

DATE OF MEETING June 19, 2024

AUTHORED BY DAVID STEWART, ENVIRONMENTAL PLANNER

SUBJECT HOME ENERGY RETROFIT FINANCING PROGRAM

OVERVIEW

Purpose of Report

To seek Council direction to submit an application for funding to implement a Property Assessed Clean Energy (PACE) style home energy retrofit financing program in Nanaimo.

Recommendation

That the Finance and Audit Committee recommend that Council direct Staff to:

1. apply to the Federation of Canadian Municipalities (FCM) Community Energy Efficiency Financing (CEF) program for pilot funding to support a Property Assessed Clean Energy (PACE) style home energy financing program and if successful, launch a PACE style home energy financing program for Nanaimo residents; and,
2. allocate up to \$200,000 from the Climate Action Reserve Fund to support a home energy retrofit financing program.

BACKGROUND

After receiving the City of Nanaimo's Home Energy Retrofit Financing Feasibility Study report on 2024-APR-22, Council directed Staff to design a home energy retrofit financing program and return to Council for consideration of implementing the program.

Federation of Canadian Municipalities (FCM) offers a Community Efficiency Financing Pilot Project Funding program that provides local governments up to \$500,000 in grant funding to cover up to 50% of eligible program design, operation, and capital costs. The program is intended to support local government financing programs that demonstrate clear market transformation potential. Pilot funding also allows local government to test a small-scale version of a program in real-world settings. City Staff would like to recommend applying to this program to offer a PACE style home energy financing program.

PACE loans are affixed to the property (rather than the individual) and repaid through the property tax bill. By securing the loan to the property, PACE loans generally can offer long-term financing with fixed, low-interest rates and have a high repayment rate. Given Provincial lending restrictions, and the lack of PACE enabling legislation, municipalities in British Columbia are ineligible for capital funding stream but may apply for the pilot funding stream for PACE style financing in a program. Staff are working separately on developing a direct lending financing

model to be integrated into the program in the future and anticipate bringing a report to Council with more information in early 2025 to access FCM's capital funding stream.]

DISCUSSION

Staff are proposing to establish a small-scale pilot PACE lending program for approximately 30 to 40 Nanaimo homeowners during the first intake. Eligible homeowners will have access to a zero-interest loan of up to a maximum of \$15,000 per property. This ceiling allows participants to secure sufficient funds to cover the cost of most heat pumps, building envelope improvements, or solar panels and backup battery installations. The limit is intended to help manage rising costs, while ensuring that the available funding can be distributed among a greater number of participants. Homeowners will be required to repay the loan over a 10-year period through their property taxes, with an expected annual repayment of 10% of the loan value. Loans repaid by homeowners will be reinvested into the program, enabling more homeowners to access funding in the future.

Program Goal and Objectives

The primary goal of the home energy retrofit financing program is to reduce the City's community greenhouse gas emissions by helping homeowners transition to, and continue to use, clean renewable energy. The program has the following three objectives:

1. **Reduce Community Greenhouse Gas Emissions from low-density residential buildings:** Buildings and infrastructure accounted for 31% of the city's 2017 GHG emissions, with a significant portion of those coming from low-density residential buildings. Collectively, the consumption of fossil fuels for home energy needs generates 49,322 tCO₂e, which is equivalent to 83% of the city's emissions from low-density housing. Supporting homeowners in converting from fossil fuels to low carbon energy equipment, like electric heat pumps, is an essential component of the City's plan to meet its climate targets.
2. **Improve Equity, Access, and Affordability:** Loans should be zero interest, accessible to as many homeowners as possible, and not encourage homeowners to take on unsustainable levels of debt. Proposed upgrades, such as switching from an oil furnace to a heat pump or installing solar panels, should present a good return on investment and result in energy bill savings. Loans should be available to those in greatest need that otherwise would be unlikely to carry out energy retrofits that provide savings and climate and health benefits.
3. **Prepare Nanaimo Residents for a Changing Climate:** *City Plan* acknowledges that the climate is changing. Nanaimo residents can expect hotter and drier summers with more intense and frequent storms that may lead to power outages. These changes will impact Nanaimo residents' home heating and cooling needs. By switching to heat pumps, residents will be able to cool their homes during the warm summer months and reduce exposure to wildfire smoke events. While prolonged power outages are rare in Nanaimo, those residents concerned about losing power can access a loan to install solar panels and a backup battery.

