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English II

CHS

Trees: The Best Building Material

Teddy Roosevelt wrote, "A true forest is not merely a storehouse full of wood, but, as it were, a factory of wood." Wood is a renewable resource that can be used to build something as small as a dog house to as large as a skyscraper. Wood is the best building material because it is inexpensive, keeps lands forested, is renewable, and stores carbon.

Trees are the most viable option for building because of their economic stability. One reason for this is because it is overall less expensive than other materials. According to "Why Wood?", the building of a new high school in Arizona, "the project team saved \$2.7 million by switching from the original steel, concrete and masonry design to wood framing" (*Wood Works*). Using wood instead of steel or concrete allows buyers to still design with intricacy and creativity but spend much less money. In addition, by harvesting wood to build with, land owners are more inclined to keep their property forested. By using wood for construction, it "Provides revenue to forest landowners and incentive for them to keep lands forested, thereby conserving forest ecosystem" (Ritter et al.). This is one way we can keep people from further damaging the earth but still be able to make an income.

Environmental and economic stability go hand in hand and trees offer both of these. First of all, wood is a renewable building material. In the United States we plant roughly six trees for every one we harvest (Bargeron). Unlike other building materials, such as steel, as long as trees are being planted they will be renewable. Secondly, trees absorb carbon and when harvested they do not release it. This is due to the process of photosynthesis which summarized takes in carbon dioxide and releases oxygen (*The Envirothon*). It is important that trees do this because carbon is

a pollutant in our air. If wood continues to be used in construction than the planting and management of forest will also continue, which will enable forests to act as carbon sinks.

On the other hand, some may argue that wood is not the most suitable option for building due to its ability to burn; however, when researched, "most contractors who are using wood to build are doing it with Cross-Laminated Timber or CLT, which acts more like concrete than wood" (Martinez). This wood does not burn as quickly and allows time for evacuation. CLT is sustainably harvested and does not have as large of a carbon footprint compared to other woods. In addition to wood's ability to burn quickly harvesting trees thins the forests and prevents providing even more fuel for wildfires.

If we continue to treat our forest with care we can continue to use its products. Wood is the building material that is most sustainable because of its ability to create jobs for harvesting, keep lands forested, its ability to be renewed, and the carbon the trees store. As Roosevelt said, a forest is not just a storage of unreplenishable wood but a continual reproduction of wood.

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