



TREEDC – Columbia, Tennessee Renewable Energy Forum Report: March 9, 2012

From: Warren Nevad, the University of Tennessee MTAS

TREEDC members Columbia Mayor Dean Dickey and Columbia State Community College President Dr. Janet Smith organized a Community Energy Forum on March 9, 2012. TREEDC 2012 Founding members First Farmers and Merchants National Bank, Columbia Power and Water Systems, Mount Pleasant Power System, the University of Tennessee, USDA Rural Development, Tennessee Valley Authority (TVA) and the Tennessee Gas Association sponsored this free community outreach forum for Columbia State's students, staff and Maury County area clean energy stakeholders. A diverse crowd of 76 attendees heard various presentations ranging from anaerobic digestions to solar financing along with the positive developments from the TVA Green Power Switch and State Economic and Community Development (ECD) Energy Efficiency Block Grant Initiatives. This was the 13th statewide forum since 2009 organized by TREEDC, a statewide organization of 75 city and county mayors and businesses chaired by the University of Tennessee President Emeritus Dr. Joe Johnson.

TREEDC Middle Tennessee Coordinator /Franklin Mayor Ken Moore led the introductions and introduced fellow member and friend Columbia Mayor Dean Dickey to the audience. Mayor Moore advised the crowd that he was very proud to be a part of the growth of TREEDC since the City of Franklin hosted a forum in June 2010. Mayor Dickey thanked the sponsors and complimented the leadership of TREEDC for carrying their message of economic development through clean energy to Maury County. Mayor Dickey added that the synergy at these forums creates momentum to develop more solar, biofuels and compressed natural gas development across the state. Mayor Dickey urged the crowd to join TREEDC to help the Mayors to carry out their legislative outreach efforts in Nashville and Washington, DC. He also thanked Dr. Johnson and the University of Tennessee for their vision in creating the Council.

Columbia State President Dr. Janet Smith informed the attendees that Columbia State had also organized a previous TREEDC forum in Franklin back in 2010. Dr. Smith gave a comprehensive powerpoint presentation of Columbia State's Green Initiatives. A Sustainability Council consisting of all sectors of Columbia State was developed. Dr. Smith advised the audience that the Energy Savings Performance Audit was completed on all

buildings owned by Columbia State. Some of the projects from the performance contract included a campus lighting retrofit, water saving strategies and procurement of hybrid and electric vehicles. Dr. Smith concluded her address by stating that she was delighted that the mayors of TREEDC were bringing in various institutions of higher education to the TREEDC membership and was looking forward to working with TREEDC in the future. Mayor Dickey then presented her with a TREEDC award.

Tim Hayes and Carlos Mayer with TREEDC founding member Vis Solis reviewed the construction activities of their 3 megawatt (mw) solar project in TREEDC member Lincoln County. This project consisted of 4 solar systems at 750 kilowatts (kW) each. They also gave a demonstration of a miniature solar tracking array and highlighted their partnership with Astroenergy regarding landfill solar development in New Jersey. Tennessee Solar Energy Association President Steve Levy gave a detailed presentation about the benefits of 3rd party ownership. He thanked Stephan Partin for his creativity in developing this concept. Levy also explained that across the country, solar ownership is shifting. 3rd party solar is more than 50 percent of the California home market in 2011. He encouraged everyone to contact the Tennessee Solar Energy Association and TREEDC for technical assistance. His powerpoint along with the others will be available shortly at <http://www.mtas.tennessee.edu/public/web.nsf/Web/Economic+Development>

