

TREEDC Newsletter

July 5, 2011 Volume 2

2011



Quarterly Publication

Upcoming Events

- July 21: 25x'25/Tennessee Department of Agriculture: Knoxville, TN
- July 29: TREEDC FORUM: Cookeville, TN
- August 9-10: TVA Solar Solutions Conference: Nashville, TN
- August 30: Annual TREEDC Business Meeting: Ducktown, TN
- September 23: TREEDC FORUM Monroe County, TN

Links

- www.treedc.us
- Like us on Facebook!

TREEDC Member City of Memphis wins Statewide Green Leadership Award

The Tennessee Municipal League (TML) recently awarded its annual green leadership award to the City of Memphis on June 12th at their annual conference in Murfreesboro. TREEDC board member and Councilman Edmund Ford, Jr graciously accepted the award on behalf of the city. TML praised the city for their clean energy initiatives with Federal Express, ECOality, The University of Memphis, Sharp Solar and Sustainable Shelby.



TREEDC Returns to Jackson

On April 5, 2011 the Tennessee Renewable Energy and Economic Development Council (TREEDC) held its second symposium in Jackson, Tennessee. Held at the University of Tennessee West Research Center, 45 attendees from 11 cities, 8 counties, 5 states and the country of Denmark joined to learn about job creation opportunities in the clean energy sectors of biofuels, solar energy, green diesel, compressed natural gas and biosolids gasification. Representatives from the Tennessee Valley Authority (TVA), USDA Rural Development and the Tennessee Department of Agriculture were also in attendance. The symposium was organized by Jackson City Councilman Ernest Brooks, II and the Jackson Energy Authority. Presenters at the forum included representatives from TREEDC members Pathway Lending, 49 Green, Integrated Solar, Efficient Energy of Tennessee and Clean Energy.

Brent Bailey with the 25 x '25 Initiative provided agricultural opportunities in clean energy development for area farmers. Henning Bollerslev of 49 Green explained that agricultural and municipal wastes totaling 30,000 tons could be converted using microwave technology to produce 2.4 million gallons of green synthetic diesel. Participants were afforded a tour of the state of the art solar generation facility at the American Five Business Center in Jackson following the forum.



from left to right: Greg Martin, Clean Energy; Henning Bollerslev, 49 Green; Brent Bailey; 25x'25; Kyle Holmberg, Dept. of Agriculture; Warren Nevad, MTAS; Pikeville Mayor Greg Johnson, TREEDC President; Three Way Mayor James Hill; Mark Klan, TVA; Paul Phelan, TVA; Tipton County Mayor Jeffrey Huffman; Harvey Abouelata, Efficient Energy of Tennessee; and Al Campbell, Pathway Lending

TREEDC Testifies before General Assembly

TREEDC President/Pikeville Mayor Greg Johnson and Legal Affairs Director/Jackson City Councilman Ernest Brooks, II testified before the General Assembly House Agricultural Committee earlier this year. Mayor Johnson gave an historical overview of the creation of TREEDC by the University of Tennessee, (UT) President Emeritus Dr. Joe Johnson; UT Institute for Public Service; UT Municipal Technical Advisory Service (MTAS); 4 small town mayors; and McBee Bailey & Associates. Mayor Johnson also expressed his appreciation to the Tennessee Department of Agriculture, USDA Rural Development and the Tennessee Valley Authority (TVA) for their initial support. Mayor Johnson concluded his remarks by providing a summary of completed projects by TREEDC members.

TREEDC Legal Affairs Director Brooks advised the Committee that the 50 city and county mayors across Tennessee were poised to help accelerate market development of agricultural biomass feedstocks into clean energy for more jobs to Tennessee's rural communities. Solar energy development could also be an enormous revenue generator for farms. Brooks also added that TREEDC desires to become a needed informational resource to the Committee in the future and that TREEDC was working with Genera Energy in their ambassador program. Brooks also mentioned that TREEDC has created various partnerships with Memphis Bioworks and the National League of Cities to facilitate more progress in clean energy development in Tennessee.



