FACT SHEET: REPORT ON THE ECONOMIC IMPACT OF THE BIOBASED PRODUCT INDUSTRY

Report Overview
Mandated by the 2014 Farm Bill, An Economic Impact Analysis of the U.S. Biobased Product Industry, is the first federally-sponsored economic report to examine and quantify the effect of the biobased products industry from an economics and jobs perspectives. A follow-up to Why Biobased?, the report provides a snapshot of available information on the U.S. bioeconomy and a platform upon which to build future efforts to measure the bioeconomy.

Economic Impact
The report demonstrates the biobased industry is a substantial generator of economic activity and jobs. As shown in Figure 1, in 2013, the biobased industry contributed a total of $369 billion value added to the U.S. economy and 4 million American jobs through direct, indirect, and induced contributions. Each job in the biobased industry is responsible for generating 1.64 jobs in other sectors of the economy.

In 2013, 1.5 million jobs directly supported the biobased product industry resulting in 1.1 million indirect jobs in related industries, and another 1.4 million induced jobs produced from the purchase of goods and services generated by the direct and indirect jobs. Similarly, the $126 billion in direct sales by the biobased products industry generated another $126 in indirect sales and $117 in induced sales, as shown in Figure 2. Contributions analyses were conducted to assess the effects of specific biobased segments within the U.S. economy. The report findings demonstrate the seven major overarching sectors that represent the U.S. biobased products industry’s contribution to the U.S. economy, including: Agriculture and Forestry, Biorefining, Biobased Chemicals, Enzymes, Bioplastic Bottles and Packaging, Forest Products, and Textiles.

Figure 1: Key Findings of the U.S. Biobased Products Industry in 2013

<table>
<thead>
<tr>
<th>The Number of American Jobs Contributed</th>
<th>Value added Contribution to the Economy</th>
<th>The Jobs Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Million</td>
<td>$369 Billion</td>
<td>2.64</td>
</tr>
<tr>
<td>by the U.S. Biobased Products Industry in 2013</td>
<td>from the U.S. Biobased Products Industry in 2013</td>
<td>For every 1 Biobased Products job, 1.64 more jobs are created in the United States</td>
</tr>
</tbody>
</table>
State Impact
The study includes location quotients by state to show the impact of the industry on individual states. Figure 2 shows states with the greatest concentrations of biobased products industrial activities, including: Mississippi, Oregon, Maine, Wisconsin, Idaho, Alabama, North Carolina, Arkansas, and South Dakota.

Figure 2: Location Quotient for the Total Biobased Products Industry in 2013*

*Note: Darker green and higher numbers indicates increased activity at the state level relative to the U.S. in the biobased products industry

Environmental Impact
Estimates are that the use of biobased products currently displaces about 300 million gallons of petroleum per year – equivalent to taking 200,000 cars off the road. Moving forward, additional analyses regarding the impact of the biobased products industry on water and land use are recommended.

About the Report
The report was commissioned by the USDA BioPreferred program, which works to increase federal procurement of biobased products and to create market-pull for biobased products through the USDA Certified Biobased Product voluntary label. Research and analysis that provide the foundation for the report’s key findings was led by its primary authors, Dr. Jay Golden, Director of Duke University’s Center for Sustainability & Commerce, and Dr. Robert Handfield, Professor of Supply Chain Management at North Carolina State University’s Poole College of Management.

Website: www.biopreferred.gov   Email: biopreferred@dm.usda.gov   Phone: (919) 765-9969

USDA is an equal opportunity provider and employer.
July 2015