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Dockside Green

Innovation in Sustainable Building Design

Being first. Thinking big. It takes a visionary company to invest in a bold new concept, especially in the high-stakes area of community development.

Windmill Development, a company known for innovative environmental building design, partnered with Vancity to create Dockside Green, a 1.3 million-square-foot, mixed-use community on a former brownfield site in Victoria. Dockside Green is taking an innovative, even revolutionary, approach to community planning and development, integrating energy, water and resource management in a sustainable community design. The project has the potential to create a paradigm shift in how new developments are done in the future.

Dockside Green will incorporate a community-wide integrated energy system that includes heating from renewable biomass energy, district heating distribution and heat recovery, and a wastewater treatment and sewage heat recovery system. The project is further enhanced by energy-efficient buildings that are targeting LEED Platinum certification, and providing greater comfort, efficiency and asset value for occupants.

Windmill believes they are building the neighbourhood of the future today and sees the project as a catalyst to encourage sustainable community development. In doing so, they enhance their reputation as leaders in high-performance building and sustainable community design – which makes being first look like a very sound business strategy.

HIGHLIGHTS

Energy efficiency measures

- Integrated community energy system incorporating renewable fuel, sewage heat recovery and district heating
- Advanced building envelope construction
- Optimal use of passive solar heating
- High-efficiency lighting and appliances
- Advanced in-suite electric and water metering and control system
- 100 per cent fresh air system to each suite with heat recovery

Results

- 55 per cent lower energy consumption than a community built to model energy code
- Total energy savings of 15 gigawatt hours per year forecast for the entire community
- Net zero greenhouse gas emissions
- 60 per cent less water consumption than conventional buildings

At Dockside Green, Windmill Development is building the neighbourhood of the future today.