The amount of forest biomass used for energy and chemical production will likely rise in the coming decades as the amount provided by wind, solar, and hydroelectric sources diminish. Natural gas prices have fluctuated recently and will likely rise in the coming decades. A 15% tax on carbon emissions is projected to double the cost of coal, while renewables are competitive. Forest-derived feedstocks can be co-fired or combusted with other fuels, and their production and transport may contribute to carbon credits.

The solid volume of a 3 g subsample is measured. Moisture is determined on a 2 g subsample dried to constant mass at 105°C. Particle Size is measured by a laser particle size analyser. Particle Size data are converted into maximum length (L), minimum width (W), and volume mean (Dv). The analyses performed in the Forest Operations (USDA Forest Service) and Biosystems Engineering (Auburn University) labs conform to published standards or to methods specified by analytical equipment manufacturers.