



Tennessee Renewable Energy and Economic Development Council Quarterly Newsletter

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TDEC Commissioner Robert Martineau; Emanuel Bailey, TREEDC board member; TREEDC President/Ducktown Mayor James Talley; Dennis Tennant, Tennessee Tech University Associate Director; Warren Nevad The University of Tennessee MTAS/TREEDC Director; TREEDC Vice-President/Gainesboro Mayor John Fox; Deputy Governor Claude Ramsey; Dr. Edmund Ford, Jr. Memphis TREEDC Board Member; and Tennessee Tech University Vice President Dr. Susan Elkins

TREEDC is Awarded Excellence in Energy and Renewable Resources by the 2012 Governor's Environmental Stewardship Awards



NASHVILLE – Tennessee Gov. Bill Haslam and Environment and Conservation Commissioner Bob Martineau announced the winners of the 2012 Governor's Environmental Stewardship Awards last month. The 11 winners were recognized for their achievements and positive impact on the state's natural resources in an awards ceremony held in Nashville on August 24.

“From implementing innovative new technology to environmentally friendly building practices to community members simply supporting one another, the honorees announced today once again demonstrate that Tennessee businesses, local governments, schools and everyday citizens are committed to healthier and more sustainable communities,” Haslam said.

The Governor's Environmental Stewardship Awards program recognizes exceptional voluntary actions that improve or protect our environment and natural resources with projects or initiatives not required by law or regulation. In its 26th year, this year's awards program covered nine categories: Building Green; Energy and Renewable Resources; Environmental Education and Outreach; Environmental Education and Outreach (school category); Land Use; Materials Management; Natural Heritage; Sustainable Performance; and Lifetime Achievement.

Additions to the award roster this year include two Pursuit of Excellence Awards, recognizing past award winners who continue to demonstrate a high regard for environmental stewardship practices. The winner of one additional honor, the Robert Sparks Walker Lifetime Achievement Award, will be announced at the awards ceremony in August.

A panel of 36 professionals representing agricultural, conservation, forestry, environmental and academic professionals judged more than 100 nominations and selected this year's award recipients based on criteria including on-the-ground achievement, innovation and public education.

“The ongoing protection of our land, water and air are essential components to our quality of life,” added Martineau. “This year's award winners have put forth an extraordinary amount of effort, and we are pleased to be in position to honor their commitment to environmental stewardship and for leaving a positive legacy for all Tennesseans.”

According to the press release “The Tennessee Renewable Energy & Economic Development Council demonstrated exceptional leadership in 2011 by partnering with 75 cities and counties to facilitate the advancement of renewable energy and energy efficiency in Tennessee.

TREEDC’s biggest mark in 2011 was through its assistance to several small communities with solar and biodiesel development. TREEDC also started a joint program with TVA to help bring more renewable energy to the state via its partnership with the Green Power Switch Program. As part of their efforts, TREEDC hosted six free clean energy forums across the state, reaching out to more than 500 citizens to learn more about the environmental and economic benefits of renewable energy. TREEDC’s outreach is designed to plan and facilitate development of Tennessee’s abundant natural renewable resources to spur sustainable economic development and to provide long term energy security to the citizens of Tennessee, extended to private businesses, local governments, farmers, energy and service providers, resource agencies and universities.”



TREEDC Hosts Forum at Tennessee Tech University



TREEDC held its 2nd annual forum at Tennessee Tech University on July 27, 2012. A total of 92 attendees heard various renewable energy related presentations. TREEDC President/Ducktown Mayor James Talley announced that TREEDC had been involved in several waste to energy projects and earned an environmental leadership award by Governor Bill Haslam. Dr. Elkins stated that she was very proud of the hard work in organizing the forum by Mr. Tennant. She also noted the large presence of TTU’s faculty and staff that we were in attendance.

Pat Riley of the Tennessee Gas Association and Gibson County Utilities highlighted the environmental and economic benefits of natural gas as an alternative transportation fuel for local government’s fleets. He encouraged the local elected and university officials to explore the feasibility of using compressed natural gas as a more cost effective alternative.

He advised the crowd that TREEDC was undertaking a capital funding program to help aid local governments to bundle their developmental projects regarding the construction of compressed natural gas stations and vehicle conversions.

