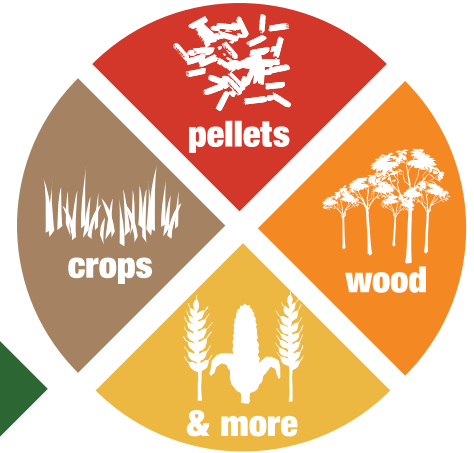


# HEATING THE MIDWEST

WITH RENEWABLE BIOMASS



## Conference & Expo

April 29–May 1, 2014

Radisson Hotel & Conference Center  
Green Bay, Wisconsin

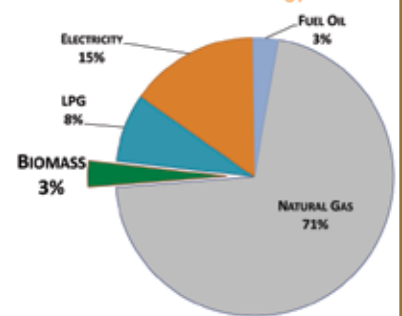
### Share the Vision

We propose that 15% of all thermal energy in the Midwest come from renewable energy sources with 10% derived from sustainably produced biomass by 2025.

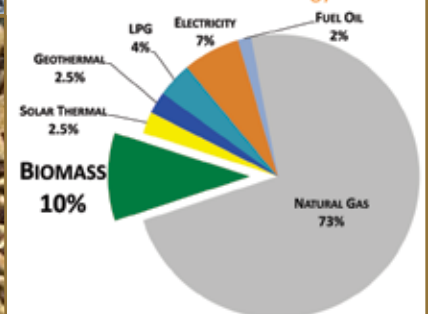
The remainder of this energy would come from solar thermal and geothermal sources. This shift in our sources for thermal energy will produce extraordinary economic, social, and environmental benefits for the Midwest, which currently relies on fossil fuel for 97% of its thermal energy.



### 2012 Midwest Thermal Energy Sources



### 2025 Midwest Thermal Energy Vision



## Heating the Midwest with Renewable Biomass

Heating the Midwest (HTM) is a group of volunteers with a serious interest in growing awareness and usage of biomass thermal fuel for heat in the Midwest.

### Our Mission:

*"To advance biomass thermal heating in the Midwest for a more sustainable future, while improving the economic, environmental and social well-being of the region."*

Driven and directed by a Steering Committee, Heating the Midwest includes industry, government, non-profit organizations, university representatives and tribal representatives. It is an efficient group of biomass advocates working to promote biomass to a larger constituency, including government policy makers and entities, consumers and businesses in the Midwest.

### Members of the HTM Steering Committee:

#### Chair, Brian Brashaw

bbrashaw@nrri.umn.edu

University of Minnesota Duluth,

Natural Resources Research Institute (NRRI)

#### Vice Chair, T.J. Morice

tj@marthwood.com

Marth Wood Supply, Inc.

#### Vice Chair, Chris Wiberg

cwiberg@tpinspection.com

Timber Products Inspection –  
Biomass Energy Lab

## Natural Resources Research Institute

UNIVERSITY OF MINNESOTA DULUTH

Driven to Discover

### Research and Outreach for the Woody Biomass Industry

- ◆ Resource Assessments
- ◆ Energy Crop Development
- ◆ Biomass Characterization
- ◆ Solid Fuel Research
- ◆ Pellet/Briquette Research & Pilot Plant
- ◆ Torrefaction Capability
- ◆ Market Studies & Development



Contact: Tim Hagen, thagen@nrri.umn.edu, 218.720.4373  
www.nrri.umn.edu



AN ALLETE COMPANY

## EnergyForward



Our plan for a balanced energy future.

[www.mnpower.com/EnergyForward](http://www.mnpower.com/EnergyForward)

# WELCOME!

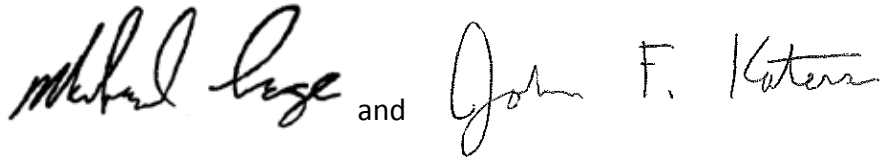
Dear Conference Attendees,

On behalf of the entire Conference Organizing Committee, we would like to welcome you to the Heating the Midwest 2014 Conference and Expo. As we learned this past winter, when propane markets were extremely volatile, energy supply and price are critical issues for the Midwest. This year's conference will feature a number of presentations focused on taking advantage of locally available biomass opportunities and expanding the implementation of biomass thermal in the Midwest. The keynote address on "Midwest Biomass Thermal Energy: Opportunities and Challenges Ahead" will provide the foundation for other conference sessions on Biomass Technology and Implementation, Environmental and Regulatory Considerations, and Wood Products Industry Success Stories. The focus of the second day of the conference will be on regional biomass energy efforts that are taking place in several states in the Midwest.

This year's Conference and Expo will feature an indoor and outdoor exposition area showcasing more than 30 vendors, businesses, and organizations that will be demonstrating the latest advancements in the biomass industry. In addition, on the first evening of the conference there will be a Biomass Heating Expo that will be open to the general public and include several speakers. For those able to attend on Tuesday, there will also be a pre-conference tour of an industrial fuel pellet manufacturing facility, a greenhouse facility heated with woody biomass, a hardwood sawmill and dry-kiln operation with a wood chip boiler system, and a biomass pellet producer with a pellet boiler system.

We thank you for participating in this conference as co-hosts, sponsors, exhibitors, speakers, and registrants, as your involvement helps lead efforts on building a stronger biomass thermal infrastructure in the Midwest. By working together, we can continue to support the continued development and implementation of a biomass vision for the Midwest.

Sincerely,



Michael Troge and John F. Katers  
Conference Co-Chairs  
Heating the Midwest with Renewable Biomass

## Conference Organizing Committee:

### John Arendt

UW-Green Bay, Environmental Management  
and Business Institute (EMBI)  
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### Michael Troge

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State of Wisconsin  
Department of Natural Resources

## Conference Exhibitors

AFS Energy Systems  
Agricultural Utilization Research Institute (AURI)  
Biomass Engineering and Equipment  
Center for First Americans Forestlands,  
College of Menominee Nation  
Illinois Biomass Working Group  
Higgins Heating  
Miron Construction Co., Inc.

