A Wisconsin forest products cluster: a catalyst for sustainable, enduring transformation

Our vision

Northern Wisconsin's forest products industry is the largest in the nation, providing high-quality jobs to nearly 39,000 workers and contributing $14.6 billion to manufacturing output in the state. With the highest concentration of paper manufacturing in the United States, our region is the leading U.S. producer of paper products ranging from tissue to corrugated cardboard to specialty papers that supply national markets and drive $1+billion of exports to 100 countries.

For much of the last century, steady demand for the region's products sheltered this industry and the rural, timber-dependent communities that rely on it from economic downturns and the accompanying social challenges. This sense of security has faded in the past 20 years as events like the Great Recession, changes in global demand for forest products, and the COVID-19 pandemic forced mill closures and a re-thinking of the future of the industry. These events have catalyzed the coalescence of a regional growth cluster for forest products in Northern Wisconsin.

Build Back Better brings the opportunity to *align* the focus of the stakeholders who shape our forest products ecosystem to transition the industry as global forces drive rapid change and the need to diversify our state's outputs has never been greater. *Our vision is the transformation of our forest products industry to one that is positioned to meet, exceed, anticipate, and drive the demands of our 21st-century customers seeking sustainable, high-performance products, while creating a resilient and thriving rural economy underpinned by sustainable forest management*.

Our region and industry

Vibrant urban communities like Green Bay partner with the beauty of the rural north to form our 35-county region which is home to over 12+ million acres of forests, the 2nd largest freshwater system in the world, and the designation of #1 in papermaking in the country.

The Wisconsin Northwoods is a vast area of lakes and forests interspersed with small timber-dependent communities. The Menominee Forest on the Menominee Reservation is the largest tract of virgin, native timberland in the Great Lakes and it exemplifies long-term, active and sustainable forest management.

Within our region, the forest products industry supports 38,800 jobs accounting for 5% of regional employment and 30% of manufacturing employment. The forest products industry is the #1 employer in 7 counties in our region. In Adams, Florence, Iron, Sawyer and Trempealeau counties, the industry makes up 60% to 80% of all manufacturing jobs. Critically, these are high-quality jobs, with a median income of $58,000 compared with the regional average of $45,000; many are union jobs that provide family-supporting incomes without needing a 4-year degree.

Representation of the historically under-represented and disproportionately negatively affected communities including Native American, Hmong, those of struggling socioeconomic status and recent Afghan refugees is an opportunity our coalition embraces.

As an example, the Menominee Nation, a coalition partner, currently faces unemployment rates exceeding 12%. Racial disparities plaguing Native Americans in Wisconsin is evident in prison rates more than 5x higher than that of the white population. In counties such as Forest, Native Americans make up <15% of the total population but over 50% of the prison population.

With this proposal we combine the commitment from industry leaders to prioritize equitable workforce practices, educational programming and upskilling specific to the needs of our diverse

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communities, and an opportunity to address and overcome disparities at a younger age through our partnership with K-12 institutions.

Economic opportunity

The vulnerability of the entire region's timber-dependent economy was exposed with the closure of the Wisconsin Rapids pulp and paper mill in July 2020 due to COVID-19-related drop in demand for commercial print advertising like catalogs. The scale of the mill's operation, utilizing over 700,000 tons of maple pulpwood annually, impacted timber growers and loggers throughout the region. Almost overnight the mill no longer procured wood, impacting the livelihoods and business of 12,000 loggers and haulers. A recent analysis estimated that the 915 mill jobs lost led to a regional loss of 2,195 jobs and a loss in earnings of $143 million.

Despite this local market challenge, worldwide demand for forest products is neither decreasing nor ailing; rather, the end-uses are changing rapidly. Macro trends such as e-commerce, anti-plastic sentiment, and efforts to reduce food waste and landfill waste are increasing demand for wood fibers in packaging and other single-use applications. Construction using mass timber is gaining traction. Global competitors are seizing on these industry trends, often in unsustainable ways. In South America, where multinational companies are investing billions of dollars in response to China's growing demand for fiber, a reliance on massive eucalyptus plantations has perverse impacts on land and water quality and the displacement of indigenous populations. Meanwhile, European nations are embracing the bio-economy and forest management as tools to combat climate change and other global challenges in ways the U.S. market has not.

Our region has the natural, physical, and human assets to outcompete rival regions globally and to shape and grow our share of the future forest products industry reinvention of a forest economy centered on environmental sustainability and equity. To do so, our industry needs to pivot from a laser-focus on the efficient production of goods to innovate and invest in new products, processes, and capabilities that will underpin the burgeoning bioeconomy and capture new markets. Investing now is critical as several of our manufacturing assets are aging and will require significant capital in the next decade. The projects proposed below will reinforce our region's innovation capacity, supply chain, and labor force to ensure that the businesses located here can confidently make the capital investments necessary to diversify into those new markets and grow and sustain operations long term.

