

# TREEDC Newsletter October 2019



#### TREEDC Partners with Technological University of the Philippines

TREEDC Mayor/President Dwain Land recently entered into an agreement with Technological University of the Philippines (TUP) to create and develop a Pilot Philippine Infrastructure and Energy Efficiency Program. This program will interconnect clean energy related technologies such as solar, lighting, phase change materials and water conservation to help TUP realize their energy goals. This pilot will utilize TUP students and TREEDC members to lower TUP's energy footprint and showcase TUP's energy efficiency program in the Philippines. Special thanks to the University of Tennessee Municipal Technical Advisory Service (MTAS) and the 108 Tennessee mayors of TREEDC for their efforts.



TREEDC celebrates partnership with TUP in Manilla, Philippines

### **Confirmed Speakers for 6th Annual TREEDC- Tennessee Tech Conference**



Franklin Mayor Ken Moore and the Franklin Solar Sustainability Project

TREEDC is pleased to announce that the following mayors will share their successes in renewable energy at the annual conference on December 12-13, 2019 at Tennessee Tech University: McKenzie Mayor/Tennessee Municipal League President Jill Holland, Chattanooga Mayor Andy Berke, Knoxville Mayor Madeline Rogero and Franklin Mayor Ken Moore. We also are pleased to announce that Jim Tracy, Tennessee Dir. of U.S.D.A. Development, Molly Cripps, Assistant Commissioner of TDEC, and Amy Henry, TVA Sr. Manager of Enterprise Relations will join us.

This conference will feature mayoral panels featuring best practices in economic development, energy efficiency and innovation in renewable energy. We will have presentations regarding community toolboxes and batteries for renewables. Attendees will also hear from leaders with State and Federal Government about the future of renewable energy. Conference will also include special awards.

We have included our agenda draft and registration link

https://epay.tntech.edu/C20205\_ustores/web/classic/product\_detail.jsp?PRODUCTID=1459&SI\_NGLESTORE=true to our conference. We are looking forward to catching up with everyone at our evening reception at 37 Cedar in Cookeville. Please call Mayor Dwain Land at 423-718-34 if you have questions.

# TREEDC Member Johnson Controls to Implement \$7.7 Million of Infrastructure Upgrades Across 3 Tennessee School Districts



TREEDC member Johnson Controls will enhance classroom environments throughout three Tennessee school districts – a combined 22 schools – with projects estimated to be completed by the end of 2019. Updates throughout the districts will include infrastructure, energy management and water conservation strategies to address deferred maintenance and improve efficiencies.

The school districts partnering with Johnson Controls include TREEDC Member Lake County School District in Tiptonville, Overton County School District in Livingston and Smith County School District in Carthage. The combined \$7.7M in improvements are enabled through Energy Savings Performance Contracts (ESPC) and Tennessee's Energy Efficient Schools Initiative (EESI). These engagements will help fund project implementations using guaranteed savings to offset the cost of the upgrades.

Lake County School District's \$1.6M in improvements include LED lighting, WiFi thermostats, window and cooling tower replacements, and an HVAC rooftop unit above the district's high school gymnasium, completed in May. The HVAC unit provides air conditioning in a gym that previously had no temperature regulating systems. Upon completion, Lake County will have realized more than \$1.9 million dollars in energy, operations and maintenance savings, guaranteed over the 16-year agreement. The district also utilized a Tennessee Valley Authority incentive to fund electrical needs.

Overton County School District is implementing \$2.9M in improvements to reduce energy, operations and maintenance costs. Overton County will realize \$3.5 million dollars in energy, operations and maintenance savings, guaranteed over the 12-year agreement. Like Overton, Smith County School District will implement AdvancEd's STEM Program and energy efficiency upgrades, such as LED lighting, water conservation methods and energy management systems.

"Through our partnerships, we can help Lake County, Overton County and Smith County School Districts capture energy savings that can be reinvested to address deferred maintenance and improve district learning environments," said Ryan Ball, Performance Infrastructure™ Executive, for Johnson Controls. "These improvements will help further the mission of each school and enhance student and faculty comfort and productivity." Congratulations to Johnson Controls.

# TREEDC Vice President Pat Riley Named President of the Tennessee Association of Utility Districts



From left to right: Nevad, Bolivar Mayor Julian McTizic and TREEDC VP Pat Riley

Congratulations to TREEDC Vice President Pat
Riley for being selected as President of the
Tennessee Association of Utility Districts
(TAUD). TAUD serves over 500 utilities and
businesses across Tennessee. The mission of
TAUD is to provide the highest quality technical,
legal and operational support to assist its
members in delivering safe and efficient services
in the public interest. TAUD's staff consists of
water, wastewater and cross connection experts
that provide technical assistance.

### TREEDC Member Pellissippi State Launches New Program for Water, Wastewater Technology

TREEDC member Pellissippi State Community College recently launched a new water and wastewater technology program for aspiring operators.



