

An Overview of the Seventh Annual Southern BioProducts and Renewable Energy Conference

Brent Bailey, Immediate Past President

Over 150 business, academic, association and governmental leaders participated in the Seventh Annual Southern BioProducts and Renewable Energy Conference on April 14-15, 2008, at the Silver Star Hotel and Conference Center in Choctaw, Mississippi, to examine the opportunities and challenges associated with biomass utilization. The Mississippi Biomass Council, Mississippi Technology Alliance-Strategic Biomass Council and Mississippi State University Industrial Outreach Service were the event organizers.

The theme of the 2008 conference, ***“BUILDING ON THE STRENGTHS OF MISSISSIPPI’S BIOMASS RESOURCES”***, allowed attendees to examine from a state and regional approach ways in which the strengths and resources of Mississippi and the Southern United States can contribute to the development and implementation of various biomass-based renewable energy technologies and highlighted recent successes in the rapidly growing renewable energy sector.

Conference attendees were challenged each to open their minds, and with an unbiased view, evaluate how the biomass sector can make a major contribution to reducing U.S. dependence on imported and fossil energy sources and, in so doing, enhance the country’s economic security, move toward an atmospheric carbon balance and bring more economic activity to much of rural America.

The greatness of the United States, and of Mississippi in particular, has been its ability to create and cultivate ingenuity and apply it to developing new technologies that will enhance the human condition. The agricultural and forestry sectors are prime examples of this greatness. Advances in plant and animal sciences have led to ever increasing production, resulting in more abundant and safer food and other products. There is no reason why this same level of ingenuity can not apply to the energy sector and develop the critical mass needed to move this issue to center stage. This conference is intended to provide information that will lead to increased levels of local self-determination and economic development.

Conference Sponsors: The conference sponsors are also an important part of the continued success and quality of the conference. Their support makes us able to hold an event like this.

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Opening Session: John Robert Smith, Mayor of Meridian, Mississippi, opened the session with the official welcome and offered insights into his vision for Meridian to become Mississippi's first "Green City". Dr. Mark Jenner then provided an overview of some the activities that are occurring around the nation involving the utilization of agriculture and forestry biomass for energy production. He concluded that the next generations of biomass feedstocks and technology will enhance commercial viability and shift the economics to bioenergy.

Policymaker Forum: The conference attendees heard from Cade Clurman, Legislative Assistant for Congressman Chip Pickering, Public Service Commissioner Brandon Presley, State Representative David Norquist, and Jim Lipe of the Mississippi Department of Agriculture and Commerce. Cade presented a brief "view from the Hill" regarding agriculture and energy policy issues. Commissioner Presley talked about his vision for assessing the electricity demand needs for the state and policy options for integrating new generation technologies. Representative Norquist emphasized that members of the Legislature need to hear from constituents and others who are knowledgeable about energy needs and common-sense policy options. Jim Lipe recommitted the Ag Department's support of biofuels and informed the audience of regulatory changes that will be taking place to make the blending of biofuels more attractive to fuel distributors.

Lunch Keynote Address: Dr. Vance Watson, Interim President of Mississippi State University, provided the welcome for the luncheon speaker, Dr. Gale Buchanan. Dr. Buchanan is the USDA Under Secretary for Research, Education, and Economics. His roots run deep through agriculture and the land grant college system. He stressed the need for adequate university research support and the role that technology transfer will play in the development and implementation of new energy strategies.

Biomass Feedstocks Forum: Wayne Tucker, Director of the Mississippi Institute for Forest Inventory, provided an update on the progress of his agency in developing a comprehensive forest inventory for Mississippi's 19.8 million forested acres. Dr. Joe Bouton, Vice-President of the Samuel Roberts Noble Foundation, talked about the benefits of using switchgrass as a bioenergy feedstock. Eugene Columbus, MSU

Department of Ag and Bio Engineering, provided an overview of the MSU Sustainable Energy Research Center and its bioenergy strategic initiatives and accomplishments.

Biomass Harvest and Collection Forum: Christopher Wright, Research Engineer with the Idaho National Laboratory, gave the group an overview of biomass feedstock supply system needs to support a biorefinery. Dana Mitchell, USDA Forest Service Southern Research Station, talked about her experience in developing biomass feedstock for specific bioenergy co-firing applications.