Ernest Brooks, II, City of Jackson/TREEDC Legal Affairs with Michael Bowman with 25x'25 Initiative

TREEDC Member City Crossville Holds Sustainable Fair for area elementary students

Cumberland County's fifth-grade students visited the third annual city of Crossville Sustainability Fair on May 12, 2011. The event was sponsored by TREEDC Secretary and Crossville Mayor J. H. Graham, III. The city of Crossville lets students know how they can impact the environment, see some of the latest technology in energy savings and hear from experts in sustainability and conservation. The Crossville Public Works Department also proudly demonstrated its new biodiesel production facility which converts waste vegetable oil into biodiesel for its city vehicles and equipment.



Crossville Sustainability Fair participants watch biodiesel demonstration by Crossville Public Works (Crossville Chronicle)

TREEDC Energy Efficiency Update

The cities of Pikeville, Sunbright, Ducktown, Gainesboro and Winfield have been very active in developing biodiesel recycling programs, energy efficient street lighting and solar development projects. TREEDC co-founder Emanuel Bailey helped start these programs last year. These cities are to be commended for taking the initiative to use clean energy for a better future for their communities.

These communities affiliated with the Tennessee Renewable Energy and Economic Development Council (TREEDC) received grant awards under the stimulus grant program being administered by the State Economic & Community Development (ECD). These communities

have cooperatively participated in the TREEDC “Lead By Example” Program developed in partnership with the University of Tennessee Municipal Technical Advisory Service (MTAS). Projects proposed include planning and implementation of the following comprehensive alternative energy services available to cities and counties in Tennessee:

LED Lighting replacement projects

Traffic Signals Replacement

Outdoor Lighting Replacement

Building Office Lighting Replacement

Facilities Weatherization & Energy Reduction Projects

Building Weatherization Project

Solar Collector Projects

Energy Producing Projects

Solar Cell Projects

Micro Hydro Generation Projects

Biomass Energy Production

Alternative Fuel Producing Projects

Biodiesel Production and Recycling

Ethanol Conversion Programs

Compressed Natural Gas Facilities

TREEDC Member ECOtality Update

Clean energy stakeholders gathered outside Loews Vanderbilt Hotel in Nashville on June 13, 2011 to dedicate the Blink Pedestal charging stations. Nashville Mayor Karl Dean commended the hotel for stepping up and being the first commercial partner in the city to install a charger. ECOtality began installations of its Blink Level 2 wall mount charging stations in EV Project regions nationwide last December, and has since installed more than 1,200 commercial and residential chargers.

ECOtality aims to deploy approximately 2,500 residential, commercial and DC fast charging stations in the state of Tennessee by the end of the year. Locations for the publicly available charging stations were selected by taking into account a variety of factors including traffic patterns and the locations of employment centers, regional attractions and retail hubs, as well as the input from many regional partners and stakeholders. ECOtality has worked closely with TV Project partners such as TREEDC and the Tennessee Valley Authority (TVA) to map out a blueprint for electric transportation in Tennessee and determine which sites are best suited for charging stations.

ECOtality sponsored a TREEDC reception at the Tennessee Municipal League (TML) Annual conference in June. The company is currently in discussions with many municipalities, counties and private property owners for installations of public charging stations, and has partnered with national retailers including Sears, Fred Meyer, Macy's, BP/Arco, and Best Buy. Cracker Barrel will install charging stations at 24 Tennessee locations as part of the project.

Organizations in the state of Tennessee that are interested in hosting Blink charging stations should contact Stephanie Cox, Tennessee Area Manager at ECOtality at scox@ecotality.com or by calling 615.504.4928.



Stephanie Cox with ECOtality gives presentation at TREEDC event

TREEDC Member Efficient Energy of Tennessee installs solar for SECO Tools

Government officials and solar industry members were in attendance on Friday, April 8 when SECO Tools in Lenoir City hosted a ribbon cutting to inaugurate its 29.6 kilowatt solar PV system. The system, designed by TREEDC founding member Efficient Energy of Tennessee, will generate enough clean energy to power over three average Tennessee homes annually.

