Statement for the Record Mr. Tom Talbot Founder and Chief Executive Officer Glen Oak Lumber & Milling On behalf of the Hardwood Federation

House Science, Space, & Technology Subcommittee on Investigations and Oversight May 8<sup>th</sup>, 2012

Good Morning, Mr. Chairman, Ranking Member Miller, and members of the Subcommittee. My name is Tom Talbot and I am the founder and Chief Executive Officer of Glen Oak Lumber & Milling, which operates facilities in Wisconsin, Kentucky, Pennsylvania, and Georgia. Founded in 1979, Glen Oak prides itself on being never satisfied with the "status quo" and we regularly invest in research and development activities that can improve product quality and add more value to our industry leading brands, while maintaining a strong environmental focus. Glen Oak Lumber and Milling employs approximately 190 individuals across all branches of our core business.

In addition, I serve on the Hardwood Federation's Board of Directors. The Hardwood Federation coordinates industry policy positions to ensure a unified voice on legislation impacting hardwood businesses. We are the largest DC based hardwood industry trade association, representing thousands of hardwood businesses in every state in the U.S. Hardwood Federation and its members believe it is critical to keep American companies operating and our citizens employed by maintaining an impressive record of hardwood forest stewardship and a growing consumer demand for hardwood products. Companies in the hardwood industry are predominantly small family-owned businesses dependent upon a sustainable supply of healthy timber resources.

Overall, the U.S. Forest products industry produces about \$175 billion in products annually and employs nearly 900,000 men and women in good paying jobs. The industry meets a payroll of approximately \$50 billion annually and is among the top 10 manufacturing sector employers in 47 states.

The industry plays a significant role in the U.S. economy and has experienced a significant decline in operations due to the economic downturn and housing market crash. Specifically, U.S. hardwood lumber production is down 53% from 2007 to 2011 with a total loss of 583,000 jobs in wood manufacturing employment (*Hardwood Publishing Company, 2011: NAICS 321- Wood Products and NAICS 327 – Furniture & Related Products*). During this period the hardwood industry has relied mainly on the export market to keep us afloat.

One of the most important opportunities for the future viability of the forest products industry is recognition of wood as a true "green" material in green building design, because of its environmental benefits. The green building market is one of the fastest growing markets for wood products. Even in this current economy with the housing market in dire condition, the green building market is expected to continue growing. Some even estimate the market could grow from its \$7.1 billion value in 2010, to as much as \$173 billion in value by 2015.

Wood has played a significant role as a structural material in the United States for hundreds of years. USDA Secretary Tom Vilsack in March 2011 announced its commitment to promoting wood in any green building designs: "Wood has a vital role to play in meeting the growing demand for green building materials. Forest Service studies show that wood compares favorably to competing materials" (USDA News Release No. 0143.11).

There is also strong support from the conservation community applauding the Secretary's announcement. Both the environmental community and industry expressed in a joint letter their commitment to work closely with the Administration to "conserve working forests and mitigate climate change through wood products utilization in green building."

U.S. Forest Service Chief Tom Tidwell states: "Our country has the resources, the work force, and the innovative spirit to reintroduce wood products into all aspects of the next generation of buildings." In addition, Chief Tidwell remarks that "as we move forward with restoring America's forests, we are getting smarter and more efficient in how we use wood products as both an energy and green building source. Our progress in this area will also help maintain rural jobs" (USDA, Science Supporting the Economic and Environmental Benefits of Using Wood and Wood Products in Green Building Construction, 2011).

To truly address the environmental concerns that green building is attempting to resolve—concerns like reducing energy consumption, carbon emissions, and air and water pollution— green building must use a science based system, Life Cycle Assessment (LCA), to evaluate building materials. Systems that don't incorporate and rely on LCA for building materials are not founded in science and will not likely be accomplishing the environmental goals that the systems were intended to achieve.

LCA is a methodology involving a rigorous process that measures the environmental impact of a product. Scott Bowe, Professor of Wood Science and Forest Products for the University of Wisconsin reports: "LCA has become the methodical standard for measuring the environmental impact of a product's manufacture and use. It is important that the green building programs used in the United States adopt LCA as their standard measure for environmental performance." (Please see written comments from University of Wisconsin to Committee on Science, Space & Technology.) LCA has been incorporated into the design system by some standards, like Green Globes. Currently, the US Green Building Council's LEED standard does not use LCA to evaluate building materials. The lack of a rigorous process to measure environmental impacts means that products that do have a lower environmental footprint, like wood products, are not promoted and encouraged. A recent proposal from USGBC would also better incorporate LCA into the LEED standard, which is an improvement. This proposal has not been finalized and is therefore still subject to change.

