



**Testimony of Joshua Henry
Chief Executive Officer, GO Lab, Inc.
Before the House Committee on Agriculture
Subcommittee on Conservation and Forestry**

Innovative Wood Products: Promoting Rural Economies and Healthy Forests
February 26, 2020

Introduction

Chair Spanberger, Ranking Member LaMalfa and members of the Committee, I'm grateful for the opportunity to appear before you today to discuss the key role innovative wood products can play in strengthening rural economies and promoting healthy forest management.

My name is Joshua Henry. I'm a materials chemist and President of GO Lab, a building products company based in Belfast, Maine.

Next year, our company will become the first in North America to manufacture a recyclable, renewable, nontoxic construction insulation made from softwood residuals—the byproduct of lumber production.

The GO Lab Story

I am thrilled to be here because I think our story is one that is going to need to become more common, if rural communities and economies are going to be able to succeed.

GO Lab started over 4 years ago, when my business partner Matt O'Malia and I realized that there was a suite of construction insulation products in Europe—made from softwood fiber—that were not being manufactured anywhere in North America. That realization was both interesting and confusing to us because the technology to manufacture these products had been around for over 20 years and had resulted in a renewable, recyclable and nontoxic insulation that—from a performance and application standpoint—was a great fit for the North American building market.

Matt and I did not intend on becoming manufacturers.



At the time, I was a professor in the chemistry department at the University of Maine. Matt, an architect, had founded a company that designed and built the first certified Passive Haus building in Maine (12th in the US) and has since grown exponentially and achieved national prominence in the field of energy efficient building design and construction.

We just wanted to answer one question: why had these products, which are both cost and logistically prohibitive to import, never been manufactured in North America?

I am here talking to you today because there is no good answer to this question.

In fact, what we have found out is that—due to the cost of energy, raw materials and labor in the United States—this suite of products can be manufactured and distributed here at a lower cost, relative to Europe, and most importantly, can be cost competitive with all of the other construction insulations on the U.S. market. That revelation led me to, somewhat prematurely, quit my job in academia and focus on bringing the technology to manufacture these products to the United States.

The other substantial motivator was the challenging situation that has transpired over the last 4 years in Maine's forest products industry. During this time, 6 paper mills have closed and over 5,000 jobs have been lost, resulting in \$1.5 billion in reduced economic impact.

The forests are Maine's greatest natural resource.

They're a large part of our identity as a state.

And Matt and I felt like we had a meaningful, achievable concept for bringing new economic opportunity, jobs and sustainability to this critical industry.

That was three years ago.

Today, the demolition and renovation phase at GO Lab's first U.S. manufacturing facility, at the former UPM Paper mill in Madison, Maine, is underway and at this time next year, that facility will be manufacturing the first of the three wood fiber insulation products.



We have gotten to this point thanks to a substantial private equity raise, robust support from Maine's Department of Economic and Community Development and grants from both the Environmental Protection Agency and the US Forest Service.

That support has allowed us to employ 3 of the top manufacturing personnel from that mill. Once up and running, our operation in Madison will employ more than 120 people, generate over \$100 million in revenue and will have introduced a new, value-added manufactured forest product to the nation that will inevitably result in future plants in rural communities across the US.

That outcome is virtually assured by ongoing changes in code requirements for energy efficiency in buildings. Motivated by a desire to reduce the operational and environmental cost of our built environment—and to contribute to our shared national objective of energy independence—states and municipalities have adopted building codes, vetted by the U.S. Department of Energy that, on average, reduce the energy consumption of new buildings at a rate of 3% per year.

But that reduction in operational energy consumption, achieved by the insulation that currently dominates the \$11 billion U.S. market, is substantially offset by the energy consumed during the manufacturing process used to produce these products.

The insulating wood composites GO Lab is bringing to market are different.

They require minimal energy to make.

As the only scalable insulation made from organic matter, wood fiber insulation has the unique ability to sequester carbon dioxide.

The end result is a group of manufactured products with the unusual distinction of having an environmental footprint that is actually positive.

Thank you for the opportunity to share our story.



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