




THE UNIVERSITY of TENNESSEE   
INSTITUTE for PUBLIC SERVICE  
MUNICIPAL TECHNICAL ADVISORY SERVICE

## **TREEDC – Vonore (Monroe County) Forum: October 7, 2011**

### **Tellico West Conference Center at Grand Vista Resort**

From: Warren Nevad, the University of Tennessee MTAS

The Mayors of the Tennessee Renewable Energy and Economic Development Council (TREEDC) collaborated with Genera Energy, Tennessee Reservoir Development Agency, Michael Brady, Inc. and Monroe County Office of Economic Development to provide a free community outreach forum to area citizens and clean energy stakeholders on October 7, 2011. Attendees gathered together to examine strategies to develop alternative energies in East Tennessee and to learn about renewable energy related case studies. Monroe County Director of Economic Development and MTAS Management Consultant Warren Nevad developed the agenda which consisted of morning presentations from representatives from the University of Tennessee Institute for Public Service (IPS), Tennessee Department of Agriculture, Genera Energy, Frontline Bioenergy, 49 Green, LTA Consulting, Inc., Oak Ridge National Laboratory (ORNL), and Tennessee Valley Authority (TVA).

Monroe County Mayor Tim Yates welcomed the 86 attendees and thanked TREEDC President/Pikeville Mayor Greg Johnson for bringing more awareness in renewable energy to the community. TREEDC Chairman/University of Tennessee President Emeritus Dr. Joe Johnson advised the audience that this was TREEDC's 10<sup>th</sup> forum across the state since 2009. Dr. Johnson added that people who had attended the previous forums were now working together and building a series of partnerships to help bring solar energy development to the Town of Sunbright and alternative transportation fuels to Crossville and other cities statewide. IPS Assistant Vice President Chuck Shoopman mentioned that he is looking forward to witnessing how the mayors will move forward in the future with TREEDC's work of leveraging university resources for community development in renewable energy. He also thanked the Municipal Technical Advisory Service (MTAS) for their work in organizing TREEDC and pledged his support. Tennessee Department of Agriculture Deputy Commissioner Jai Templeton, a former mayor of McNairy County informed the group about the Tennessee Agriculture and Forestry Economic Development Task force. The goal of this task force is to increase jobs in rural areas and build demand for farm and forest products.

Dr. Sam Jackson with Genera Energy and The University of Tennessee Institute of Agriculture Center for Renewable Carbon gave an overview of the Tennessee Biofuels Initiative. Dr. Jackson added that Dupont Danisco Cellulosic Ethanol (DDCE) is currently evaluating sites in Tennessee for a commercial scale cellulosic ethanol facility. Dr. Jackson also advised the attendees of the upcoming Biomass Field Days on October 25<sup>th</sup> and 26<sup>th</sup>. Bill Lee, CEO of Frontline Bioenergy gave suggestions on how to develop regional feedstock delivery systems which would help create markets for renewable energy. Lee also commented that Frontline Bioenergy's partnership with SGC Energia would bring his firm a new focus on liquid hydrocarbons synthesis, also known as the Fischer-Tropsch process. Henning Bollerslev of 49 Green gave a powerpoint presentation about their technology that converts municipal wastes into synthetic diesel by using a microwave conversion process that does not emit emissions. Bollerslev, a native of Denmark, expressed his appreciation to TREEDC officials for extending an opportunity to develop and commercialize his technology in Tennessee. Dr. Chad Duty explained that the goal of the Department of Energy SunShot program is reduce the system cost of a solar installation to \$1 per watt in the long term. He gave an interesting overview of the solar research, development and deployment at ORNL. Dr. Duty concluded his presentation by reviewing systems integration of renewables at the ORNL Sustainability campus. These renewables include solar charging stations for electric vehicles.

TREEDC founding member Leslee Alexander discussed LTA's sustainability consulting work with Gresham, Smith and Partners regarding TVA energy audits. Alexander also advised the audience that LTA Consulting, Inc. was very active in creating public private partnerships in clean energy technology. TVA Senior Program Manager Randy Johnson gave an overview regarding the renewable energy opportunities in the TVA/Clean Air Agreements. Johnson informed the membership that TVA will provide \$350 million over 5 years to fund environmental improvement projects. These projects will assist in improving the air quality throughout the Tennessee Valley region. TVA has allocated \$290 million for implemented projects in energy efficiency, renewable energy and other projects. \$60 million is allocated for State Environmental Mitigation Projects. Johnson also reviewed the program for Tennessee Valley Smart Energy Communities.