The new program, approved by the Tennessee Board of Regents at the end of June, started this fall and will prepare students for careers in water and wastewater treatment plants. It is the first program of its kind in the state.

An advisory committee comprised of 11 utility representatives as well as staff from the Tennessee Association of Utility Districts and the state's Fleming Training Center worked with Pellissippi State to create a program that will meet the needs of water and wastewater treatment plants. Instructional materials align with those used for state-level certifications so that graduates will be prepared for the workforce.

Pellissippi State's Water Quality Technology program provides both operational theory and a strong practical background in mathematics, chemistry and aquatic sciences through coursework, site visits and a capstone project conducted at a local water or wastewater treatment facility. Congratulations, Pellissippi State!

## ABM Aviation, Clean Sweep, Other Fleets Certified as Tennessee Green Fleets for Emission Reductions Efforts



Awards ceremony at the Sustainable Transportation Forum & Expo

On Wednesday October 2, 2019, TREEDC member Tennessee Clean Fuels certified five new fleets for their emission reductions via the "Tennessee Green Fleets" Certification Program. The fleets including the BNA bus and shuttle operations fleet managed by ABM Aviation at the Nashville airport, Oak Ridge National Lab's (ORNL) fleet in Oak Ridge, Waste Management's compressed natural gas fleet operating out of Jackson, TN, the Tennessee State Parks' fleet of electric golf carts across the state at state golf courses, and Clean Sweep's fleet of propane-powered street sweepers in Chattanooga.

The fleets were recognized at the University of Tennessee, Knoxville during the fifth annual Sustainable Transportation Forum & Expo, which was managed by the Tennessee Department of Environment and Conservation (TDEC), Tennessee Department of Transportation (TDOT) and TNCleanFuels.

Two of the fleets utilize CNG as their primary alternative fuel (WM, ABM Aviation), two fleets have electric vehicles in their fleet (Tennessee Golf Trail, ORNL), one uses propane autogas as its primary alternative fuel (Clean Sweep), and one fleet utilizes both of the biofuels E85 ethanol and B20 biodiesel as its primary alternative fuel (ORNL).

#### TREEDC Member Chattanooga Plays Green Ball



Chattanooga Green Power Night

On August 23<sup>rd</sup>, The Chattanooga Lookouts, Cincinnati's Double-A farm club, held Green Power Night. In doing so, they'll become the first Minor League team to host a 100-percent carbon-neutral game. The Lookouts commemorated the occasion by suiting up in green jerseys, a distinct deviation from their normal red and white color scheme.

Green Power Night is the result of a partnership between the Lookouts, TREEDC Members Electric Power Board (EPB), City of Chattanooga and the Tennessee Valley Authority (TVA). The Lookouts' home of AT&T Field was powered via locally-generated solar energy credits. The solar energy comes from EPB's Solar Share, a community solar energy installation located on Chattanooga's Holtzclaw Avenue.

#### **TREEDC Member Knoxville Reduces Energy Emissions**

Knoxville recently reached its goal of reducing municipal greenhouse gas emissions by 20% from a 2005 baseline. Now, officials within the city's sustainability office are outlining new emission goals to reduce community emissions 80% by 2050. Erin Gill, Knoxville Sustainability Director has worked diligently to explore emission reduction opportunities.

As part of the 2050 planning process, the city is encouraging citizens to efficiently use transportation and electricity. From reducing food waste to switching to energy-efficient vehicles or appliances, city officials say Knoxvillians can reduce emissions and save money in the process. Click here to read the full story. Congratulations, Knoxville.



Erin Gill, Knoxville Sustainability Director

#### **TREEDC Member Franklin Announces Expansion**

Officials with the City of Franklin and Enexor BioEnergy recently announced the expansion of the renewable energy company's Franklin operations, a move expected to represent a \$5 million investment and yield approximately 50 jobs over the next two years.

Founded in 2015, the startup has developed a small-scale, renewable energy system that converts organic and biomass waste into clean electricity as well as hot and chilled water. This combined heating and power system has broad applications for commercial, industrial and institutional use, according to the release.

Enexor anticipates it will begin manufacturing its renewable bioenergy system by year's end in the facility, which it will lease. The company plans to export its systems to countries in Europe, Africa, Asia and Latin America.

#### **TDEC Launches Transit and Shuttle Bus Grant Program**

TDEC recently released its second solicitation for projects under the Volkswagen Diesel Settlement Environmental Mitigation Trust (VW Settlement EMT). The purpose of the EMT is to execute environmental mitigation projects that reduce emissions of nitrogen oxides. All terms that are both bolded and italicized below are defined in Appendix D-2 of the State Trust Agreement.



Under this solicitation, \$16 million in EMT funding is available for eligible **Class 4-8 Transit and Shuttle Bus** projects. The grant program, managed by the TDEC Office of Energy Programs, will provide financial assistance to public, non-profit, and private fleets in Tennessee that apply to replace eligible **Transit or Shuttle Buses** with any new **Alternate Fueled or All-Electric Transit or Shuttle Buses**. Additionally, fleets may also apply to **Repower Transit or Shuttle Buses** with new **All-Electric Transit or Shuttle Bus** drivetrains.

