Benefits of Innovative Wood Products
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Summarized below are the societal benefits of innovative wood products. These products are now commercially available within California; however, most are manufactured outside the state (except biochar). As market demand increases for these products, local manufacturing (in state), is likely to occur.

Mass Timber (Cross Laminated, Glue Laminated, Nail Laminated, Dowel Laminated):

- Mass timber buildings require reduced time and costs for construction.
- Structures require less concrete and steel for structural integrity.
- Mass timber features reduced greenhouse gas emissions as compared to concrete and steel for both production and construction.
- Mass timber buildings sequester carbon.

Wood Fiber Insulation:

- Boards, loose fill, and batts are made from chips, potential byproducts of forest restoration.
- Insulation properties are comparable to or exceed other types of insulation.
- Wood fiber insulation sequesters carbon and has greenhouse gas benefits.

Wood Wool Cement Board:

- Versatile product with favorable fire, decay, and pest resistance.
- Certified as environmentally superior to other materials by European entities.
- Potentially substitutable or complementary to mass timber construction.
- Reduces greenhouse gas emissions as compared to other products.

Cellulosic Nanocrystals in Cement:

- Nanocrystals can be obtained as a byproduct of forest restoration.
- Infusion of nanocrystals into cement increases its strength by improving its ability to hydrate.
- The amount of cement needed to create an equivalent structure may be reduced with attendant greenhouse gas emissions benefits.

Biochar:

- Biochar can be produced as a byproduct of pyrolysis of wood wastes and materials obtained from forest restoration projects.
- Biochar has definite benefits when used as a soil amendment in terms of water holding capacity, nutrient status and biological properties thereby enhancing crop yields.
- Biochar increases carbon sequestration in soils.