The networking lunch consisted of a presentation from Assistant Commissioner of State Department of Labor and Workforce Development Iliff McMahan, Jr. The Commissioner gave a comprehensive review of Governor Bill Haslam's Jobs4TN plan which focuses on 1) recruiting targeted industries such as renewable energy; 2) assisting current industries with expansions; 3) supporting regional economic development and 4) investing in innovation. The plan establishes regional "jobs base camps" across the state: The state has fundamentally changed its field staff to establish a "jobs base camp" in each of nine regions across the state. Each base camp works with local partners to develop and/or revise a

regional economic develop plan and align existing federal and state resources around that plan. A key function of these jobs base camps will be reaching out to rural counties to incorporate them into broader regional economic development strategies that leverage existing resources and maximize the assets of rural communities

Martin Penny with Cooley Public Strategies spearheaded the afternoon panel which consisted of presentations of various renewable energy technologies available to local governments across the state. Mr. Penny explained his role with Pew Charitable Trust and TREEDC regarding a prior luncheon forum with former Michigan Governor Jennifer Granholm. State of Tennessee Economic and Community Development Energy Director Molly Cripps gave an update on the Energy Efficiency Block Grant Program. A total of 134 total grants were awarded to local governments in 65 counties in Tennessee for rounds 1 and 2. Round 3 will begin later this month and an approximately \$1.1 million will be available to fund 10-11 additional local governments. She expressed appreciation to TREEDC for helping such communities as Sunbright and Pikeville with their work. Contact TREEDC for additional information. Cripps also provided a schedule of the upcoming Tennessee Energy Management workshops for the Energy Efficient Schools Initiative on November 29<sup>th</sup> in Jackson, December 1<sup>st</sup> in Knoxville, and December 6<sup>th</sup> in Murfreesboro. Seating is limited to 50 participants in each venue. Contact Ramona Nelson at 731-426-0536 for more information. Lisa Leonard, Sales and Marketing Team Leader with Choice Solar and Geothermal gave an informative presentation regarding the benefits and opportunities of geothermal for public facilities in Tennessee. A geothermal heat pump, ground source heat pump (GSHP), geoexchange or ground heat pump is a central heating and/or cooling system that uses the natural warmth of the earth to heat and cool your building. Leonard reviewed the following benefits available for geothermal users:

- 1) The operating cost of geothermal can be up to 70% less than conventional systems.
- 2) No cooling towers or heating elements to operate, which require additional energy
- 3) Safe – with few moving parts
- 4) Reduces electricity consumption in U.S. by 799 million kilowatt hours annually
- 5) 4 to 6.8 year Return on Investment ( ROI)

Tennessee Solar Energy Association Founder Steve Levy gave a thorough presentation about the benefits of placing solar arrays on closed landfill states. This practice is allowed in other states but has not gained traction in Tennessee. According to Levy, the benefits of install solar on capped landfills include:

- 1) Provides productive use and income to landfill owners and municipalities
- 2) Stewardship of contaminated lands
- 3) Aesthetic appeal of solar arrays compared to vacant landfill site
- 4) Unintrusive footings that do not impact cap
- 5) Can allow for larger scale installations

Jonathan Overly, Director and Founder of East Tennessee Clean Fuels Coalition gave presentations about emerging alternative transportation fuels available for local government fleets. His first powerpoint gave an update on the status of the ECOTality Electric Vehicle Project. Tennessee was selected as one of the six states across the country to participate in the Electric Vehicle charging station program. Overly gave a map overview of the charging stations and description of organizations that have procured electric charging stations. He provided a list of automobile manufacturers that produce electric vehicles including Nissan and General Motors Volt. More are on the way. Overly then discussed the opportunities in natural gas as a viable alternative transportation fuel for fleets across Tennessee. He explained the work of the Tennessee Natural Gas Team which is a partnership of TN Clean Cities coalitions, TN Gas Association & other organizations to advance natural gas as transportation fuel in the state. This group promotes natural gas through education and legislation so that fleets and public stations throughout Tennessee make natural gas a viable alternative for Tennessee.

Details on this program along with all other presentations from the forum will be available shortly at <http://www.mtas.tennessee.edu/public/web.nsf/Web/Economic+Development>.

The final 2011 TREEDC forum is scheduled for November 18<sup>th</sup> in Memphis, Tennessee and will be sponsored by the City of Memphis, Shelby County and Memphis Light Gas and Water. The first forum in 2012 will be sponsored by Hiwassee College in Madisonville, Tennessee sometime next February. For more information about TREEDC contact [warren.nevad@tennessee.edu](mailto:warren.nevad@tennessee.edu) or visit [www.treedc.us](http://www.treedc.us)