The Importance of Forest Products For New York’s Bioeconomy

KEY POINTS

1. The bioeconomy describes the portion of the economy that produces renewable bio-based feedstocks and converts them to value-added products, such as bio-based products, bioenergy, and feed.

2. Other states and countries already recognize the importance of the bioeconomy and are developing it.

3. A state-based bioeconomy initiative could greatly increase the number of urban and rural well-paying jobs and stimulate economic growth throughout New York State while forests continue to be sustainably harvested.

4. To be a national and international bioeconomy leader, New York needs to develop a comprehensive bioeconomy roadmap based on its resources and strengths.

5. At SUNY ESF, we are well positioned to empower New York State to utilize its forest resources to enhance its bioeconomy.

WHAT IS THE BIOECONOMY?

- The bioeconomy describes the portion of an economy that produces renewable bio-based rather than fossil fuel-based feedstocks, to produce bio-based products (e.g., chemicals, pharmaceuticals, biodegradable plastics), bioenergy, food, and animal feed.

- The bioeconomy uses forestry-, agriculture-, and aquaculture-based feedstocks, as well as biological raw materials produced by industry.

- Utilizing bio-based feedstocks creates jobs and economic development while providing climate change benefits and other environmental services, such as clean water, wildlife habitat, and recreation opportunities.

The US Bioeconomy

The USDA Office of Chief Economist estimates that in 2014 the US bio-based products industry supported 4.22 million jobs and added $393 billion in value to the US economy.¹

Other Developing Bioeconomies

Other states and countries already recognize the importance of the bioeconomy in a future sustainability-focused world, and the benefits it can provide to their citizens.

- **Minnesota.** In 2015, the Minnesota legislature created a new incentive program to attract commercial-scale production of advanced biofuels, renewable chemicals, and biomass thermal energy. The Bioeconomy Coalition of Minnesota is positioning the state as a global bioeconomy leader.²

- **Finland.** Finland’s national bioeconomy strategy is designed to grow their bioeconomy output by EUR 100 billion and create 100,000 new jobs by increasing bioeconomy businesses and adding new high value products and services.³

Please visit esf.edu/cafri-ny
New York’s forests and wood products industries are currently directly responsible for nearly 40,000 well-paying jobs and more than $13 billion in economic output and are directly responsible for another 53,000 jobs and nearly $10 billion of economic activity.4

A state-based bioeconomy initiative could greatly increase the number of urban and rural well-paying jobs and economic growth throughout New York State while our forests continue to be sustainably managed, increase carbon sequestration, and provide the clean water, wildlife, recreational, and other attributes that New Yorkers expect and rely on from their forests.

At SUNY ESF, we are well positioned to empower New York to utilize its forests resources to enhance its bioeconomy. For example, we are already:

- Assessing the role our forests can plan in climate adaptation and mitigation;
- Working with industry and other partners to convert biological resources into value added bio-based products and bioenergy;
- Creating innovative solutions for increasing carbon sequestration in our forests, climate mitigation, and energy production;
- Analyzing how mass timber buildings (i.e., 50 to 20 story buildings) can be deployed across New York State.

### A Path Forward

To be a national and international bioeconomy leader, NY must learn from other state and country bioeconomy initiatives and develop a NY comprehensive bioeconomy roadmap. This will ensure a competitive environment for bio-based businesses and workforce development opportunities for workers to acquire bioeconomy-based job skills while promoting policies for the sustainable management of forests and access to forest-based bioeconomy feedstocks.

For more information about how SUNY ESF can empower NYS’s Bioeconomy, contact:

**Dr. Timothy Volk**, Professor of Forestry
tvolk@esf.edu
(315) 470-6774

**Dr. Robert Malmsheimer**, Professor of Forest Policy & Law
rmalmsh@esf.edu
(315) 470-6909

### New York State Forest Sector in 2017

(source: Cavo et al. 2019)

<table>
<thead>
<tr>
<th>Region</th>
<th>Employment</th>
<th>Direct Economic Activity (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western/Central NY</td>
<td>9,029</td>
<td>$2,916</td>
</tr>
<tr>
<td>Southern Tier</td>
<td>4,579</td>
<td>$1,201</td>
</tr>
<tr>
<td>North Country</td>
<td>7,931</td>
<td>$3,563</td>
</tr>
<tr>
<td>Capital Region</td>
<td>3,644</td>
<td>$1,088</td>
</tr>
<tr>
<td>Downstate</td>
<td>14,701</td>
<td>$4,381</td>
</tr>
</tbody>
</table>

### References: