

What is the False Creek Neighbourhood Energy Utility (NEU)?

The Neighbourhood Energy Utility (NEU) is a community energy system that will provide space heating and domestic hot water to all buildings within SEFC. The NEU will draw from sustainable heat sources to achieve significant reductions in greenhouse gas emissions versus conventional building developments. The first phase of NEU development will recover waste heat from the municipal sewer system to serve more than 40 SEFC buildings. In addition, heat will also be utilized from solar modules on the rooftops of at least 3 SEFC buildings. The City of Vancouver will own the NEU, and all costs will be recovered through rates charged to future customers.

Why Community Energy?

A community energy system uses a network of pipes and heat exchangers to share thermal energy amongst a number of buildings. In recent years, community energy systems have significantly reduced the consumption of fossil fuel in many communities throughout the world. This is because community energy systems have the ability to utilize renewable "waste" heat sources that would otherwise not be usable with conventional systems. The centralization of energy production also results in significant energy efficiency benefits. Community energy systems can provide additional benefits of reduced energy costs over time, more environmentally friendly fuel sources and local ownership.

NEU Primary Objectives

- Minimize greenhouse gas emissions, consistent with the directions established in Vancouver Community Climate Change Action Plan
- Support the development and demonstration of flexible, innovative and local technologies
- Establish and maintain customer rates that are competitive with the long-term capital and operating costs of other energy options available to customers
- System expansion of the NEU to other neighbourhood and developments

SEFC Community Energy Centre

- Sewer heat recovery as the primary energy source
- High efficiency natural gas boilers to provide backup and supplemental heat on the coldest days of the year
- Will be built to achieve LEED™ Gold or Platinum certification

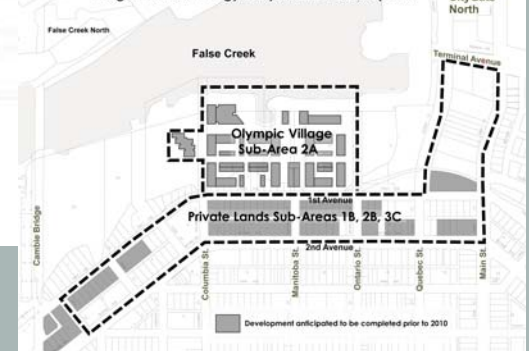
Block Scale Water Distribution

- Low temperature distribution system supplying warm water to all SEFC buildings for space heating and domestic hot water
- Heat transmitted to buildings using energy transfer stations

Solar Thermal Modules

- Solar thermal modules capture and convert sunlight to heat energy
- Will be installed on the roof-tops of at least 3 SEFC buildings
- Will return solar energy to the NEU distribution system

Neighbourhood Energy Utility: Phase 1 Development



Southeast False Creek Neighbourhood Energy Utility

Overview

