

Nexterra Completes Successful Trials of Syngas Conditioning Technology

Vancouver, BC – January 26, 2010 – Nexterra Systems Corp. (www.nexterra.ca), a leading developer and supplier of biomass gasification systems, announced today that it has successfully completed performance testing of its proprietary syngas conditioning technology. This technology is a key component of Nexterra's previously announced combined heat and power system ("CHP System") that is being developed at Nexterra's Product Development Centre in Kamloops.

The conditioning technology cleans and refines biomass-derived syngas so that it can be directly fired into internal combustion engines instead of natural gas to generate electricity. The technology will be packaged with Nexterra's biomass gasification systems and internal combustion engines into modular CHP plants sized from $2-10\,$ MWe. The new CHP System will be capable of achieving overall efficiencies up to 65% in cogeneration mode and over 30% in combined cycle mode. Future applications of conditioned syngas include conversion into biomethane and other synthetic fuels and chemicals.

"This is an important milestone for Nexterra and we are very pleased with the results," said Dejan Sparica, Nexterra's VP and Chief Engineer. "Trials conducted in the fourth quarter of 2009 verify that our combined gasification and conditioning technologies produce a clean, stable and consistent grade of syngas with more than 99% removal of tars and inorganics. The resulting syngas meets and exceeds the fuel specification for internal combustion engines. We will continue optimization and refinement of the process in 2010."

"These are impressive results for Nexterra," said John Hepburn, Vice President of Research and International for the University of British Columbia ("UBC"). "Over the past several years Nexterra has established itself as an international leader in biomass gasification. Their new CHP System has tremendous potential to help UBC, other campuses, communities and industry to achieve their green energy goals while reducing greenhouse gas emissions. We look forward to collaborating with Nexterra to further develop the technology."

The syngas conditioning technology is based on a closed-loop, thermal cracking and heat recovery process, which is designed to be simpler, cleaner, more reliable and lower cost than competing gas clean-up systems. Nexterra initiated development of the technology in 2007. Proof-of-concept testing was completed in 2008. The next step will be to operate a GE Jenbacher model 208 internal combustion engine on conditioned syngas in Q1 2010. This will be followed by full-scale demonstration projects. Nexterra will continue testing and optimization of the syngas conditioning technology process and the overall CHP System throughout 2010.

Nexterra has received funding assistance for development, testing and commercialization of the syngas conditioning technology and CHP System from the following: Sustainable Development Technology Canada, a not-for-profit corporation created by the Government of Canada, BC Bioenergy Network (BCBN), National Research Council of Canada – Industrial Research Assistance Program and Ethanol BC.



News Release

About Nexterra Systems Corp. – Nexterra Systems Corp. is a leading supplier of biomass gasification systems that generate heat and power for institutional and industrial customers. Nexterra's thermal gasification systems are commercially proven and have been selected by public and private customers, such as the US Department of Energy, University of South Carolina, Dockside Green, Kruger Products, the University of Northern BC and Tolko Industries. Nexterra is a private company based in Vancouver, Canada. For more information: www.nexterra.ca

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