



## Billion Ton Study: What can be Learned about Bioenergy Sustainability?

### Field Trip – Agenda

#### Wednesday, September, 28, 2011 - Field Trip

Time	Event	Lead
8:00 am	Depart from lobby of Comfort Inn Distribute visitor badges (please have photo ID available)	Becky Bowman
8:30 – 9:45 am	UT Arboretum: Forest Residue Collection	Richard Evans
9:45 – 10:00 am	Travel to NTRC	
10:00 – 11:30 am	National Transportation Research Center <ul style="list-style-type: none"> <li>• Material compatibility with biofuels</li> <li>• Vehicle Evaluation (Chassis dynamometer lab)</li> <li>• Biofuel engine optimization (Engine test cell)</li> <li>• Emissions issues with biofuels (Analytical lab)</li> </ul>	Tim Theiss and Mark Downing
11:30 – 12:30 pm	Travel to Vonore restaurant	
12:30 – 1:30 pm	Working lunch – Overview of the University of Tennessee (UT) Biofuels Initiative and Switchgrass Program	Sam Jackson
1:30 – 3:30 pm	Travel to switchgrass field to discuss growing bioenergy crops	UT/Genera Energy (Sam Jackson/Ken Goddard/JonWalton)
3:30 – 5:00 pm	Travel to Genera Energy LLC Biomass Innovation Park to discuss biomass logistics, processing and conversion	Genera Energy LLC (Sam Jackson/Clay Dye)
5:00 – 6:00 p.m.	Travel to hotel	

Point of Contact: Becky Bowman (cell: 505-699-3641 or [rzl@ornl.gov](mailto:rzl@ornl.gov))

# Billion Ton Study: What can be Learned about Bioenergy Sustainability?

## Workshop – Agenda

**Thursday, September 29, 2011 - Workshop – Day 1 –  
Building 1505, DJ Nelson Auditorium**

Time	Event	Lead
7:50am	Bus leaves hotel traveling to ORNL Visitor Center (please have a photo ID available)	Becky Bowman
8:30 – 9:00 am	Welcome, introductions, and purpose of workshop (light refreshments will be available)	Martin Keller Virginia Dale
9:00 – 9:30 am	Value of Billion Ton Study and sustainability to DOE	Ranyee Chiang
9:30 am – noon	Plenary: Background on Billion Ton (BT) Study	
9:30 – 9:50 am	<ul style="list-style-type: none"> <li>• BT overview and long-term perspective</li> </ul>	Bob Perlack
9:50 – 10:10 am	<ul style="list-style-type: none"> <li>• Assumptions and implications involving residues</li> </ul>	Richard Nelson
10:40 – 11:00 am	<ul style="list-style-type: none"> <li>• Assumptions and implications involving forest resources (Light refreshments available)</li> </ul>	Bryce Stokes
11:00 – 11:20 am	<ul style="list-style-type: none"> <li>• Economic assumptions and implications</li> </ul>	Burt English
11:20 am – noon	<ul style="list-style-type: none"> <li>• Discussion with speaker panel</li> </ul>	
noon – 1:00 pm	Group picture / Lunch available as discussions continue	
1:00 – 2:00 pm	Plenary: Use of the BT for sustainability analyses	
1:00-1:25 pm	<ul style="list-style-type: none"> <li>• Environmental and socioeconomic indicators of bioenergy sustainability</li> </ul>	Allen McBride and Paul Leiby
1:25- 1:50 pm	<ul style="list-style-type: none"> <li>• Demo of Knowledge Discovery Framework (KDF)</li> </ul>	Aaron Myers
1:50-2:00 pm	<ul style="list-style-type: none"> <li>• Breakout group assignments                             <ul style="list-style-type: none"> <li>✓ Topic 1: Next steps for incorporating sustainability in resource analysis</li> <li>✓ Topic 2: Ways to use the Billion Ton Study data to explore bioenergy sustainability across the full biofuel supply chain</li> </ul> </li> </ul>	Robin Graham Mark Downing

2:30 – 4:30 pm	Breakout group meetings (Light refreshments available)	
4:30 – 5:30 pm	Plenary – Reports from breakout groups	Robin Graham
5:30 – 6:00 pm	Travel from ORNL to restaurant – Flatwater Grill	
6:00 – 8:00 pm	Dinner featuring guest speaker: switchgrass production	Ken Goddard
8:00 – 8:30 pm	Travel from restaurant to hotel	

## Friday, September 30, 2011 – Workshop – Day 2

Time	Event	Lead
8:00 am	Bus leaves hotel traveling to ORNL	Becky Bowman
8:30-8:40 am	Plenary: New thoughts from prior day	
8:40 – 11:10 am	Plenary: How to use the Billion Ton Study to address sustainability concerns	
8:40 – 9:00 am	<ul style="list-style-type: none"> <li>Large-Scale Biofuel Water Sustainability Assessment</li> </ul>	May Wu
9:00 – 9:20 am	<ul style="list-style-type: none"> <li>Use of BT data for water quality estimates at large scales</li> </ul>	Yetta Jager
9:20 – 9:40 am	<ul style="list-style-type: none"> <li>University researcher use of the BT Data</li> </ul>	Peter Tittmann
9:40 – 10:00 am	<ul style="list-style-type: none"> <li>USDA ARS researcher use of the BT Data</li> </ul>	Doug Karlen
10:00 – 10:30 am	Discussions regarding morning presentations (Light refreshments available)	
10:30 – 10:50 am	<ul style="list-style-type: none"> <li>Industry research use of the BT Data</li> </ul>	Jami Nettles
10:50 – 11:10 am	<ul style="list-style-type: none"> <li>Other use of the BT Data</li> </ul>	Esther Parish
11:10 am – 12:30 pm	Breakout groups continued from Thursday	
12:30 – 1:30 pm	Lunch with breakout group discussions	
1:30 – 2:30 pm	Plenary: Breakout reports and discussion	Mark Downing
2:30-3:00 pm	Break & completion of workshop evaluation forms (light refreshments available)	
3:00 -4:00 pm	Plenary: Next steps	Virginia Dale

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4:00 pm

Adjourn workshop - bus departs for Knoxville Airport

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