Portage and Main Outdoor Wood Boilers/  
Strawbale Farms  
Rotochopper, Inc.  
SEH, Inc.  
Tweet/Garot Mechanical, Inc.  
Vermeer Wisconsin, Inc.  
State of Wisconsin  
Department of Natural Resources

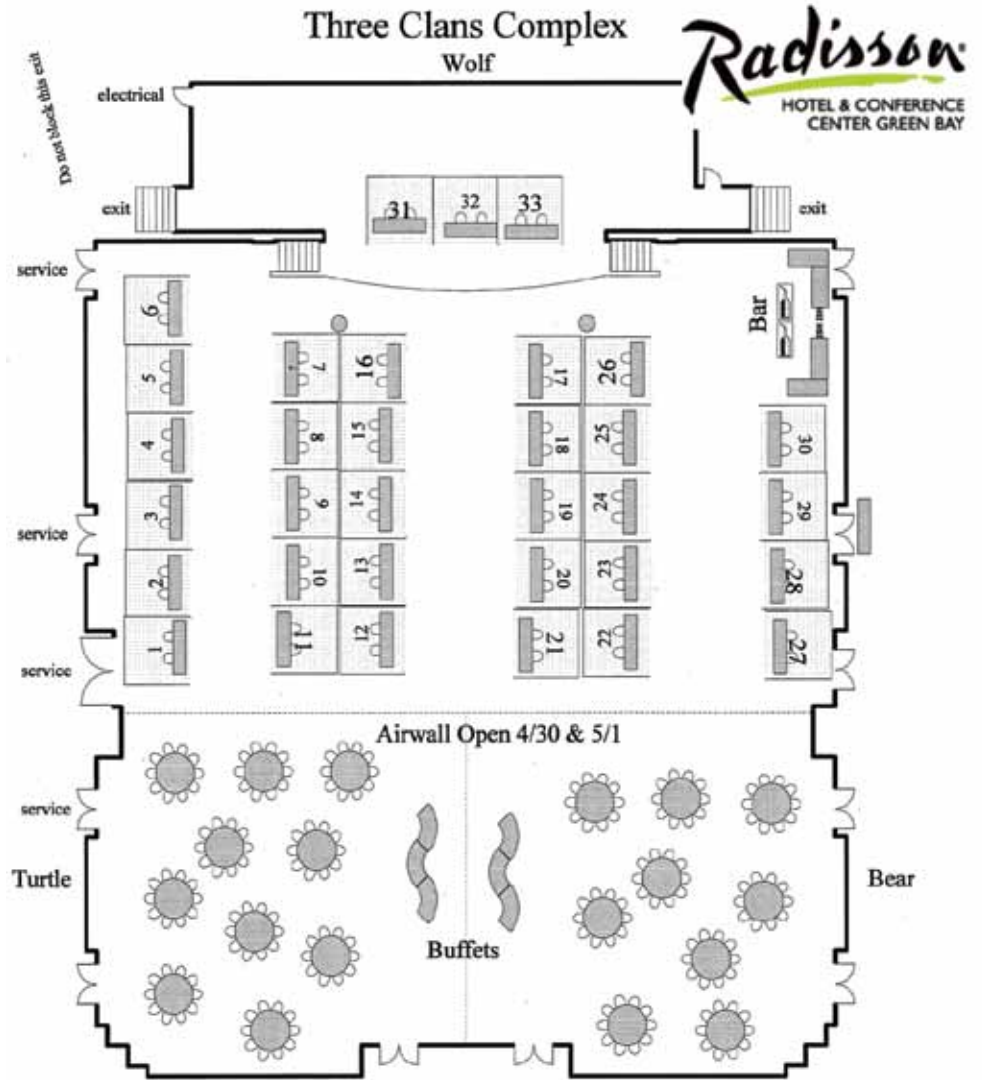


# EXPO HALL

## Exhibitors

(See page 13 for exhibitors descriptions )

- 1 USDA Forest Service, Forest Products Marketing Unit
- 2 EvenTemp Biomass – The Energy Shop
- 3 EvenTemp Biomass – The Energy Shop
- 4 Miron Construction Company, Inc.
- 5 Illinois Biomass Working Group
- 6 SEH, Inc.
- 7 RENEW Wisconsin
- 8 BBI International – Biomass Magazine
- 9 Center for First Americans Forestlands, College of Menominee Nation
- 10 Agricultural Utilization Research Institute (AURI)
- 11 Woodmaster
- 12 Woodmaster
- 13 Minnesota Statewide Wood Energy Team
- 14 Minnesota Statewide Wood Energy Team
- 15 Biomass Engineering and Equipment
- 16 Vermeer Wisconsin, Inc.
- 17 Tweet/Garot Mechanical, Inc.
- 18 Wisconsin Department of Natural Resources
- 19 Central Boiler
- 20 University of Minnesota Duluth Natural Resources Research Institute (NRRI)
- 21 Marth Companies
- 22 Marth Companies
- 23 Higgins Heating



- 24 Messersmith Manufacturing
- 25 Wood Stove Exchange Program, Wisconsin Public Service and the American Lung Association
- 26 Rotochopper, Inc.
- 27 UW–Green Bay, Environmental Management and Business Institute (EMBI)
- 28 Oneida Tribe of Indians of Wisconsin
- 29 Timber Products Inspection Biomass Energy Lab
- 30 AFS Energy Systems
- 31 Biomass Thermal Energy Council

**Outdoor exhibits will be open during Expo Hall hours.**

Portage and Main / Strawbale Farms

Marth Companies

Woodmaster

# AGENDA AT A GLANCE

**Tuesday, April 29**

**Wednesday, April 30**

**Thursday, May 1**

7:30 AM			Registration and continental breakfast in the Expo Hall	Registration and continental breakfast in the Expo Hall
8:00 AM	Pre-Conference Tour	Registration and continental breakfast in the Expo Hall		General Session
8:15 AM				
8:30 AM				
8:45 AM				
9:00 AM				Session 6: Regional Biomass Thermal Energy Efforts
9:15 AM		Plenary Session		
9:30 AM				
9:45 AM				
10:00 AM				Refreshment and Networking Break
10:15 AM				
10:20 AM		Refreshment and Networking Break		
10:45 AM				
10:50 AM				
11:00 AM				Session 6 Continues
11:15 AM		Plenary Session Continues		
11:30 AM				
11:40 AM				
11:45 AM				Closing Session
12:00 PM				
12:15 PM		Lunch in the Expo Hall		
12:30 PM				
12:45 PM				
1:00 PM				
1:15 PM				
1:30 PM	Session 1: Biomass Technologies and Implementation	Session 2: Wood Products Industry Real World Projects - Success Stories		
1:45 PM				
2:00 PM				
2:15 PM				
2:30 PM				
2:45 PM	Refreshment and Networking Break			
3:00 PM				
3:15 PM				
3:30 PM	Session 3: Biomass Environmental and Regulatory Considerations	Session 4: Biomass Heating Real World Projects - Success Stories		
3:45 PM				
4:00 PM				
4:15 PM				
4:30 PM				
4:45 PM				
5:00 PM	Registration opens in the Expo Hall	Biomass Heating Expo		
5:15 PM				
5:30 PM				
5:45 PM				
6:00 PM	Vendors' Reception in the Expo Hall	Biomass Heating Expo Speakers		
6:15 PM				
6:30 PM				
6:45 PM				
7:00 PM				
7:15 PM				
7:30 PM				
7:45 PM				
8:00 PM	Expo Hall Closes			
8:15 PM				
8:30 PM		Expo Hall Closes		

