



## TREEDC Newsletter October 2020



### University of Tennessee President Randy Boyd Visits TREEDC President/Dunlap Mayor Dwain Land



*UT President Randy Boyd Visits City of Dunlap*

UT President Randy Boyd recently visited TREEDC President Dwain Land and UT MTAS Executive Director Margaret Norris in Dunlap Tennessee. The purpose of the visit was to tour Dunlap's impressive solar facilities, LED lighting upgrades and newly installed battery operated generator at city hall. TREEDC Member Bronco Power Boost President Billy Whittaker demonstrated the state-of-art power booster which provided emergency power to the city's financial computers and wi-fi during power outage. Mayor Land gave President Boyd an overview of the mission of TREEDC and its origins in 2008.

President Boyd met Dunlap's city employees and also heard about the technical assistance that MTAS provides to cities across the state. President Boyd expressed his admiration to President Land and MTAS Executive Director Norris for their vision and attention to detail for communities across the state. For more pictures of President Boyd's visits, go to page 7.

### MTAS/TREEDC Intern Christy Haddad Assists City of Harriman



*From left to right Harriman City Manager Kevin Helms, MTAS/TREEDC Intern Christy Haddad and MTAS Management Consultant Warren Nevad*

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Christy Haddad, a graduate student in the University of Tennessee Masters of Public Policy and Administration, began her internship on September 8, 2020. Christy will be assisting Harriman City Manager Kevin Helms with personnel research and the development of job descriptions. She will also conduct research in best practices for municipal renewable energy programs. Christy earned her undergraduate degree from Political Science at UT. Throughout her undergraduate career, Christy has managed and maintained skills such as community outreach, polling and statistics data, field organizing, and public service. Christy proudly hails from New Jersey. Good Luck, Christy!

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## Reminder: 2020 Annual Conference



*From left to right: Nevad, 2019 TREEDC Environmental Legacy Award Winner Bill Penny and President/Dunlap Mayor Dwain Land*

The Tennessee Renewable Energy & Economic Development Council (TREEDC) will hold its 7<sup>th</sup> annual conference at Tennessee Tech University on December 10-11, 2020. The theme of our conference will be Post-Pandemic Economic Recovery for our cities, counties, businesses and colleges and universities. We will have panel presentations and discussions relating to economic recovery resources available to our members, COVID-19 assistance programs from our business members, and lessons learned from our mayors during the pandemic. Knox County Mayor Glenn Jacobs will provide the keynote address on December 11<sup>th</sup>.

We will also have our annual awards presentations, exhibitors and networking opportunities. We will also introduce you to our start-up companies that are part of the TREEDC network. Click here: [https://epay.tntech.edu/C20205\\_ustores/web/store\\_main.jsp?STOREID=61&SINGLESTORE=true](https://epay.tntech.edu/C20205_ustores/web/store_main.jsp?STOREID=61&SINGLESTORE=true) for registration to the annual conference.

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*Knox County Mayor Glenn Jacobs will provide keynote address at 2020 TREEDC Annual Conference*

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## TREEDC Member Lightwave Solar Installs Solar at Turnip Truck's New Store

Recently, West Nashville welcomed Turnip Truck (<http://theturniptruck.com/>) to the neighborhood. The locally owned full-service natural grocer opened its third store on Charlotte Avenue. Turnip Truck opened their first store in East Nashville in 2001 and their second store in the Gulch in 2010. Founder John Dyke and the team had always wanted to add solar to their business, and they decided to make it happen with the new project. TREEDC member Lightwave Solar assisted the new store's goal of reducing energy by at least 15 percent with the installation of 214 high efficiency solar panels strategically placed to avoid shading from walls and equipment. As a result of this installation, Turnip Truck expects to see annual savings of \$6,000 to its electric bills.



