communities.
- Work with Alberta Municipalities and the Government of Alberta to address equity gaps in the current *Clean Energy Improvements Regulation* including expanding eligibility criteria for commercial buildings to include multi-unit residential buildings and, potentially, different ownership models.

ATTACHMENTS

1. CEIP Pilot Summary Results to Date
2. Work Plan and Resources Required for Permanent CEIP
3. Insight Community - Clean Energy July 2022 Mixed Topic Initial Results