

How to Recycle Biomass/Wood for Manufacturers (or Large Companies)

South Carolina's forestry industry is a major economic contributor to the state, forestry byproducts and residuals add incremental revenues to landowners and forest products. In addition, the state has made a name for itself in the biomass industry. What previously was a small biomass presence has become a thriving industry, providing power for tens of thousands of South Carolina homes and businesses.

Materials Accepted¹

- Pallets (including broken)
- Vood shipping containers or boxes
- ◊ Wood shavings, chips, or sawdust
- Lumber/Timber, green waste, softwood, hardwood, and blockboard.

Please note: This is a general list for this commodity. For a more detailed look, please contact your recycler to confirm what they are able to accept.

How to Recycling Biomass/Wood: Questions a Recycling Company May Ask

- ◊ What type of wood do you have?
 - <u>Examples</u> Softwood, Hardwood, Blockboard, Plywood, Orientated Strand Board (OBS), Chipboard, Medium Density Fiberboard (MDF), and Hardboard
- O you have more than one type of wood in your facility? If so, what types?
 - <u>How to find this information</u>: Facility Engineer or the Material Safety Data Sheet (*MSDS*) for the material
- ◊ What's your monthly volume by type?
- ◊ Can your business keep different kinds of wood separated?
- ◊ Does your business have space to store the material?
- ◊ How is the material contained? (ex: loose, bailed, etc.)
 Pictures and/or samples of the material (s) are always
 helpful, and will likely be requested.

How to Recycle Properly

- Wood should be separated from other materials and stored where it won't be contaminated.
- Wood with chemicals or treatments must be separated and carefully evaluated for possible recycling use.
- To get payment for recycled pallets or wood, the handling should show process control to avoid contamination.



What is Contamination?

- The <u>smallest amount of contamination</u> can cause expensive repairs or extensive shutdowns of high value equipment downstream, or large fines by a user, and <u>must be avoided.</u>
- Contamination by chemicals or foreign materials such as large, stray rock, or metal pieces is a major concern for any downstream use. Even a small amount of paint on wood is enough contamination that it may prohibit many end uses.
- Materials May Not Accepted: Chipboard, Hardboard (HDF High-density fiberboard), Medium Density Fiberboard (MDF), Orientated Strand Board (OSB), and plywood.

¹Nottinghamshire County Council (n.d) <u>WRAP Wood Recycling Guide</u>



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Recent Innovations in this Commodity

 There are new plant-based shipping materials being developed that travel with the wood. Polymer-based foams are being replaced by plant-based, such that the material can be recycled with paper.

End Products

- Wood waste can be used in mulching and biomass applications.
- Animal Bedding
- Reclaimed wood: table, chair, decorative, headboard, picture frames, etc.
- Pallets can be upcycled by disassembling and cut/resurface into usable boards, or cut into shapes for resale. A quick internet search for wood sign blanks shows a whole cottage industry based on pallet wood. In general, wood is recycled in large volumes to mulch or wood fuel for electricity production and/or heat for an industrial process such as in a paper mill.



Additional Resources

- ◊ Biomass Power Association
- ◊ <u>SC Biomass Council</u>
- Smart Business Recycling Program If you recycle, make sure to report it!
- ◊ <u>Recycling in SC</u>



For more details, please visit the <u>SC Recycling Markets</u> <u>Directory</u> or contact us at <u>recycling@sccommerce.com</u>.