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## TREEDC Member Entegritty to Develop 375-kW Solar System for Eureka Springs, Arkansas



TREEDC Member Entegritty will install a 375-kW solar system in Carroll County, Arkansas for the City of Eureka Springs. In addition to the solar array, the energy services project also includes LED lighting upgrades for the police and fire stations, public works office, auditorium, wastewater treatment plant, and Lake Leatherwood Ballfield, as well as HVAC upgrades and water-saving measures. Under the terms of the agreement with Entegritty, Eureka Springs will purchase solar energy at a known rate for the next 25 years, resulting in lifetime savings of more than \$750,000.

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## Department of Energy Announces New Funding Opportunity

**ENERGY.GOV**

Office of  
**ENERGY EFFICIENCY &  
RENEWABLE ENERGY**

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The U.S. Department of Energy (DOE) recently announced the Buildings Energy Efficiency Frontiers & Innovation Technologies (BENEFIT) 2020 Funding Opportunity Announcement (FOA). This funding opportunity will provide up to \$80 million for projects that enhance energy demand flexibility across buildings and the electric power grid.

Residential and commercial buildings account for nearly 40% of the nation's total energy demand—more than America's industrial (32%) or transportation (28%) sectors. Buildings also account for roughly 74% of all electricity use in the United States and an even greater share of peak power demand in some regions.

The DOE Office of Energy Efficiency and Renewable Energy's (EERE) overall goal is to use energy more productively and efficiently. These projects will help improve the energy efficiency of America's building stock, which consists of over 119 million homes and 5.6 million commercial buildings—more than half of which were constructed before 1980.

To learn more about this FOA and to submit an application, please visit the [EERE Exchange](#). Applicants must submit a concept paper by 5:00 p.m. Eastern Time on Thursday, November 5 to be eligible to submit a full application. For more information on EERE's Building Technologies Office (BTO), visit the [BTO website](#).

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## TDEC Seeks Medium and Large Truck Projects Under Volkswagen Environmental Mitigation Trust

The Tennessee Department of Environment and Conservation (TDEC) has released its third 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 (NOx). All terms that are both bolded and italicized on this page are defined in Appendix D-2 of the State Trust Agreement.



Under this solicitation, \$6,177,588.45 in EMT funding is available for eligible **Class 4-7 Local Freight Truck** (Medium Truck) projects and \$4,118,392.30 in EMT funding is available for eligible **Class 8 Local Freight Truck and Port Drayage Truck** (Large Truck) projects. Entities may apply for funds for Medium Truck projects, Large Truck projects, or both Medium and Large Truck projects within the same application. The Grant Programs, 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 Medium and Large Trucks with new diesel, **Alternate Fueled**, or **All-Electric** trucks. Additionally, fleets may also apply to **Repower** Eligible Medium and Large Trucks with new diesel, **Alternate Fueled**, or **All-Electric** engines or drivetrains.

Eligible applicants are limited to one application each. Applications may include a variety of vehicle and/or fuel types. All terms and conditions of the program, including maximum number of replacements or **Repowers** and associated funding caps, are outlined in an application manual, accessible here: Medium and Large Truck Grant Programs Application Manual.

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Applications and supporting documentation must be submitted electronically via the TDEC online grants management system, which may be accessed here: <https://tdec.smartsimple.com/>. Applications must be received by **4 p.m. Central on October 30, 2020**. 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.

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## Rural Opportunities to Use Transportation for Economic Success

The U.S. Department of Transportation has developed an Applicant Toolkit to provide grant funding guidance under its Rural Opportunities to Use Transportation for Economic Success (ROUTES) initiative. This toolkit supports rural transportation providers in identifying and navigating U.S. DOT discretionary grant funding opportunities and provides user-friendly information and resources to support rural applicants' understanding of U.S. DOT discretionary grant programs, planning opportunities, programs, and funding processes. The ROUTES initiative is coordinated across key modal administrations, including the Federal Highway Administration, the Federal Transit Administration, the Federal Rail Administration, and the Federal Aviation Administration. To learn more about this initiative, visit <https://www.transportation.gov/rural>.



