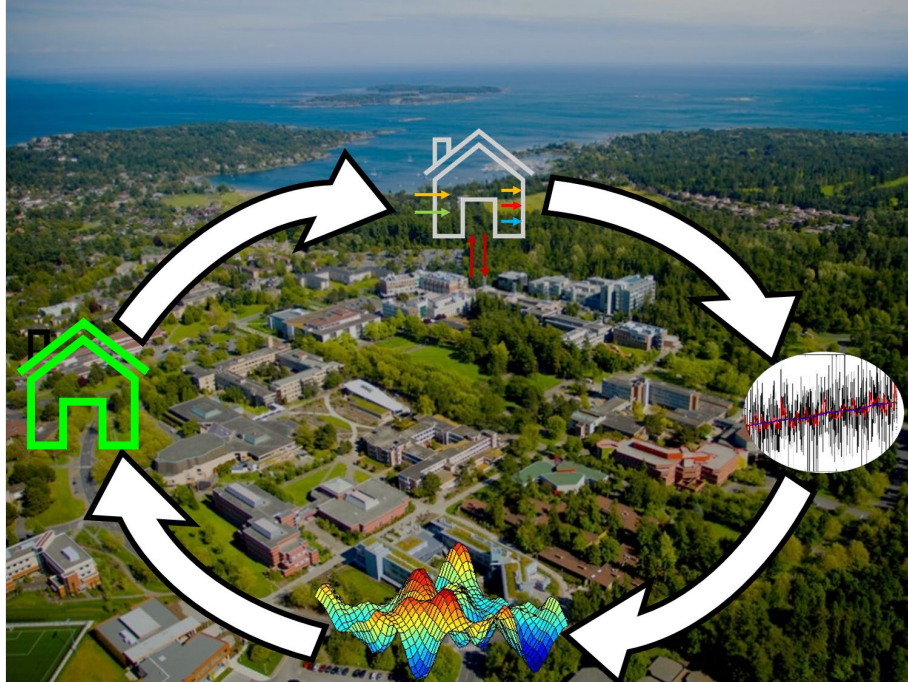# Multiple Post-Doctoral Fellow positions available at the
ReBuild Initiative

A nexus for research into data-driven retrofit solutions for energy-efficient buildings

The ReBuild Initiative is a large research project with many industry and government partners that will apply data-driven and simulation methods to challenges related to retrofitting buildings – see website for more details. The positions will be supervised by the Director of the Initiative, Dr Ralph Evins, who leads the Energy in Cities research group. The work will be carried out in the stimulating multi-disciplinary environment of the Institute for Integrated Energy Systems (IESVic) and the new green Civil Engineering department at the University of Victoria on Vancouver Island in beautiful British Columbia, Canada.

There are several theme areas that could each align with a post-doctoral position:

1. **Data-driven methods for building energy analysis**
   Applying machine learning techniques to building energy related problems that span classification of building characteristics, load prediction, stock-level clustering and surrogate modelling.
2. **Building simulation tools to model existing buildings**
   Developing new workflows to better enable building energy simulation tools to model existing buildings, including model calibration using surrogate models and machine learning.
3. **Analysis of retrofit solutions**
   Helping partners to develop analyses of the options available for deep energy retrofits, including new technologies, market factors and relevant policies.

4. Tool development to support building retrofit analysis
   Software development to underpin research, including implementing new workflows and dashboards that provide insight into research findings.

Specific responsibilities
 - Undertake research activities and projects aligned with the relevant theme area.
 - Management of one or more research activities and projects.
 - Daily supervision of graduate students.
 - Prepare & assist others in preparing publications, reports and presentations.

Requirements
 - A PhD in a relevant field.
 - A strong publication record and research experience in relevant topics.
 - Experience in supervising graduate students is desirable.
 - Experience managing a research project is desirable.
 - A high level of proficiency in the written and verbal use of English.
 - A good working knowledge of Python is highly desirable (for an exceptional candidate an expert level in another programming language could be acceptable).

How to apply
Applications will be considered on a rolling basis, and could start as soon as possible. Positions are funded at a level comparable with NSERC [Post-doctoral](#) scholarships. Holders of these or similar fellowships are eligible for significant top-up funding.

The Energy in Cities group specifically encourages applications from persons with disabilities, visible minorities, Aboriginal Peoples, people of all sexual orientations and genders, and others who may contribute to the further diversification of the University.

Please apply on the ReBuild website under [Vacancies](#).

If you have previously applied for a position, do not reapply.
Only apply for one position - you will be considered for all open positions.