

A proposal to support, diversify, and expand Michigan's forest products industry.



To bolster the value

of Michigan's \$16 billion forest products industry and help achieve the goals set out by the Governor's 2013 Forest Products Summit, a coalition of Michigan forest products and allied industries is requesting an annual \$5 million investment by the State of Michigan to advance innovation in Michigan's forest biomaterials industries.

Forest biomaterials innovation, fueled by creative people and research, can increase competitiveness and profitability to drive economic growth across Michigan. REFORGE Michigan forges and strengthens collaboration among Michigan's forest biomaterials industries, academia, and government that will foster linkages between the forest resource base in rural communities and forest-product processing and manufacturing in a broad range of communities.

Forest biomaterials in Michigan provide a wide range of economic and social benefits to our local communities and businesses, encompassing traditional forest products such as lumber, paper, composites, furniture, heat, and energy, as well as a new breed of emerging high-value products such as plastics, lubricants, fabrics, and chemical substrates. Products from forest biomaterials have applications in a wide range of industries, including, housing, transportation, and human health, among others. Using Michigan-grown resources, there are remarkable opportunities to create new jobs and expand local businesses based on both traditional and advanced biomaterials.

Key national rankings indicate that Michigan has tremendous potential to increase the size of its forest biomaterials industries based on Michigan's forest resource, manufacturing know-how, and the disparity between resource availability and employment.

Michigan is:

- 6th in total timberland
- 15th in jobs in forestry and logging
- 17th in jobs in primary wood processing
- 16th in jobs in wood product manufacturing (Wisconsin ranks 1st)



Bridging the gap

between forest resources and forestry-based jobs in Michigan depends on industry, universities, and government working together. As a collaborative effort, **REFORGE MICHIGAN**, modeled after the successful Project GREEEN at Michigan State University, will bridge this gap by pursuing **two major goals**:



The first is to address priorities identified by the forest biomaterials industries by providing competitive grant support for research and

extension activities. This effort includes all Michigan institutions of higher education that are interested in bringing rapid, science-based responses to industry-identified needs.

Researchers will leverage State and private support to attract federal funds to further expand project impacts and benefits. Grant support to address industry priorities will catalyze a synergy between industry and Michigan colleges and universities that can make Michigan a leader in sustainable utilization of forest biomaterials.



The second goal is to enhance delivery of innovative products and services by increasing Michigan's research and extension capacity in forest biomaterials,

especially in wood science. The core of existing forest biomaterials expertise resides in Michigan's nationally accredited and internationally recognized forestry programs at Michigan Technological University (MTU) and Michigan State University (MSU). MTU and MSU will coordinate on building the capacity that will effectively serve Michigan forest biomaterials industries and jointly oversee the competitive grants program.

Without compromising future generations, Michigan can derive the full value of its natural resources. Strategic government investment can marshal Michigan's human resources and spark innovation that will bolster existing and emerging industries in forest biomaterials while enhancing environmental quality and local community well-being.



R C F O R G E MICHIGAN

A proposal to *reforge* the synergy between Michigan's forest product industries and universities enabling innovative people and solutions to

1) Support existing industries by making them more competitive and profitable;

2) Creating more higher value opportunities;

3) Linking rural communities to manufacturing.





Mark Rudnicki, Ph.D.

Professor of Practice, Forest Biomaterials Executive Director, Michigan Forest Biomaterials Initiative

OFFICE: (906) 487-2603 CELL: (860) 634-1920 School of Forest Resources and Environmental Science

Michigan Technological University 1400 Townsend Dr., Houghton, MI 49931