Eligible Retrofit Packages

Program loans may be used for any of the following:

1. Switching from fossil fuel space heating to an electric heat pump:
For an average small to medium single-family dwelling, switching from oil heating to an electric heat pump will result in a 95% emission reduction for that home. The savings is approximately 4.8tCO₂e in annual emissions, while saving approximately \$2,100 in annual energy cost. Switching from natural gas to an electric heat pump will result in a 79% emission reduction with 2.6tCO₂e in annual emission reduction.
2. Installing solar panels where the homeowner already has electric heating:
Installing solar panels allows homeowners to access affordable clean energy, while potentially reducing demand on the electrical grid. While energy savings from solar panel installations will vary based on the number, orientation, solar exposure, and efficiency of the panels, the home energy financing feasibility study estimates solar panel installs can result in approximately \$900 in energy savings for an average Nanaimo home.
3. Installing a backup battery where solar panels are already in place:
One of the primary barriers we have heard locally, to all-electric homes, is a concern about power outages. Providing funding for backup batteries will help homeowners build resiliency within their homes and reduce their concerns about losing power.
4. Building envelope upgrades to reduce air leakage and improve energy efficiency, such as door and window replacements or adding insulation:
A high-performing well-insulated home will maintain comfortable temperatures for longer and with less primary heating and cooling required than a home with a leaky and poorly insulated building envelope. By upgrading their building envelope, homeowners can save money on energy costs, reduce GHGs, and be more prepared for power outages or extreme heat events. Switching from natural gas to a heat pump with improved insulation and door and window upgrades will result in an 81% emission reduction with 2.7tCO₂e in annual emission reduction.
5. Non-energy related measures that might impede energy retrofits or enhance health and wellbeing, such as better filters in heat pumps:
These measures must be combined with one of the above retrofits. No more than 30% of the individual loan amount can be used to support non-energy measures. FCM recognizes that some homeowners may need to prioritize other health and safety upgrades before focusing on energy-related retrofits. Allowing financing for these upgrades removes a barrier for those who may not be able to afford energy-related upgrades due to other competing home priorities.

Program Eligibility

Project funding will be paid directly to the contractor. Regardless of the type of retrofit the homeowner chooses, loans will be limited to work that can be completed within a ten-month period following loan approval.

To allow program staff to prioritize climate benefits and those applicants in the greatest need, loans will **not** be distributed on a first come first served basis. Instead, loans will be evaluated based on established criteria that reflect the program objectives. Eligible applicants will be able to apply for loans during a designated loan intake period. All loan applications will then be scored based on the following weighted criteria:

- Climate Impact – what level of GHG reduction will be achieved through the proposed retrofit? If the proposed retrofit is not completed, is there a risk of increased emissions due to switching to a higher carbon energy system?
- Income/Equity – what is the applicant's income? Do they qualify for any other rebate or loan program? Are they part of an equity-seeking group or a group vulnerable to climate impacts (i.e. seniors living alone)?
- Energy Savings – will the retrofit result in energy savings for the applicant?
- Climate Resiliency – will the retrofit help prepare the homeowners for the impacts of climate change?

The highest-scoring applications will be prioritized for PACE funding.

The program will have a minimum and maximum qualifying household income and assessed property value¹, with a goal of targeting middle-income households. Where homeowners are eligible for a more affordable program option, those homeowners should be directed to the program through the Home Energy Navigator Program. For example, lower-income residents who qualify for the Federal Oil to Heat Pump Affordability Program² or the just launched CleanBC Better Homes Energy Savings Program³, will be directed to the best program for them. Extremely high-income earners (e.g., top 10% of Nanaimo households), will not be eligible for the program as financing is not considered a major barrier for these homeowners.

¹ In addition to meeting an income threshold, participants in the CleanBC Income Qualified Program and soon to launch CleanBC Better Homes Energy Savings program must have a total assessed value at or under \$1,230,000 in the BC Assessment listing for the address of the applicant's home in the year of program registration.

² Qualifications for the [Federal Oil to Heat pump affordability program](#) are based on the median income (after tax) by household. The income limits vary based on the number of people within the household ranging from \$45,080 for a single-person household to \$163,300 for five people or more.

³ The Province recently announced that they will be launching a [new Program on June 18, 2024](#) to replace the CleanBC Income Qualified Program. The new program will pay for up to 100% of retrofit costs and include a new income level with a higher minimum income qualification for fossil fuel to heat pump conversions, allowing more BC homeowners to qualify.

Barriers and Gap Analysis

While financing is available in the marketplace, and currently through the Federal Canada Greener Homes program, a municipal PACE financing product has the potential to address key barriers and market gaps that are currently limiting the uptake of energy retrofits.

