New tool helps towns assess resources needed for bioenergy plant

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For B.C. communities considering investing in a bioenergy heating system, it can be expensive and time-consuming to weigh the pros and cons.

Researchers at UBC have partnered with the Community Energy Association and the Wood Waste to Rural Heat project to create a tool that evaluates if local forest waste wood can support these systems, which then have the added benefit of reducing the risk of forest fires and cutting greenhouse gas emissions.

As energy costs rise, communities are looking for alternative renewable heating fuels for large buildings like schools, hospitals, and libraries. Bioenergy heating systems, like the one at UBC's Bioenergy Research and Demonstration Facility, use wood waste to produce clean heat.

"Bioenergy heating systems not only provide a source of clean heat but they also help communities cut greenhouse gas emissions to meet provincial targets," said David Flanders, a researcher with the Faculty of Forestry and the Collaborative for Advanced Landscape Planning.

These systems could take advantage of excess wood many communities already remove from area forests to reduce the risk of forest fires.

Working with three communities in the Shuswap, Kootenays and northern B.C., researchers developed an online tool that uses forest ecosystem modeling technology to estimate how much wood could be

removed from surrounding forests to reduce fire risk while maintaining forest health. A calculator then determines how much bioenergy is available from that wood so that decision-makers can evaluate bioenergy systems.

"With the money and capacity challenges many small communities face, the tool will allow them to decide if it makes sense to invest in a biomass project," said David Dubois, a project coordinator with the Wood Waste to Rural Heat project.

More information: The tool can be accessed online at: www.communityenergy.bc.ca/reso … roduction/first-heat

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