

Woody Bioenergy in Virginia

Managing Our Resources for a Profitable and Sustainable System

Petersburg, VA

September 29, 2008

Agenda

- 8:30-9:00 Arrival and Refreshments
- 9:00-9:15 Welcome – Congressman J. Randy Forbes
- 9:15-9:30 Opportunities and Challenges for Woody Biomass in Virginia – Stephen A. Walz, Senior Advisor for Energy Policy for Governor Kaine
- 9:30-10:00 Southern Woody Biomass Training Initiative – Ben Jackson, University of Georgia
- 10:00-10:35 Basics of Managing and Utilizing Woody Bioenergy Resources – Charlie Becker, Virginia Department of Forestry
- 10:35-10:50 Break
- 10:50-11:30 Recovering and Transporting Urban Waste Wood, Secondary Wood manufacturing By-Products, and Harvesting Residues – Phil Araman, US Forest Service
- 11:30-12:15 Economics of Urban Wood Waste and Secondary Wood Manufacturing By-Products for Renewable Energy – Bob Smith, Virginia Tech
- 12:15-1:15 Lunch
- 1:15-3:30 Case Studies – Stories of Supply and Demand: Opportunities and Challenges Associated with Implementation
- Introductions – John Munsell, Virginia Tech
- 1:15-1:45 Case #1 – Harry Gregori, Environmental Solutions, Inc.
- 1:45-2:15 Case #2 – John Lanier, Smurfit-Stone Container Corporation
- 2:15-2:30 Break
- 2:30-3:00 Case #3 – Mark Loftin, Associated Physics of America
- 3:00-3:30 Panel Discussion – Q&A
- 3:30-4:15 Small Group Discussion & Exercise – Ideas for Sustainability and Profitability in Virginia. Group recommendations compiled and shared with the Governor.
- 4:15-4:30 Small Group Reports
- 4:30 Adjourn

Speaker Bio's

Congressman J. Randy Forbes, Virginia's 4th Congressional District

Randy Forbes represents the diverse and expansive Fourth Congressional District of Virginia. Elected in a special election in 2001, he is now serving his fourth term in the U.S. House of Representatives. Randy focuses his efforts in Congress on protecting the security and sovereignty of our nation, preserving the moral and historical roots of our country, strengthening our military and supporting veterans, growing educational opportunities for our children, and promoting economic development through fiscal responsibility. Randy graduated from Great Bridge High School in Chesapeake in 1970. He was valedictorian of his 1974 class at Randolph-Macon College. In 1977, Randy graduated from the University Of Virginia School Of Law.

Stephen A. Walz - Senior Advisor for Energy Policy

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Stephen Walz is the Senior Advisor for Energy Policy in the Office of Governor Timothy Kaine. As part of his effort, he is overseeing implementation of the Virginia Energy Plan, which sets out recommendations for state energy actions over the next 10 years. Mr. Walz also is Chair of the Governor's Energy Policy Advisory Council and serves on the Governor's Commission on Climate Change.

Mr. Walz previously served as Director of the Division of Administration of the Department of Mines, Minerals and Energy. Mr. Walz also has served as Director of the Department's Division of Energy and in policy and energy efficiency program management positions. Prior to joining Virginia state government, Mr. Walz worked in energy and community development programs in Missouri and Nebraska.

Mr. Walz has a BS in Civil Engineering from Worcester Polytechnic Institute in Worcester, Massachusetts.

Ben Jackson, Professor and Timber Harvesting Extension Specialist

Warnell School of Forestry and Natural Resources

The University of Georgia Athens, GA

Ben Jackson received his Ph.D. in Forest Economics from Texas A&M University in 1980. Jackson is dedicated to developing forestry and natural resources continuing education program primarily for natural resource professionals employed by forestry consultants, state and federal agencies and forest industry. Other participants are forest landowners, related industry representatives, realtors and investment professionals.

Charles W. Becker III, CF, Utilization & Marketing Manager

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Charlie's current position is Utilization & Marketing Manager with the VA Department of Forestry (DOF), with the responsibility of assisting to maintain a prosperous forest industry in Virginia. Charlie has worked for DOF for over 20 years, first as an area forester in southwest Virginia, assisting private landowners manage their forestland and then as the Resource Conservation & Development (RC&D) Forester in Wytheville. Charlie obtained his B.S. Degree in Forestry and Wildlife from Virginia Tech in 1981 and a M.S. Degree in Forestry from the University of Tennessee, Knoxville in 1986. Charlie has also worked in wildlife management, forest recreation, forest inventory, and urban forestry.