"SECO Tools' solar system is a huge accomplishment and is a perfect example of the grant funding at work in the state of Tennessee," said Harvey Abouelata, VP of Sales and Marketing for EETN. "EETN uses SHARP solar panels, which are produced in Memphis, Tennessee, creating and protecting jobs in our state. Additionally, SHARP uses AGC Flat Glass, which is produced in Kingsport, Tennessee, further creating and protecting Tennessee jobs."

As a multinational producer of specialty tools with a presence in over 50 countries around the world, SECO's stated goal is to be a global industry leader in terms of green energy production, and its Lenoir City facility is the first to install solar panels. The project was possible in part by a grant from the Tennessee Solar Institute, which paid for approximately 30% of the total cost of the \$187,500 project.



Will Dodson, USDA Rural Development, Mary Speight Shaffer, Harvey Abouelata and Bobby Goode

MTAS/TREEDC Outreach Activities

University of Tennessee MTAS Management Consultant Warren Nevad was active in providing educational outreach presentations and briefings to various renewable energy related stakeholders and other statewide organizations during the 2nd quarter of 2011. Below is a list of presentations given from April 1 thru June 30, 2011. Please contact warren.nevad@tennessee.edu if you are interested in learning more about the projects being conducted by the University of Tennessee MTAS and TREEDC.

- 1) Southern Consortium of University Public Service Organizations (SCUPSO); Charlotte, NC: April 6, 2011
- 2) USDA Rural Development Annual Conference: Tennessee Tech University, Cookeville, TN: April 14, 2011
- 3) Tennessee City Management Association, Franklin, TN: April 28, 2011
- 4) USDA Roundtable on biofuels with U.S. Secretary of Agriculture Tom Vilsack on biofuels: Nashville, TN: May 23, 2011
- 5) Tennessee Commissioner of Agriculture Julius Johnson: briefing: June 7, 2011
- 6) Tennessee Gas Association Conference, Asheville, NC: June 8, 2011
- 7) Tennessee Annual Municipal League Conference, Murfreesboro, TN :June 12, 2011



MTAS Consultant Warren Nevad addresses Tennessee Gas Association regarding compressed natural gas opportunities for fleets

TREEDC Partners with Michigan Governor Jennifer Granholm and Pew Foundation

On June 21, 2011, over 40 guests attended a clean energy forum lunch in Knoxville sponsored by TREEDC, Pew Foundation and Cooley Public Strategies. Former Michigan Governor Jennifer Granholm, Pew Senior Energy Advisor stated that a well rounded clean energy policy has a “big job potential” and by 2020 there will be \$2.3 trillion in private investments and 37 million clean-energy jobs globally. The United States is third in private-sector investment for clean energy, behind China and Germany.

Dr. Rudy Shankar, TVA Vice President for Technology Innovation gave the audience an update regarding TVA’s Green Power Switch (GPS) program update and status of the electric vehicle industry. TREEDC is working with TVA on the redesign of the GPS program.



TREEDC President Greg Johnson and Michigan Governor Jennifer Granholm



Dr. Rudy Shankar addresses audience

TREEDC Members Brief Deputy Governor Claude Ramsey and Tennessee Dept. of Environment and Conservation (TDEC) Commissioner Bob Martineau

On June 22, 2011, 12 Tennessee Renewable Energy & Economic Development Council (TREEDC) Advisory board members held an informational briefing with Deputy Governor Claude Ramsey and TDEC Commissioner Bob Martineau. The purpose of this briefing was to advise the new state administration about the various city and county energy projects initiated by TREEDC, a statewide network of city and county mayors working to promote renewable energy in Tennessee.

TREEDC President/Pikeville Mayor Greg Johnson also explained the critical role that the University of Tennessee (UT) Institute for Public Service (IPS), the Municipal Technical Advisory Service (MTAS) and UT President Emeritus Dr. Joe Johnson played in creating the Council. TREEDC Cofounder Emanuel Bailey discussed the Council's involvement with biosolids conversion possibilities into syngas. Gibson County Utilities Director Pat Riley discussed potential compressed natural gas opportunities for municipal and county fleets. Attendees included Columbia Mayor Dean Dickey, Dunlap Mayor Dwain Land, Dunlap Administrative Assistant Yonna Weldon, Ducktown Mayor James Talley, Sequatchie County Mayor Claude Lewis, Jackson Energy Authority Manager Scott Dahlstrom and State Economic and Community Development (ECD) Recruiter Joe Claxton.





