

# **Woody Biomass Economic Study**

**Defining the Scope & the Input  
Sought from Stakeholders**

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**Tallahassee, FL  
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# Mandate for the Study

## Laws of Florida, Chapter 2008-227, Section 113:

“Woody biomass economic study. – The Department of Agriculture and Consumer Services, in conjunction with the Department of Environmental Protection, shall conduct an economic impact analysis on the effects of granting financial incentives to energy producers who use woody biomass as fuel, including an analysis of effects on wood supply and prices and impacts on current markets and forests sustainability. The departments shall prepare and submit a report on the results of the analysis to the Governor, the President of the Senate, and the Speaker of the House of Representatives no later than March 1, 2010.”

# Biomass Definition

## Laws of Florida, Chapter 2008-227, Section 41:

““Biomass” means a power source that is comprised of, but not limited to, combustible residues or gases from forest products manufacturing, waste, byproducts, or products from agricultural and orchard crops, waste or co-products from livestock and poultry operations, waste or byproducts from food processing, urban wood waste, municipal solid waste, municipal liquid waste treatment operations, and landfill gas.”

The above definition does not define “woody biomass”, which is the subject of the study mandated by the same House Bill

# Tasks to Accomplish

1. Economic impact analysis of financial incentives to energy producers who use woody biomass as fuel:
  - a. Effects on wood supply / demand and prices
  - b. Impacts to current markets
  - c. Forest sustainability
  
2. Final report to the Governor, President of the Senate and the Speaker of the House by March 1, 2010

# Approach

- Formed a DOF/DEP/UF team for the study:
  - Mr. James Karels, DOF, Director and State Forester
  - Dr. Timothy White, UF School of Forestry, Director
  - Mr. Charles Goddard, DEP, Bureau Chief
  - Dr. Jarek Nowak, DOF, Forest Utilization Specialist
  - Dr. Douglas Carter, UF, Prof. of Forest Economics
  - Dr. Alan Hodges, UF, Extension Scientist
  - Dr. Frederic Rossi, UF, postdoc in Forest Economics

# Approach

- Prepared study proposal describing data and methods to be used, available at: <http://www.fl-dof.com/>
- Conducting the public stakeholder meeting seeking input on issues associated with the woody biomass economic study and our proposed methodology
- The contents of the meeting is recorded digitally to capture the anticipated discussion
- Additional input can be provided via a dedicated website form available at: <http://www.fl-dof.com/>

# Scope

- Three scenarios of woody biomass availability will be modeled:
  1. Merchantable timber alone
  2. Merchantable timber + tree tops
  3. Merchantable timber + tree tops + urban wood
- Forest understory vegetation will not be part of the modeling b/c of limited information

# Main Data Sources

- Annual Forest Inventory and Analysis (FIA) data for Florida (years 2002-2007), available at: <http://www.ncrs2.fs.fed.us/4801/fiadb/fim30/wcfim30.asp>
- Biannual Timber Product Output (TPO) data for Florida (year 2007) to be available at: <http://srsfia2.fs.fed.us/php/tpo2/tpo2.php>
- Urban woody biomass data sources

# Final Report

- The final report prepared for the Governor & the Legislature will be based mostly on the UF modeling
- However, other non-modeled kinds of woody biomass will be addressed in the final report to the extent possible, such as:
  - TPO-derived logging residues
  - FIA plot-derived non-merchantable timber
  - Forest understory

# Financial Incentives Considered

- Renewable Portfolio Standard (RPS) in which: between 2% and 20% of all Florida's electricity is produced from woody biomass
- Effects of tax incentives on woody biomass supply / demand and prices
- Effects of carbon credit offset markets on woody biomass supply / demand and prices

# Supply, Demand and Prices

- The current and long-term (20-year) timber supply and prices will be assessed using Forest and Agricultural Sector Model known as *FASOM* – Dr. Doug Carter and Dr. Fred Rossi
- The economic impacts of changes in demand for woody biomass due to the expanded bioenergy production in Florida will be assessed using *IMPLAN Professional* software model – Dr. Alan Hodges

# Impacts to Current Markets

- Impact to forest products industry resulting from expanding bioenergy production sector will be evaluated in terms of:
  - Timber markets
  - Industry output
  - Income
  - Employment
  - Business taxes

# Forest Sustainability

- Current and future (20 years out) forest sustainability will be modeled in terms of timberland acreage and timber volumes
- Forest reforestation and afforestation trends will be modeled and compared to available “real life” data.

# Timeline

## 2009

- Mar 24 – FIA 8<sup>th</sup> cycle posted to USFS website
- Apr ?? – Timber Product Output (TPO) data posted
- Apr 14 – Stakeholder Meeting at DOF in Tallahassee
- Apr 15 – DOF website for comments available
- May 15 – Last day to post stakeholder comments
- Jun 1 – Team meets to consider received input
- Nov 1 – Final Report from the UF to the DOF due

## 2010

- Jan 1 – Woody Biomass Economic Study Report drafted
- Mar 1 – Study Report submitted to Gov & Legislature

The background of the slide is a close-up photograph of a wooden surface with a prominent vertical grain. The wood has a rich, warm brown color with darker, almost black, streaks and knots. The texture is highly detailed, showing the natural grain patterns and some minor imperfections like small cracks and dark spots.

**Thank you!**

**...Any Questions?**