# AGENDA

## Tuesday, April 29, 2014

- 8:00 AM **Pre-Conference Tour**  
**Greenwood Energy, Green Bay, WI** (biomass fuel manufacturer)  
**Schroeder Floral Inc., Green Bay, WI** (greenhouse facility heated with woody biomass)  
**Krueger Lumber, Valders, WI** (hardwood sawmill and dry-kiln operation with wood chip boiler system)  
**Marth Companies, Peshtigo, WI** (biomass pellet producer and boiler system)
- 12:00 PM **Vendor setup in Expo Hall** (Three Clans Complex)
- 5:00 PM **Registration Opens in the Expo Lobby** (Three Clans Complex)
- 6:00 PM **Vendors' Reception in the Expo Hall** (Three Clans Complex)  
*All sponsors, exhibitors, conference registrants, and guests are invited to attend.*

Concludes at 8:00 PM

## Wednesday, April 30, 2014

### Opening Plenary Session (Iroquois Complex)

- 7:30 AM **Registration opens with continental breakfast in the Expo Hall** (Three Clans Complex)
- 8:45 AM **Introduction**  
**Mike Troge**, Conference Co-Chair and Environmental Project Manager, Oneida Tribe of Indians of Wisconsin, Oneida, WI and **John Katers**, Conference Co-Chair and Director, Environmental Management and Business Institute (EMBI), University of Wisconsin-Green Bay, Green Bay, WI
- Welcome**  
**Greg Matson**, Oneida Tribe of Indians of Wisconsin, Oneida, WI and **Troy Streckenbach**, Brown County Executive Director, Green Bay, WI
- 9:15 AM **Opening Remarks**  
**Kevin Vesperman**, Administrator, Wisconsin Division of Energy Services, Madison, WI
- 9:35 AM **Keynote Address: Midwest Biomass Thermal Energy: Opportunities and Challenges Ahead!**  
**Scott Nichols**, President, Tarm USA, Inc., Lyme, NH
- 10:20 AM **Refreshment and Networking Break**
- Effective Strategies to Increase Biomass Thermal in the Midwest**  
**Dan Wilson**, Chairman, Biomass Thermal Energy Council and Vice-President, Wilson Engineering Service, Meadville, PA
- Biomass Energy Assessment and Integration Opportunities**  
**Josh Kaurich**, Division Manager, H & H Energy Management, Madison, WI
- 12:00 PM **Lunch in the Expo Hall** (Three Clans Complex)

### 1:00 PM Break Out Sessions 1 and 2 (Concurrent)

#### Session 1: Biomass Technologies and Implementation (Iroquois Complex – Cayuga/Oneida/Tuscarora Rooms)

**Biomass Heating Opportunities for Architects and Heating Professionals**  
**Daryl Dean**, Architect, U.S. Forest Service, Rhinelander, WI

**Technology Overview for Small Heating Systems**  
**Mark Knaebe**, Natural Resources Specialist, USDA Forest Service, Forest Products Laboratory, Madison, WI

**Biomass Fuel Products: Overview of Pellets, Chips, and Residues**  
**Don Peterson**, President, Renewable Resource Solutions, LLC, Crystal Falls, MI

# AGENDA

## **What is Energy Costing You?**

*Jessica Simons, Natural Resources Specialist, SE Michigan Resource Conservation and Development Council, Ann Arbor, MI*

## **Session 2: Wood Products Industry Real World Projects – Success Stories** *(Iroquois Complex – Onondaga/Mohawk/Seneca Rooms)*

### **We Energy/Domtar Rothschild Biomass Cogeneration Plant**

*Jeff Plunkett, Fiber Procurement Manager, Domtar Corporation and Terry Carroll, Plant Manager, We Energies, Rothchild, WI*

### **Appleton Coated Paper**

*David Wardecke, Utilities Manager, Combined Locks, WI*

### **Granite Valley Forest Products**

*Mark Christopher, General Manager, Granite Valley Forest Products, New London, WI*

### **Biomass Boiler Feasibility Study and Shooting Star Casino Biomass Boiler**

*Mike Triplett, Planner and Michael Neusser, Economic Development Director, White Earth Nation, White Earth, MN*

### **1:30 PM Biomass Heating Expo, Expo Hall (Three Clans Complex)**

*Open to general public and regional businesses. Speakers start at 6:00 PM. Fair concludes at 8:30 PM.*

### **2:45 PM Refreshment and Networking Break (open to general public in the Expo Hall)**

## **3:15 PM Break Out Sessions 3 and 4 (Concurrent)**

## **Session 3: Biomass Environmental and Regulatory Considerations** *(Iroquois Complex – Cayuga/Oneida/Tuscarora Rooms)*

### **Air Quality and Biomass Heating Emission Regulations**

*Laurel Sukup, Environmental Assistance Coordinator, Wisconsin Department of Natural Resources, Madison, WI*

### **EPA Performance Standards for Residential Wood Heaters**

*Joseph Seymour, Executive Director, Biomass Thermal Energy Council, Washington, DC*

### **BioEnergy Learning and Research Centre**

*Brian Kurikka, Manager, Applied Research, Confederation College, Thunder Bay, Ontario*

### **Benefits and Opportunities: Integrating Biomass Grasslands into the NE Wisconsin Landscape**

*Matthew Dornbush, Associate Professor, University of Wisconsin–Green Bay, Green Bay, WI*

## **Session 4: Biomass Heating Real World Projects – Success Stories** *(Iroquois Complex – Onondaga/Mohawk/Seneca Rooms)*

### **Academic Institutions**

*Gerry Guard, General Manager, Messersmith Manufacturing, Inc., Bark River, MI*

### **Northern Michigan University Ripley Heating Plant**

*Gisele Duehring, Associate Director, Facilities/Heating Plant, Marquette, MI*

### **Northeast Regional Corrections Center**

*Tony Mancuso, Director of Property Management, St. Louis County, Duluth, MN*

### **St. Louis County Schools (Babbit, Cherry) Biomass Boiler Heat System Conversion**

*Per Carlsson, CEO, ABioNova, St. Louis Park, MN*

*Sessions 3 and 4 conclude at 5:00 PM*



# AGENDA

## Session 5: Biomass Heating Expo Speakers (Expo Hall – Three Clans Complex)

- 6:00 PM **Heating the Midwest – Growing Biomass Thermal in Wisconsin**  
*Brian Brashaw, Chair, Heating the Midwest with Renewable Biomass, Duluth, MN*
- Cleaner Burning, Cleaner Air: Improving Air Quality in Wisconsin through the Wisconsin Woodstove Exchange Program**  
*Dona Wininsky, Director of Public Policy and Communications, American Lung Association of Wisconsin*
- Factors to Consider When Selecting a Wood Burning Appliance**  
*Scott Sanford, Senior Outreach Specialist, Rural Energy Program, University of Wisconsin, Madison, WI*
- How Can My Business/Facility Determine if Wood Energy Makes Economic Sense?**  
*Dennis Becker, Associate Professor, University of Minnesota, St. Paul, MN*

**Biomass Heating Expo Closes at 8:30 PM**

## Thursday, May 1, 2014

- 7:30 AM **Conference opens with continental breakfast in the Expo Hall (Three Clans Complex)**

### General Session (Iroquois Complex)

- 8:15 AM **When Energy Markets Go Crazy!**  
*Holly O'Higgins, Energy Analyst, Wisconsin State Energy Office, Madison, WI*

