



Forests for the Future: Team Pennsylvania's Strategic Impact Initiative to Advance Pennsylvania Hardwoods

Introduction

Pennsylvania's hardwood industry is an economic engine supporting economic activity across the state. Accelerating developments in the hardwoods industry—by focusing on enhancing technology & innovation, international trade, partnerships, new markets, and increasing woody biomass utilization—can create new revenue streams, strengthen rural economies, enhance forest sustainability, and reinforce Pennsylvania's position in national and global forestry innovation. Team Pennsylvania is uniquely positioned to advance support at the state level, consistent with our four organizational goals: Collaborate, Lead, Impact, and Empower.

Hardwoods in Pennsylvania's Economy

Pennsylvania is home to the largest hardwood-producing region in the United States, with 57% of the state's land—covering roughly 17 million acres—blanketed by hardwood forests.¹ Forestry-related industries directly contributed \$7.7 billion to GSP and supported over 60,000 jobs in 2022.^{2,3} Pennsylvania hardwood products have historically been sought after globally for their superior quality, aesthetics, and strength, with major export markets such as China, Canada, Europe, Mexico, and Southeast Asia. Sustainability remains a defining value across Pennsylvania's hardwoods industry, with leaders committed to science-based forest management that ensures long-term forest health and productivity. These working forests play a vital role in climate mitigation, sequestering an estimated 17 million metric tons of carbon dioxide annually. Importantly, that carbon remains stored in harvested wood products over time, positioning hardwoods as a renewable, climate-smart alternative to more carbon-intensive materials such as plastic, steel, or concrete.⁴

Challenges and Headwinds

Pennsylvania hardwoods face a range of headwinds. Global market uncertainty, including trade disruptions and inflation, has negatively impacted demand for Pennsylvania hardwoods. Additionally, lower-cost synthetic alternatives have put pressure on hardwoods' market share,

¹ [USDA Forest Service, Forests of Pennsylvania, 2020](#)

² [The Pennsylvania Agriculture Economic Analysis 2025](#)

³ "Forestry-related industries" includes the Forestry Processing Cluster and the Forest Product Manufacturing Cluster

⁴ Based on estimates that one acre of mature forest can absorb approximately one metric ton of CO₂ per year. ([Penn State Extension](#), 2023).

despite often lacking the durability, aesthetic appeal, and sustainability of natural wood, raising concerns about potential health impacts.⁵

Weakened demand also poses a longer-term risk to sustainable forest management. Without active harvests, forests may become undermanaged, leading to increased vulnerability to pests, fire, and disease, undercutting the sustainability and climate benefits that Pennsylvania's working forests provide.

In terms of production, the workforce in logging and sawmill operations has also declined, creating difficulties due to fewer new workers entering the field and experienced loggers retiring. Overcoming these issues will require strategic public-private initiatives and investment in innovation to sustain the benefits of Pennsylvania's hardwood leadership.

Opportunities for Growth

Through research and conversations with leaders across Pennsylvania hardwoods and forest products industries, we have identified growth opportunities for hardwoods in the advancement of innovative hardwood production, technology, and product development, and the deployment of technology designed to alleviate industry pain points:

- **Innovative hardwood production, technology, and product development:** Advancing technology across the hardwood value chain presents a critical opportunity to address long-standing industry pain points—including labor shortages, processing inefficiencies, and supply chain challenges. Modernizing industry through robotics, automation, and emerging technologies can improve productivity, reduce costs, and enhance competitiveness. Pennsylvania hardwoods also stand to benefit from creative uses of woody biomass that are gaining traction, including powering data centers, producing sustainable community fuels, and generating high-value outputs like biochemicals, bioplastics, biofuels, and biochar. Together, these innovations can create new revenue streams, reduce waste, and support long-term forest health.
- **Market Development:** Expanding trade partnerships and cultivating new markets for innovative, waste-to-value hardwood byproducts are key drivers of growth. Highlighting the sustainability and climate benefits of utilizing hardwoods to consumers can strengthen their market position while supporting rural economies and responsible forest management. Exploring national and international best practices can further inform market strategies, ensuring Pennsylvania hardwoods remain competitive in an evolving global landscape.

Together, these priorities tackle immediate industry challenges while unlocking long-term growth. They align with cross-sector goals like rural economic development, workforce

⁵ Studies show that many synthetic substitutes emit VOCs and have a higher environmental impact than sustainably harvested hardwoods ([EPA](#), [Athena Institute](#)).

resilience, and forest health and sustainability, making them a strategic and timely choice to be the focus of state-level collaboration.

The Role of Team Pennsylvania

Advancing Pennsylvania's hardwoods industry directly aligns with Team Pennsylvania's mission and strategic goals. As a public-private partnership, we are uniquely positioned to catalyze progress, bringing together industry, government, and ecosystem partners to unlock transformative opportunities. As a neutral convener, Team Pennsylvania has deep experience connecting uncommon partners to pursue shared goals. Pennsylvania already demonstrates national and global leadership in hardwoods, and we believe this position can be further strengthened through the kind of strategic, coordinated efforts in which we excel.

With hardwood forests covering more than half of the Commonwealth's landmass, this is a natural asset with the potential for far-reaching economic impact. Strengthening hardwood opportunities can benefit private forest landowners and rural communities through expanded economic opportunity, underscoring the importance of recognition and engagement from partners committed to Pennsylvania's future.⁶

Through stakeholder coordination, strategic partnerships, and pursuit of funding, we are well-positioned to help advance initiatives that unlock sustainable, long-term growth for the hardwood industry and the commonwealth.

Next Steps

Working to ensure Pennsylvania's hardwoods industry remains strong requires shared commitment. As such, Team Pennsylvania is advancing hardwoods as a Strategic Impact Initiative, dedicating organizational resources and facilitating pilot projects to catalyze broader, statewide efforts. This work is grounded in a clear focus on innovation and forest sustainability that positions forest regions for long-term economic growth. By publicly signaling this commitment, we aim to attract aligned partners, particularly private sector leaders, who share our vision for a stronger, more resilient forest products economy.

In the months ahead, we will coordinate stakeholders, pursue partnerships, and identify fundable projects and opportunities that drive measurable impact for the industry and the commonwealth.

To learn more or get involved, reach out to agriculture@teampa.com, and a member of our team will be in touch to explore next steps.

⁶ It is estimated that 70% of forested land in Pennsylvania is privately-owned. (See [2021 Forest Landowner Survey Results](#), Penn State University, 2024)