



Sun Grant Western Regional Center

Oregon State University

Regional Economic Analysis of Feedstock Production and Feedstock Processing for Biofuels in the Pacific Northwest and Alaska

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OVERVIEW

Existing analysis of feedstock production potential and economic impacts have largely excluded Pacific Northwest (PNW) states. Drs. Holland and Painter, along with a multidisciplinary team, will examine crop and fuel production for biodiesel, corn ethanol, and cellulosic ethanol in Washington, Oregon, Idaho and Alaska using current IMPLAN data for each state. The team seeks to answer the following questions: 1) can in-state developed feedstocks and production industries compete with imported feedstocks; 2) will biofuels feedstocks be an attractive alternative crop across the varied production regions in the PNW; and 3) how will increased biofuels production and utilization impact the broader regional economy. The researchers will develop Computable General Equilibrium (CGE) economic simulation models incorporating biofuels production activities into the regional economies of each state and the region as a whole. The resulting data will inform policymakers and elected officials as well as agriculture and industry industries.

Progress to Date

The research team has completed the models for Washington and Idaho. The sectoring plan used for Washington economic model was also used to construct the CGE for the Idaho economy. The Idaho CGE model has been handed off to cooperators at the University of Idaho for analysis of the economic impacts of fuel mandates and tax and subsidy policies for biofuels in Idaho. They are now working on the construction of the regional computable general equilibrium (CGE) biofuels model for Oregon. They obtained the Oregon IMPLAN data and used it to construct a social accounting matrix (SAM) of the Oregon economy. The SAM is completed; information about grain ethanol and biodiesel industries and critical feedstocks have been added.

Collaborators

Co- PI: Kathleen Painter, University of Idaho

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