Philip A. Araman, Research Team Leader

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Phil Araman is a Research Team Leader and Scientist with the USDA Forest Service Southern Research Station and an Adjunct Professor and Senior Scientist in Wood Science and Forest Products at Virginia Tech. He has degrees in Wood Science and Technology (BS) from North Carolina State University and Forest Products (MS) from Virginia Tech. His team's research mission has been to develop advanced tree evaluation and processing technologies, automated hardwood processing technologies, new or improved products made from low- and medium-grade hardwood sawtimber and nonselect species, and to develop effective wood product recovery, reuse, and recycling (<http://www.srs4702.forprod.vt.edu>). They have also conducted non-timber forest products research (<http://www.sfp.forprod.vt.edu>).

Bob Smith, Professor/Associate Dean College of Natural Resources at Virginia Tech

Bob is a Professor and associate dean for engagement for the College of Natural Resources at Virginia Tech. He is also the director of the Center for Forest Products Marketing and Management. He holds a Ph.D. from Virginia Tech in Forest Products Marketing, a MBA from the University of Wisconsin at Oshkosh, and a B.S. in Wood Science from Michigan Tech. His current research efforts focus in industrial marketing and international trade of forest products. Bob teaches forest products marketing and sales workshops throughout the North America.

Harry E. Gregori, Jr., Vice President

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Harry E. Gregori, Jr. is Vice President of Environmental Solutions, Inc. (ESI) of Richmond, Virginia. Prior to his work at ESI for the past four years, Harry was the Director of Pollution Prevention and

Compliance Assistance with the Virginia Department of Environmental Quality. Harry has also been adjunct faculty teaching environmental classes in the graduate schools of public administration and planning at VCU and University of Virginia. Mr. Gregori responsibilities at ESI include the development of beneficial uses of by-products with specific emphasis on the development of alternative and innovative energy sources. Harry also specializes in Environmental Management Systems (ISO14000) program development, management and auditing. Mr. Gregori holds a Bachelor of Science (BS) degree in Community Development and a Master's (MRP) degree in Regional Planning from the Pennsylvania State University, as well as a Master's (MPA) degree in Public Administration from Virginia Commonwealth University.

Mark O. Loftin – Intellectual Property Counsel, Vice President of Engineering,
Associated Physics of America, LLC

Mr. Loftin is primarily responsible for the Company's Strategic Business Planning, Organizational Development, Intellectual Property Development, Engineering, Sales Contracts, and Application Development. Mr. Loftin received his B.S. degree in Chemical Engineering in 1990 from the University of South Alabama and a Juris Doctor degree in 1999 from Southwestern University School of Law in Los Angeles, California. Mr. Loftin has spent the past 15 years as a process engineer consultant to several international oil and gas production and refining companies. Over the past 4 years, Mr. Loftin has focused on renewable energy technologies for industrial applications. Mr. Loftin is a registered Patent Attorney with the U.S. Patent and Trademark Office and is also a member of the Alabama State Bar.

Presentation Title: Biomass Fuel Specifications for Industrial Gasification Equipment This presentation will examine qualitative and quantitative aspects of woody biomass sales transactions between suppliers and operators of industrial gasification equipment. If biomass suppliers are going to compete against natural gas in the heavy industry sector, they will be required to deliver their fuel to the customer consistently with regard to the customer's equipment specifications. Many people are not aware that even natural gas goes through numerous conditioning processes before being sent into a pipeline for use by customers. Woody biomass must also be processed to some extent to be usable by customers. This presentation will cover what APA's industrial gasification equipment requires with regard to woody biomass feedstock and what APA's customers typically require from the biomass suppliers. The objective will be to make biomass suppliers more aware of the technical and business issues relating to such transactions and to demonstrate the importance of knowing what the industrial customer needs from his contract biomass fuel supplier.

John T. Lanier is the Virginia Region Fiber Supply Manager for Smurfit-Stone Container Corporation Forest Resources. He procures wood fiber and wood biomass for two Smurfit-Stone Containerboard Mills in Hopewell and West Point, VA. John has a BS degree in accounting from the Virginia Commonwealth University, and has been employed by Smurfit-Stone since 1982. Combined, Smurfit-Stone's West Point Mill and Hopewell consumes approximately 735,000 tons of biomass/year. The biomass provides fuel to create steam in the mills' power plants to provide about 25% of the mills' energy needs.