

# Supporting Innovative Wood Products in State Agency Procurement Protocols

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Innovative Wood Products (IWP), including mass timber, wood wool and wood fiber cement panels, biochar, biochar-infused cement and asphalt, and wood fiber insulation, are currently underutilized in California. These wood-based products have the potential to help the state meet its greenhouse gas (GHG) reduction and embodied carbon goals, while also supporting the necessary increased pace and scale of sustainable forest restoration to help improve forest health and reduce wildfire risks. California state agencies can play a key role in enabling IWP to reach their market growth potential. Recognizing the barriers and following a few recommendations would help remove obstacles and encourage consideration of IWP for state projects. Although outside the scope of this current project, there appears to be significant market potential for IWP in California considering private sector adoption and development of IWP in other states, Europe, and Canada.<sup>1</sup>

## Barriers

- IWP are not specifically recognized by state agency procurement protocols and are relatively unknown by state agency staff.
- State designers and managers at the Department of General Services, including the Division of the State Architect, are not aware of (and therefore not motivated by) the potential benefits of IWP as they relate to state mandates for embodied carbon reductions and improved forest health.
- California's building code has unique requirements for some IWP that create approval delays, procurement obstacles, and design challenges that discourage their use in state-sponsored construction projects.

## Recommendations

- **Building designers and decision makers** at all state agencies involved with procurement need to account for the carbon benefits of IWP in their procurement decisions to be consistent with state policy (e.g., AB 2446, enacted September 2022) advocating reduced embodied carbon in buildings and net zero GHG emissions in the future.

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<sup>1</sup> Two examples that surfaced during research performed for this project include: 1) The sole U.S. producer of wood wool cement panels used on a growing number of projects in California is importing the material from overseas because there are no competitive domestic producers, and 2) Although California has completed approximately 15% more mass timber projects than Oregon or Washington, annual construction expenditures in California are more than four times that of these other states.

- **CAL FIRE and Caltrans** (two state agencies that have significant opportunities to deploy IWP) need to raise awareness to support research into IWP through policy and financial incentives.
- **State agency designers and decision makers** could benefit from becoming better informed about the benefits and real-world applications of IWP through continuing education offerings by the Wood Institute, WoodWorks, American Institute of Architects Los Angeles, the U.S. Green Building Council, the American Society of Civil Engineers, or other professionally recognized organizations.
- **The California Strategic Growth Council, California Energy Commission, and California Department of Housing and Community Development** (agencies with significant competitive grant programs focused on housing) need to request the consideration of use of IWP in projects funded by their competitive grant programs. This should also apply to housing designed pursuant to Executive Order N-06-19.
- **The California Building Standards Commission** needs to reassess provisions of the California Building Standards Code that hinder the use of IWP in state projects, specifically the requirement for continuous monitoring for cross-laminated timber and glulam production for Division of State Architect and Office of Statewide Health Planning and Development projects as well as restrictions concerning height and area limitations. Reevaluation of restrictions regarding use of combustible material and novel IWP is also recommended. Third party peer review processes need to be incorporated to prevent approval delays by all approval agencies until agency personnel are comfortable with their technical knowledge to assess these technologies.
- **The Joint Institute for Wood Products Innovation** needs to examine ways to encourage collaboration of state and federal agencies, educational and research institutions, and the private sector to advance the use of IWP within state agencies. This collaborative could establish information sharing procedures with agencies in other states and internationally, as appropriate. In addition, the Joint Institute needs to consider dedicating resources to monitor state agency trends regarding procurement of IWP for state projects. Policies and procedures could be evaluated in status reports prepared by the Joint Institute at five-year-intervals.
- **GO-Biz and the Governor's Office of Land Use and Climate Innovation** need to consider providing the financial and regulatory incentives for the establishment of IWP manufacturers in California, including the requirement to source raw material from California forest management and restoration projects where feasible.
- **The Governor could** issue an Executive Order implementing these recommendations to fast-track implementation of key state policies in support of IWP deployment.

The full [Assessment of State Agency Procurement Protocols Related to Innovative Wood Products](#) report is available on the Joint Institute for Wood Products Innovation [website](#)