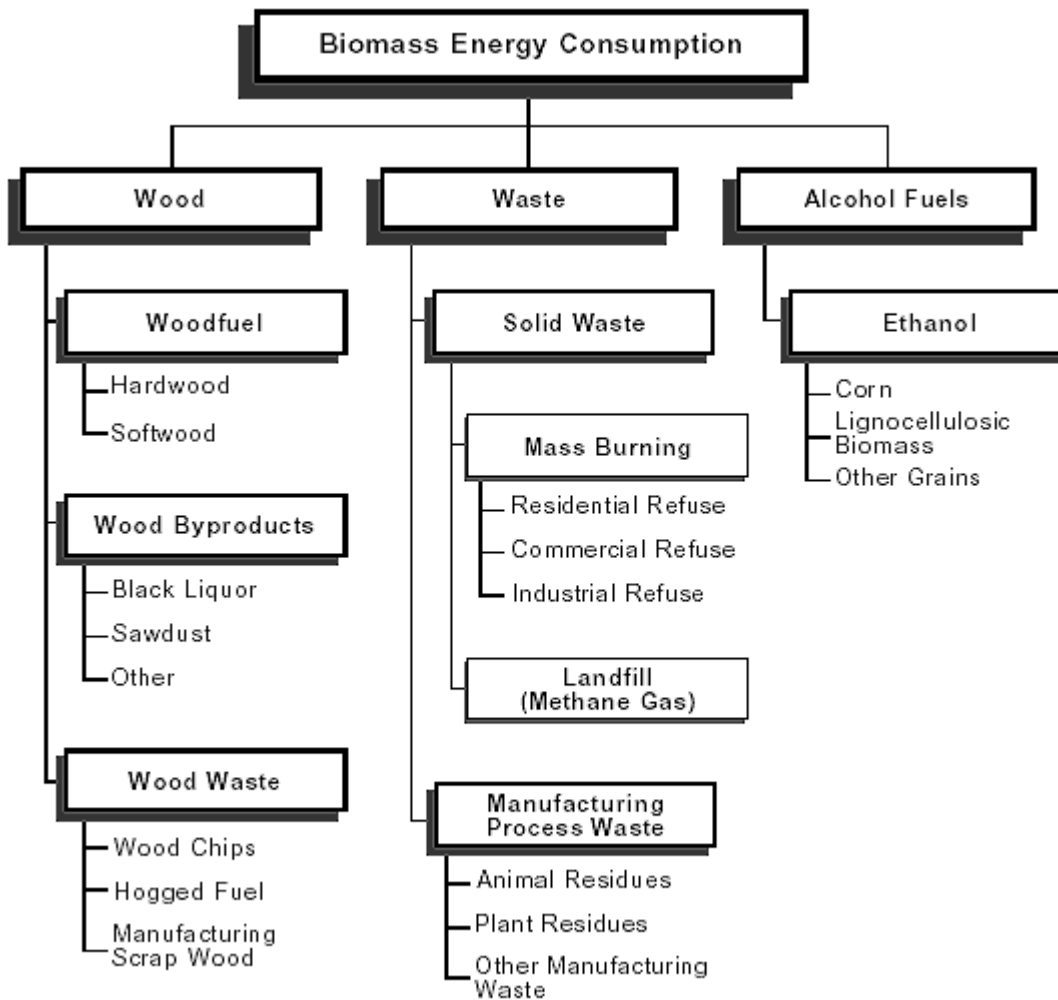


Biomass Characteristics

Biomass fuels consist of three main segments: wood, waste, and alcohol fuels (Figure 1). Wood energy is derived from the following sources: roundwood, used primarily in the industrial and electric utility sectors; woodfuel, used predominantly in the residential and commercial sectors; and wood byproducts and wood waste, which are usually used in the industrial sector. Waste energy is derived from the following sources: mass burning of garbage; conversion of garbage to refuse-derived fuel pellets for eventual burning; collection of methane gas from landfills; and burning or anaerobic digestion of wastes. Alcohol fuel in this report refers to ethanol, typically derived from corn and used primarily in the transportation sector.

Figure 1. Biomass Energy Resource Hierarchy



Source: Energy Information Administration, Office of Coal, Nuclear, Electric and Alternative Fuels.

The transportation sector is referred to only in connection with ethanol, which is used in gasoline-powered vehicles. The industrial sector includes manufacturing industries with Standard Industrial Classification (SIC) Codes 20 through 39.¹² The electric utility sector includes all entities providing electric power to the public. The residential sector includes all types of residences: single-family, multifamily, and mobile homes.

The use of terms and units of measure related to wood energy differs among the consuming sectors. The industrial and electric utility sectors use the term *woodfuel* for all types of wood, wood-derived fuels, and wood byproducts burned as fuel, including cord wood, limb wood, and black liquor. The unit most often used for measuring the amount of woodfuel consumed by these sectors is *ovendried short tons*.

¹² Descriptions of these codes are presented in Appendix A.