Specifically, it enables:

1. access to more competitive interest rates than those available on the consumer loan market;
2. quicker access to funding than the Federal Canada Greener Homes program and a longer-term payback period than a consumer loan making payments more affordable when spread out over a longer period;
3. the ability to design in-house eligibility criteria that aligns with municipal equity and climate goals. By connecting the loan to the property, credit checks are not required, and homeowners unable to obtain high credit ratings will be eligible provided their taxes are in good standing;
4. an application that can be streamlined within the program process and be integrated in the Home Energy Navigator program;
5. debt to remain with the property if the home is sold; and,
6. opportunities to align and support municipal targets through program criteria, such as lowering GHG emissions and improving affordability.

Risk Mitigation

PACE loans are tied to the property and paid back through property taxation. Through this setup, the risk of loan default is extremely low. Analysis of PACE loan programs in Canada found loans exhibited strong repayment performance, outperforming other creditworthy unsecured consumer loans, and performing comparably to prime auto loans. Within Alberta, an organization known as Alberta Municipalities operates PACE loans for a number of Alberta municipalities. While the program is relatively new, Alberta's PACE program did not experience any defaults in its first year of operations. If a homeowner does default on a PACE loan, the default will essentially be the same as defaulting on their property taxes and the City will be able to recoup the costs through tax sale.

In the extremely unlikely event that the homeowner defaults on a loan, and the City is unable to recoup the costs through tax sale, there is no risk of the City losing tax revenue. The majority of the loan capital will be provided through the FCM grant. As the funds are a grant and not a loan, the City is not required to payback the money. As homeowners will be required to pay off 10% of the loan amount annually through their taxes, the City can reinvest these funds to support future loans.

Other de-risking strategies that will be included in the loan program include:

- Requiring all eligible applicants' property taxes to be in good standing.
- Directing applicants to more suitable programs, such as the Provincial and Federal income-qualified programs where applicable.
- Requiring a pre- and post-energy audit performed by a credited energy advisor for loan applicants.
- Prioritizing retrofits that will result in energy savings.

Local Area Service Bylaw

Despite repeated calls from local governments within BC, including multiple Union of British Columbia Municipalities (UBCM) resolutions and a commitment to support PACE financing within the provincial climate action strategy CleanBC, the Province has not yet brought forward PACE-enabling legislation. Notwithstanding the lack of PACE-enabling legislation in the province and municipal borrowing restrictions, the City can operate a PACE-style program through the use of local service area improvement bylaws. The Community Charter, S.210 indicates that a Local Area Service is a "municipal service that is to be paid for in whole or in part by a local service tax" and services may be those "that the council considers provide particular benefit to part of the municipality." By reducing community emissions and supporting more energy efficient and resilient homes, the program will have a direct community benefit consistent with municipal goals.

Other Local Governments

Municipal PACE-style financing programs already exist in Saanich and Central Saanich. Both programs were established through the Local Service Area Bylaw provisions described above, and originally focused on oil to heat pump financing. Given the limited number of oil-heated homes in the region and the emissions impact of natural gas heating, both Saanich and Central Saanich programs have expanded to allow natural gas to heat pump conversions. Both highly successful programs are run by a third-party administrator, are fully subscribed, and allow loans of up to \$12,000. Staff were able to model much of the proposed Nanaimo PACE program off these programs, with a number of changes based on their program learnings, responding to the Nanaimo specific context, and allowing for innovation.

PACE programs are also common in other parts of Canada including Kingston, Ontario; Ottawa, Ontario; Halifax, Nova Scotia; Saskatoon, Saskatchewan; Toronto, Ontario; Colchester, Nova Scotia; and numerous Alberta municipalities among others.

Third-Party Administration and Staff Time

To ease administrative burden, Staff intend to select a third-party administrator to manage program sign up, customer support, and loan administration. Staff also intend to integrate the program with the existing Home Energy Navigator program, which will provide homeowners with additional support, such as understanding their homes' energy performance, identifying retrofit and fuel switching options, finding contractors, understanding contractor quotes, and applying for rebates. In order to ensure homeowners understand all their retrofit financing options prior to

applying for a loan, enrollment into the Home Energy Navigator program will be a mandatory requirement for loan applicants.

While the program will be managed by a third-party administrator, program setup and administration will require significant Staff time, primarily from Finance and Sustainability Staff. Financing Staff will be responsible for confirming loan applicants' taxes are in good standing and preparing local improvement bylaws for each loan applicant. Sustainability will be the lead City department for the program and will be responsible for:

- program design and setup;
- applying for funding and liaising with FCM staff;
- managing the third-party administrator;
- answering questions from the public directed to the City; and,
- monitoring the program and responding to program challenges and opportunities as they arise.

