45 case studies of wood-to-energy systems

Oct. 14, 2009, Greenville, SC – The U.S. Endowment for Forestry and Communities has announced the completion of **45 case studies** of "best-in-class" community-scale wood-to-energy systems selected from projects across Canada, Europe, and the United States. The case studies illustrate the development and experiences of biomass facilities in many different applications and provide evidence that local biomass feedstocks are a technically and financially viable fuel source. They also provide a deeper understanding of how woody biomass is being used in institutional settings.

Modern wood-to-energy systems are capable of burning a wide variety of organic materials. Among those addressed in the case studies are systems that use wood chips, pellets, and cordwood. The type of system used is determined by the need of the institution and the availability of a local wood supply.

Biomass for heat is more common in Europe than elsewhere; whole towns and villages obtain heat and hot water from district heating. District heating generates energy from a centralized biomass facility and distributes the heat to users via underground pipes. Although incentives exist for transitioning from fossil fuel to wood in other countries, in Sweden "incentives aren't needed. District heating pays off."

"We believe the case-studies provide valuable insight into the range and flexibility of modern community-scale wood energy applications around the world," says Christopher Recchia, executive director of Biomass Energy Resources Center (BERC) of Vermont. BERC led the development of the case studies. Project sponsors included forest industry and resource agencies and federal natural resources agencies: American Forest and Paper Association, Forest Products Association of Canada, USDA Forest Service, and Natural Resources Canada.

The larger project will include a review of the state of the science of wood-to-energy conversion and a North America-wide database of woody biomass users at the community and industrial scales.

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