Catherine Wilt, Director of Policy for the Center for Clean Products gave an overview of the Department of Energy SunShot grant program with the University of Tennessee. The purpose of the proposal is to identify bottlenecks to solar adoption, reduce costs and speed deployment.

Molly Cripps, ECD Energy Director, gave an update of the funding rounds of the Stimulus funded Energy Efficiency Community Development Block Grants which have provided needed funding of \$13,818,200 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.

Lori Munkeboe, TDEC Director of Sustainable Initiatives gave an overview of TDEC'S Clean Energy grant program funding for year 1, which included projects in the cities of Covington, Brentwood, Chattanooga and Athens.



Kingston Mayor Troy Beets, Dennis Tennant, Tennessee Tech, Warren Nevad, the University of Tennessee MTAS, TREEDC President/Ducktown Mayor James Talley and Tennessee Tech President Dr. Phil Oldham.

Stephanie Cox, ECotality Area service Manager for North America, gave a review of the ECotality electric vehicle charging project. This was a \$230 million dollar infrastructure study in six states and Washington, D.C. The electric vehicles involved in the project

included the Nissan LEAF and Chevy Volt. In Tennessee, many successful businesses such as Cracker Barrel, Loveless Café, Peabody and Lowes Vanderbilt hotels took advantage of the ECOTality deployment of various electric charging stations.

Henning Bollerslev of 49 Green discussed the Danish 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. Bollerslev also stated that the TREEDC model could be replicated in all the states.

Harvey Abouelata, President of ARiESs Energy illustrated the significant environmental progress exhibited by Wampler's Sausage. The Wampler's 30kW and 500kW solar systems produce a total of 694,410 kilowatt hours annually. The Cellulose to hydrogen energy system (CHyP) being developed for Wampplers will produce 3,985,800 kilowatt hours annually. According to Abouelata, the combined 4,680,210 kilowatts of clean energy will be enough to annually power 325 average sized homes in the TVA region.

The networking lunch consisted of a presentation by Pathway Lending Senior Vice President Amy Bunton regarding energy efficiency and clean energy loan programs for businesses in Tennessee. New TTU President Dr. Phil Oldham also appeared at the luncheon.

TREEDC Participates in 25th Anniversary celebration of Mountain Challenge at Maryville College



Maryville College and TREEDC recently partnered together on September 23, 2012 to organize a renewable energy forum for students as part of the College's 25th anniversary celebration of Mountain Challenge. Dr. Mark O'Gorman, Associate Professor of Environmental Studies, Maryville College presented an overview of Maryville's sustainability programs. Kristine Tallent, President of the Maryville College Alumni Association, welcomed the attendees. Harvey Abouelata, President of ARiES Energy, Bob Patterson, President of PBG Energy and Warren Nevad, municipal management consultant at the University of Tennessee's Municipal Technical Advisory Services (MTAS), also gave presentations during the forum.

Attendees visited Maryville College's renewable energy projects, including the solar array; solar thermal and LEED® certification work at Crawford House championed by Mountain Challenge; the Solar Dok® solar-powered picnic tables near Bartlett Hall; the MC biomass steam plant easily seen from the Clayton Center plaza; and the electric car charging stations in the Clayton Center parking lot. Plans are underway to develop a community wide renewable energy forum next year.

Maryville College is ideally situated in Maryville, Tenn., between the Great Smoky Mountains National Park and Knoxville. Founded in 1819, it is the 12th oldest institution of higher learning in the South and maintains an affiliation with the Presbyterian Church (USA). Known for its academic rigor and its focus on the liberal arts, Maryville is where students come to stretch their minds, stretch themselves and learn how to make a difference in the world. Total enrollment for the fall 2012 semester is 1,093.

TREEDC Conducts Leadership Middle Tennessee Renewable Energy Forum in Murfreesboro



Leadership Middle Tennessee Executive Director Susan Taylor and Alumni President Mercedes Jones organized a renewable energy panel of TREEDC members for their summit on September 12, 2012 in Murfreesboro, Tennessee. 91 Leadership Middle Tennessee students and alumni gathered together to learn about the latest developments in municipal sustainability programs, compressed natural gas, waste to energy and energy financing.

