

Figure 5.4 Biomass Summary Chart

Feedstock	Processing	Energy product
Solid biomass/cellulose (virgin wood; woody crops such as willow & poplar; forest residues; pelletized residues; agricultural residues such as corn stover, straw, etc.; perennial grasses; switchgrass)	Direct burning in stoves OR converted to electricity using the same process as in coal-fired power plants (i.e., a Rankine heat to steam turbine to electricity cycle). Sometimes biomass is combined with coal in the same power plant.	Heat or electricity OR cogeneration of both heat and electricity.
Wet biomass (animal waste, municipal organic waste, etc.)	Converted to biogas.	Heat or electricity OR cogeneration of both.
Sugar & starch plants (corn, beets, etc.)	Sugars converted to ethanol.	Liquid fuels primarily for transportation.
Oil crops (rapeseed, sunflower, etc.)	Vegetable oil.	Liquid fuels primarily for transportation.
Algae	Several processes being developed.	Liquid fuels primarily for transportation.

The Renewable Energy Reader, K.K. DuVivier 2011
 Andy Aden, The Current State of Technology for Cellulosic Ethanol,
 National Renewable Energy Lab. 3 (Feb. 5, 2009),
http://www1.eere.energy.gov/biomass/pdfs/aden_20090212.pdf