TREEDC Chairman Dr. Joe Johnson delivers keynote address at Franklin forum as CTAS Consultant Frank McKee look on.

TREEDC Holds 2nd Annual Franklin Forum

The Tennessee Renewable Energy and Economic Development Council (TREEDC) held its 2nd annual Middle Tennessee forum at the new Franklin Police Conference Center on June 24, 2011. More than 90 attendees from 14 cities, 8 counties, 4 states and 21 clean energy businesses gathered together to examine ways to fast track clean energy development such as green diesel, solar, propane and electric car charging infrastructure in Tennessee. Representatives from the Tennessee Valley Authority (TVA), University of Tennessee Institute for Public Service (IPS), Tennessee Economic and Community Development (ECD) and Middle Tennessee Clean Cities Coalition also participated in this community wide forum.

The University of Tennessee President Emeritus Dr. Joe Johnson praised the efforts of TREEDC President /Pikeville Mayor Greg Johnson and the leadership team in motivating, inspiring and educating local, state and federal political leaders in Tennessee about the benefits of energy efficiency and renewable energy development through job creation. He complimented the TREEDC mayors with taking the initiative to partner with the new state commissioners from the Tennessee Department of Environment & Conservation and Department of Agriculture. He also revealed that the TREEDC mayors had recently met Deputy Governor Claude Ramsey and the new Tennessee congressional delegation.

Kerry Perkinson, Vice President of Tennessee Bank & Trust gave a stirring presentation regarding the diminishing availability of oil throughout the world. Mr. Perkinson urged the attendees to look at ways in adding to the mix of alternative transportation fuels. Amy Bunton, Senior Vice President with Pathway Lending discussed details regarding a low interest \$50

million revolving loan fund program to finance energy efficiency projects for businesses. Mark Schwartz, founder of greenMARK Collaborative explained his firm's role in building a network of architects, engineers, and builders to assist businesses with creation of energy efficiency and LED lighting projects. Jim Coker of Heritage Propane urged city officials to require maintenance contractors to use propane when mowing city's parks and fields. Henning Bollerslev of 49 green gave a presentation about his technology to convert agricultural and municipal wastes into green diesel which can be easily transported compared to other alternative transportation fuels. Bollerslev, a native of Denmark, expressed his appreciation to TREEDC officials for extending an opportunity to develop and commercialize his technology in Tennessee.

The networking lunch consisted of presentations about the electric charging project status by ECotality Stakeholder Manager Stephanie Cox and Columbia State Sustainability Initiatives by Dr. Shanna Jackson. TREEDC also discussed its work with the TVA Green Power Switch Program, Pew Foundation and review of the legislative testimony to the State General Assembly's Agricultural Committee. TREEDC also discussed the strong potential of compressed natural gas for municipal and county fleets. The annual TREEDC business meeting will be hosted by Ducktown Mayor/TREEDC East Tennessee Coordinator James Talley in August. Details will follow.

LL Browning, TVA Program Manager of End Use Generation Technical Support led a panel discussion involving the current and future trends of the solar industry in Tennessee. Susan Curtis, TVA Senior Manager of Generations Partner gave an update of the TVA Generations Partner program. This program supplies TVA's Green Power Switch program with renewable power, making more green power available to consumers and creating a market for green power generation. Generation Partners participants defray the cost of their renewable systems and lower their monthly energy bills through the revenue they receive from the sale of the green power. Ms. Curtis also invited attendees to register for the free TVA Solar Solutions Conference in Nashville on August 9th and 10th. Steve Johnson of Lightwave Solar and Steve Levy with Tennessee Solar Energy Association opined that Tennessee needed to be more consistent in solar policy in order to make solar more affordable and practical for everyone. They also stressed that Sharp Solar and AGC Flatglass are critical components of the solar energy supply chain in Tennessee. John Atkins with TerraShares briefed the audience about his company's innovative Shared Savings Solar program where municipalities can benefit with solar energy without capital investments. His white paper regarding this approach is available through TREEDC.



from left to right: Mike Tallent Assistant Vice President for UT IPS, Ducktown Mayor James Talley and UT President Emeritus Dr. Joe Johnson



Pathway Lending Senior Vice President Amy Bunton

2011 Membership Update

Below is a list of our 2011 members. Membership enrollment for 2011 expires on September 1, 2011.