TREEDC President/Ducktown Mayor James Talley gave an update regarding the 2012 TREEDC membership drive. As of September 2012, TREEDC had 87 city and county members along with various other clean energy stakeholders across the state. He mentioned that neighboring states were looking at replicating a similar like TREEDC model for their states. Mayor Talley also mentioned that TREEDC was active in project assistance regarding local government solar and waste to energy projects. Mayor Talley concluded his remarks by advising the audience that TREEDC was partnering with Tennessee Department of Environment and Conservation (TDEC) Sustainability Director Lori Munkeboe and Tennessee economic and Community Development Energy Director Molly Cripps to conduct a strategic planning session in October in Ducktown, Tennessee.

Middle Tennessee State University Professor Cliff Ricketts discussed the various alternative

transportation fuels that are being researched at MTSU. Franklin Sustainability Director Andrew Orr gave an overview of the city's innovative sustainability programs including their solar farm located adjacent to the wastewater plant. Henning Bollerslev discussed 49 Green's system of using a microwave process to convert municipal waste into synthetic diesel. Pat Riley of the Tennessee Gas Association advised the attendees that TREEDC and the Tennessee Gas Association have partnered to create more compressed natural gas opportunities for municipal and county fleets across the State. Bill Owen, President of Asset & Equity Corporation gave an overview of the TREEDC Energy Pooled Financing Program for compressed natural gas.



TREEDC President James Talley addressed the crowd



Leadership Middle Tennessee Alumni President Mercedes Jones welcomes the 91 attendees in Murfreesboro

Christian Brothers University Announces TREEDC-Memphis Forum



TREEDC member Christian Brothers University and TREEDC have partnered together to organize the 3rd Renewable energy Forum in Memphis on November 16, 2012. The forum will highlight current renewable energy development in the Memphis area. Details will follow shortly are you can check out www.treedc.us by October 16, 2012 for agenda. Christian Brothers University is a four-year, private university affiliated with the Roman Catholic Church. The University was founded in 1871 by the De La Salle Christian Brothers, a Catholic teaching order.

CBU is located on a 75-acre wooded campus in midtown Memphis, Tennessee—about four miles east of downtown; near Interstates 40, 240, and 55; and close to major medical centers. The campus is at 650 East Parkway South, at the corner of Central Avenue.

PHG Energy Partners with TREEDC Member City Covington

Tennessee-based alternative energy company, PHG Energy, is partnering with TREEDC member city Covington, TN to turn waste to energy. Through PHG's downdraft biomass gasification equipment and technology, they will work with Covington to make the city more energy efficient by converting a wide range of waste materials to a low-emission substitute for natural gas or other fossil fuels.

By using the gasification method, Covington will be able to reduce landfill and transportation fees for 360 total tons of previously landfill-bound waste materials. Covington will use approximately 12 tons of waste per day to convert into energy.

Aiding in the construction of the waste-to-energy system is the \$250,000 Clean Tennessee Energy Grant, which Covington received from Tennessee Gov. Bill Haslam and Department of Environment and Conservation Commissioner Bob Martineau.

"Covington may be a small city, but we're constantly looking toward the future in our thinking and planning," said Mayor Gordon. "We want to embrace technology that fits our situation, and this system lets us turn waste into an opportunity. Working with PHG is a win-win for Covington. It helps our environment and it helps our city financially. Simply put, we're doing the right thing, in the right way, for the right reason."

The biomass gasification plant will be built on city property beginning in November of this year, and will be adjacent to the city's wastewater treatment plant. Utilizing the gasification system is projected to prevent emissions of 425 tons of carbon into the atmosphere each year by reducing energy usage related to waste water treatment, as well as fossil fuels used in waste disposal transportation.

To learn more about PHG Energy and their partnership with PHG, visit their website at <http://www.phgenenergy.com/> or contact Mike Webb, Director of Business Development at 615.259.5850 or mike.webb@phgenenergy.com.



