**Wood Energy Early Adopters**

Chadron State College  
Chadron, Nebraska

**Year Converted:** 1991 (was natural gas)  
**Woodchip Fuel:** 9,000 tons of ponderosa pine, generated from forest thinning and wildfire fuels management  
**Energy Use:** Heat 1.1 million square feet and cool 500,000 square feet of campus buildings

Arbor Day Lied Lodge and Conference Center  
Nebraska City, Nebraska

**Year Converted:** 1995 (was natural gas)  
**Woodchip Fuel:** 3,500 tons of cottonwood, generated from sawmill waste from pallet and shipping material manufacturer  
**Energy Use:** Heat and cool 500,000 square feet of building space and provide process steam for pool heating and laundry services

Nebraska College of Technical Agriculture  
Curtis, Nebraska

**Year Converted:** 2012 (was natural gas)  
**Woodchip fuel:** 1,500 tons of redcedar, generated from eastern redcedar forest and pasture management  
**Energy Use:** Heat 200,000 square feet of campus building space

**Facility Types with Wood Energy Potential**

- Agriculture/livestock operations  
- Warehouses  
- Correctional institutions  
- Wholesale nursery greenhouses  
- Municipal buildings  
- Hospitals  
- Schools  
- Colleges  
- Universities

For more information about the Nebraska Forest Service, Forest Products Utilization program or the TREES Heat Nebraska program contact:  

Adam Smith  
Forest Products Utilization Team Leader  
102 Forestry Hall  
Lincoln, NE 68583-0815  
402-472-1276  
asmith11@unl.edu

Under the Forest Products Utilization program, TREES Heat Nebraska is the Nebraska Forest Service’s technical and financial assistance initiative dedicated to wood energy system development. Increasing energy costs across the country are negatively impacting rural communities. Woody biomass is an alternative renewable energy option that may reduce these costs.

Wood energy for thermal heating, cooling and/or electricity generation has the potential to provide significant utility cost savings, generate new rural businesses and jobs, and utilize woody residue resulting from forest management and wood products processing activities.
Technical Assistance
NFS Forest Products Utilization staff are available to assist interested parties investigate and establish wood energy systems. Collaborating closely with the facility, NFS can offer a variety of assistance opportunities.

Pre-feasibility Economic Analysis
Using the facility's previous three years' utility expenses, an economic analysis can be completed to identify the facility's potential annual utility savings with wood energy use.

Wood Resource Analysis
Working with forest resource and wood residue inventory information, NFS can assist with determining the availability of wood fuel within the project region.

Fuel Supply Chain Development
Not only does NFS have years of experience working with Nebraska's forest products industry, we also maintain directories containing information regarding businesses in Nebraska with the potential to provide wood fuel for an energy system.

Project Partnership Development
There are many opportunities to partner with agencies and organizations to establish a wood energy system through additional technical or financial assistance. NFS can help facilitate those vital connections between these organizations and interested facilities.

Financial Assistance
As a result of the passage of the Wildfire Control Act of 2013, which called for increased market development for forest and other woody residues, NFS is offering two financial assistance opportunities aimed at creating wood energy markets.

Engineering Feasibility Grants
Wood Energy Feasibility (WEF) grants are available to cost-share for the completion of technical engineering feasibility studies. Studies provide basic system engineering and design, technology and equipment options, construction and renovation needs and a total project cost estimate.

Eligible Applicants: Public, private, for-profit, and not-for-profit organizations
Cost-share: 50 percent, up to $10,000 per project

Conversion Funding Grants
Wood Energy Conversion (WEC) grants are available to qualified facilities that have completed project pre-work activities. Grant funding is available for contract services for the final design, construction and installation of wood-fueled energy systems, including the purchase of the boiler system and equipment.

Eligible Applicants: Public, private, for-profit and not-for-profit organizations
Cost-share: 50 percent, up to an annual maximum. For more information, contact Adam Smith, NFS, 402-472-1276.