Sustainability Staff will also work closely with the third-party administrator and the City's Communication Staff in marketing the loan program.

Based on our understanding of the work required through conversations with other local governments, Staff estimate that program setup will require 0.5 FTE of Sustainability Staff time for a period of approximately four months; and program operation will require 0.1 FTE of Finance Staff time and 0.2 FTE of Sustainability Staff time till the end of 2026. This Staff time estimate does not include program design, investigation, and funding application preparation prior to successful grant approval. Setting up a successful retrofit program will likely impact Sustainability Division's ability to deliver on other priority actions. Staff plan to bring a report to assess Sustainability Divisions' capacity to deliver on the priority actions in the Integrated Action Plan and options to address a potential shortfall.

Budget

For the pilot PACE program, the City can apply for up to \$500,000 in grant money from the FCM CEF program, provided the City provides matching funds either as cash or in-kind Staff hours.

Capital funding for loans will be provided primarily through the FCM grant. The City's funding contribution will include funding already allocated to the relevant project and program, anticipated Staff in-kind hours, and \$200,000 from the Climate Action Reserve Fund, \$50,000 of which is to continue to support the Home Energy Navigator Program in 2025.

Next Steps

If Council directs Staff to proceed with a grant application to FCM, and if successful, it is anticipated a program could launch in Q2 2025.]

OPTIONS

1. That the Finance and Audit Committee recommend that Council direct Staff to:
 1. apply to the Federation of Canadian Municipalities (FCM) Community Energy Efficiency Financing (CEF) program for pilot funding to support a Property Assessed Clean Energy (PACE) style home energy financing program and if successful, launch a PACE style home energy financing program for Nanaimo residents; and,
 2. allocate up to \$200,000 from the Climate Action Reserve Fund to support a home energy retrofit financing program.
 - The advantages of this option: This option will allow the City to provide residents with a financial tool to help complete retrofits necessary to meet the City's climate reduction targets, reduce electrical demand, lower utility costs, and improve home comfort. By using PACE financing, homeowners will be able to tie the loan to their property and access zero interest long-term funding.
 - The disadvantages of this option: A PACE program will require more Staff time and resources than other financing options, such as direct lending. If Council chooses not to support a local PACE financing program, the funding and Finance and Sustainability Staff time can be directed to other priorities.
 - Financial Implications: The total proposed project budget will be approximately \$900,000. 50% of the budget will be covered through a Federation of Canadian Municipalities grant. The remaining 50% will be covered through a combination of in-kind Staff time, current budgeted projects, and the City's cash contribution. The 2024-2028 Financial Plan will be amended to add \$200,000 in funding from the Climate Action Reserve Fund to support program costs and provide additional loan capital. If approved, the projected 2024 closing balance of the Climate Action Reserve Fund is \$929,525.
2. That the Finance and Audit Committee deny support for a municipal PACE home retrofit financing program.
 - The advantages of this option: Not pursuing a PACE loan program will free up funding and Staff resources to pursue other priorities.
 - The disadvantages of this option: Less resources available to residents to pursue home retrofits. Since fossil fuel heating in existing homes remains a key source of community greenhouse gas emissions, to meet the City's climate targets, existing homeowners need to make the switch from fossil fuel heating to low carbon systems.
 - Financial Implications: This option will not require any City of Nanaimo financing and will leave the requested \$200,000 in the Climate Action Reserve Fund available for other sustainability projects and programs.

SUMMARY POINTS

- A home energy retrofit financing pilot program is being developed to offer zero-interest loans of up to \$15,000 for Nanaimo homeowners. Loans will be available to homeowners who wish to switch from fossil fuel heating to a heat pump, upgrade doors, windows and building insulation, or install solar panels with or without a backup battery.
- The Federation of Canadian Municipalities Community Energy Efficiency Financing pilot program provides local governments up to \$500,000 in grant funding to cover up to 50% of eligible program design, operation, and capital costs. The remaining costs must be provided by the local government through cash and/or in-kind (Staff time) contributions.
- The primary goal of the home energy retrofit financing program is to reduce the City's community greenhouse gas emissions by helping homeowners transition to, and continue to use, clean renewable energy.

Submitted by:

Ting Pan
Manager, Sustainability

Concurrence by:

Jeremy Holm
Director, Planning & Development

Wendy Fulla
Director, Finance

Laura Mercer
General Manager, Corporate Services