

ADMINISTRATIVE REPORT

Report Date: January 8, 2019
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VanRIMS No.: 08-2000-20
Meeting Date: February 13, 2019

TO: Standing Committee on City Finance and Services

FROM: General Manager, Planning, Urban Design and Sustainability

SUBJECT: Zero Emissions Buildings: Extend BCIT Grant Program for Passive House Tradesperson Training Course

RECOMMENDATION

- A. THAT Council approve a further grant of up to \$95,000 to the British Columbia Institute of Technology (BCIT) to enable BCIT to offer additional Passive House trades training courses at a discounted tuition rate over calendar years 2019-2021; source of funding is the Sustainability Reserve.
- B. THAT the General Manager of Planning, Urban Design and Sustainability and the Director of Legal Services be authorized to enter into an agreement with BCIT for the grant, subject to each of them being satisfied with the terms and conditions of such agreement.
- C. THAT no legal rights or obligations will be created by Council's adoption of these recommendations unless and until the grant agreement is executed by the City's authorized signatories.

Recommendation A is for a grant and requires eight affirmative votes of Council for approval.

REPORT SUMMARY

This report proposes renewing a grant that enables discounted tuition for tradespeople that work in Vancouver to take in-depth Passive House tradesperson training at BCIT. This successful program has been underway since 2017 but voluntary adoption of the Passive House Standard and other near zero emission building approaches is accelerating rapidly. The City's ability to continue to successfully catalyse this voluntary leadership and transform the building industry requires a significant increase in the number of tradespeople with the skills required to build air tight buildings with very low heat loss.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

In January 2011, Council adopted the revised Greenest City Action Plan 2020 targets, which included: “all buildings constructed from 2020 on will be carbon neutral in operations”.

In April 2014, Council adopted a set of Vancouver Building By-law amendments that included progressive energy efficiency measures.

In November 2015, Council approved the Renewable City Strategy, putting Vancouver on a path to achieve 100% renewable energy use before 2050.

In July 2016, Council approved the Zero Emissions Building Plan, which directed staff to establish limits on the greenhouse gas emissions for newly constructed buildings and to step these limits down to zero by 2030.

In March 2017, Council approved the first grant with BCIT to allow for a discounted tuition rate for Passive House tradesperson training.

In January 2019, Council approved the motion: Ramping Up Vancouver's Climate Action in Response to the Climate Emergency.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager recommends approval of the foregoing.

REPORT

Background/Context

One of the key actions approved under the 2016 Zero Emissions Building Plan was to develop tools and programs to support private sector leaders striving to build to near zero emissions. To start, Council approved a \$1.625 million Zero Emissions Building Catalyst Program for related programs and initiatives to catalyse voluntary industry leadership. To date \$775,000 of funding for the Zero Emissions Building Catalyst Program has been utilized from a provincial grant called the Climate Action Rebate Incentive Program, held in the City's Sustainability Reserve.

As one of the initial actions to support this private sector leadership, Council approved a grant of \$95,000 to BCIT. This grant matched the contributions of companies or individual tradespersons active in the Vancouver market towards the tuition costs of the Passive House tradesperson training course during 2017 and 2018. Four of the five discounted courses have now taken place, providing training for approximately 70 tradespersons and the fifth is scheduled for April 2019. Thus far, a range of participants have completed the course, ranging from energy advisors to trades from large scale construction companies. There is a rigorous vetting process in place to ensure that the participants work in Vancouver and have completed a project in Vancouver within the preceding year.

Strategic Analysis

The success of the Zero Emissions Building Plan is rooted in leading builders and developers at the forefront of industry constructing zero emissions buildings. As these local leaders shift construction to new, energy-efficient forms, industry capacity will grow, costs will lower, processes will be refined and policy and regulatory barriers will be identified.

Achieving the Passive House standard is an effective way to construct zero emissions buildings and meet Zero Emissions Building Plan targets. Passive House is a well-established, ultra-low energy building performance standard and certification process that is applicable to nearly every building type. A Passive House building has a thick layer of insulation, high performance windows and doors, an airtight envelope, and mechanical ventilation to supply fresh air. As a result, a Passive House building has a quiet interior, stable indoor temperatures, high air quality, and requires little energy for heating and cooling, resulting in very low GHG emissions.

BCIT, in conjunction with Passive House Canada, offers a 5-day intensive Passive House for Trades course in their High Performance Building Lab. The course covers introductory material on the Passive House standard but importantly, offers hands-on training in high-performance building envelope construction methods and details that are relevant to all near zero carbon building projects. Passive House training for architects and designers has been well-established in Vancouver but there is still a relatively small pool of skilled construction tradespeople with this training. This lack of capacity can lead to construction challenges for zero emission buildings and creates an impediment to voluntary leadership.

Facilitating opportunities to take this course for tradespersons working in Vancouver is important. The subsidy makes the course more affordable and thus accessible. The tuition for the course is normally \$1808, therefore with the subsidy to trades working in Vancouver, the cost to the individual or their employer is \$904.

With the proposed continuation of this grant, a project that has tangible benefit and is running smoothly will be extended. BCIT will be able to continue to offer discounted access to the course for the years 2019 and 2022, and provide training for an estimated 100 additional tradespersons working in Vancouver. Continuing to make this training more accessible represents one of a number of strategies that serve to build capacity in Vancouver and extend both reach and opportunity for the Passive House method and zero emission buildings.

Implications/Related Issues/Risk

Financial

If approved, the up to \$95,000 grant will be provided from the Sustainability Reserve.

Environmental

This training is one piece in a suite of tools that will contribute to Vancouver reaching its goal of zero emissions from new buildings by 2030.

Legal

The terms of the grant agreement that will be entered into by the City and BCIT following Council approval are substantially similar to the terms of the agreement for the earlier \$95,000 grant to BCIT.

CONCLUSION

An initial grant to facilitate more tradespeople accessing Passive House training has proven to be successful and the program is continuing to gain in momentum. Continuing this grant and program for another 3 years is a natural next step in facilitating the shift toward zero emissions buildings.

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