

Nexterra waste fuel gasification systems

Charlie Ker and Cliff Mui, Nexterra Energy Corp.

Nexterra is a Vancouver-based company which has developed gasifiers to produce an exceptionally clean syngas that can be used to directly fire heating and drying applications such as veneer dryers, rotary dryers, lumber dry kilns, lime kilns and boilers. Nexterra gasifiers use a wide range of wood fuels including bark and white wood (3" minus up to 60% moisture) and may also be adapted for other biomass fuels. The gasifiers produce low particulate emissions (typically <50 mg/m³) that may eliminate the requirement for air pollution control equipment, depending on the fuel type and jurisdiction. Nexterra's gasifier technology is fully commercial and has been operating well over 2 years at the Heffley Creek sawmill near Kamloops. Construction of a gasification plant for Victoria's Dockside Green development is nearly complete, and the system has been ordered for Oak Ridge National Laboratory and Kruger Products in New Westminster, BC. Charlie Ker and Cliff Mui will discuss the development and application of this technology, including energy and emissions performance.