

Wood and Non-wood Fiber Products Scorecard

Score	Examples of Materials
2	<ul style="list-style-type: none"> ▲ Wood products with PCR content greater than 75% wood or agricultural by-products ▲ Forest Stewardship Council (FSC), certified ▲ Cork ▲ Reclaimed wood (e.g., sunken logs, used timbers, used floorboards) ▲ Certified organic agricultural products in non-formaldehyde, non-urethane/MDI fiberboard
1	<ul style="list-style-type: none"> ▲ Wood products with PCR content between 10 and 75% ▲ Australian sandalwood ▲ Canadian Standards Association (CSA), certified ▲ Domestic hardwoods (e.g., oak, cherry) ▲ Fiber board. Non-organic formadehyde-free ▲ Lyptus™ ▲ Mahogany certified under the Convention on International Trade of Endangered Species (CITES) ▲ Raffia ▲ Rubberwood (former latex plantation wood) ▲ Sustainable Forest Initiative (SFI), certified ▲ Wicker
0	<ul style="list-style-type: none"> ▲ Wood products with PCR content less than 10% ▲ AQC treated wood ▲ Borate treated wood ▲ Bamboo ▲ Certified organic agricultural products with formaldehyde or urethane adhesives ▲ Domestic softwood (e.g., pine, fir) ▲ Formaldehyde-free plywood, chipboard, fiberboard (wheat, rice hulls, etc.), oriented strand board (OSB) and medium density fiber board (MDF) ▲ Plantation grown woods
-1	<ul style="list-style-type: none"> ▲ Cedar ▲ Clear cut fast growth (e.g., alder, eucalyptus) ▲ Genetically modified organism (GMO) wood sources (e.g., some poplar, pine and eucalyptus) ▲ Phenol-formaldehyde plywood, medium density fiber board (MDF), oriented strand board (OSB) ▲ Veneers from threatened species (The World Resource Institute uses the following data bases for their definition of threatened tree species wcmc.org.uk/trees/background/intro.htm)
-2	<ul style="list-style-type: none"> ▲ CCA treated wood ▲ Mahogany unless certified under the Convention on International Trade of Endangered Species (CITES) ▲ Urea-formaldehyde plywood, medium density fiber board (MDF), oriented strand board (OSB) ▲ Virgin clear-cut old growth/endangered species (some redwood, Douglas fir) ▲ Wood with resorcinol adhesives (specialty plywoods) ▲ Wood from any threatened species (wcmc.org.uk/trees/background/intro.htm)

Scorecards reflect the environmental and social characteristics of the listed materials/products/brands. Other business characteristics such as performance, functionality, cost, and quality are not evaluated and should be considered in conjunction with the scorecards. Materials/products/brands are listed in alphabetical order for each rating score and do not reflect a hierarchy of preference within the rating score.

Wood and Non-wood Fiber Environmental and Social Issues

Criteria	Good	Bad
Material Source and Manufacturing	<ul style="list-style-type: none"> + Use of recycled/reclaimed materials reduces impacts of forest management and harvesting including top soil loss, stream siltation, habitat loss, watershed disruption, and global warming + Certified forest management; FSC preferred over SFI, CSA + Use of “engineered” wood can help optimize wood use and minimize waste + Well managed forests serve as a carbon sink (take in more carbon than is released) 	<ul style="list-style-type: none"> - GMO trees risk maintenance of biodiversity - Plantation grown woods can limit biodiversity due to monocrop replacing diverse forest habitat and may be pesticide intensive - Clear cutting negatively affects habitat, such as sediment contamination of streams - Clear cutting eliminates forest service as carbon sink for extended period (although if forest is reestablished, carbon sink service is restored)
Biosphere Health and Safety (toxicity, sensitization, endocrine disruptions)	<ul style="list-style-type: none"> + Borate preservative treatments better than any metal based preservative compounds + ACG better than preservatives with heavy metals 	<ul style="list-style-type: none"> - Workers exposed to toxic materials and hazardous substances especially working/cutting plywood and particle board (inhalation of sawdust from sanding and formaldehyde from adhesives) - Laminants such as plywood, oriented strand board, fiberboard, melamine typically use formaldehyde adhesive resins that off-gas formaldehyde - CCA pressure-treated wood can leach toxic chemicals and heavy metals
Social Issues	<ul style="list-style-type: none"> + Certified, well managed forests preserve employment in forest communities and can offer other economic opportunities (e.g. eco-tourism) 	<ul style="list-style-type: none"> - Clear cutting negatively affects logging communities and other industries in forest product economies (fishing, tourism)
Energy (Transportation and Processing)	<ul style="list-style-type: none"> + Regionally sourced products require less energy for transportation + Mills that use waste wood for energy reduce fossil fuel requirements 	<ul style="list-style-type: none"> - Long distance trucking of forest products uses substantially more energy than rail shipment
End of Life	<ul style="list-style-type: none"> + Unfinished and finished wood can be reclaimed and re-milled for use + Unfinished wood can be recycled as mulch or burned for energy value 	<ul style="list-style-type: none"> - Chromated copper arsenate (CCA) pressure-treated wood should not be burned or incinerated or buried in conventional landfills (it can leach toxic chemicals). CCA treated lumber is not federally regulated, but should be disposed of as hazardous waste