



The Changing Landscape of Woody Biomass Utilization: Where Does Renewable Energy Fit?

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UNIVERSITY OF MINNESOTA DULUTH

Driven to Discover™

*For a strong economy,
a healthy environment.*

Overview

The Natural Resources Research Institute was established by the State Legislature in 1983 and given this unique mission:

To foster the economic development of Minnesota's natural resources in an environmentally sound manner to promote private sector employment.

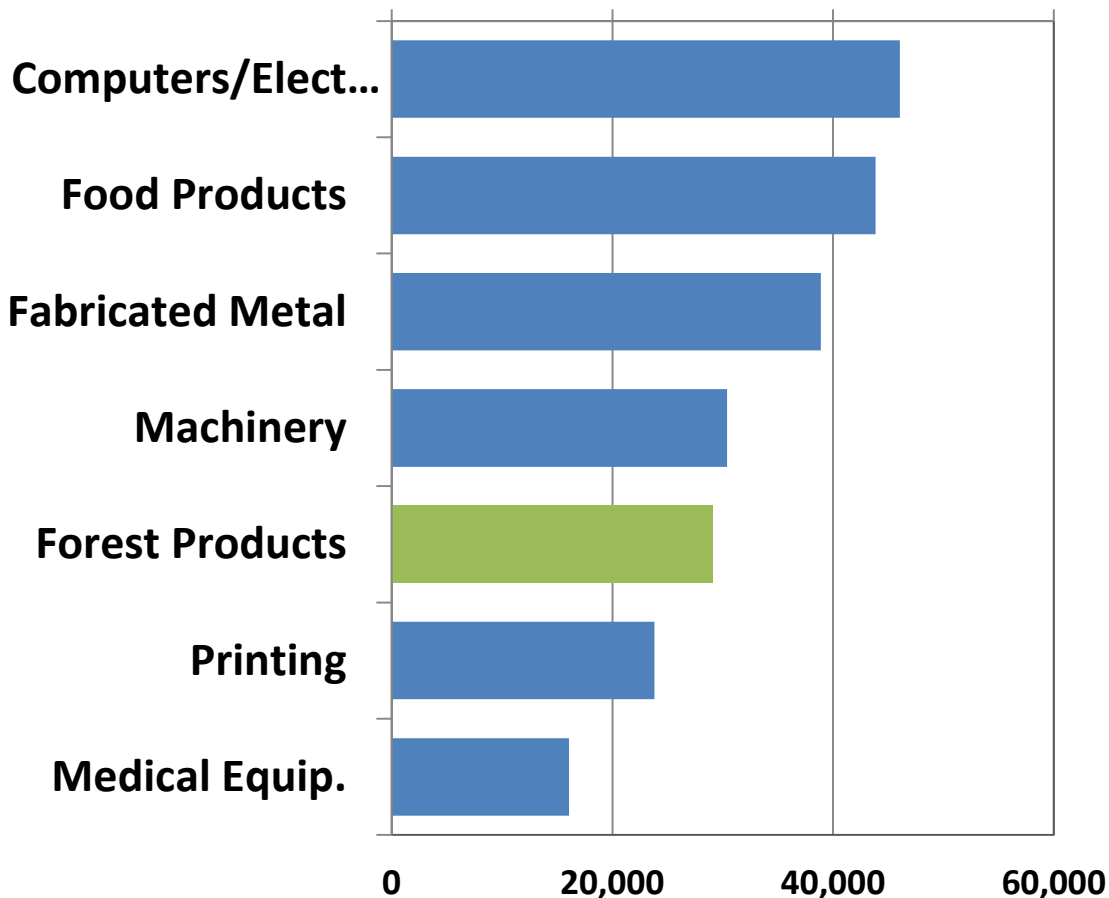
***Growing strong industries!
Developing new ideas!
Nurturing natural resources!***

While the Forest Industry Has Seen Challenges . . .

- Housing recession
- Low cost fiber and new manufacturing investment in other regions and countries
- E-publishing and electronic media growth
- Land ownership changes
- Health of the supply chain
- Forest policy

... It is Still a Cornerstone of Minnesota's Economy!

Minnesota Manufacturing Payroll



- \$16.1 billion dollar value of shipments effect and 8.2 percent of mfg. value added (Gross State Product)
- 62,370 jobs total employment effect

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. . . With Future Opportunities!

- Core industries are improving and still important
- **New opportunities developing in biofuels and biochemicals**
- Nanotechnology
- **Rural green energy solutions – wood to energy**

