

The New Bioeconomy in the PNW

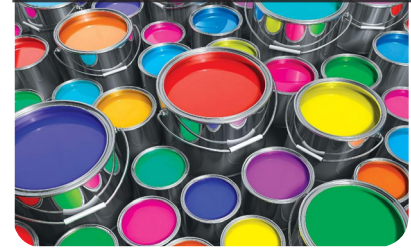
From Poplar Trees



To De-Icing Salts



Or Cans of Paint



BUILDING A BIOECONOMY

Advanced Hardwood Biofuels Northwest (AHB), a team of university and industry partners, is working to build a bioeconomy. Fast growing poplar trees are converted into drop-in fuels and chemicals that are the building blocks of many of the products we use every day.

Along the conversion pathway to cellulosic biofuels, **high-value chemicals such as acetic acid, ethyl acetate, ethanol, and ethylene are produced.** These biochemicals are used in a variety of bioproducts that we use in our everyday lives such as paints, plastics, solvents, packaging, pharmaceuticals, cosmetics, and even nutritional supplements and textiles. These products are traditionally made from petroleum based chemicals. Producing bio-based chemicals provides locally-made renewable products that are better for the environment, and our local economy.

According to an AHB job creation study by UC Davis, **a single biorefinery making chemicals and fuels can generate up to 4000 jobs during construction and operation.**

A NEED FOR POLICY

The potential for cellulosic biofuels to provide a renewable, locally-made fuel supply has captured the attention of policy makers and the public.

However, **due to current fuel prices, it is hard for advanced biofuels to compete in the market.** Creating a bioeconomy that includes bio-based chemicals in addition to biofuels can help establish biorefineries as economically viable enterprises.

THE PACIFIC NORTHWEST BIOECONOMY

In the long term we envision biorefineries making **plastics, the soles of our shoes, fleece clothing, and fuels from trees instead of petroleum.** In the short term, the focus is on making acetic acid and environmental friendly de-icing salts used at airports and cities across the country.

De-icing salts (potassium acetate salts) are made during the first step in the AHB process. Potassium acetate salts are more environmentally friendly and less corrosive than chloride based salt typically used on roadways.

Including a diverse portfolio of high-value biochemicals is an important piece of a sustainable biofuels system that is based on renewable, locally-produced, poplar trees. Because biochemicals require fewer steps to manufacture, a biofuels system that includes biochemicals offers more immediate economic promise for the Pacific Northwest bioeconomy.

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