



ecoACTION
Using Less • Living Better

Equilibrium™
Communities
HEALTHY COMMUNITIES FOR
A HEALTHY ENVIRONMENT

Station Pointe, Edmonton (The Communitas Group Ltd.)

Station Pointe is one of six selected projects in the EQUilibrium™ Communities Initiative, a three-year, \$4.2M collaborative sustainable community demonstration initiative of Natural Resources Canada (NRCan) and Canada Mortgage and Housing Corporation (CMHC) under the Government of Canada's ecoACTION initiatives.

The EQUilibrium™ Communities Initiative provides financial assistance for technical and promotional activities of selected neighbourhood development projects which, through their planning, design, implementation and operation, will provide measurable improvements over current approaches in the areas of energy and water consumption, environmental protection, land use planning, sustainable transportation and other features. Capital construction costs are not funded through the initiative.

This transit-oriented development is to be the first redevelopment within the Fort Road community renewal project initiated by the City of Edmonton on former industrial lands northeast of downtown. The site is located within walking distance of a light rail transit station and bus terminal. The project is planned to include 220 affordable and market-priced homes in the form of townhomes, and mid- and high-rise apartments. The mix of uses is expected to include over 1,400 m² of commercial/retail uses, a daycare and community facilities.

Affordability is a guiding objective in this project, targeting prices below the area average. A green loan is proposed to cover the increased capital costs of energy-saving features and be paid back

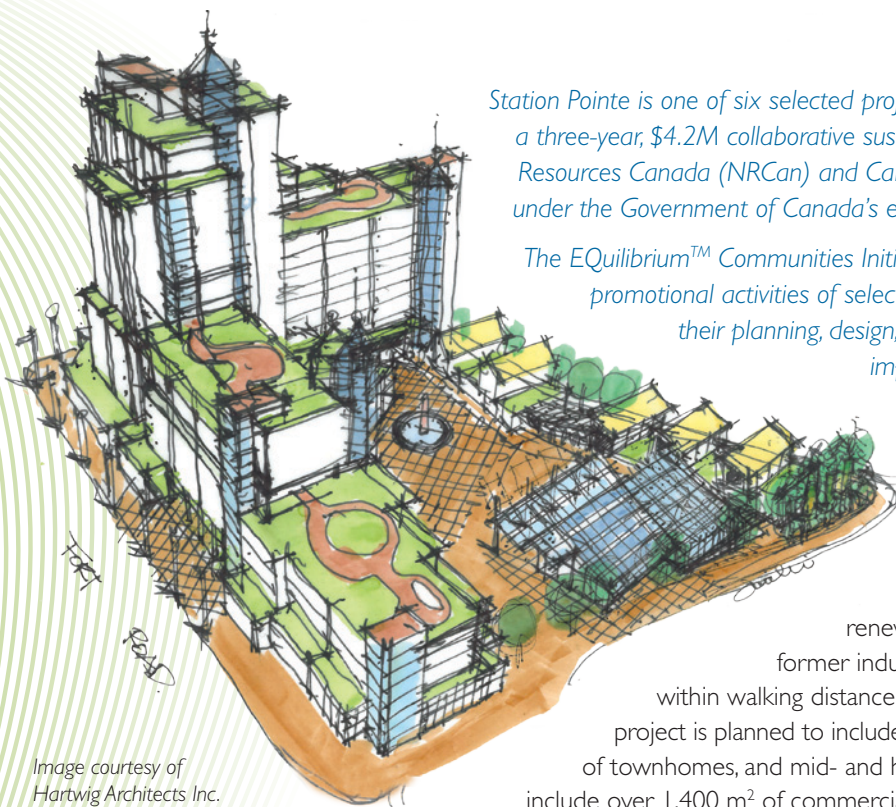


Image courtesy of
Hartwig Architects Inc.

Research Objectives

Natural Resources Canada

- NRCan's CanmetENERGY works with communities to reduce their energy consumption by understanding the synergies between building design, urban form, transportation and land use, and assisting with the development of integrated community energy system concepts.

Canada Mortgage and Housing Corporation

- Improved environmental performance of residential, mixed use neighbourhoods;
- Integration of housing and community infrastructure such as energy, transportation, water and waste water; natural environment;
- Built examples, technical analysis and supporting information that is of use to developers and municipalities.

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Natural Resources
Canada

Ressources naturelles
Canada

Canada



through a monthly green fee equal to the operating savings realized. Communitas has had success with this approach in another high-efficiency multi-residential building in Edmonton. Station Pointe is planned to be developed as a number of cooperatives, including both home ownership and continuing, as well as a second tier cooperative. Because the co-ops are to function as a neighbourhood association and take responsibility for the common property and systems, the long-term viability of the community features is ensured.

The project targets a 75 per cent reduction in building energy use. Through initiative support, Communitas is exploring options for renewable and waste energy sources in a district energy system as well as passive house designs.

Initiative support is also being used for investigating options for treating 100 per cent of the wastewater on site which will then be re-used for toilet flushing and irrigation. The project aims to divert 100 per cent of the stormwater from the municipal sewer, through

a combination of on-site infiltration and capture for treatment and use on site.

As the most northern of the six EQUilibrium™ communities projects, it plans to embrace indoor and outdoor “winter city” design concepts such as maximizing solar exposure, options for pedestrian movement through all buildings, prevailing wind protection, and design for snow storage and removal.

Since the project is in the planning phase, the initiative-funded work focuses on consultation/alignment, analysis and design for performance improvements. This includes consultation with approval authorities on the proposed water re-use options and alignment with the community and future residents. Analysis and design improvements are in areas that include: renewable and waste energy use at the neighbourhood scale; green financing options; and options for on-site collection, treatment and use of rainwater and wastewater.



Site plan and urban context. Image courtesy of Hartwig Architects Inc.

List of Consultants:

Architect-Prime Consultant
Prime Mechanical Consultant
Mechanical Engineer
LEED Consultants

Hartwig Architecture Inc
Vital Engineering
Cobalt Engineering
EcoAmmo

Solar PV Specialists
Structural Engineer
Electrical Engineer

Howell-Mayhew Engineering
Read Jones Christoffersen Engineering
Beaubien Glover Maskell Engineering

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For more information about the EQUilibrium™ Communities Initiative, and winning projects, visit: www.ecoaction.gc.ca/equilibrium-eng.cfm