Tennessee Renewable Energy and Economic Development Council

January 2018 Newsletter

TREEDC Holds Successful 4th Annual Conference at Tennessee Tech University



Mayor Dwain Land, UT-MTAS Director Margaret Norris, Knoxville Mayor Madeline Rogero and Chattanooga Mayor Andy Berke

The Tennessee Renewable Energy & Economic Development Council (TREEDC) recently held its 4TH annual Renewable Energy Conference at TREEDC Founding Member Tennessee Tech University on December 14 - 15, 2017. 96 stakeholders registered for the conference which was bannered under the theme of "Best Practices of Renewable Energy and Economic Development for Local Governments". It brought together leadership from the Tennessee Valley Authority (TVA), USDA Rural Development, and the State Department of Environment and Conservation (TDEC) Offices of Energy Programs and Sustainability. Chattanooga Mayor Andy Berke, Knoxville Mayor Madeline Rogero and Nashville Director of Sustainability Erin Hafkenschiel participated in an urban renewable energy panel moderated by the University of Tennessee Municipal Technical Advisory Service (MTAS) Executive Director Margaret Norris.

TREEDC President/Dunlap Mayor Dwain Land, TREEDC Board Member Mike McWherter and

Cookeville Mayor Ricky Shelton welcomed the audience. Keynote addresses were presented by Tennessee Tech Vice President Dr. Bharat Soni, and Assistant Commissioner Amy New of the Tennessee Department of Economic and Community Development (TNECD) on day one of the conference. Attendees were also treated to informational presentations from Jonathan Overly of the East Tennessee Clean Fuels Coalition and Dr. Kendra Abkowitz of the Tennessee Department of Environment and Conservation (TDEC) Offices of Policy and Planning and Sustainable Practices. Discussions included opportunities pertaining to the Volkswagen Diesel Settlement Fund. Day one concluded with a discussion of best practices in Rural Renewable Energy Programs by Dunlap Mayor Land, Lake County Mayor Denny Johnson and Dan LeVan with Energ3.

Day two consisted of keynote presentations from TenneSeia President Matt Beasley and Michael Scalf with the Tennessee Valley Authority (TVA). The Conference concluded with a panel discussing emerging issues in renewable energy in Tennessee. Presentations were given by Michael Walton, Chattanooga Green Spaces, Rory McIlmoil of Appalachian Voices, Michael Holtzhower of Southeast Diesel and Martin Penny with Cooley Public strategies. Conference PowerPoints are available at http://treedc.us/newsletters_reports/index.html The 108 TREEDC Mayors would like to thank the following sponsors of our 2017 Annual Conference:

- 1) Cumberland Securities
- 2) Christopher Intellectual Property
- 3) Energ3
- 4) Hannah Solar
- 5) Johnson Controls
- 6) NORESCO
- 7) Siemens
- 8) Tennessee Solar Solutions
- 9) Tennessee Valley Alternative Energy

From left to right: Mayor Land, USDA Tennessee Rural Development Director Jim Tracy and Knoxville Mayor Madeline Rogero



Martin Penny, Cooley Public Strategies Named TREEDC Champion in 2017



From left to right TREEDC President/Dunlap Mayor Dwain Land, TREEDC Champion Martin Penny and Warren Nevad, MTAS/TREEDC

During the TREEDC Annual Conference in Cookeville, Tennessee, the University of Tennessee MTAS/TREEDC Director Warren Nevad and TREEDC President/Dunlap Mayor Dwain Land presented the TREEDC 2017 Champion Award to Martin Penny of **Cooley Public Strategies, Penny was** recognized for his role in organizing the Mayor's roundtable discussions in Nashville with the Environmental Defense Fund and the Nature Conservancy. Penny also organized the successful TREEDC Washington DC delegation trip and the Paris Landing Forum with TREEDC Board Member Mike McWherter. Congratulations, Martin!

TREEDC Launches 2018 Membership Campaign

TREEDC Chairman/University of Tennessee at Martin Chancellor Dr. Keith Carver and TREEDC President/Dunlap Mayor Dwain Land have officially launched our 2018 membership campaign. TREEDC will recognize its 10 year anniversary in 2018 with various special events. The TREEDC board has kept the 2018 membership dues levels unchanged from prior years. Memberships help pay for expenses related to TREEDC's outreach, educational and project facilitation for our member local governments. Being a TREEDC member, affords networking and developmental opportunities, sponsorships of various events and participation in our International exchange program. TREEDC is a 501 C 3 charitable organization. For more information regarding 2018 membership opportunities click



http://treedc.us/membership/index.html

TREEDC Member Tennessee Advanced Energy Business Council (TAEBC) Releases Video

Discover Tennessee's advanced energy entrepreneurs and how the Energy Mentor Network, formed in partnership with the Tennessee Advanced Energy Business Council and Launch Tennessee, is fostering their growth within the state.

<u>Entrepreneurs in Advanced Energy</u>" video is the fourth in TAEBC's "This is Advanced Energy" series. The video showcases Tennessee's advanced energy entrepreneurial success and the organizations driving that success.

The University of Tennessee Wins Green Power Leadership EPA Award

The University of Tennessee (UT) received a Green Power Leadership Award this fall from the US Environmental Protection Agency (EPA), the only school in the Southeast to win the award. Past recipients include Northwestern University, Oklahoma State University, and Ohio State University.