TREEDC Partners with TDEC Sustaining Tennessee's Future Conference



TREEDC was a proud sponsor of TDEC Sustaining Tennessee's Future Conference held from September 26th through September 28th. TDEC Commissioner Robert Martineau welcomed the audience and gave an overview of TDEC's vision. TDEC Deputy Commissioner Brock Hill reviewed the agency's clean energy developments related to Tennessee State Parks. TREEDC Advisory Board Member/Montgomery County Mayor Carolyn Bowers participated in the Sustainability Outlook in Middle Tennessee Panel. In addition, TREEDC President/Ducktown Mayor James Talley discussed the City of Ducktown's initiatives related to electric vehicle charging stations and solar development.

Mid-State Construction and TREEDC to Host a Geothermal Workshop in Nashville

Mid State Construction and TREEDC have partnered together to organize a statewide geothermal workshop in Nashville on November 28, 2012. The workshop will highlight best practices in geothermal in Tennessee. Details will follow shortly are you can check out www.treedc.us by October 28, 2012 for agenda.



Michael Brady, Inc. joins TREEDC as a 2012 Founding Member

The mayors of TREEDC are proud to announce that Michael Brady Inc. (MBI) has joined TREEDC and will be one of our sponsors for our next three forums. MBI is currently one of the top rated firms in the southeast. MBI offers a full service experience to its clients by incorporating all architectural and engineering services for a project under one roof. Since its founding in 1990 by Michael Brady, the firm has grown in both momentum and size. With staff currently registered in all 50 states and with over 60 employees, MBI has 20+ years of experience as a company that offers exceptional service to its clients. We are one of the first firms in the nation to employ Building Information Modeling (BIM). Our Revit software along with the latest versions of AutoCad, MBI offers its clients the opportunity to experience Live Design. The Live Design concept gives MBI the capability to move projects from inception to construction in substantially less time by offering 3D models and renderings of their projects as design development moves along.



TREEDC Member/Knoxville Mayor Madeline Rogero Speaks at Luncheon



Nevad, Knoxville Mayor Madeline Rogero, and Keith Ridley, UT-CIS

Knoxville Mayor Madeline Rogero spoke at the Tennessee Renewable Energy Economic Council (TREEDC) Renewable Energy Luncheon on August 15, 2012 at Chesapeake's Restaurant. A total of 50 interested attendees heard about the Knoxville Building Better Buildings Initiative and their success with Ameresco in making Knoxville more energy efficient. State Senator Becky Massey, University of Tennessee Institute for Public Service Assistant Vice President Steve Thompson and State of Tennessee Energy Director Molly Cripps were also in attendance. The University of Tennessee Center For Industrial Services Consultant Keith Ridley also discussed his agency's E3 initiative. The E3 Initiative which stands for Economy, Energy and Environment is an innovative program that supports manufacturing leadership through sustainability.

Mayor Rogero also expressed her appreciation to MTAS, the TREEDC mayors and TREEDC East Tennessee Coordinator/Kingston Mayor Troy Beets for organizing the luncheon. She also added that the City of Knoxville is a proud member of TREEDC helping to promote energy efficiency and renewable energy. Knoxville Sustainability Director Susanna Southerland also gave an informative update regarding her department's sustainability objectives. Stewart Shunk, Regional Director for Ameresco stated that over the past decade, Ameresco has implemented almost \$100 million dollars of Energy Savings Performance Contracting in the State of Tennessee alone. All of their Tennessee projects utilize Tennessee contractors and trades. Shunk also reviewed their energy upgrades with

TREEDC members Roane State Community College, Columbia State Community College and Austin Peay State University. TREEDC is available to host a luncheon for your community. Email warren.nevad@tennessee.edu for more details.

25x'25 Names TREEDC Partner of the Week



In recognition of TREEDC's work, 25x'25 has named TREEDC partner of the week for the week of October 8th. As such, the TREEDC logo will be featured on the 25x'25 homepage, along with a short overview of TREEDC's work and a link to www.treedc.us for more information. Please visit www.25x25.org and share the news with your members and partners!

Upcoming TREEDC Events

October 12, 2012 – Chattanooga - TREEDC – UTC-Volkswagen Forum

October 18, 2012 – Knoxville – Solar workshop

November 16, 2012 – Memphis -TREEDC – Christian Brothers University forum

November 28, 2012 – Nashville- TREEDC – Geothermal Workshop