### Session 6: Regional Biomass Thermal Energy Efforts (Iroquois Complex)

- 9:00 AM **Minnesota State Wood Energy Team**  
*Mark Lindquist, Biofuels Program Manager, Minnesota Department of Natural Resources, St. Paul, MN*
- Illinois Biomass Working Group**  
*Fred Iutzi, Manager, Value-Added Sustainable Development Center, Western Illinois University, Macomb, IL*
- 10:00 AM **Refreshment and Networking Break (Three Clans Complex)**
- 10:20 AM **RENEW Wisconsin**  
*Tyler Huebner, Executive Director, RENEW Wisconsin, Madison, WI*
- Michigan Biomass Thermal Energy Organizations**  
*Bill Cook, Extension Forester/Biologist, Michigan State University, Escanaba, MI*
- 11:15 AM **Indiana Biomass Energy Working Group**  
*Chad Martin, Renewable Energy Extension Specialist, Purdue University, West Lafayette, IN*

### Closing Session (Iroquois Complex)

- 11:45 AM **Final Remarks**  
*Brian Brashaw, Steering Committee Chair, Heating the Midwest with Renewable Biomass and Program Director, Wood Materials and Manufacturing Program, University of Minnesota Duluth, Natural Resources Research Institute, Duluth, MN*

**Conference Closes at 12:00 PM**



## CONFERENCE CO-HOSTS



### BBI International

*Biomass Magazine* is a monthly trade publication tailored to serve companies and organizations engaged in producing or utilizing biomass power and heat, advanced biofuels, biogas, wood pellets, and biobased chemicals. In addition to policy, regulation, project finance, technology and plant management, the publication maintains a core editorial focus on biomass logistics: generating, cultivating, collecting, transporting, processing, marketing, procuring, and utilizing sustainable biomass.



### Biomass Energy Resource Center at the Vermont Energy Investment Corp.

The Biomass Energy Resource Center (BERC) at Vermont Energy Investment Corp. (VEIC) is an international non-profit headquartered in Burlington, Vermont. BERC assists communities, colleges and universities, state and local governments, businesses, utilities, schools, and others in making the most of their local biomass energy resources. BERC is a project-focused organization whose mission is to achieve a healthier environment, strengthen local economies, and increase energy security across the US through the development of sustainable biomass energy systems at the community level. BERC's particular focus is on the use of woody biomass and other pelletizable biomass fuels. With years of staff expertise in the field, and extensive relationships with other experts, manufacturers, suppliers, public agencies, and consultants, BERC is one of the nation's leading organizations involved in the assessment, development, and management of community-scale biomass energy projects.



### Biomass Thermal Energy Council

The Biomass Thermal Energy Council (BTEC) is an association of biomass fuel producers, appliance manufacturers and distributors, supply chain companies, and non-profit organizations that view biomass thermal energy as a renewable, responsible, clean and energy-efficient pathway to meeting America's energy needs. BTEC engages in research, education, and public advocacy for the fast-growing biomass thermal energy industry. For more information, visit [www.biomassthermal.org](http://www.biomassthermal.org).



### CleanTech Open

The CleanTech Open runs the world's largest cleantech accelerator. Our mission is to find, fund, and foster entrepreneurs with technologies and products that address today's most urgent energy, environmental, and economic challenges. Since 2006, through its unique platform for emerging businesses, the CleanTech Open has certified approximately 720 businesses. These alumni have since raised more than \$800M.



### Midwest Renewable Energy Association

The Midwest Renewable Energy Association (MREA) is a non-profit organization founded in 1990 with a mission to promote renewable energy, energy efficiency, and sustainable living through education and demonstration. MREA offers nationally accredited training on solar electric, solar heating, and small-scale wind systems. Join us in celebrating our 25<sup>th</sup> Energy Fair June 20-22, 2014 in Custer, WI. Visit [www.midwestrenew.org](http://www.midwestrenew.org) for details on training and events.



### Minnesota Clean Energy Resource Teams

The Clean Energy Resource Teams (CERTs) are a statewide partnership with a shared mission to connect individuals and their communities to the resources they need to identify and implement community-based clean energy projects. We empower communities and their members to adopt energy conservation, energy efficiency, and renewable energy technologies and practices for their homes, businesses, and local institutions. Learn more and get involved at [www.mncerts.org](http://www.mncerts.org).



### New North

New North, Inc. is a nonprofit, regional marketing and economic development organization fostering collaboration among private and public sector leaders throughout the 18 counties of northeast Wisconsin. New North is a regional partner to the WEDC and the State of Wisconsin, as well as local economic development partners, and represents more than 100 private investors.



### Northeast Biomass Heating

The Northeast Biomass Thermal Working Group (NEBTWG) is a coalition of biomass thermal advocates committed to working together to advance the use of biomass for heating and CHP (combined heat and power) in the northeastern United States.



### Pellet Fuels Institute

The Pellet Fuels Institute (PFI) is a North American trade association promoting energy independence through the efficient use of clean, renewable, densified biomass fuel. The organization exists in order to: create and represent the ultimate expertise in the densified biomass fuel industry; coordinate and integrate the needs of raw material sources, equipment suppliers and consultants, fuel producers, appliance manufacturers, and distribution entities; and educate, disseminate, and promote the benefits of densified biomass fuel technology. PFI is comprised of nearly 100 member companies including fuel manufacturers and equipment suppliers.



### RENEW Wisconsin

RENEW Wisconsin leads and represents businesses, organizations, and individuals who seek more clean, renewable energy in Wisconsin. In its 22<sup>nd</sup> year, RENEW Wisconsin continues to advance renewable energy policies for Wisconsin through advocacy, education, and collaborative initiatives. RENEW is at the policy and regulation table every day representing over 60 business members conducting renewable energy business in Wisconsin as well as over 300 individuals and other organizations who share our vision for Wisconsin.



[www.heatingthemidwest.org](http://www.heatingthemidwest.org)

# PRESENTERS

## Dennis Becker

Dennis Becker is an Associate Professor of Natural Resource Policy at the University of Minnesota in the Department of Forest Resources. The author of numerous scientific papers, his research focuses on forests and environmental policy with an emphasis in biomass utilization, community energy systems, forest carbon accounting, and social impact assessment. Dennis is Chair of the Society of American Foresters national Committee on Forest Policy, Board of Directors for the Biomass Thermal Energy Council, and is the undergraduate major coordinator for the Environmental, Science, Policy, and Management program at UM.

## Brian Brashaw

Brian Brashaw is the Director of the Wood Materials & Manufacturing Program at the Natural Resources Research Institute at UM-Duluth (UMD NRRI). Brian manages a broad-based research and technical assistance program focused on wood products manufacturing, resource utilization, and nondestructive evaluation technologies. He serves as Chairperson for Heating the Midwest with Renewable Biomass in support of developing increased economic opportunities for woody biofuels in the Great Lakes. He also co-manages the woody biomass fuels research laboratory at UMD NRRI. He received a BS from UW-Stevens Point, an MS from Washington State University, and is a PhD candidate at Mississippi State University.

## Per Carlsson

Per Carlsson founded ABioNova in 2008. He has extensive experience working with bioenergy technology and boiler systems, primarily for clients as cities, utilities, schools, housing authorities, housing associations, and industries. ABioNova is based in Gothenburg, Sweden and Minneapolis, Minnesota. Per was awarded Adventurer of the Year 2011 by Business Region Gothenburg, where the jury said: "ABioNova had the courage to bet on one of the most difficult markets – the United States. They export Swedish environmental expertise to an immature market, and by thinking "systems" rather than "product", the company has created an infrastructure for biofuels in the United States."

