THE UNIVERSITY OF
BRITISH COLUMBIA

**UBC Public Affairs**

310 – 6251 Cecil Green Park Rd.
Vancouver B.C. Canada V6T 1Z1

www.publicaffairs.ubc.ca

Tel: 604.822.3131
Fax: 604.822.2684
E-mail: public.affairs@ubc.ca

UBC News Line:
604.UBC.NEWS (822.6397)

**Contacts:**

**Basil Waugh**
UBC Public Affairs
Tel: 604.822.2048
Cell: 604.219.8077
Email: basil.waugh@ubc.ca

**Raymond McAllister**
Nexterra Systems
Tel: 604.637.2501 Ext 172
rmcallister@nexterra.ca

**Chet Lasell**
GE Power & Water
Tel: 518-385-2904
Cell: 518-269-9387
Chet.lasell@ge.com

mr-12-154

**MEDIA RELEASE | September 13, 2012**

# UBC first Canadian university to produce clean heat and electricity from biofuel

Today, the University of British Columbia officially opened a $34-million clean energy facility, making it Canada's first university – and one of a few institutions worldwide – to produce both clean heat and electricity for its campus from renewable bioenergy.

UBC's Bioenergy Research and Demonstration Facility (BRDF) will generate enough clean electricity to power 1,500 homes and will supply up to 12 percent of UBC's heat requirements. It will reduce UBC's natural gas consumption by 12 per cent and campus greenhouse gas emissions by 9 per cent (5,000 tonnes), the equivalent of taking 1,000 cars off the road.

The facility, which runs on tree trimmings and wood chips diverted from local landfills, is a partnership with Nexterra Systems Corporation and GE. It is the first commercial demonstration of a new application that combines Nexterra's gasification and syngas cleaning technologies with GE's Jenbacher engines.

"This exciting facility targets a major challenge facing society – the need for new, clean energy solutions that work at a community scale," says UBC President Stephen Toope. "This is a flagship example of UBC as a living laboratory, where researchers, staff, students and partners collaborate on innovations targeting the pressing challenges of our day."

UBC researchers, students and partners will use the facility to research, develop and evaluate bioenergy and other clean energies, processes and technologies.

The four-storey, 1,900-square-metre facility is also the first North American commercial application of cross-laminated-timber (CLT), a solid wood building system adapted for B.C. lumber and manufactured in B.C. facilities.

Funding support for the project includes $13.7 million from the Federal Government (Natural Resources Canada, Western Economic Diversification Canada, Sustainable Development Technology Canada) and $7 million from the BC Government (BC's Innovative Clean Energy Fund, BC Bioenergy Network and the BC Ministry of Forests). Additional support was provided by FPInnovations and the Canadian Wood Council.

View and download high-resolution photos of the facility, which was designed by McFarland Marceau Architects, at: www.flickr.com/photos/brdf. Read Nexterra's media release at: http://nexterra.ca/

**Quotes:**

"This project represents a significant milestone for Nexterra and we are thankful to our partners for helping to make this a tremendous success," says **Mike Scott, President and CEO of Nexterra**. "We are seeing significant interest in

THE UNIVERSITY OF BRITISH COLUMBIA

**UBC Public Affairs**

310 – 6251 Cecil Green Park Rd.
Vancouver B.C. Canada V6T 1Z1

www.publicaffairs.ubc.ca

Tel: 604.822.3131
Fax: 604.822.2684
E-mail: public.affairs@ubc.ca

UBC News Line:
604.UBC.NEWS (822.6397)

**Contacts:**

**Basil Waugh**
UBC Public Affairs
Tel: 604.822.2048
Cell: 604.219.8077
Email: basil.waugh@ubc.ca

**Raymond McAllister**
Nexterra Systems
Tel: 604.637.2501 Ext 172
rmcallister@nexterra.ca

**Chet Lasell**
GE Power & Water
Tel: 518-385-2904
Cell: 518-269-9387
Chet.lasell@ge.com

mr-12-154

this next-generation solution from around the globe. We look forward to further proving the system out at UBC and then replicating this system worldwide."

"With the successful start-up of our ecomagination-qualified GE Jenbacher gas engine at UBC, Nexterra is well on the road to delivering a renewable biomass combined heat-and-power solution that meets the demanding real-world reliability requirements of district energy providers and distributed power producers worldwide," says **Roger George, general manager, North America, GE Gas Engines.**

"Our government's approach to resource development means investing in the development of innovative renewable energy technologies that create jobs and generate new economic opportunities," said **Wai Young, Member of Parliament for Vancouver South, on behalf of the Honourable Joe Oliver, Canada's Minister of Natural Resources**. "Today's announcement demonstrates our tangible support for renewable energy projects that increase energy efficiency and drive innovation."

"Our government is proud to have supported this project from day one because we have made education and research a top priority," says **John Yap, Minister of Advanced Education, Innovation and Technology**, representing the provincial government, which contributed $7 million to the project through several ministries and departments.

**Background: UBC's leadership in sustainability:**

- BRDF is one of four UBC projects, with a total value of $150 million, that will reduce institutional GHG emissions by 33 per cent by 2015 (below 2007 levels), including continuous optimization and a hot water district energy conversion.
- UBC's carbon reduction targets – which include a 67 per cent reduction of institutional GHGs by 2020 and zero emissions by 2050 – are the most aggressive among top-40 universities.
- UBC's Centre for Interactive Research on Sustainability opened in 2011 as North America's "greenest" building, designed to regenerate the environment and advance research, innovation and outreach on urban sustainability challenges.
- UBC is creating a model sustainable residential community where more than 18,000 students, staff, faculty and other residents live, work and learn together. UBC provides more student housing than any university in Canada.
- UBC was the first Canadian university to meet the Kyoto Protocol requirements, received Canada's first gold STARS rating, and is regularly ranked among the world's greenest campuses.

**Learn more at www.sustain.ubc.ca.**