

SAF Spring Conference, 8-10 May 2007
Emerging Technologies in Woody Biomass Use
New Perceptions of a Familiar Resource
Bay de Noc Community College, Escanaba, Michigan

TUESDAY - 8 May 2007

9:30 Registration – Joe Heirman Center, Bay de Noc Community College

10:15 Welcome and Introduction – Doug Heym, MSAF State Chair

10:30 Keynote: The Forest Biorefinery- How do we capture more value?

– Kris Berglund, Michigan State University

Michigan has excellent forest resources that could potentially lead to significant economic impact. How can these opportunities be pursued? A brief summary of energy utilization patterns will be presented followed by approaches underway both in the US and abroad to capture more value from the forestry industry. The concept of the forest biorefinery will be discussed in the context of replacement of fossil fuels in the entire range of fuels and higher value chemicals.

11:30 Lunch & MSAF Chapter Meetings

1:00 Supply of Woody Biofeedstocks in Michigan

- Anthony Weatherspoon, Michigan DNR

What are the wood markets and wood supplies like in Michigan today and what are the trends for the near future. The possibility of the energy industry replacing lost fiber markets is one avenue, but alternative unused sources of feedstocks are critical.

1:50 “Turning Biomass into Bio-energy Products”

- Mark Knaebe of Forest Products Research Lab

Here is a review of existing and potential opportunities for harvesting, transporting, and converting biomass into products that will expand our bio-economy. What are the engineering and financial considerations for specific technologies designed for converting standing biomass into fuels, electricity, chemicals, and other products?

Break 2:40 pm – 3:10 pm

3:10 “Economics and Policy Considerations”

- Ken Skog of the Forest Products Research Lab

What are the financial and policy aspects of the woody bio-economy? Which processes are viable now and when might others become viable? What is the trend in energy subsidies and how does government action effect what happens here?

4:00 Panel discussion

5:30 Social Hour

6:30 Banquet, State Meeting, and Forest Education Fund Raffle

Directions to the Danforth Place: From the college, turn right onto Danforth Road (west), pass through the stoplights. Danforth Road curves to the northwest and goes up a big hill. The Danforth Place is just past the top of the hill, on the left. There will be large sign that will welcome the SAF. About two miles.

WEDNESDAY - 9 May 2007

8:00 “Forest Management Implications – Environmental Impacts”

- Dick Rossman of Minnesota DNR

*A range of issues defines the **Biomass Harvest Guidelines** for harvesting of biomass from both natural systems and energy plantation systems. Minnesota’s experience with drafting these types of guidelines should help serve Michigan’s need to address environmental concerns of woody biomass harvests. [<http://www.frc.state.mn.us/FMgdline/BHGC.html>]*

8:50 “Forest Management Implications –Silvicultural Practices”

- Dan Buchman, Natural Resources Research Institute, University of Minnesota

Explores how silvicultural practices may change as a result of increased use of materials that are not presently commercial and harvested. Provides some of the guidelines for establishing energy plantations of willows and poplars on various sites throughout Michigan.

9:40 Break (~half hour)

10:10 Case Studies – Examples of Projects and Programs

- Laurentian Energy Authority; *Minnesota, electricity and heat generation*
- Mascoma Corporation; *New York, ethanol via fermentation*
- Advanced Biorefinery Inc.; *portable bio-oil production*
- Flambeau River Biorefinery; *Wisconsin, energy independence of a pulp & paper mill*
- Fuels for Schools; *Pacific Northwest, evaluating and installing woody biomass systems*
- Torrefaction; *a wood treatment process with a promise*
- USFS woody biomass grant program; *Minnesota, Superior National Forest study*
- Messersmith Industrial Biomass Combustion Systems; *Bark River, Michigan*

12:00 – 5:00 Lunch and Field Tour

- Energy plantations (poplar, willow, switchgrass); *MSU U.P. Tree Improvement Center*
- Mechanical Slash Bundling; *Nelson Forest Products*
- NewPage Corporation; *wood energy conversion & waste stream energy product possibilities*
- Ag Solution’s Biodiesel Plant; *Gladstone, Dick Vande Vusse*

THURSDAY 10 May 2007

Field Tour (If you plan to attend these tours, we will meet on Tuesday to arrange lunches)

1. Messersmith Industrial Biomass Combustion Systems; *Bark River, Larry Klope*
2. Vulcan Wood Products; *pellet mill in Vulcan*
3. Louisiana-Pacific OSB Mill; *Sagola, Jon Lamy*
4. North Dickinson Schools; *long-time woody chip burning*