## Terry Carroll

Terry Carroll is the We Energies manager of the Rothschild Biomass Cogeneration Plant. Terry has been with We Energies for 30 years in a variety of engineering and management positions. For the last 20 years, Terry has been involved in many phases of renewable energy, including solar, wind, and biomass energy. Terry is the former manager of the Minery plant in Neenah, WI, which used paper mill sludge as a fuel source for renewable generation, and was widely considered a pioneer in biomass steam/power generation. A graduate of the UW-Madison with a degree in Electrical Engineering, Terry is a registered professional engineer.

## Mark Christopher

Mark Christopher is a fourth generation lumberman from New London, WI. Mark has over 40 years of experience in the hardwood lumber industry and graduated from the National Hardwood Lumber Association School in Memphis, TN in 1972. Throughout his illustrious career, Mark has performed in every facet of the lumber industry, beginning in grading, sawing, timber cruising, and kiln drying, to designing modern lumber equipment and state-of-the-art lumber facilities. In addition to this expertise, Mark also worked with reclaiming submerged logs from various bodies of water from around the world.

## Bill Cook

Bill Cook is an Upper Peninsula Extension Forester & Wildlife Biologist for Michigan State University (MSU) Extension at the MSU Forest Biomass Innovation Center near Escanaba. Since 1997, Bill has worked with regional private forest owners, natural resource agencies and industries, and within public education communities. Much of his focus involves wood energy outreach and now climate change and forest impacts work. Prior to his current position, Bill worked for more than eight years in American Indian country, for various public and private agencies, Trees for Tomorrow Natural Resources Education Center, and has international forestry experience in Germany, Great Britain, Malaysia, and Sweden.

## Daryl Dean

Daryl Dean, AIA, is the Senior Architect with the USDA Forest Service Eastern Region (Region 9) Technical Services Team, an Adjunct Faculty at Nicolet Area Technical College in Rhinelander, WI, and a registered architect with over 28 years of experience with residential, commercial, institutional, and federal clients. His projects include work on eight LEED-certified office projects, dozens of historic rehabilitation and restoration/reuse projects, and consulting/coordination on alternative energy solutions and building envelope improvements for several facilities throughout the 20 states/15 National Forests in Region 9. He is serving his second term as a Director-at-Large on the AIA-WI Board of Directors, chairs the Parish Renovation/Design Committee for his church, and is the "volunteer architect" for the Rhinelander Soccer Club's new complex.

## Matthew Dornbush

Matthew Dornbush is an Associate Professor of Biology in the Department of Natural and Applied Sciences at the UW-Green Bay, and is chair of the graduate program in Environmental Science & Policy. Matthew's research interests center around restoration ecology, focusing on the effects of human generated communities and species invasions on ecosystem services. Recent projects focus on evaluating the mechanisms by which garlic mustard dominates Midwestern forests, the differential impacts of native and exotic *Phragmites australis* genotypes on wetland communities, and the environmental benefits of targeted native biofuel grassland plantings in northeast WI.

## Gisele Duehring

Gisele Duehring earned a BSME from Iowa State University. After working for a power company and its A&E firm, she became Northern Michigan University's Ripley Plant Owner's Representative for biomass combined heat plant (CHP) construction and retrofit of existing plant while being plant manager of the existing plant. In addition to processing equipment submittals, drawings, punch lists, invoices, change orders, environmental permit-required testing and reports, and organizing vendor-lead operator training, she worked on fuel supply and ash disposal contracts, obtaining a Department of Agriculture liming license to land-apply ash. She involves faculty and students in the CHP.

## Gerry Guard

Gerry Guard has been part of the Messersmith team for the past eight years. During most of this time, he has been a customer advocate, working with clients to explore the most effective way for them to acquire the fuel cost savings associated with biomass boiler systems. He has assisted customers from Maine to Alaska in examining the variety of options available with Messersmith systems. Gerry became General Manager of Messersmith Manufacturing, Inc. in 2013 and in this role leads the Messersmith team in continuing its tradition of outstanding customer service.

## Tyler Huebner

Tyler Huebner is the Executive Director of RENEW Wisconsin, a non-profit organization that advocates and promotes renewable energy as a business driver and environmental solution. RENEW leads and represents businesses, organizations, and individuals who seek more clean, renewable energy in WI, primarily by advocating for state policies and regulations that promote renewables. Tyler has degrees from the University of Iowa and Stanford and has experience at the US Department of Energy, Wisconsin's Division of Energy Services, and in energy consulting.

## Fred Iutzi

Fred Iutzi manages programs in agriculture, energy, sustainability, and cooperatives for the IL Institute for Rural Affairs (IIRA) at Western Illinois University (WIU). He is chair of the IL Biomass Working Group, vice chair of the Agricultural Watershed Institute, a gubernatorial appointee to the IL Ethanol Research Advisory Board, and a steering committee member of Heating the Midwest. Iutzi received an MS in sustainable agriculture and agronomy from Iowa State University and a BA in geography from the University of Missouri, and he is a Certified Crop Adviser and a Professional Community and Economic Developer. He resides in rural Hancock County, IL and assists with his family's cash grain farm.



# PRESENTERS

## John Katers

John F. Katers, Professor and Chair of Natural and Applied Sciences (Engineering) at UW–Green Bay, holds a PhD in civil and environmental engineering from Marquette University, an MS in Environmental Science and Policy and a BS in Environmental Science and Business Management from UW–Green Bay. With a broad background in waste management, recycling, and renewable energy, he directs the University's Environmental Management and Business Institute (EMBI), works as a Project Design Leader for Short Elliott Hendrickson Inc. (SEH), and was a technology lead for biomass and biogas projects for Focus on Energy in Wisconsin.

## Josh Kaurich

Josh Kaurich is Vice President of H&H Group Holdings, Inc. located in Madison, WI, and the Division Manager for H&H Energy Management. Josh is the co-founder of Midwest Energy Procurement Solutions, LLC, an energy purchasing company focused on procurement and purchasing of natural gas and electrical energy in the Midwest. As an Association of Energy Engineers Certified Energy Manager (CEM), a Certified Energy Procurement Professional (CEP), and certified Renewable Energy Assessor, Josh's experience with energy management and efficiency, renewable energy, and biofuels helps him to identify integrated energy solutions, and have helped him grow a successful Energy Performance Contracting company and consulting group. His auditing experience covers the educational, industrial, commercial, agricultural, and residential sector. Josh works extensively on growing the H&H Company and integrating design, engineering, and construction together under one roof.

## Mark Knaebe

Mark Knaebe works in the Forest Products Marketing Unit of the Forest Products Laboratory in Madison, WI. One focus of his work is bioenergy, and he specializes in problems associated with batch fed stoves. He operates a BioMax 5TM, which generates electricity by burning wood pellets. Technologies used in the BioMax can also improve efficiency and reduce pollution in other burning devices. Currently he is developing a condensing stove with a higher heating value (HHV) efficiency exceeding 96%. In addition to his research work, he frequently gives presentations on bioenergy and utilization of silvicultural thinnings.

## Brian Kurikka

For the past 11 years, Brian Kurikka has been employed at Confederation College as an Instructor in Forestry, Manager of the Natural Resources Centre, and in his current role of Manager–Applied Research. Brian is responsible for building research partnerships with government, industry, aboriginal, and other communities across northwestern Ontario, and undertaking business development activities. He has been involved in the forest sector in management and marketing positions for over more than 29 years, and he sits on the Council of the Ontario Professional Foresters Association, Neebing Economic Development Committee, and City of Thunder Bay Urban Forest/Emerald Ash Borer Task Force.