Networking Reception/Student Poster Voting: Each year, students from the state universities and colleges are invited to present their research in the areas of bioenergy feedstocks, technologies, policy, economics, biomass utilization, etc. Judging is done by the conference attendees on the content and quality of visual presentation among other criteria and announced the following morning. The networking reception also provides time for conference attendees to interact with the dozen or more exhibitors.

From Conception to Construction: Assessing Bio-Based Opportunities: Sam Shepard with Global Green Resources of Texas laid out his vision for a Mississippi Alternative Energy Center to serve as a research and development center for renewable energy technologies, including algae. The President of the Parton Group, Stan Parton, talked about how project developers and financial institutions analyze biomass feedstock costs and availability. Pete Moss, President of Frazier, Barnes and Associates looked at the challenges currently facing the biodiesel industry.

Opportunities for a Bio-Based Economy: Where do we go now?: Marvin Burchfield, Vice President of Decker Energy International, made the case for biomass-based electrical generation as a proven technology and the only significant renewable resource in the Southeast.

Student Recognition Session: 2008 Student Research Poster Competition award winners are as follows:

First place poster prize: \$350

Thomas Jones of Mississippi State University

Poster Title: A Bioenergy Mill Location and Decision Support System Based on a County Level Forest Inventory and Geo-Spatial Information

Second place poster prize: \$200

Laura Beth Moore of University of Southern Mississippi

Poster Title: Convert Spent WOMBAT Fluid to Fertilizer

Third place poster prize: \$100

Lin Wei of Mississippi State University

Poster Title: A Novel Method of Determination of Surface Area of Biomass Particles

The Mississippi Biomass Council's **Undergraduate Biomass Studies Scholarship** is made possible by a grant from the Mississippi Technology Alliance–Strategic Biomass Initiative. The scholarship is awarded to a deserving student pursuing undergraduate studies in the areas of biomass science, technology, economics, or policy issues. The

scholarship applicant must be a Mississippi resident and attending any in-state university or community college.

Ms. Emily Dickens of the University of Southern Mississippi was selected to receive the 2008 Mississippi Biomass Council Undergraduate Biomass Studies Scholarship of \$1000. Ms. Dickens is a **junior in the Polymer Science program and is actively conducting research in the development of formaldehyde-free particleboards.**

In addition, Mr. Rex Livingston, a Mississippi State University Biological Engineering major conducting research in the bioenergy/biofuels arena, was present an award of \$500 for his scholar achievements.

Morning Keynote: Former Secretary of State Dr. Eric Clark, now Executive Director of the Mississippi State Board of Community and Junior Colleges, explained the role of work force development opportunities and small business startup support that is available at the state's Community and Junior Colleges.

Woody Biomass Utilization in Mississippi: Opportunities for Bioenergy and Bio-Based Products: Researchers from the MSU Departments of Forestry and Forest Products focused on the forest resources of Mississippi, new techniques in forest slash collection, and training resources available to forest stakeholders and economic developers. Presentations were made by Dr. Donald Grebner, Dr. Philip Steele, and Dr. Randy Rousseau.

Mississippi Biomass Council Annual Meeting: Mississippi Biomass Council President Brent Bailey provided an overview of activities and accomplishments of the Council over the last year: Membership is steady or has increased; New MBC color brochure developed; E-newsletter for members delivered via email every two weeks; new website design to be launched; New partnerships and sponsored events; Began discussions of the development of a Biomass Utilization Strategy for Mississippi. 2008 also marks the 10-year anniversary of the formation of the Council.

Dr. Motice Bruce, Director of the Mississippi Development Authority-Energy Division, addressed the Council meeting and explained her vision for the MDA-Energy Division and ways that the Council can work with the agency.

New Directors and Officers were elected to fill expiring terms and/or vacant positions. Mr. Robert Thompson of USM's Polymer Science Institute and Mr. Harvey Howze were elected to the MBC Board of Directors. A new slate of officers was elected to lead the Council:

President – Dr. Liam Leightley, MSU College of Forest Resources

Vice-President – Andy Whittington, MS Farm Bureau Federation

Treasurer – Stuart Dean, MSU-IOS (retired)

Secretary – Kevin Mitchell, Strata-G