

**UBC SUSTAINABILITY SCHOLARS PROGRAM**  
**Summer 2018**

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**Research Project Title**

High Performance Housing for the Missing Middle – Planning and Policy Tools for the Step Code

**Context**

The City of New Westminster is developing land use planning and regulatory approaches to support local adoption of the new BC Energy Step Code. In tandem with this, the City has launched a community-based energy efficiency and GHG emission reduction initiative for new and existing buildings (see High Performance New Home program on the **EnergySaveNewWest.ca** website), that provides support to local builders, designers and architects in pursuing high performance.

This UBC Scholar project will help inform City staff on preferred planning policy and regulatory options specific to what is sometimes referred to in BC's Lower Mainland as 'missing middle' housing. That is, policies relevant to ground-oriented wood-frame multi-residential buildings such as townhomes / rowhomes, duplexes, triplexes and quadriplexes, as well as multi-residential housing forms such as stacked townhomes and 4-6 storey mid-rise apartment buildings. These types of housing are strongly encouraged in New Westminster's new Official Community Plan 2041.

In 2016-17, the City developed a set of Passive Design Exclusions for New Westminster's single-detached zones, with FSR increases to compensate for thicker insulated wall assemblies, as well as height relaxations for deeper insulated foundations and roofs, which are tied to homes achieving the top three levels of the Step Code for Part 9 buildings. This student project would build on this policy, but with a view to understanding what policy and regulatory triggers / incentives / requirements would help drive similar take-up for missing middle housing archetypes, in terms of the higher levels of the Step Code.

The student would be part of a City staff team and have a chance to interface with a sustainability consultant when needed during the policy research and analysis phase.

**Goal or Operations Plan objective**

Develop a set of preferred planning and/or regulatory approaches that would encourage (or require) new ground-oriented and mid-rise multi-residential development to achieve higher than BC Building Code energy performance, and help drive local implementation of the BC Energy Step Code.

**Related Objectives**

1. Support the targets and objectives of New Westminster's Environmental Strategy, Community Energy & Emissions Plan (CEEP), and Official Community Plan 2041.
2. Inform the proposed implementation framework and timing of the BC Energy Step Code for Part 9 buildings for the 2018-2022 period.

**Outline scope of project and why it is of value to your organization. Describe how and when the scholar's work will be actionable.**

- Conduct background research and planning policy scan on what other BC local governments have implemented (or are considering implementing) in terms of Zoning Bylaw, density bonusing, relaxations and/or regulatory requirements with respect to enhanced building energy performance for ground-oriented multi's and mid-rise residential archetypes.
- This work requires engaging / interviewing other local government staff as part of the research scan. Note: City staff will provide related research reports conducted by BC Housing and Community Energy Association on local government preparedness for implementing the BC Energy Step Code.
- Identify new program drivers or incentives (relevant to the High Performance New Home Program) that would support policy and regulatory measures identified by the Scholar's research.

**Deliverables**

- A final report, containing a summary of local government policy and program research conducted and recommendations on preferred program, policy and regulatory options for missing middle housing in New Westminster.

**Submit applications here: <http://bit.ly/2DC2jpP>**

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- A presentation on the Key Findings report recommendations, as noted above.
- A draft Council Report summarizing the above initiative and including report recommendations, and how the recommendations support the local implementation of the BC Energy Step Code for Part 9 buildings. [Note: City staff will assist the Scholar in preparing this report.]
- Final report or executive summary for the UBC Sustainability Scholars Program online project library.

**Time Commitment**

- This project will take **250** hours to complete during the period **30 April 2018** and **10 August 2018**. Actual timeline to be determined with the UBC Scholar at project start up.
- Generally, the Scholar is expected to complete work hours between 9:00 am and 5:00 pm, as needed. Some work can be completed at home or offsite, but City staff are encouraging the Scholar to work at City Hall as much as feasible. Work space with City e-mail account will be provided at City Hall for purposes of this project.

**Skill set/background required/preferred**

- Demonstrated interest in advancing innovative land use and development planning policies, and supportive regulatory measures for local governments.
- Demonstrated interest in green building, energy efficiency and GHG emission reduction strategies for the built environment
- Strong writing skills
- Ability to work independently
- Demonstrated time management skills
- Familiarity with qualitative and/or quantitative research methodologies and implementation
- Comfortable interacting with local government staff, urban planning and sustainability consultants

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