## Mark Lindquist

Mark Lindquist is an interdisciplinary planner and policy analyst in the Minnesota DNR's Office of Planning and Policy. Mark works with natural resource managers, other state agencies, private industries, NGOs, and others to support the sustainable use and development of natural resource. His primary areas of focus revolve around the intersection of resource management and energy, climate change, agriculture, and business development. Mark has a diverse background, including experience with natural resource planning, community planning and development, policy analysis, and advocacy.

## Tony Mancuso

Tony Mancuso has served as the Director of Property Management for St. Louis County, MN since 1997. A longtime advocate and activist in facilities related energy conservation, water conservation, and renewable energy programs, he has implemented several conservation and renewable energy projects in public sector facilities resulting in significant ongoing annual energy cost savings. He has more than 30 years of

experience in building management, maintenance, and operations, and more than 15 years as owner of residential renewable energy systems.

## Chad Martin

Chad Martin is a statewide Specialist and manages the engagement efforts of the Renewable Energy Extension program at Purdue University. His work involves deploying research derived expertise among diverse networks. He assists in the outreach of the Purdue Energy Center at Discovery Park and assists local extension educators to serve both the public and private stakeholders. His current focus is in the areas of bioenergy, utility scale and distributed wind energy, and energy efficiency. The program's goal is to support local economic development by building capacity and providing services to stakeholders as they discover emerging opportunities to accumulate competitive advantages for the successful growth of the clean energy sector.

## Greg Matson

Greg Matson currently serves as Vice Chairman for the Oneida Tribe. He's happily married to Victoria who he refers to as his gift from the Creator, and they are proud parents of six children. His family is very active in retaining his culture and the philosophy of the Oneida people which is to be of a good mind. During his tenure as an elected official, he has aggressively pursued food sovereignty, green energy, economic diversity, and positive environmental change just to name a few. As an avid outdoorsman, Greg has come to understand that all things are connected.

## Michael Neusser

Michael W. Neusser is a member of the Sault Sainte Marie Tribe of Chippewa Indians. He has worked in government relations, economic/social development, and gaming for Native American Tribes for more than 10 years, including tribes located in the US and Canada. He has experience in international marketing and business development, relationship management, entrepreneurship, and sales. He is finishing his Masters of Tribal Administration and Governance at the UM–Duluth and is Economic Development Director for White Earth Nation.

## Scott Nichols

Scott Nichol's biomass thermal career began in 1995 with Tarm USA in Lyme, NH. His extensive experience in the applications of wood heat and his commitment to consumer education contributed significantly to the growth of Tarm Biomass. As Tarm Biomass president, he has diversified its thermal offerings while retaining a commitment to biomass combustion best practices. Scott is one of nine founders of BTEC, a member of the Northeast Biomass Thermal Working Group, a member of ASTM and UL technical committees, a contributor to additional biomass thermal committees, and an advisor to the Alliance for Green Heat. Scott holds a BS in Business Law and Public Policy from Syracuse University.

## Holly Laux O'Higgins

Holly O'Higgins is a WI native and author of the Wisconsin Energy Statistics book, an annual publication of the State Energy Office that highlights all aspects of energy generation, consumption, pricing, and expenditures. She tracks propane and other fuel prices in WI and works to create forecasts for fuel prices that impact the benefits received by LIHEAP participants. As the manager for the Energy Efficiency and Conservation Block Grant, she worked directly with communities across the state to improve energy efficiency and develop plans for reducing consumption.

## Don Peterson

Don Peterson established Renewable Resource Solutions (RRS) in 2001. RRS has been involved in providing a wide range of services including: grant writing, wood energy assessments, feasibility studies, business plans, resource analyses, biomass harvesting demonstrations, and a variety of other activities. Don contracted with the USFS's State and Private sector to be its Woody Biomass Consultant for the Northeastern US, in which capacity he worked with governmental entities in assessing and dealing with wood energy and woody biomass policies and opportunities. He also worked with private industry, associations, and other organizations regarding wood energy and woody biomass.

# PRESENTERS

## Jeff Plunkett

Jeff Plunkett has worked in the paper industry for 38 years of which the last 24 have been with Domtar in Rothschild, WI. The last 14 years have been in fiber procurement and his responsibilities have included purchasing pulpwood, kraft pulp, and biomass for the paper mill. Jeff has been a part of the team in Rothschild that helped achieve approval for the cogeneration plant from the Wisconsin Public Service Commission, and as a Domtar employee he is currently the procurement agent for We Energies and purchases the biomass for the co-gen plant.

## Scott Sanford

Scott Sanford is a Senior Outreach Specialist in the department of Biological Systems Engineering at UW–Madison. He manages the Rural Energy Program which looks for ways to reduce energy use in agriculture and rural businesses, provide educational materials on energy efficiency, and promote energy generation from renewable energy sources. Programming areas includes irrigation, dairy farm, greenhouses, crop storage, mint distillation, grain drying, solar energy, wind power, biogas, energy from biomass, and a sweet subject, maple syrup production. He has authored 20 extension bulletins, written many articles, and made numerous presentations on a wide variety of energy related topics that affect agriculture. Recently Scott was awarded the Wayne G. Russell Award for his work in Energy and Agriculture by ASABE and Alliant Energy.

## Joseph Seymour

Joseph Seymour is the Executive Director of the Biomass Thermal Energy Council (BTEC) and has been coordinating its policy and regulatory activities since 2010. In this time, he has been responsible for: regulatory responses to the EPA on many issues, including biomass boiler emissions limits and non-hazardous solid waste definitions; congressional hearings through structured statements, including the Energy Title of the 2012 Farm Bill and comprehensive tax reform; and mobilization of industry stakeholders regarding biomass thermal incentives. He has led the development BTEC's comprehensive outreach series, including webinars, legislative and topical factsheets, and podcast interviews, and he has authored numerous national and regional articles on biomass heating.

## Jessica Simons

Jessica Simons has managed over more than \$1.1 million in federally funded wood utilization programming for the Southeast Michigan Resource Conservation and Development Council over the last decade. The RC&D Council's work began as a response to the area's emerald ash borer crisis but evolved into a comprehensive urban wood use initiative that includes small-business marketing assistance and biomass energy development. Jessica serves as Secretary/Trustee for the Great Lakes Section of the Forest Products Society and is on the organizing committee for the Urban Forest Products Alliance. She holds an MS in natural resources from the University of Michigan and a BA in biology from West Virginia University.

## Troy Streckenbach

Troy Streckenbach is a life-long resident of Brown County, WI and grew up in the Green Bay area. He graduated from UW–Oshkosh with a degree in International Studies and an emphasis in Business and Political Science. Troy has owned and operated six businesses in Brown County for the past 12 years. In 2006, he was recognized by the Green Bay Area Chamber as one of the "25 people you must know," in 2007 as the Current Entrepreneur of the Year, and in 2009 as one of the "40 people under 40 you should know." He brings a fresh approach to Brown County government and his businessman background gives him strong management skills and fiscal discipline to effectively govern Brown County.

## Laurel Sukup

Laurel Sukup is the Sustainability and Business Support Section Chief for the WI Department of Natural Resources. She has worked closely with the wood products industry for years to assist companies on having a clear path through environmental permitting. In her new position, she works to support small businesses to offer clarity on permitting as well as foster beyond compliance actions through programs such as Wisconsin's Green Tier program.

