



## NEXTERRA BIOMASS SYSTEM CONFIRMED AS ONE OF THE CLEANEST IN NORTH AMERICA

**Vancouver**, **BC** – **August 25**, **2011** – Recent third party testing and analysis of the University of Northern British Columbia's (UNBC) Nexterra Biomass Gasification System has concluded that the plant is one of the cleanest biomass facilities operating in North America. The biomass gasification system was supplied and installed by Nexterra Systems Corp.

The Nexterra system, which provides heat to most buildings on UNBC's Prince George campus, underwent independent testing to assess the emissions for Particulate Matter (PM), Volatile Organic Compounds (VOC), Carbon Monoxide (CO) and Nitrogen Oxides (NOx). Testing results showed that the Nexterra system generated emission levels that are extremely low for biomass energy systems and are equivalent to natural gas.

"As a university, we are keen to be at the forefront of renewable energy developments; especially those relevant to northern, forest-based communities. We are proud to have delivered on the commitment we made to our community that we would generate our own renewable energy and be a showpiece for the province without compromising air quality in the Prince George airshed," said UNBC President George Iwama.

When compared against the average emissions levels generated by 17 conventional biomass combustion plants located in the US and Canada built within the last decade and of a similar scale, the test results from UNBC were:

- 18 times lower with respect to Particulate Matter
- 65 times lower with respect to Carbon Monoxide
- 37 times lower with respect to Volatile Organic Compounds
- 2 times lower with respect to Nox emissions

Further, when compared against US Environmental Protection Agency's (EPA) AP-42 air emissions regulatory factors for natural gas, emissions from the UNBC biomass system were:

- 2 times lower with respect to Particulate Matter
- 21 times lower with respect to Carbon Monoxide
- 11 times lower with respect to Volatile Organic Compounds
- On par with respect to Nox emissions

"These are impressive emissions results and we applaud UNBC and Nexterra for this accomplishment," said Michael Weedon, Executive Director of the BC Bioenergy Network. "As distributed biomass heat and power solutions become more integrated into communities, ultra low emissions, reliability, fuel versatility and efficiency as demonstrated by Nexterra, will become increasingly important for widespread adoption in North America."

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"We are delighted with these latest test results," said Jonathan Rhone, President and CEO of Nexterra. "We are seeing a growing trend across North America that communities want distributed biomass heat and power solutions provided that they do not result in a net degradation of air quality. We are very pleased to help UNBC deliver on this commitment to the citizens of Prince George."

The UNBC biomass gasification system, which opened in March of this year, integrates campus operations with research and teaching relevant to community development. The system enables the university to generate renewable heat economically thorough locally-sourced wood waste. It was funded by the Governments of BC and Canada.

The biomass gasification system is expected to displace up to 85 per cent of UNBC's natural gas consumption, reducing greenhouse gas emissions by up to 3,500 tonnes per year, which is the equivalent of removing nearly 1,000 cars off the road. In 2010, UNBC's bioenergy project was selected as the top Campus Sustainability Project in North America by the Association for the Advancement of Sustainability in Higher Education (AASHE), the largest college/university sustainability organization in the world.

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Note: emissions data on biomass combustion systems and BACT permit levels for natural gas were collected by Levelton Consultants Ltd., a leading engineering and science consulting firm.

**About Nexterra Systems Corp.** – Nexterra Systems is a leading supplier of biomass gasification solutions that generate renewable heat, power and syngas for institutional and industrial customers. Working to the highest standards with world leading partners, such as General Electric, Nexterra has successfully supplied commercial gasification systems for projects at the US Department of Energy, University of South Carolina, Dockside Green, Kruger Products, the University of Northern BC and Tolko Industries. www.nexterra.ca

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