Typical wood waste stream resulting from production is characterised by two waste material categories:

- Solid timber, and a combination of waste material (timber shavings, sawdust, and veneer panel/board trims);
- A mixture of sawdust and shavings and a separate collection of veneer panel trims.

The Waste Hierarchy

The basic concept behind waste management is the waste hierarchy, where the preferred and usually most effective approaches to managing waste are at the top.

Two options for a potential wood waste recycling model:

1. Recycling the residues by making contact and use of the resource disposal and recovery centres existent in the wood waste supply chain;
2. Turning the wood wastes into profit by onsite processing into high-value products and direct selling to the end consumer.
Four recommendations to be followed regardless of the wood waste recycling direction:

1. **Do More With Less**
   - Optimising the manufacturing process to produce less waste to prevent or minimize the production of residues should always be one of the first targets. Waste minimisation and resource maximisation for manufactured products can be done everywhere from design stage to the inventory management and storage.

2. **Product Design**
   - Having the right design and using optimised cutting patterns can help avoiding situations such as over-processing raw material.

3. **Planning**
   - Even the best manufacturing process creates wastes. In this case, turning wastes into valuable wood products becomes the focus. Formulate a plan for products design and create additional items integrating and utilising offcuts.

4. **Segregate Wastes**
   - Coordinate the various wood waste streams to avoid the contamination of the wood waste with adhesive, dust, and other contaminants.

The more is achieved usually the more opportunities open up and good economic and business practices can be observed as those improvements are sustained.

More information:

Barbara Ozarska – Leader • Enhancing Value Added Wood Processing in PNG Project
The University of Melbourne, Australia • Email: bo@unimelb.edu.au

Benoit Belleville – Researcher • The University of Melbourne, Australia • Email: benoit.belleville@unimelb.edu.au

Visit...
- Wood Processors Tool Kit: www.pip.com.pg/resources/wood-processors/welcome
- www.pip.com.pg/resources/wood-processors/wood-processing-techniques (for more wood waste resources)
- Enhancing Value Added Wood Processing in PNG Project: www.pip.com.pg/projects/current-projects