## Mike Triplett

Michael Triplett has 37 years of community and economic development experience working for tribal governments, municipalities, and regional development organizations in the Southwest and Upper Midwest. Currently, he is an economic development planner with the White Earth Nation based in White Earth, MN, and most recently has been guiding the tribal efforts in renewable energy ventures in wind, solar, and biomass. He was one of the original members of the NW (MN) Clean Energy Resource Team. He has a BS from Colorado State University in Social Sciences and completed graduate coursework from Iowa State University in Urban and Regional Planning.

## Mike Troge

Michael Troge has been Environmental Project Manager for Oneida Tribe of Indians of Wisconsin for 19 years. He is a UW–Stevens Point graduate with a background in watershed planning. Mike initiated his work in Oneida as an agricultural specialist to address erosion/runoff issues and land restoration activities. While studying energy technologies, he saw an opportunity to bring community energy needs and land protection together to address multiple issues including water quality, air emissions, and biodiversity. In the past decade, he has shifted his professional focus toward community energy planning that considers technologies that support the clean energy economy, including biomass.

## Kevin Vesperman

Kevin Vesperman is Administrator for the WI Division of Energy Services, which runs the State Energy Office (SEO) and the state's low-income energy assistance and energy efficiency programs. Kevin has more than 30 years of experience in the utility industry, including the environmental area, fuel procurement, business development on the deregulated side of the utility, and electric generation project development. Power plant development efforts included a combustion turbine peaking facility (permitted and constructed) and two coal-fired generation facilities. Kevin was the company expert on power plant siting, technology selection, carbon capture and sequestration, and he was involved in strategic planning efforts. Kevin received a BS in Civil Engineering and an MS in Civil and Environmental Engineering from UW–Madison.

## David Wardecke

David Wardecke is a WI native who appreciates all that Wisconsin has to offer. He attended UW–Madison to study mechanical engineering and started his career at Appleton Coated after graduation. His responsibilities have included energy conservation, maintenance supervision, project engineering, environmental engineering, and managing the utility operations. He considers himself an advocate for environmental sustainability, energy efficiency, and the use of renewable energy.

## Dan Wilson

Dan Wilson is a Vice President at Wilson Engineering Services, PC (WES). WES is a full service engineering firm operating in the energy and environmental sectors. Dan has overseen WES's role in more than 50 biomass thermal and combined heat and power projects, which has included concept development, design, permitting, and construction management. Dan is a professional engineer and has a BS in Agricultural and Biological Engineering from Penn State and an MS in Civil Engineering from Johns Hopkins. He is the Chairman of the Biomass Thermal Energy Council and serves on the board of the PA Biomass Energy Association.

## Dona Wininsky

Dona Wininsky is Director of Public Policy and Communications for the American Lung Association of WI which supports policies that improve air quality for people with asthma and other illnesses. Dona has been with ALA for 20 years, the last 15 working in public policy. She oversees all of the organization's environmental/air quality programs including the Woodstove Exchange Program, and she has been involved in efforts to strengthen federal air quality standards and enforce the Clean Air Act. Dona has a BA in Music Education from Lawrence University and an MA Mass Communication from UW–Milwaukee.



# SPONSORS

## Central Boiler

Central Boiler is the premier manufacturer of outdoor wood furnaces. With 30 years of engineering wood-burning systems and a desire to create safer and more efficient heating products, the company's innovations and patents have established them as a leader in product quality. Central Boiler has a dealer network throughout the United States, Canada, and Europe.

## EvenTemp Biomass and The Energy Shop

EvenTemp Biomass and The Energy Shop are distributors of biomass stoves, fireplace inserts, fireplaces, furnaces, and venting components for residential and commercial applications. EvenTemp Biomass is based in Waco, Nebraska with dealerships throughout the Midwest. The Energy Shop has locations in Green Bay, Sheboygan, and Eagle River, WI.

## Iron Range Resources and Rehabilitation Board

Iron Range Resources and Rehabilitation Board (IRRRB) is a State of Minnesota development agency located in Eveleth. IRRRB offers low-interest loans and grants to support a variety of manufacturers and fabricators that locate or expand in the IRRRB service area of northeastern Minnesota, including those in the biofuels, wood, and forest industry.

## Marth Companies

Marth reclaims fiber from post-manufacturing processes and has certified foresters who find cost-effective resources that can be utilized and refined for use in a wide variety of consumer-friendly products. Our innovative approach to creating value from wood residuals has led to the development of many products including being one of the longest continuously running wood pellet facilities east of the Mississippi.

## Messersmith Manufacturing, Inc.

For over 30 years, Messersmith Manufacturing, Inc. has been designing, fabricating, and installing biomass boiler systems. Messersmith systems include fuel storage and handling, combustor/boiler, particulate removal, stack, controls, commissioning, and operator training. Using green, wood-based fuels such as chips and sawdust, our automated biomass boiler systems produce hot water or steam.

## Minnesota Power

Minnesota Power is a utility company based in Duluth, Minnesota and is owned by ALLETE, Inc., a provider of affordable, reliable energy services in the upper Midwest. Other ALLETE businesses include Superior Water, Light & Power; ALLETE Clean Energy; ALLETE Renewable Resources; BNI Coal; and ALLETE Properties. For more information, visit [www.mnpower.com](http://www.mnpower.com).

## Minnesota Statewide Wood Energy Team

The Minnesota Statewide Wood Energy Team is comprised of Minnesotans from state, federal, and non-profit organizations focused on promoting high efficiency wood energy systems. The team is focused on driving the installation of wood energy systems by providing education and outreach, on-site assessments, and competitive funding for engineering feasibility/final design analyses.

## Oneida Tribe of Indians of Wisconsin

The Oneida Tribe of Indians of Wisconsin is committed to producing, purchasing, and using energy in a responsible, efficient, and cost effective manner. Toward this end, the Oneida Energy Team is executing a comprehensive energy management strategy with participation from internal entities. Efforts that support the strategy include monitoring energy flow through the organization, investing in efficiency, and working with local, regional, and national partners to develop a clean energy economy.

## Timber Products Inspection Biomass Energy Lab

Timber Products (TP) is an ISO 17025 accredited lab providing analytical testing services for the biomass and pelletized fuel industry.

TP is accredited by the ALSC as an auditing agency and testing lab for the Pellet Fuels Institute Standards program. Biomass Energy Lab (BEL) is ISO 17025 accredited for CEN/EN methods and provides certification for biomass export shipments in addition to EN Plus auditing, testing, and on-site consulting.

## University of Minnesota Duluth, Natural Resources Research Institute

Founded by the Minnesota legislature in 1983, the University of Minnesota Duluth's Natural Resources Research Institute fosters the economic development of Minnesota's natural resources in an environmentally sound manner to promote private sector employment. NRRRI researchers provide a wide range of research and development services to industries large and small—from substantial iron ore operations to entrepreneurial start-ups. NRRRI is actively working with the biomass industry focused on fiber supply, conversion technologies, and industry outreach.

## US Forest Service, Forest Products Marketing Unit

The US Forest Service Forest Products Laboratory's Forest Products Marketing Unit provides expertise in wood products utilization, marketing, technology transfer, and technical assistance. The TMU assists businesses, local governments, and rural communities to ensure ready adoption of forest-based technologies. TMU's work includes forest products conservation, processing, manufacturing efficiency, recycling, and bioenergy.

