

Executive Summary:
WoodSyn's Value-Based Forest Restoration (VBFR) Business Model



WoodSyn, LLC is transforming the crisis of low-value forest biomass and escalating wildfire risk into a regenerative market opportunity by introducing **Value-Based Forest Restoration (VBFR)**. This model addresses the dual needs of scalable forest conservation and affordable, resilient housing by transforming non-merchantable, small-diameter timber—often termed "liability biomass"—into high-value, prefabricated construction materials known as **OptimWall™**.

VBFR's core innovation lies in creating a financially superior outlet for restoration fiber, ensuring that ecological stewardship is economically self-sustaining. This integrated approach is designed to deliver superior returns and verifiable impact across economic, environmental, and social dimensions.

Economic Value and Investment Thesis

WoodSyn's model is built on superior unit economics that fund conservation through market performance, *not subsidies*.

- ◆ **Highest Return-to-Log (RTL) Margins:** Independent analysis confirms that OptimWall™ (Wood-Wool-Cement Large Wall Elements or WWC-LWE) production provides the **highest value-per-ton pathway** (RTL) for liability biomass, materially exceeding alternatives such as base sawmilling, post-and-pole, or energy outlets.
- ◆ **Funding Restoration:** OptimWall™ demonstrated approximately **\$416/BDT EBITDA at the mill gate** in an independent study, maintaining positive EBIT even after factoring in logging

and haul costs. This superior economic margin is what pays for forest restoration, underwrites stable fiber offtake, and produces investor-grade project cash flows.

- ◆ **Adoption Without a Green Premium:** Critically, the margin is rooted in performance. **Builders are driven to adopt OptimWall™** because it shortens construction schedules, reduces on-site sequencing risk, and delivers superior quality, providing cost, schedule, and quality benefits that make it profitable without needing a green premium.
- ◆ **Risk Mitigation & Diversified Revenue:** The supply chain is de-risked by locating manufacturing plants near abundant and proximate feedstock (liability biomass near communities), which reduces haul miles and input volatility. Furthermore, optional revenue streams, such as verified **Carbon Dioxide Removal (CDR) credit revenue** for long-lived carbon storage, enhance RTL economics and can potentially offset timber feedstock costs for OptimWall™ once commercial scale is achieved.

Environmental and Conservation Value

The VBFR model fundamentally transforms low-value timber into a regenerative economic engine for forest health.

Wildfire Risk Reduction: By monetizing small-diameter timber that would otherwise be wasted or burned, VBFR finances forest thinning and restoration efforts. This reduces wildfire fuel loads and supports healthier stands, lowering community disaster exposure.

Sustainable Supply Chain: The approach taps abundant liability biomass and uses a repeatable plant-siting model to ensure efficient scaling across U.S. forested regions.

Durable Carbon Sequestration: OptimWall™ locks carbon into long-lived building systems, supporting measurable climate benefits. The CDR program is designed to issue third-party verified credits, reinforcing the product's performance advantages.

Social and Community Value

WoodSyn addresses housing equity and rural decline by creating high-performance homes and stable local jobs.

Resilient, Attainable Housing: OptimWall™ is a prefabricated wall system (WWC panels) that delivers relevant resilience against fire, moisture, and insects, which is essential for communities in the Wildland-Urban Interface (WUI). The mineral-bonded panels provide a non-combustible

alternative to conventional stick-framing, helping **ease underwriting concerns** and reduce insurance risk in high-risk zones facing "insurance retreat".



Rural Economic Development: The model converts underused fiber into local **manufacturing and logging jobs** in communities affected by mill closures. Co-locating the advanced manufacturing facility (e.g., in Bellemont, AZ) with forest restoration operations strengthens local supply chains and keeps dollars circulating in rural economies.

Workforce Capacity: WoodSyn supports workforce training through partnerships, including serving on the Curriculum Advisory Board for Coconino County Community College (CCC) Sustainable Construction and Advanced Manufacturing curricula, preparing a skilled local labor pool.

Conclusion

WoodSyn's VBFR model offers investors a unique pathway to simultaneously drive economic growth and conservation outcomes. By leveraging the performance of the OptimWall™ system—which wins on cost, schedule, and resilience **without a green premium**—WoodSyn generates the superior RTL economics necessary to fund large-scale forest restoration, create quality rural jobs, and deliver essential fire-resilient, attainable housing solutions. WoodSyn combines top-quartile financial returns with durable demand drivers (WUI resilience and insurance market pressure) and measurable climate benefits, making it the most effective use of restoration fiber in today's market