



CLEAN ENERGY FROM WOOD

Nechako Lumber Company's Organic Rankine Cycle (ORC) system is providing environmentally friendly energy for the mill's operations.

- excess heat from the existing bio-energy system heats oil for use in the ORC system to generate electricity and heat for the industrial complex
- ORC systems offer significant savings for wood manufacturing operations — there is no cost for fuel, nor for transportation or fuel handling costs, as this is all managed as part of the plant's day-to-day operations



UTILIZING CANADA'S FORESTS: RESULTS EXPECTED



ORC SYSTEM CAN PRODUCE ENOUGH ENERGY TO POWER

1300 HOMES



FULL-TIME JOBS SECURED

75
+4 NEW HIRES

INNOVATING WITH WOOD

- ORC systems take heat from combustibles such as sawdust and bark and vaporize an organic fluid which then passes through a turbine to generate electricity
- the system creates more than 10GWh of electricity every year

Awards

BC Hydro's Powersmart Award
Clean Energy BC's 2012 Project of the year
BC Lt. Gov Safety Award for 2013

POTENTIAL OPPORTUNITIES

ECONOMIC: SIGNIFICANT SAVINGS FOR WOOD MANUFACTURING OPERATIONS

MARKET: HIGH REPLICATION POTENTIAL BECAUSE OF READY ACCESS TO WOOD RESIDUES

ECONOMIC: ELIMINATED COSTS FOR FUEL, TRANSPORTATION, AND FUEL HANDLING

ENVIRONMENT: GENERATES CLEAN, RELIABLE AND RENEWABLE ELECTRICITY



NECHAKO LUMBER PRODUCES HIGH-QUALITY STUDS AND BOARD STOCK FOR DOMESTIC AND EXPORT MARKETS

PROJECT LOCATION:
VANDERHOOF, BRITISH COLUMBIA

We wanted to find a way to be more energy and cost-efficient in our operation. By capturing the waste heat, we are now using every bit of the wood fibre while leaving a very low carbon footprint.

— Alan Fitzpatrick, CEO, Nechako Lumber and President, Nechako Green Energy

Investments in Forest Industry Transformation Program: In 2010, Natural Resources Canada's Canadian Forest Service created the Investments in Forest Industry Transformation Program (IFIT) to support Canadian companies to develop and grow markets for new and innovative high-value products using Canada's forest resources. *For more information www.nrcan.gc.ca/forests/federal-programs/13139*

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