For example, a recent review of several LCA assessments by a Canadian think tank shows that substituting one cubic meter of wood for one cubic meter of other building materials such as steel, concrete, or plastics, reduces CO2 emissions by an average of 1.1 tons. Irrespective of species, 1 kg of US hardwood lumber stores the equivalent of 1.5948 kg of carbon dioxide for as long as it is in use. Irrespective of species, carbon storage in American hardwood lumber is more than sufficient to offset the Global Warming Potential (GWP or 'carbon footprint) of all emissions (from burning of fossil fuels) during forestry, sawmilling, kiln drying and all stages of transport even when delivered to ports in Europe and Asia. Wood is the only mainstream construction material that, through sustainable management and harvest for use in long life products, has the potential to act as a significant carbon pool (as opposed to a drain) within the structure of a building. Without LCA, these impacts are not considered when designing green buildings.

While we commend the steps being taken in the LEED system to incorporate "responsible extraction" in its new standard for all products, not just wood, we are concerned with its approach. LEED continues to recognize only one forest certification standard, the Forest Stewardship Council, for its "responsible extraction" credit. HF supports the inclusion of all credible forest certification standards and believes that the varied patterns of forest ownership require varied structures for certification systems.

In addition, there is simply no comparability between the standards for responsible extraction required of wood and non-wood materials in order to achieve the credit. As things stand, the draft actually rewards (by making compliance easier) those industries that have done little or nothing to develop responsible extraction standards. While we can understand that LEED is trying to encourage transformation to responsible extraction by these sectors, the draft standard ignores the obvious underlying fact that the wood sector has played the leadership role on this issue now for decades. Whereas responsible extraction is an inherent part of normal business practice in the U.S. wood products sector, it is hardly even on the radar of most other sectors.

Wood's environmental benefit is maximized when it is supplied from a sustainable source. For example, American Hardwood Export Council reports that a detailed analysis of U.S. government forest inventory data gathered at regular intervals over the last 60 years demonstrates that the volume of hardwood standing in U.S. forests more than **doubled** from 5.2 billion m<sup>3</sup> to 11.4 billion m<sup>3</sup> between 1952 and

2007. Due to very low levels of hardwood forest utilization, projections of U.S. hardwood supply indicate that harvests could rise from current levels of less than 100 million m<sup>3</sup> to in excess of 250 million m<sup>3</sup> within the next 40 years without threatening long term sustainability. Analysis of hardwood growth and removals indicates strong potential to significantly increase supply. Indeed, as part of its Annual Report of Forest Products Markets in 2011, the United Nations Timber Committee cited the *underutilization* of the American hardwood forest due to the recent economic downturn as the most pressing concern for the North American resource.

To ensure a level playing field for all building products (wood, steel, plastic, concrete, etc) the same rigorous standards for measurement of environmental performance must be adopted. This will require a shift towards the use of LCA and recognition of the importance for the development and use of Environmental Product Declarations (EPDs). There is confusion that arises from the wide variety of environmental claims made by material suppliers, some of which may be genuine, but others are false claims. A huge array of labeling systems has evolved, many certifying only a small part of the material supply chain which in reality may have only a marginal impact on the overall environmental footprint of a product. The development of EPDs would also respond to the criticism of those building rating systems which allocate environmental credits to construction materials in an uncoordinated way on the basis of single attributes.

LCA-based EPDs can deliver transparent, standardized information on the full environmental impact of a material or product across its entire life cycle. They help to ensure that efforts to reduce one impact do not result in environmental degradation elsewhere. International standards have been developed to ensure that the information provided in EPDs is comparable and that environmental assessments are performed in the same way and yield the same results no matter who does the analysis. Requirements for LCA are set out in the ISO 14040 series of standards including, for example, rules for stakeholder consultation and peer review to ensure credibility. The obvious benefits of an LCA based approach to material specification is already driving rapid uptake of EPDs in many material sectors, especially in green building systems in the UK (BREEAM), France (HQE/FDES), Germany (IBU), as well as the possibility of new opportunities for LCA based credits in the LEED system.

In closing, the use of wood in building designs has an important role in America's history and in its future. It is important to jobs, specifically in rural communities, and essential to keep forests as working forests and protect America's landscapes. Moving forward, it is imperative that federal agencies when developing building material preferences ensure that the environmental and economic benefits are determined by embracing LCA and the future use of EPDs. We applaud the leadership of the committee in holding this hearing and in helping to return science to green building decisions.