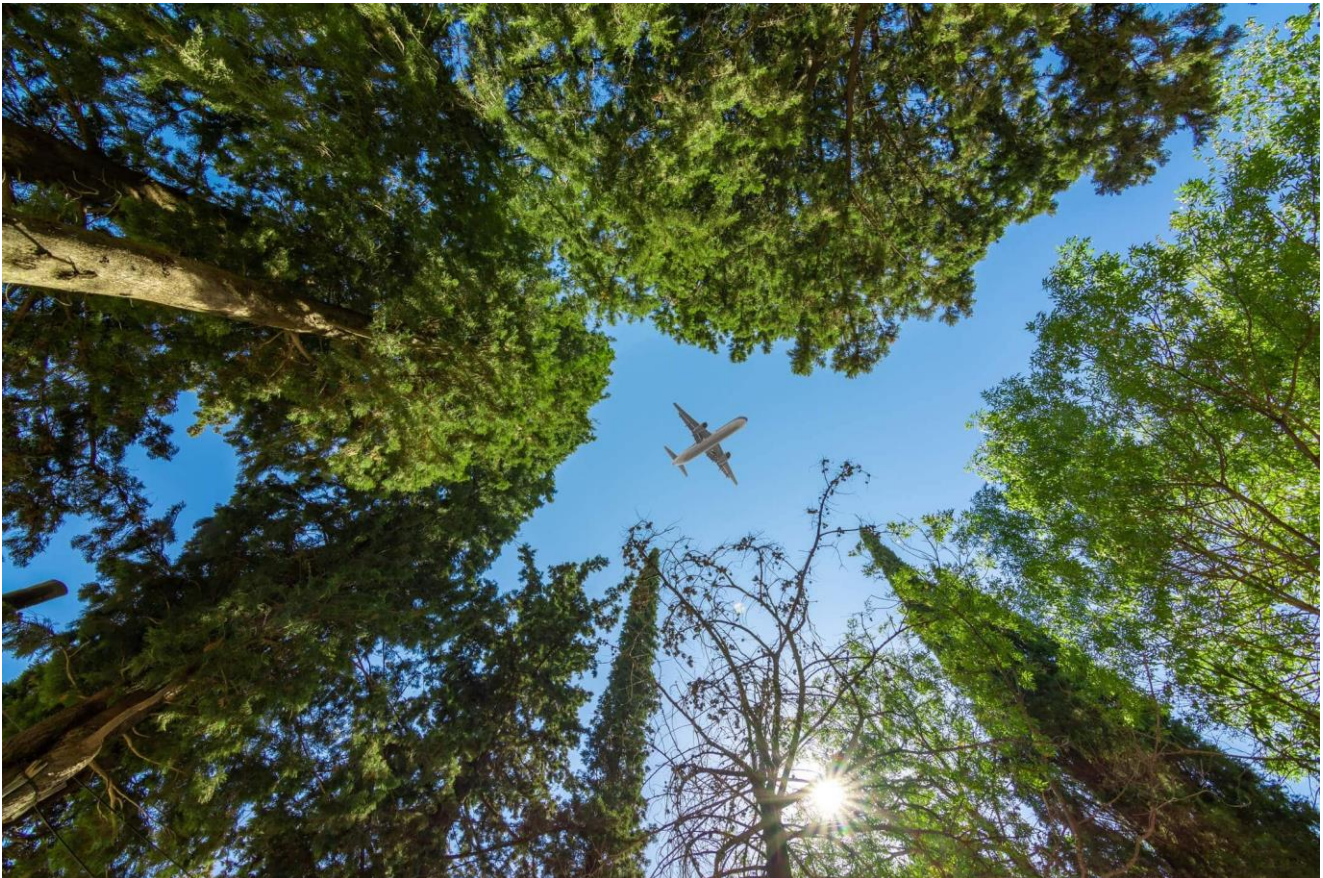


Modeling the Availability of Woody Biomass

David P. Smoot



Modeling the availability of woody biomass (organic matter from trees and plants) in heavily forested areas was the focus of a recent project conducted by the U.S. Forest Service and the Pacific Northwest National Laboratory (PNNL), one of the national laboratories of the U.S. Department of Energy.

A joint team set out to build a software model to show the economics behind harvesting woody biomass as an energy source, and how harvesting could create benefits to boost forest restoration and reduce the risk of wildfire.

The study focused on biomass from commercial thinning and timber harvesting, and evaluated the delivered costs of biomass from restoration activities, factoring in data from

nearby markets, processing, and transportation costs.

Initial results from the team's research, based on a specific geographical area, showed that nearly 1.5 million tons of economically viable biomass were available for bioenergy use. This included delivery of about 395,000 tons of wood chips at or below \$60/ton and another million tons generated from mill residue.

The team's research further validates everything that NWABF has been pursuing in the past years. Converting biomass into jet fuel is a viable proposition for the future. This was confirmed in the 2013 NARA (Northwest Advanced Renewables Alliance) study, released by the Department of Agriculture. The three-year, \$40 million study explored the availability, the costs, benefits, and logistics of using forest residuals and mill residues as a source of SAF. It confirmed that more than 10 million tons of woody biomass is available for conversion into jet fuel. [Click here](#) for further information on the results of the study.

This is encouraging news, as Northwest Advanced Bio-Fuels takes woody biomass, gasifies it and through a sophisticated proven technical process, converts it to Premium Renewable Sustainable Aviation Fuel from the conversion of slash, forest residues, and mill residues in forests. Having a better understanding of the availability of woody plant biomass to convert into Sustainable Aviation Fuel will help NWABF with its long-term operational forecasts.

To learn more about the NWABF Project, converting woody biomass to sustainable aviation fuel process, please contact us at info@nwabf.com. You can also get more information on woody biomass, sustainable aviation fuel and much more on our [Biofuel FAQs](#) page.

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Mr. Smoot has an extensive business background covering almost 45 years, starting with his honorable discharge from the U. S. Army Reserves. Mr. Smoot spent 20 years in the micro- computer hardware and software industries, where he held positions as Director of Operations for Digital Research in Pacific Grove, CA, working with IBM Boca Raton and Intel, as well as senior positions with Informix, a database software company prior to Digital Research, (DRI), as it was known.