2011 Founding Partners

Asset and Equity Corporation	Ragan-Smith Engineering
ECotality North America	Sustainable Futures
Efficient Energy of Tennessee	Tennessee Department of Agriculture
Gibson County Utilities	Tennessee Soybean Council
Jackson Energy Authority	Tennessee Tech University
Lightwave Solar	University of Tennessee MTAS
Maupin Technologies	University of Tennessee-Battelle/ORNL
McBee Bailey & Associates	USDA Rural Development
Tennessee Valley Authority	

Local Governments

Algood	Crossville
Baxter	Decatur
Bledsoe County	Ducktown
Byrdstown	Dunlap
Chattanooga	Englewood
Collierville	Franklin
Columbia	Goodlettsville
Cookeville	Graysville
Covington	Greenback
Crab Orchard	Harriman

Hendersonville	South Pittsburg
Huntsville	Sunbright
Jackson	Somerville
Jasper	Weakley County
Kimball	Whitwell
Kingston	Winfield
LaVergne	University of Tennessee-CTAS
Lincoln County	Columbia State Community College
Livingston	Memphis BioWorks Foundation
Lookout Mountain	Jackson Energy Authority
Madison County	Bi-County Solid Waste Mgt
Manchester	Clean Cities of Middle TN
McMinnville	Genera Energy
Memphis	Pathway Lending
Milan	Bartlett Chamber
Monterey	Monroe Co. Economic Dev
Montgomery County	Farmer Morgan LLC
Pikeville	Frontline Bioenergy
Roane County	25x25 Organization-Roane Alliance
Rockwood	

Individuals

Amy Howard

Bob Jackson

Brent Bailey

Dr. Joe Johnson

Frank Mckee

Lauren Rogers

L.K. Browning

Mark Klan

Pat Hardy

Thomas E. Cauley



Next TREEDC Forum to be hosted by Tennessee Tech University

Tennessee Tech University, the City of Cookeville and the University of Tennessee Municipal Technical Advisory Service (MTAS) have partnered with the Tennessee Renewable Energy and Economic Development Council (TREEDC) to organize the Cumberland Plateau TREEDC community wide outreach forum on Friday, July 29, 2011 at the Tennessee Tech STEM Center. Kim Greene, Tennessee Valley Authority (TVA) Group President of Strategy and External Relations will be our luncheon speaker.

Tennessee Tech President Dr. Robert Bell will provide a welcoming address to the forum's participants. Attendees will hear from Bill Lee, CEO of Frontline BioEnergy about biomass gasification and alternative fuel opportunities for the Upper Cumberland Region. Henning Bollerslev with 49 Green will discuss a process that uses microwave technology to convert municipal wastes to green diesel. Terry Strange with Hemlock Semiconductor will discuss the innovative training partnership with Austin Peay State University regarding manufacturing of solar polysilicon. Community wide production of biodiesel will be examined.

The Tennessee Solar Institute will also give a presentation about their work. Cookeville Economic Development Director Melinda Keifer and USDA Rural Development Energy Coordinator Will Dodson will discuss energy efficiency for cities and E85 blender pump program opportunities for area farmers. Genera Energy will discuss its innovative work regarding the development of cellulosic ethanol in Tennessee. Stephanie Cox with ECotality will conclude the forum with an update regarding the statewide electric vehicle charging project.

The free workshop will include a continental breakfast and box lunch for attendees. RSVP to treedc08@yahoo.com before July 25th. Seating is limited to 175 guests. There will be a \$15 late registration fee after July 25th.

For more information visit our website at www.treedc.us. Contact warren.nevad@tennessee.edu.