Green housing project to cut emissions

Plant at new ‘state of the art’ development in Victoria will turn wood waste into gas

BY SID TAPLER, VICTORIA

A new development in Victoria will cut its own greenhouse-gas emissions and those of its neighbours as well, says Joe Van Belleghem, co-developer of Dockside Green.

The project, which will eventually house thousands of residents, is the first in North America to not only reduce its greenhouse-gas emissions from energy use to zero, but also cut tonnes of emissions from energy consumed by its neighbours.

Located across the harbour from downtown, Dockside Green will include a plant that turns wood waste into gas to provide heat and hot water for its own use, with energy enough left over to sell to other buildings nearby.

The sale of this excess energy, resulting in reductions in the use of conventional fuels, will cut greenhouse-gas emissions by 1,823 tonnes annually, Mr. Van Belleghem said.

Dockside Green is being built on 15 acres of former industrial land with a variety of green features such as energy-efficient building materials, its own sewage treatment facility, solar lighting and incentives for residents to use public transit, bicycles and low-emission cars.

Co-developed by VanCity and Windmill Developments, the project will eventually encompass 26 buildings, 1,000 condominiums, and office, retail and light industrial space.

The wood waste or biomass plant, to be built by Nexterra Energy Corp. of Vancouver, will convert 5,000 tonnes of leftover wood from construction sites and land clearing to a gas that will provide heating and domestic hot water and produce no greenhouse gases.

Nexterra has built biomass fuel plants for a plywood mill and other forestry operations and is currently constructing a waste-wood energy system at the University of South Carolina. Dockside Green is the first residential project in North America to use this technology.

"Building green makes good economic sense for ourselves and for the consumer," Mr. Van Belleghem said. "Governments have to be accountable on this issue and the private sector has to be accountable as well."

"We don't believe that addressing climate change is a disadvantage; we see it as an economic opportunity."

Dockside Green is recognized "as state of the art for North America as far as green buildings are concerned," said Ian Bruce, climate change specialist at the David Suzuki Foundation. Mr. Bruce said more advanced projects are on the drawing boards in other areas, including Europe.

The developers are targeting a platinum rating, the highest score given by the Green Building Council that rates building projects for environmental standards under its Leadership in Energy and Environmental Design program. Mr. Van Belleghem says the company has agreed to pay the City of Victoria fines of up to $1-million if it doesn't achieve the LEEDS platinum rating.

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