The Wood Supply Chain

- U.S. Forestland
  - Public and Private
- CO2
- O2

Timber Sales Management

Loggers/Timber Harvest

Transportation

Sawlogs

Pulpwood

Biomass

Lumber/Timbers
- Plywood/Veneers/Poles

Oriented Strand Board

Packaging

Paper

Pulp

Wood Pellets

By-products

Secondary Manufacturing

ENERGY
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.