The honor comes just six months after the EPA named UT as the top consumer of green power in academia. That number one ranking represents a nine-spot climb up the list in one year.

The Office of Sustainability achieved this success using the power of another type of green—money. By increasing the rate of renewable energy credit purchases, the staff raised the university's green energy profile and freed up funding for new research.

With the help of the research fund, an industrial engineering graduate student studied more efficient technology for campus HVAC units. In another funded project, a group of students in the Department of Mechanical, Aerospace, and Biomedical Engineering researched UT's energy demand management.

Looking ahead, the Office of Sustainability is involved in two upcoming green energy projects at Hodges Library.

One project researches a potential way to capture energy needs with battery storage that could hedge against peak energy costs. These costs can be up to three times the norm at certain times of the day and year. The other project allows the study of real-time energy use in a building and informs future building designs for increased energy efficiency.

TREEDC Member Knoxville Installs LED Streetlights



Knoxville Mayor Rogero and TREEDC President/Dunlap Mayor Land at the Annual Conference

The City of Knoxville is changing its streetlights. It became official recently when TREEDC Mayor Madeline Rogero hosted a ceremony where the first LED light was lit. Rogero and city councilman and former mayor Daniel Brown were on hand when Angel Pena of TREEDC Member Siemens turned on the first new light in East Knoxville on the corner of Martin Luther King Jr. Ave. and Olive Street.

That ceremony began the retrofitting project to replace the old inefficient lights. The ceremony on Martin Luther King Jr. Ave. was the first of nearly 100 demonstration LED's. Those will be installed at 17 locations throughout Knoxville. These pilot demonstrations will aid both Siemens and the City of Knoxville to determine the best fixtures and bulbs for different types of streets and locations.

By retrofitting the city's nearly 30,000 streetlights to the LED's, the city will save money, reduce energy use and take a major step toward

exceeding its goal of reducing municipal greenhouse gas emissions by 20 percent over the next three years.

The new technology will save taxpayers nearly \$2 million per year.

TREEDC Member Cookeville Completes 1 MW Solar Array

On October 12, 2017, Cookeville Mayor **Ricky Shelton and Economic Development Director Melinda Keifer** opened the new 1 MW solar array at the City's industrial park. The project is located on a 6-acre parcel at Highlands Business Park, a commercial and industrial development site. Highlands Business Park was jointly developed by the city of Cookeville and Putnam County for the purpose of offering infrastructure-ready industrial development properties. The Highlands Solar project will create a major environmental attribute for this industrial complex immediately adjacent to Interstate 40.

The project will sell electric power to the Tennessee Valley Authority (TVA) though an interconnection with Cookeville Electric Department. The proposed 1 megawatt "Solar Advantage" array will be constructed using **2,506** solar modules at **325 to**



Cookeville Mayor Ricky Shelton addresses TREEDC Conference

330-watts per module. System generation is estimated at approximately **1,396,000 kWh** per year. That is enough power to provide electricity to **156** average-size homes per year and off set greenhouse gases equal to that produced by **222** passenger vehicles per year.

TREEDC members Vis Solis and TVAEnergy developed the projects. Similar projects have been developed elsewhere in the TVA region arrays in the TVA region in Roane and Knox Counties.

TREEDC Member Lebanon Gasification Plant Wins Award

The Lebanon Gasification Initiative has received the 2017 project of the year honors from the Tennessee Chapter of the American Public Works Association (TCAPWA). This award recognizes a project in a Tennessee city that epitomizes outstanding planning, construction, and management. This project becomes the Tennessee Chapter's nomination to the National AWPA Top Ten Projects of the Year. It was announced at the TCAPWA Annual Conference held in Knoxville. At the heart of the Lebanon initiative is the world's largest downdraft gasification plant designed and built by Aries Clean Energy.

This marks the fifth industry award for the innovative plant. Earlier this year, the plant has received honors from: the state of Tennessee Governor's Stewardship Award and project of the year accolades from Environmental Leader and Industrial Wastewater Digest. The Greater Nashville Regional Council presented the 2017 Local Government Award for Public Works & Utility Infrastructure to the city last month.



TREEDC Lebanon Mayor Bernie Ash

Like many TREEDC cities this size, Mayor Bernie Ash says tackling the solid waste issue is best done taking one step at a time. He sees this waste-to-energy plant as the first step toward a total MRF (material recovery facility) line for the city's waste. "I'm pleased to say that with the detailed planning initiated by Aries, construction and implementation have progressed very smoothly. As with any power plant, we've had some bugs to work out, but overall, it's been a great team-building experience," said Ash.

In Memoriam: Sir Fred Perdon, TREEDC Ambassador to Naga City, Philippines



This newsletter is dedicated in the memory of Sir Fred Perdon, General Manager of Philippines GNN News Network and TREEDC Naga City Ambassador. Ambassador Perdon passed away in Manila on December 14, 2017. Sir Fred helped launched the TREEDC International Exchange Program in the Philippines in 2012 which resulted in many educational outreach forums, scholarships and the development of a TREEDC solar project in Puerto Princesa in 2015. Sir Fred had attended our Inaugural tour and spoke at our first annual conference back in 2014. TREEDC will set up a scholarship fund for a student in the Naga City region in his memory during the TREEDC mission trip in 2018. Rest in Peace Sir Fred.

Sir Fred Perdon 1952-2017

Mayor Land, Sir Fred Perdon and Warren Nevad