Local businessman Rick Alexander gave a very entertaining discussion about why America is where we are because of our stubborn dependence of foreign oil. He urged the TREEDC membership to continue to promote ways for communities to produce their own energy instead of importing it from hostile countries. TREEDC Consultant Bill Owen urged the crowd to sign up for the TVA green power switch program at www.greenpowerswitch.com/treedc to help support the Council's educational activities to create more awareness to elected officials about the benefits of renewable energy to their communities. Dr. Abhijeet Borole discussed anaerobic digestion and waste to bioenergy conversion opportunities for local governments. Dr. Borole advised everyone that there were only 7 Wastewater Treatment plants in Tennessee that have anaerobic digestion and more is needed across the state. Anaerobic digestion is a series of processes in which microorganisms break down feedstocks such as food and dairy wastes and sludge in the absence of oxygen. This process can be a tool for municipal and county wastewater systems to manage waste and/or to release energy. Dr. Borole urged the state to conduct a feedstock analysis similar to a study conducted in California in 2008.

Henning Bollerslev of 49 Green gave a presentation about its technology that transforms municipal wastes into synthetic fuels via a patented microwave conversion process that does not emit emissions. Also, this technology does not take feedstock from the food chain. The technology should be available for commercial production in Denmark sometime in late 2012. Thereafter, the commercial licenses will be available in the United States.

Bollerslev, a native of Denmark, expressed his appreciation to TREEDC officials for extending an opportunity to develop and commercialize his technology in Tennessee. He added that TREEDC has great potential to be a national organization in promoting all kinds of renewable energy projects across the United States. Lisa Leonard, vice president with AriES Energy explained the various parameters of the Tennessee Department of Environment and Conservation (TDEC) Clean Tennessee Energy Grant program available to organizations. Tennessee will receive \$26.4 million over 5 years to fund clean air programs in the state. Leonard informed the audience of the benefits of geothermal energy. Her powerpoint illustrated the benefits of lower operational costs such as elimination of boiler maintenance and few moving parts in geothermal systems.

Tennessee Economic and Community Development (ECD) Energy Director Molly Cripps gave a thorough update of the 3 funding rounds of the Stimulus funded Energy Efficiency Community Development Block Grants (EECDBG) which have provided needed funding to 145 local government projects across the state. Cripps stated that TREEDC members East Ridge and Sunbright were successful in completing their programs which resulted in significant annual energy savings to these communities. Cripps also reviewed other successful projects that involved building retrofits, LED traffic lights and more efficient street lighting for local governments. She also invited folks to attend the TVA Solar Solutions Conference on April 10th. Jackson Energy Authority Senior Business Analyst/Tennessee Gas Association member Scott Dahlstrom revealed that Compressed Natural Gas (CNG) vehicles produced approximately 25 percent less carbon dioxide than gasoline or diesel engines. A gasoline gallon equivalent of natural gas ranged from \$1.50 to \$ 2.50. Dahlstrom also explained that 98 percent of natural gas comes from North America and can help us become energy independent. He concluded his remarks by inviting the attendees to attend the Tennessee Gas Association Natural Gas Vehicle Expo on April 4th in Nashville.

TVA Green Power Switch Product Manager Jenny Wright was given a TREEDC Appreciation Award before the delivery of her keynote luncheon presentation. Wright stated that purchasing 2 blocks of green power is the environmental equivalent of a 16 panel south facing solar system in Nashville. She gave a detailed breakdown of the TVA Green Power Switch capacity by the following resources: 1) solar – 42 percent; 2) wind – 38 percent; and 3) biomass – 20 percent. Wright also premiered a video testimonial from various green power switch customers across the TVA service area.

The next TREEDC forum is scheduled for April 12, 2012, in West Tennessee at Jackson State Community College in Jackson, Tennessee. TREEDC Legal Affairs/Jackson City Councilman Ernest Brooks, II will be organizing the event. We will also hold another TREEDC forum at Tennessee Tech University on July 27th. Please check out the membership tab on the newly

revised TREEDC website at www.treedc.us if your community or organization is interested in becoming a 2012 TREEDC member. Individuals or businesses that enroll under the TVA Green Power Switch program will be entitled to membership privileges for 2012. For more information about TREEDC, contact warren.nevad@tennessee.edu .