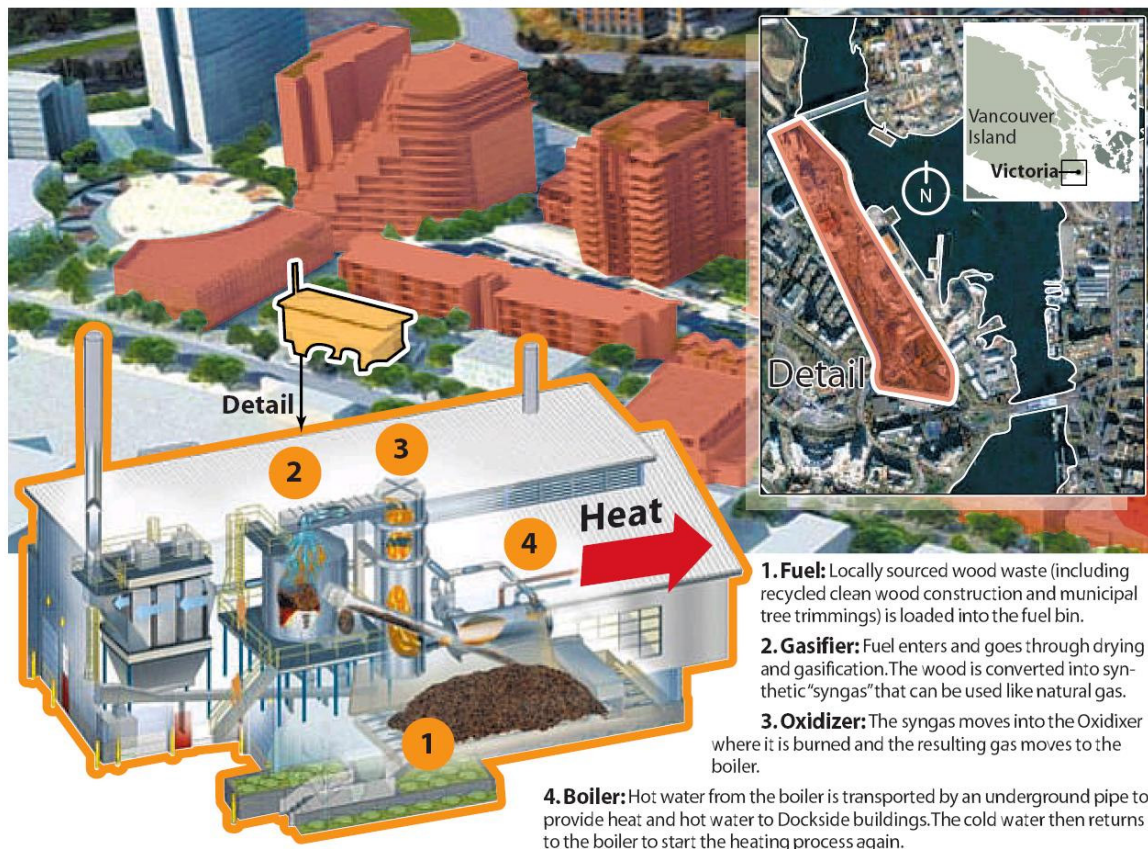


Putting the technology to work

The Dockside Green condominium development, located northwest of downtown Victoria facing the harbour, is using a Nexterra power plant to heat its homes. The first phases of the project are already occupied with final stages still to be built.



- 1. Fuel:** Locally sourced wood waste (including recycled clean wood construction and municipal tree trimmings) is loaded into the fuel bin.
- 2. Gasifier:** Fuel enters and goes through drying and gasification. The wood is converted into synthetic "syngas" that can be used like natural gas.
- 3. Oxidizer:** The syngas moves into the Oxidizer where it is burned and the resulting gas moves to the boiler.
- 4. Boiler:** Hot water from the boiler is transported by an underground pipe to provide heat and hot water to Dockside buildings. The cold water then returns to the boiler to start the heating process again.

Source: Nexterra

VANCOUVER SUN GRAPHICS

Collapse changed Nexterra

Company now has four high-profile projects after focusing on green credentials

BY GORDON HAMILTON
VANCOUVER SUN

Nexterra developed its technology for the British Columbia forest industry but when the collapse of markets drove capital away, the clean-energy company turned to urban applications, designing systems to fit institutions such as universities, housing developments and hospitals.

It has four high-profile projects, residential, institutional and industrial, all within urban settings, all with green credentials:

- Victoria's Dockside Green condominium development, a neighbourhood energy plant in a residential development. It uses urban wood, such as

waste from tree trimmings, which it feeds into a biowaste gasifier to create syngas. The gas in turn is used to provide heat and hot water for the development.

- Kruger Inc.'s New Westminster paper mill, where Nexterra is constructing a syngas system to fuel the mill's power boiler, the first of its kind in the pulp and paper industry. It will reduce greenhouse gas emissions by 22,000 tonnes a year.

- The University of South Carolina, where a biomass gasification plant using wood waste from local sawmills provides heat for the whole campus.

- A \$14.8-million biomass gasification plant at Prince George's University of Northern B.C. expected to be completed by mid-2010.

The next step, Nexterra president Jonathan Rhone said, is into the urban U.S. clean-energy market. Nexterra has signed a contract for a biomass gasification system at the U.S. Department of Energy's flagship Oak Ridge National Laboratory in Tennessee.

"This is the big time," Rhone said of the Oakridge project.

Future developments include providing upgrades to syngas that replace natural gas-fired electric utilities and even producing syngas from biosolids, the new clean-tech term for sewage sludge.

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