

FACTOR FOUR | REDUCING ENERGY AND MATERIAL FOUR FOLD

PROPOSED

A new trades and technology building could be built following passive design principles. This landmark building will be known across Canada for its low energy consumption, low maintenance costs, high comfort levels and high durability.

PROPOSED FOR 50TH



In time for the 50th anniversary celebrations, a much needed paint refresh will be given to the Afresh home, BCIT's net zero energy home.

PROPOSED FOR 50TH



The concept behind the sustainable garden demonstration project is to introduce a template of sustainable landscape practices from which members of BCIT's community can benefit, while improving the landscape of the area.

COMPLETED

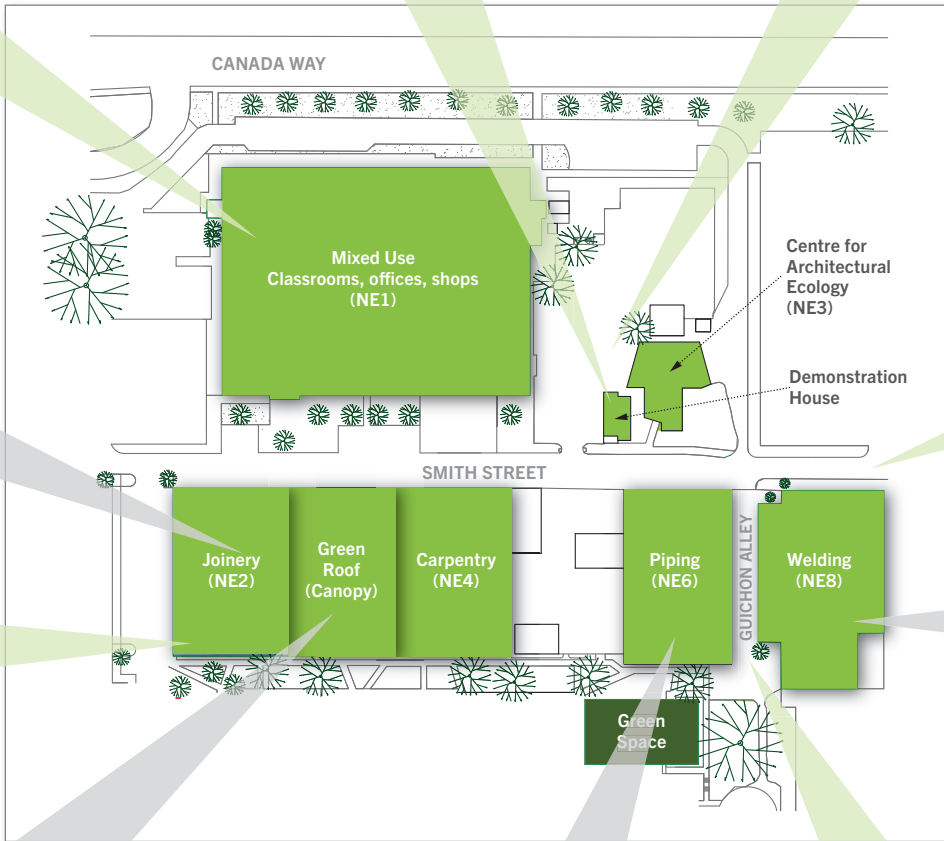


Students and staff breathe easier because of a dust extraction system operating on 10% of the pre-Factor Four energy.

PROPOSED FOR 50TH



Functioning as a living laboratory the wood-waste to energy facility will include an outdoor teaching space and technology viewing windows. The system will reuse 250,000 kg of waste while creating carbon neutral energy.



PROPOSED FOR 50TH



Students proposed celebrating our industrial nature by transforming Smith Street to a more colourful Granville Island style atmosphere.

COMPLETED



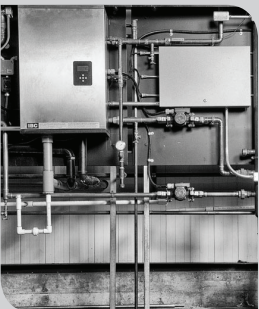
BCIT's award-nominated, 2.7 million-dollar ventilation retrofit operates on 39% of the pre-Factor Four energy while experimenting with different technologies.

COMPLETED



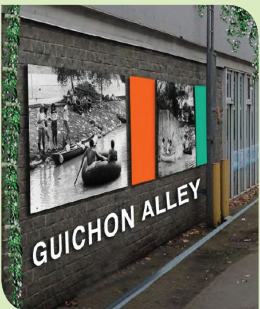
The Center for Architectural Ecology, with its offices and research facilities at the heart of Factor Four, has installed a living wall as part of the development of an elevated lab.

COMPLETED



The Piping Department students installed a high efficiency condensing boiler system operating with efficiencies at up to 98%.

PROPOSED FOR 50TH



Students, inspired by Guichon Creek, designed a project that brings awareness to daylighting urban creeks while creating a gathering space.

ADDITIONAL PROJECTS

- > Real time metering [COMPLETED]
- > Behavioural and operational change initiatives [COMPLETED]
- > LED outdoor lighting [COMPLETED]
- > Afresh home HVAC retrofit [COMPLETED]
- > Daylighting the carpentry canopy [PROPOSED]
- > Trades shops lighting redesign [PROPOSED]
- > Outdoor welding [PROPOSED]
- > Virtual welding [PROPOSED]
- > Center for Architectural Ecology Passivhaus retrofit [PROPOSED]
- > Pedestrianization of Smith Street [COMPLETED]
- > Educational signage [COMPLETED]
- > Daylighting Guichon Creek [PROPOSED]
- > Changing wood procurement and management practices in the joinery trades training program [COMPLETED]