## UW-Green Bay, Environmental Management and Business Institute

The Environmental Management and Business Institute (EMBI) was established to help strengthen UW-Green Bay's leadership position in the promotion of environmental awareness and eco-friendly initiatives. EMBI strives to work with public and private-sector partners throughout the New North region helping to develop opportunities to reduce environmental impact while increasing profitability.

## WI Department of Natural Resources

The Wisconsin Department of Natural Resources, Forest Product Services Section provides assistance in the marketing and utilization of forest products to facilitate the ability of wood-producing and wood-using organizations to use the state's wood resource in an efficient, effective, and sustainable manner, maximizing wood's contribution to Wisconsin's economy.

## Wood Stove Exchange Program, Wisconsin Public Service, and the American Lung Association

The Wood Stove Exchange Program of the American Lung Association, in partnership with Wisconsin Public Service, is offering rebates to residential customers who exchange their old wood-burning hydronic heaters or stoves with new, energy-efficient appliances. Program details and participating retailers can be found at [www.lungwi.org/woodstoves](http://www.lungwi.org/woodstoves).

## Wisconsin State Energy Office

The State Energy Office (SEO) is committed to supporting Wisconsin's goal of: generating electric power and transportation fuels from renewable resources; capturing more of the emerging bioindustry and renewable energy market; and leading the nation in groundbreaking research that will make clean energy more affordable and will create good paying Wisconsin jobs.

## WoodMaster/Northwest Manufacturing

WoodMaster furnaces are manufactured and distributed by Northwest Manufacturing of Red Lake Falls, Minnesota. Since 1989, WoodMaster has built industry-leading indoor and outdoor furnaces, continually finding innovative uses of natural energy and alternative fuel sources. For more information, visit [www.woodmaster.com](http://www.woodmaster.com).

# EXHIBITORS

## AFS Energy Systems

AFS Energy Systems is a design-build engineering and manufacturing firm specializing in biomass combustion systems, dust collection systems, fuel storage and material transfer systems. The systems are manufactured at our facilities (Advanced Fabrication Services) in Lemoyne, Pennsylvania. Installation, start-up, service and training is provided by our AFS Field Services Group.

## Agricultural Utilization Research Institute

The Agricultural Utilization Research Institute (AURI) helps develop new uses for agricultural products through science and technology, partnering with businesses and entrepreneurs to bring ideas to reality. We generate economic impact in Minnesota by helping businesses take advantage of innovative opportunities in four areas: biobased products, renewable energy, coproducts, and food.

## Biomass Engineering and Equipment

At Biomass Engineering & Equipment, we've developed world class machines that contribute to the success of the biomass pellet and briquette industry. This includes: debarking systems, log decks, log sorters, log trimmers, log transfers, chippers, chip screens, drag conveyors, truck dumps, and custom designed push/pull floor systems (a better alternative than upright silos).

## Center for First Americans Forestlands, College of Menominee Nation

The Center for First Americans Forestlands represents a collaborative partnership between the College of Menominee Nation and the US Forest Service. The Center promotes sustainable forestry/forest ecology while engaging various stakeholders. An integrated programs approach covers research, education, and outreach/technical assistance with an emphasis on current and relevant content in each program area.

## Higgins Heating

With the growing concern in many communities pertaining to solid fuel burning appliances, Higgins Heating has renewed dedication to increasing public awareness about cleaner-burning boilers and hearth products. We provide education and consultation to individual consumers and community leaders regarding the benefits of utilizing renewable biomass thermal energy. Included products: Green Tech – Crown Royal Boilers, and AHONA (Alternative Heating of North America) – Vigas and Viadrus Boilers.

## Illinois Biomass Working Group

The Illinois Biomass Working Group (IBWG) links farmers, businesses, researchers, and agencies to accelerate development of a sustainable, profitable biomass energy sector in Illinois. Visit [illinoisbiomass.org](http://illinoisbiomass.org) for upcoming biomass events and grant opportunities in Illinois and email [info@illinoisbiomass.org](mailto:info@illinoisbiomass.org) to be added to our email list or to find out more about opportunities for your biomass business in Illinois.

## Miron Construction Co., Inc.

Miron Construction Co., Inc. is a forward-thinking, fast-growing private company completing work throughout the nation. Miron provides innovative pre-construction, construction management, design-build, industrial, and general construction services, and is headquartered in Neenah, Wisconsin and posted 2013 revenue of \$685 million. For more information, visit [www.miron-construction.com](http://www.miron-construction.com).

## Portage and Maine Outdoor Wood Boilers/ Strawbale Farms

Strawbale Farms Inc. is a renewable energy company focusing on Portage and Maine wood and wood chip boilers. Portage and Maine is proud to manufacture the best built and most efficient biomass boilers in the industry. Please visit our outdoor booth to see a live demonstration of the Enviro 500 woodchip boiler.

## Rotochopper, Inc.

Rotochopper manufactures industrial grinding equipment for converting wood waste and agricultural residue into engineered fiber products such

as biomass fuel. Rotochopper horizontal grinders are available with diesel or electric power from 150 to 950 hp. Two-stage Rotochopper grinders take raw waste materials to short fiber specifications in a single pass.

## SEH, Inc.

SEH is a full-service professional services firm of engineers, architects, planners, and scientists. We provide: energy and sustainability services, environmental, transportation, drinking water, wastewater, and structural engineering; funding acquisition; surveying, technology and GIS services. For 85 years, we've worked in partnership with our clients to build a better world for all of us.

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## Vermeer Wisconsin, Inc.

Since 1961, Vermeer Wisconsin has been proud to support you and your equipment needs through our successful family-owned Wisconsin business. Vermeer is one of the most recognized brands in underground construction, tree care, wood waste and organic recycling, and surface mining. Each of our three branch locations offers you full-service operations; specializing in selling, leasing, renting, training, and servicing Vermeer and non-Vermeer complementary lines of equipment.

## WI Department of Natural Resources

The Wisconsin Department of Natural Resources, Forest Product Services Section provides assistance in the marketing and utilization of forest products to facilitate the ability of wood-producing and wood-using organizations to use the state's wood resource in an efficient, effective, and sustainable manner, maximizing wood's contribution to Wisconsin's economy.



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## TOUR LOCATIONS



### Greenwood Energy LLC

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### Schroeder's Flowers Schroeder Floral Inc.

Schroeder's Flowers, a family business since 1899, is a full service retail florist located in the center of Green Bay in a residential area. One and 1/2 acres of greenhouses are connected to the retail store where we grow potted and garden plants. We use a wood burner (slant grate gas fire burner attached to a 200 horsepower Kewaunee Economy fire tube boiler) to heat our retail store and greenhouses. We burn waste wood from pallet factories and chipped waste slab wood from saw mills. We use 40 to 50 semi-loads of chips from September to early May.



### Krueger Lumber Co.

Krueger Lumber Co. is a family owned forest products firm. We focus on the positive environmental, economic, aesthetic, and social impact that comes with being good stewards of our wooded resource. From custom forestry and efficient saw milling, to the use of our great renewable, carbon neutral wood fueled boilers! Wood is truly an environmental blessing and we are proud to be part of making our forest resource grow.



### Marth Peshtigo Pellet Company LLC

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