

Editorial

Sustainable Biofuels from Forests: Woody Biomass

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The use of woody biomass feedstocks for bioenergy and bioproducts involves multiple sources of material that together create year round supplies. The main sources of woody biomass include residues from wood manufacturing industries, low value trees including logging slash in forests that are currently underutilized and dedicated short-rotation woody crops.

Conceptually a ton of woody biomass feedstocks can replace a barrel of oil as the wood is processed (refined) through a biorefinery. As oil is refined only part of the barrel is used for liquid fuel, e.g., gasoline, while much of the carbon in oil is refined into higher value chemical products-carbon in woody biomass can be refined into the same value-added products.

Woody biomass feedstocks are renewable, locally produced and carbon neutral when processed versus non-renewable fossil carbon releases from utilizing coal, oil and natural gas. A critical component of the economic and environmental analyses of using woody biomass feedstocks in place of fossil fuels is that ALL the costs of the fossil fuel feedstocks must be included in the analysis. Past comparisons simply have ignored many of the costs, both economic and environmental, associated with fossil fuel use.

Thus the use of woody biomass feedstocks for bioenergy and bioproducts can help with energy security, reduce greenhouse gases and create job opportunities supporting rural development.

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