Case Study Covers

- **Context for the Mount Pleasant Community Centre (MPCC)**
- *Why mixed use buildings are important*
- **MPCC Profile**
- **Using LEED at Mount Pleasant**
MIXED-USE

• MULTIPLE ACTIVITIES SHARING A SINGLE SITE

• MIXED-USE IS A PRODUCT OF ZONING, REGARDLESS OF SCALE (Urban of Building scale)

• MIXED-USE RESULTS IN COMMUNITY BUILDING
With population shifting from rural to urban

World population is also shifting from rural to urban.

(United Nations data)
Mixed use urban areas have a lower GHG profile

- **6** Single use zone
- **3** Medium density mixed use zone
- **1.5** High density mixed use zone

Relative comparison in tonnes of CO₂ per person.
Nodal Development

Nodal development provides:
• Mix of jobs and housing
• Improved public amenities
• Diversity of dwelling units
• Diversity of open space
• Contextual massing and heights

Vancouver can become a nodal city; a system of interconnected nodes, from east to west, all providing easy and convenient access to jobs, public amenities, and transit.

Nodal development promotes walkability:
Orange represents a 5-10 minute walk around transit nodes
How mixed uses can effect GHG profiles

* Relative comparison in tonnes of CO₂ per person

Mount Pleasant Community Centre
Mount Pleasant CC Neighbourhood Context

- Centre of a growing community
- Many transit links
- Significant location in the community
- Close to parks
- Adjacent to bike paths
Midrise neighbourhood that is growing

Kingsway and Broadway looking North
Midrise neighbourhood with strong social fabric

Kingsway and Broadway looking West
Existing Community Centre was not:
• Central enough
• Large enough
To meet the needs of the growing community
Existing library was not well integrated
Project programming focused on relationships
Design charrettes focused on sustainability and community building
Rental housing above new library (left)

Community centre (right)
Overhang represents split between library and rental housing above it
Project section

- Residential tower
- Community centre
- Two levels of underground parking
3rd Floor Plan

Daycare

Daycare playground
(roof of gym)

Rental housing units
Kingsway
Main entry
Daylit Community Centre Lobby Area
Gym making us of natural light
Gym with rock wall and fitness centre
Fitness centre overlooks Kingsway
Library is now one of the busiest in the city
Daylit work areas are amongst the busiest at the library (get there early for your seat)
Library’s children’s area
Daycare centre
Daycare playground
Daycare playground
Community Centre offers

- Children’s Classes
- Library
- Climbing Wall
- Teen Activities
- Fitness Centre
- Adult Programs
- Parent & Tot Gym
and public street art
Project registration predated the CaGBC’s LEED NC version 1.0
As a result the project could use multiple compliance paths
Canada Green Building Council Rating Systems

Reference Guide

Application Guide

Core and Shell

Campuses

Retail

MURB

Schools

LEED NC

LEED CI

LEED H

LEED EB:O+M

It’s either
1. A New (NC) Part 3 building
2. A New tenant (CI) Part 3
3. A New (H) Part 9 building
4. Re-certification of an NC Part 3 building (EB:O+M)

With application guides to help interpret use or ownership types
## Mount Pleasant Centre LEED-BC Gold Scorecard

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Certified 26-32
Silver 33-38
Gold 39-51
Platinum 52+

Total Credits = 47 [+2 maybes]
Green building strategies began on day 1

With a study to evaluate the most appropriate building materials
Heating and cooling is done by ground-sourced heat pumps, with 74 geothermal wells, 300 feet deep, and five heat pumps.
Mount Pleasant Centre is built next to 5 bus lines, a bike route, a Wellness Walkway and within 1 Km walking distance of 75% of Mount Pleasant.
Toilets have dual tanks, select ☑️ for a small flush and ☐️ for a large flush and contribute to water savings.
Expect the indoor temperature to move with the seasons, cooler in winter and warmer in summer. Seasonal clothes will always be comfortable.
Passive Design Strategies

- Stormwater Cistern
- Earth tube and geo-exchange
- Daylighting
Mount Pleasant Community Centre Case Study