

## U.S. Department of Energy - Energy Efficiency and Renewable Energy Biomass Program

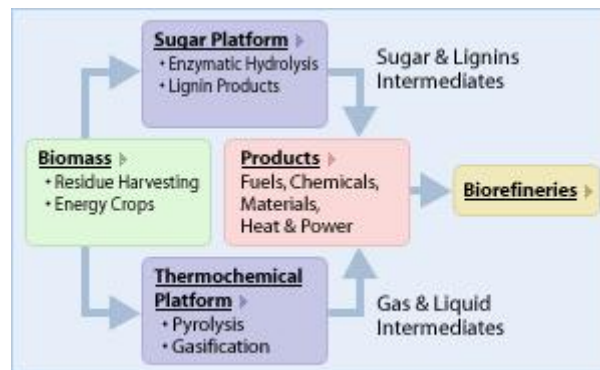
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The U.S. Department of Energy (DOE) Biomass Program develops technology for conversion of biomass (plant-derived material) to valuable fuels, chemicals, materials and power, so as to reduce dependence on foreign oil and foster growth of biorefineries. Biomass is one of our most important energy resources. The largest U.S. renewable energy source every year since 2000, it also provides the only renewable alternative for liquid transportation fuel. Biomass use strengthens rural economies, decreases America's dependence on imported oil, avoids use of MTBE or other highly toxic fuel additives, reduces air and water pollution, and reduces greenhouse gas emissions. Today's [biomass uses](#) include [ethanol](#), [biodiesel](#), [biomass power](#), and [industrial process energy](#).

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Tomorrow, [biorefineries](#) will use advanced technology such as [hydrolysis of cellulosic biomass to sugars and lignin](#) and [thermochemical conversion](#) of biomass to synthesis gas for fermentation and catalysis of these platform chemicals to produce slates of biopolymers and fuels. To expand the role of biomass in America's future, the DOE Office of the Biomass Program fosters biomass technologies with a balanced portfolio of research and development. While there are various other technologies for biomass conversion, the following graphic shows those that the Biomass Program is concentrating on, as outlined in its Multi-Year Program Plan ([PDF 6.7 MB](#)). [Download Adobe Reader](#)



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