Transit or Shuttle Buses eligible for replacement or Repower include 2009 engine model year or older Class 4-8 diesel buses used for transporting people. For purposes of this solicitation, "Transit Buses" shall include all vehicles that provide public transportation, which shall mean regular and continuing shared-ride surface transportation services that are open to the general public. "Shuttle Buses" shall include vehicles that provide transportation services for one or more specific entities, intra-terminal or intra-facility transportation services, or mobility-on-demand services.

Applications and supporting documentation must be submitted electronically via the online TDEC Grants Management System, which may be accessed here: <a href="https://tdec.smartsimple.com/">https://tdec.smartsimple.com/</a>.

Applications must be received by 4:00 PM CT on Nov. 19, 2019. TDEC will announce awards after conducting a comprehensive review and evaluation of all complete and eligible grant applications. Grant contracting efforts will occur shortly thereafter. For more information, click here: <a href="https://transit.and-">Transit.and-</a> Shuttle Bus Grant Program.

For additional information on the VW Settlement, visit the TDEC website at <a href="http://www.tn.gov/environment/VWSettlement">http://www.tn.gov/environment/VWSettlement</a> and sign up for TDEC's email list <a href="http://www.tn.gov/environment/">http://www.tn.gov/environment/VWSettlement</a> and sign up for TDEC's email list <a href="http://www.tn.gov/environment/">http://www.tn.gov/environment/VWSettlement</a> and sign up for TDEC's email list <a href="http://www.tn.gov/environment/">http://www.tn.gov/environment/<a href="http://www.tn.gov/environment/">http://www.tn.gov/environment/<a href="http://www.tn.gov/environment/">http://www.tn.gov/environment/</a> and sign up for TDEC's email list <a href="http://www.tn.gov/environment/">http://www.tn.gov/environment/</a> and sign up for TDEC's email list <a href="http://www.tn.gov/environment/">http://www.tn.gov/environment/</a> and sign up for TDEC's email list <a href="http://www.tn.gov/environment/">http://www.tn.gov/environment/</a> and sign up for TDEC's email list <a href="http://www.tn.gov/environment/">http://www.tn.gov/environment/</a> and sign up for TDEC's email list <a href="http://www.tn.gov/environment/">http://www.tn.gov/environment/</a> and sign up for the total list of the sign up for the total list of the total list of the sign up for the total list of the sign up for the total list of the total list of the sign up for the total list of the sign up for the sign up

#### **REAP to Fund Rural Energy Projects**



The <u>Rural Energy for America Program (REAP)</u> provides loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems and energy efficiency improvements. This program helps improve American energy independence by both increasing the private sector supply of renewable energy and decreasing the demand for energy.

<u>Funding for Fiscal Year 2020 is available</u> in a variety of forms, each under its own application process and timeline. Grant applications are due **October 31, 2019 and March 31, 2020**. Applications for loan guarantees are accepted year-round.

Funds may be used for renewable energy systems, such as biomass (biodiesel and ethanol, anaerobic digesters, and solid fuels); geothermal for electric generation or direct use; hydropower below 30 MW; hydrogen; small and large wind generation; small and large solar generation; and ocean (tidal, current, thermal) generation. With regard to transportation, REAP funds may be used for solar-assisted electric vehicle charging stations. Funds may also be used for the purchase, installation, and construction of energy efficiency improvements, such as high efficiency heating, ventilation and air conditioning systems (HVAC); insulation; lighting; cooling or refrigeration units; doors and windows; electric, solar, or gravity pumps for sprinkler pivots; switching from a diesel to electric irrigation motor; and replacement of energy-inefficient equipment.

<u>Click here</u> to learn more and to apply for REAP financial assistance. <u>Click here</u> to find the REAP point of contact for your Tennessee region.

#### **2019 Tennessee Valley Solar Conference**

The Tennessee Solar Energy Industries Association (TenneSEIA) recently hosted the Tennessee Valley Solar Conference at the Embassy Suites in Franklin. The purpose of the conference was to bring together solar advocates and adopters to discuss strategies, market trends, and policies that impact the Tennessee Valley solar industry. This conference included topics like <u>TVA's utility-scale solar RFPs</u>, solar opportunities under new programs like the Renewable Investment Agreement pilots, and latest efforts on program design for the residential solar market. TREEDC was a proud partner at this conference.

### TREEDC Member TAEBC to Conduct "Opportunities in Energy" Event

You're invited to join the Tennessee Advanced Energy Business Council at its annual, year-end "Opportunities in Energy" event. Happening Thursday, December 5 beginning at Noon ET, TAEBC will welcome Verizon as a featured speaker as they present on what 5G means for energy. More details coming soon! RSVP here!

