

American Recovery & Reinvestment Act (ARRA) of 2009

Wood-based Energy for Maine's Public Buildings

U.S. Department of Agriculture
Forest Service
Northeastern Area State and Private Forestry



Description: A wood-to-energy initiative is creating jobs and contributing to healthy, sustainable forests in Maine. Maine's Department of Conservation was awarded \$11.424 million in American Recovery and Reinvestment Act (ARRA) funds to create or maintain 200 jobs in counties with high unemployment. It is doing this by promoting and carrying out wood-to-energy (biomass) projects on non-Federal lands. The Maine Forest Service is leading efforts to convert the heating systems of at least 17 public buildings to wood exclusively or wood and another fuel.

Key Issues:

- **Jobs:** Maintain and/or create jobs in counties where unemployment is high.
- **Renewable energy and greenhouse gas reduction:** Diversify energy sources, improve air quality and energy security, and stabilize energy prices.
- **EPA boiler rule:** EPA draft rules and delays in issuing final rules for air emissions significantly delayed construction of these projects. Project managers had to re-bid their boilers because original quotes had expired during the delay and manufacturers' prices had gone up.

Accomplishments:

Maine ARRA: Project Completion Status of 22 Grant Awards to Counties with High Unemployment

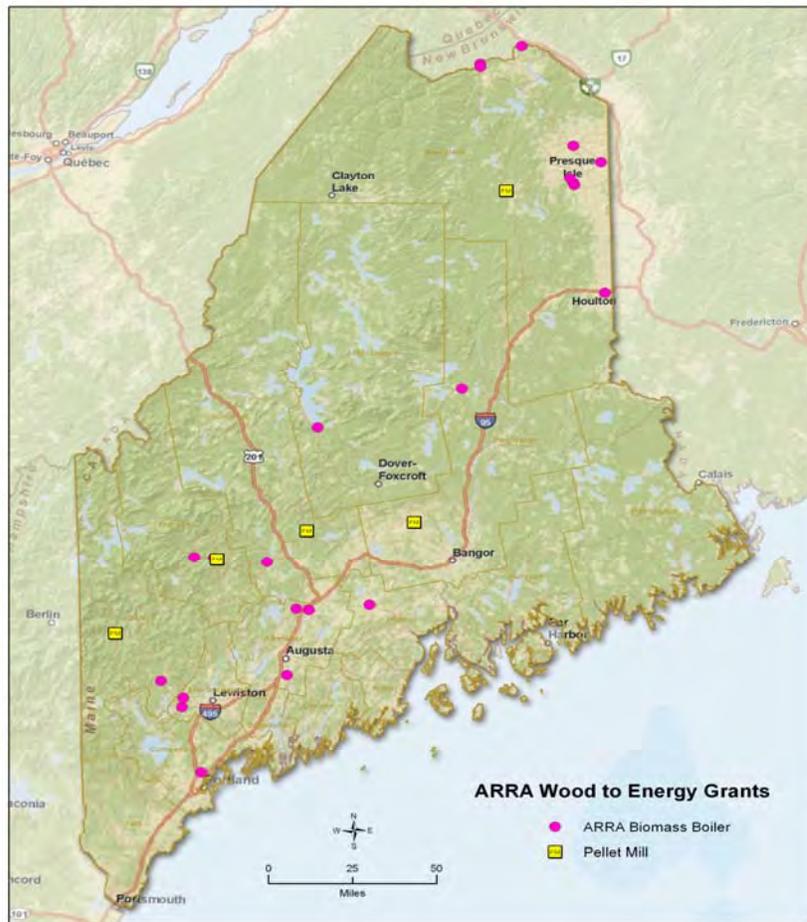
Organization	Municipality	County	% Unemployed	% Complete
<i>Unemployment percentages shown are the average for May of 2009, 2010, and 2011</i>				
Greenville Middle/High School	Greenville	Piscataquis	12.9	33
Carrabec Schools	North Anson	Somerset	11.7	66
U. Maine Cooperative Extension	Presque Isle	Aroostook	11.1	66
Fort Fairfield Middle & High Schools	Fort Fairfield	Aroostook	11.1	0
Houlton Jr./Sr. High School & Tech Ctr.	Houlton	Aroostook	11.1	100
Limestone Community School	Limestone	Aroostook	11.1	33
Madawaska Middle/High School	Madawaska	Aroostook	11.1	33
Northern Maine Community College	Presque Isle	Aroostook	11.1	33
Northern Maine Medical Center	Fort Kent	Aroostook	11.1	0
University of Maine - Presque Isle	Presque Isle	Aroostook	11.1	100
University of Maine - Fort Kent	Fort Kent	Aroostook	11.1	10
Town of Thorndike	Thorndike	Waldo	10.9	66
Oxford Hills High School	South Paris	Oxford	10.8	100
Phillips Elementary/Middle School	Phillips	Franklin	10.6	100
Town of Strong	Strong	Franklin	10.6	66
Millinocket Regional Hospital*	Millinocket	Penobscot	8.9	0
City of Gardiner	Gardiner	Kennebec	8.4	10
Messalonskee Elem./Jr./High Schools	Oakland	Kennebec	8.4	33
Waterville High School	Waterville	Kennebec	8.4	33
Town of Mechanic Falls	Mechanic Falls	Androscoggin	8.3	0
Poland High School	Poland	Androscoggin	8.3	100
Falmouth Middle School	Falmouth	Cumberland	6.5	0

* Recently published reports indicate that the current unemployment rate is 17 percent in the towns of Millinocket and E. Millinocket.

Of the 22 awards, 16 went to schools, 2 went to hospitals in small communities (Northern Maine Medical Center and Millinocket Regional Hospital), and 4 went directly to town halls in small communities (Strong, Thorndike, Gardiner, and Mechanic Falls).

To date, 63.9 full-time equivalent (FTE) jobs have been either created or maintained. This FTE figure represents only 32 percent of the total projected FTEs for this initiative since many projects were put on hold pending the publication of the EPA boiler rules. Once these projects are completed, the target of 200 jobs is expected to be met or exceeded.

Location of Maine ARRA Wood-to-Energy Grants



Future Direction:

When fully operational, these wood-based heating systems will replace the use of 900,000 gallons of #2-grade heating oil annually, which will save Maine communities \$2.7 million each year. If the heating systems collectively use more than \$700,000 worth of wood fiber on average each year, the equivalent of 7.5 woods workers will be employed yearly for the useful life of the projects.

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