Jill P. Stuckey, Director

Center of Innovation – Energy

Biomass to Jobs, It’s not the Southeast’s First Rodeo
Tom Vilsack, Secretary of USDA - June 22, 2011

Biomass is a vital part of America’s clean energy future as we work to decrease our dependence on foreign oil. Biomass projects will help grow regional economics, create new jobs and improve and protect our environment. We will need architects and engineers to design these plants, skilled labors to build them and trained technicians to operate them.
Drivers:  

*From an Economic Development Standpoint*

- **Economy** – Forest Industries
- **Mandates** – Europe - creating jobs in the U.S.
- **Energy Security** – Supply disruptions, Middle East
One Stop Shop

- **Forum** for new and expanding businesses
- Venue to explain state & federal **policies and procedures**
- We work to Expedite the **permitting** process
- **Matchmaking** to form successful collaborations
### Georgia Offices
- Center of Innovation
- Governor’s Office
- Agriculture
- Natural Resources
- Revenue
- Community Affairs
- Economic Development
- Herty Advanced Materials Development Center
- Fire Marshall
- Forestry Commission

### Federal Offices
- Department of Agriculture
- Environmental Protection Agency

### Universities
- University of Georgia
- Georgia Institute of Technology
Forestry = Biomass to Energy = Jobs
Between 1998 and 2008 the growth of growing stock on timberland in the state has exceeded removals by an average of 38.5% annually or 546,086,970 cubic feet per year.
Forest Inventory

![Forest Inventory Chart]

The chart shows the distribution of inventory, growth, and removals in million green tons. The inventory dominates significantly, indicating a large amount of standing timber. Growth and removals are negligible in comparison to the inventory.
Giant Miscanthus

- Herbaceous, Deciduous, Perennial
- Rhizomes rather than seed
- 11 - 25 Dry tons/acre/year
- 27 - 62 Dry tons/hectare/year
- Height up to 15 feet
- Stems are erect, similar to thin bamboo
- Low environmental inputs
- Alternative non-food use for marginal Land
- Drought tolerant, crowds out weeds
- Carbon neutral
- Nutrients returned to the soil each year
Emerging R & D Trends = Jobs

- UGA Energy Crops
- GaTech Fiber Research
Announced Bioenergy Projects by State

<table>
<thead>
<tr>
<th>State</th>
<th>Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA</td>
<td>37</td>
</tr>
<tr>
<td>CA</td>
<td>34</td>
</tr>
<tr>
<td>FL OR PA</td>
<td>18</td>
</tr>
<tr>
<td>ME, MI, VA, WI</td>
<td>17</td>
</tr>
<tr>
<td>NY</td>
<td>16</td>
</tr>
</tbody>
</table>

Source: Forisk Consulting, LLC
2002-2008: What Happened in Iowa in re: Biofuels?

IOWA STATE UNIVERSITY
Bioeconomy Institute
Let’s Compare Today’s Corn Ethanol Plant to a Biomass Drop-in Fuels Plant

<table>
<thead>
<tr>
<th>Corn To Ethanol</th>
<th>100 mil gal Biomass Plant</th>
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<tbody>
<tr>
<td>• <em>Brings in $218mil to the Economy every yr</em></td>
<td>✓</td>
</tr>
<tr>
<td>• <strong>262 Fuel trucks leave the plant every week</strong></td>
<td>✓</td>
</tr>
<tr>
<td>• <em>Employees 60 Direct Jobs</em></td>
<td>✓</td>
</tr>
<tr>
<td>• <strong>240 Indirect Jobs</strong></td>
<td>✓</td>
</tr>
</tbody>
</table>
The state has sufficient biomass to support the development of more than 45 major biomass investments of greater than $100 Million each.
GREEN = JOBS
For More Information Contact:

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