The impacts of this investment will be significant:

Δ # of jobs	Δ labor income	Δ total output	Δ maple wood sold	Δ of recycled paper
2,500	$250,000,000	$2,000,000,000	500,000 tons	200,000 tons

First, by deploying the projects in this proposal, we will not only avert the loss of the region's timber-dependent jobs but create 2,500 new jobs and $2 billion of new economic output over the next decade. This growth is anticipated as existing manufacturing assets are refreshed and revitalized – with private investment – to produce in-demand fiber-based products. Paper mill workers are paid substantially higher than the average wage. We project an uplift of the average wage for loggers and haulers, who currently face lower wages due to the current oversupply of timber and will benefit from increased demand for fresh fiber.

Second, these projects will have positive environmental impacts by expanding opportunities for carbon capture through mass timber, improved recycling, and diversion of high-performance single-use packaging and service-ware from landfills. Particularly compelling is a locally sourced replacement for imported eucalyptus pulp. Either we invest in climate-friendly approaches in the U.S., or the global market will increase its consumption of environmentally dubious eucalyptus.

Our coalition

Our regional cluster brings together industry, higher education, and State & Tribal governments with a strong commitment from labor to align on a sustainable future for the forest products industry. Led by the Wisconsin Paper Council, our coalition represents the interests of employers and workers across 35 counties and has gained significant support and enthusiasm beyond the core coalition. Sector businesses, philanthropy, regional economic development organizations and public officials have all embraced this initiative (see letters of support attached).

Coalition Member / Role	Description
Wisconsin Paper Council (WPC) ***Lead Institution*** *(letter of commitment attached)*	Premier trade association advocating for Wisconsin's paper, pulp and forestry industries before state and federal elected officials and regulators. The WPC also works to educate the general public and media about the importance of paper, pulp, and forestry production in Wisconsin.
Menominee Indian Tribe of Wisconsin *(letter of commitment attached)*	The Menominee Tribe employees approximately 700 people of which 72% are Native American making it the largest employer in Menominee County. It operates Menominee Tribal Enterprises as a forest products and sawmilling business.
Mid-State Technical College *(letter of commitment attached)*	One of 16 regional colleges in the Wisconsin Technical College System with four campuses in the region. It offers associate degrees, technical diplomas, and certificates in a variety of high-demand careers designed to meet local workforce needs.
Sustainable Resources Institute (SRI) *(letter of commitment attached)*	A non-profit specializing in leading and delivering forestry projects involving all aspects of the forest industry. SRI works with foresters, loggers, sawyers, and landowners to certify forest lands, harvest urban wood, and market forest products.
University of Wisconsin-Stevens Point (UWSP) *(letter of commitment attached)*	The region's primary forest products-focused institution of higher education, offering the state's only 4-year paper science and engineering bachelor's program. Longstanding record in industry outreach, thought leadership between business and academia, and translating research into new products.
Wisconsin Department of Natural Resources' Division of Forestry (WI DNR) *(letter of commitment attached)*	State agency responsible for protecting and sustainably managing Wisconsin's forest ecosystems for economic, social and ecological benefits. This is achieved by maintaining diverse ecosystems, increasing forest productivity, promoting conservation/stewardship, and supporting forest recreation.

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Great Lakes Timber Professionals Association (GLTPA) (*letter of commitment attached)*	The leading trade association of the Lake States forest products industry for over 70 years. GLTPA is a non-profit organization representing members in Wisconsin and Michigan and is committed to leading the forest products industry in sustainable forest management.

Component projects

The projects set out below capitalize on our region's natural, human, and physical assets to strengthen existing markets, grow new markets, secure and upgrade renewable feedstocks, create resilient, sustainable communities, provide a highly skilled workforce and lead in the innovation and diversification of fiber-based products.

Component Project	Description	Success metrics
A Forest-Fiber-Paper-Packaging Nexus ***Lead***: UWSP Est. EDA budget request: $25m	A facility to house R&D, innovation, industry engagement, and equitable outreach (through the HUSTLE Bar, described in the Equity Appendix) to maintain global leadership in the forest products industry. The facility will serve as the convening institute for industry-innovation efforts and accommodate labs, meeting spaces, equipment, and staff dedicated to research on packaging, new fiber markets, benchmarking, and improved recycling projects.	Δ jobs created: 475 Δ labor income: $47.5m Δ value-added: $75m Δ total output: $400m
Midwest Forest Foresight, Benchmarking, and Needs Assessment Initiative: Delivering a forest-based circular bioeconomy ***Lead:*** WI DNR Est. EDA budget request: $15m	Address diversification of forest products in the context of a forest-based, circular bioeconomy. Component projects include implementing carbon capture and carbon trading; creating evidence-based metrics to support marketing; market intelligence and research to enter world markets in mass timber, renewable materials and chemicals, renewable polymers, functional fibers, and specialty pulps; and a comprehensive forest products industry roadmap.	Δ jobs: 450 Δ income: $45m Δ value: $70m Δ output: $375m
Recovered Paper and Recycled Fiber Advancement ***Lead***: UWSP Est. EDA budget request: $7.5m	Remove barriers and implement solutions to increase paper recycling program participation among residents; implement new technology and consumer awareness programming to improve fiber separation at recovery facilities; and reduce the amount of valuable fiber materials entering landfill each year.	Δ jobs: 200 Δ income: $20m Δ value: $30m Δ output: $150m
Maple Wood Markets' Transformation	Create new markets by gap analyses and deploying processes and new equipment for maple wood applications such as construction	Δ jobs: 200 Δ income: $20m Δ value: $30m

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Lead: SRI with GLTPA Est. EDA budget request: $10m	products and wood pulps. This includes a highly differentiated, sustainably sourced, wood pulp to substitute a portion of over 2 million tons of pulp now imported from South America.	Δ output: $150m
Advanced Manuf., Engineering, Tech & Apprenticeship Ctr. ***Lead:*** MSTC w/ WPC Est. EDA budget request: $17.5m	Create a training destination for current and next generation workforce, targeting rural area early education, summer camps, K-12 partners, and apprenticeship pilot programs. Ensure our rural areas have equal opportunity in Industry 4.0 skills and creative problem solving.	Δ jobs: 425 Δ income: $42.5m Δ value: $60m Δ output: $325m
Functional and High-Performance Paper and Packaging ***Lead:*** UWSP Est. EDA budget request: $10m	Drive and lead innovation in fiber-based sustainable packaging through projects such as creating next-generation coatings for functional paper packaging, labeling and certification standards, and new industry- and customer-targeted sustainability metrics.	Δ jobs: 550 Δ income: $55.5m Δ value: $70m Δ output: $450m
Market Potential of Tribal Sawmill ***Lead:*** Menominee Nation Est. EDA budget request: $7.5m	Scope and implement new processes, equipment and production for efficient manufacture and new wood product market opportunities.	Δ jobs: 200 Δ income: $20m Δ value: $30.5m Δ output: $150m

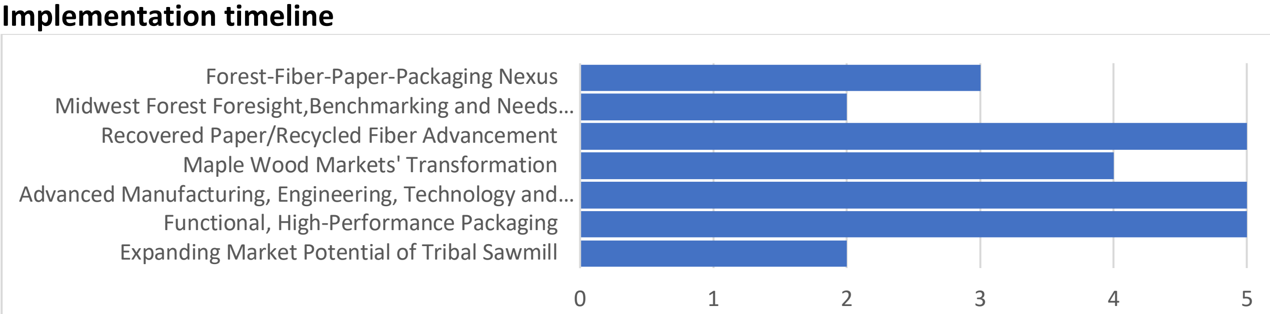
Availability of match funding

Sources and amounts identified to date include private industry ($5m), a Wisconsin Innovation Grant ($10m, application in progress), land donation ($275k), and City of Stevens Point ($250k). The Wisconsin Governor's Office and Wisconsin Economic Development Corporation set out in their joint letter of support the State programs that can be leveraged to support Phase 2 awards and how Phase 1 projects can trigger WEDC's support to implement successful Phase 2 projects.

Barriers to implementation and mitigants

Potential barriers to implementation revolve around construction scheduling, such as labor shortages, supply chain constraints, and the possibility of inclement winter weather. Our project leads will build contingencies into project budgets and timelines to account for these risks and ensure that the final project scopes and achievable within the EDA's established timeline.

Implementation timeline



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