The Wood Supply Chain

- U.S. Forestland: Public and Private
- Reforestation
- Sawlogs
- Pulpwood
- Biomass
- Lumber/Timbers
- Plywood/Veneers/Poles
- Oriented Strand Board
- Packaging
- Paper
- Pulp
- Wood Pellets
- Energy

Carbon Dioxide (CO2)
Oxygen (O2)

Timber Sales Management
Loggers/Timber Harvest
Transportation

By-products
Secondary Manufacturing
The Wood Supply Chain

**US Forestland** – There are 514 million acres of working forests in the United States that supply a range of products and benefits to society; 70 percent of the working forests in this country is privately owned. These private lands produce the vast majority of forest products.

**CO2** – Trees absorb carbon dioxide and release oxygen, capturing carbon and turning it into wood in the process. Forests are one of the best ways to remove carbon from the atmosphere.

**O2** - After absorbing carbon, trees release oxygen.

**Timber Sale Management** – Professional foresters manage the growth and harvest of the timber resource, assuring that environmental and economic benefits are balanced.

**Loggers / Timber Harvesters** – Loggers harvest trees according to the forest management plan and bring them to a central location in the woods for sorting, processing, and loading onto trucks.

**Transportation** – Forest products truckers bring the wood from the forest to the mill on trucks designed to haul timber.

**Reforestation** – In many areas, nursery-grown trees are planted by specialized crews to assure a new forest. In some regions of the country, forests naturally regenerate, and do not need replanting. In all cases, establishment of a new forest is an important part of forest management, and critical to assure a sustainable supply of timber for future generations.

**Sawlogs** – Sawlogs are the high-quality sections of trees that are sent to a sawmill for processing into lumber. The diameter of sawlogs varies by region, but it is generally larger than pulpwood, and more valuable to the landowner.

**Pulpwood** – Roundwood harvested specifically to produce pulp and paper, or some engineered wood products such as OSB. Pulpwood is less valuable to the landowner than sawlogs.

**Biomass** – The lowest value products from a timber harvest, biomass consists of tops, branches, and stems with defects. Biomass is used to produce energy.

**Lumber / Timbers / Plywood / Veneers** – Produced from sawlogs, these solid wood products are used in a variety of applications, including construction, value added manufacturing, and shipping.

**Oriented Strand Board (OSB)** – An engineered wood panel made from flakes of wood that are bonded together with adhesives and pressure. It is commonly used in construction for exterior walls, flooring, and roof decking.

**By-products** – When a log is sawn into a board, the parts that are not the primary product become sawdust, chips, and bark. These by-products can be used in papermaking, engineered wood products, biomass energy production or landscaping.

**Secondary Manufacturing** – Boards are turned into consumer-ready products such as furniture, pallets, wood trusses, and flooring.

**Pulp** – An intermediate product produced from pulpwood that is then converted into paper, packaging, tissue, and other products.

**Packaging** – Pulp is turned into boxes, paperboard, and paper bags for use in shipping and packaging a range of products, from corrugated boxes to dog food bags to cereal boxes.

**Paper** – A wide range of products used chiefly for writing, printing, drawing, wrapping, and sanitary (tissue) applications.

**By-products** – When pulp and paper is produced, products produced at the same time can be reused in the manufacturing process, used for biomass energy or chemical recovery, or have other applications.

**Secondary Manufacturing** – Conversion of pulp, paper, and paperboard into consumer-ready products such as copy paper, boxes, or paper cups.

**Wood Pellets** – Low-value wood such as sawdust that are pressed into a standard size, used in the production of heat or electricity.

**Energy** – Low-value biomass and manufacturing by-products can be used to generate heat and electricity for use in industrial, residential and grid applications.