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## New Compressed Natural Gas (CNG) Instant Refueling Unit Will Reduce Infrastructure Barriers in US



*Natural gas compressor and Go-Flo instant fueling station*

Onboard Dynamics announced the launch of their new GoFill™ refueling system. It is an instant and nimble drying and dispensing unit for refueling CNG vehicles. The new product eliminates infrastructure barriers for fleet operators who immediately need an easy CNG station setup to refuel their commercial trucks.

The first unit rolled out in Oregon, as part of the NW Natural's free truck loan program. The GoFill will be providing natural gas for refueling CNG into a Hylion low-emission Class 8 truck for long and heavy hauls. The program provides fleet operators a short-term, no-cost demo period to experience the vehicle. The on-site, easy station set-up makes fueling convenient during the demo period.

The versatile design makes the GoFill a temporary or permanent installation. When paired with Onboard Dynamics' natural gas compressor, the GoFlo®, an instant fueling station can be set up that doesn't require electricity to operate. This makes rapid deployment possible in locations where infrastructure is challenging. The new GoFill, when packaged with the GoFlo, gives operators everything they need to begin converting their fleet to natural or renewable natural gas. It offers an easy-to-setup and take-down CNG fueling station that will create new opportunities for expanding NGV fleets or a quick fueling solution for ad hoc projects.

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## Washington County Cuts Ribbon on Five New Propane School Buses, Alternative Fuels Program

On August 26, 2020, [Washington County Schools](#) (WCS) celebrated the addition of five new propane-powered school buses to their fleet through a ribbon-cutting and “big check” presentation event. In late 2019, WCS applied for and won \$102,500 towards their efforts to replace older diesel buses through the Tennessee’s [“Reducing Diesel Emissions for a Healthier Tennessee” \(RDE4HT\) Rebate Program](#). The five new propane buses were received in June and July, checked and tested by WCS transportation staff and started use in recent weeks. Jonathan Overly of the East Tennessee Clean Fuels Coalition served as the event emcee.



In addition to the five propane school buses, the school system has won funding to replace another older diesel bus with a new all-electric one that should be received in September. WCS is interested in trying several new bus technologies to assess their operability, potential cost savings and emissions reductions.

The RDE4HT Rebate Program is state EPA funding that the Tennessee Department of Environment and Conservation (TDEC) manages and contracts with the East Tennessee Clean Fuels Coalition to operate and oversee. The Rebate Program releases a Request for Proposals in October each year prioritizing school districts for bus replacements, with an emphasis on alternative fuel buses over new diesel buses (although districts can also pursue new diesel buses).

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## TREEDC Member Tennessee Tech Unveils New DCEF Unit in Cookeville as Part of “EV Testbed” Project



Recently, TREEDC Member [Tennessee Technological University](#) (Tennessee Tech, or TTU) unveiled a new [Direct Current Fast Charging](#) (DCFC) station that will serve a [U.S. Department of Energy](#)-funded project started in 2019, as well as the greater Cookeville area. The unit was installed in a TTU parking lot along a busy corridor in Cookeville and will be the primary refueling site for an all-electric E450 shuttle bus that is part of the same DOE project. Lead project infrastructure partner [Seven States Power Corporation](#) managed the installation.

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TTU was awarded and started that three-year DOE project last year, towards “developing an Electrical Vehicle (EV) Testbed in the 14-county ‘Upper Cumberland’ region of Tennessee.” The region is a largely rural area and includes a number of economically distressed counties. The grant’s Principal Investigator, [Dr. Pinggen Chen](#), is an Assistant Professor in TTU’s Department of Mechanical Engineering and has brought a diverse group of about 10 partners into the project. Congratulations, Tennessee Tech.

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## TVA Will Install 40-MWh Lithium-Ion Energy Storage System

The Tennessee Valley Authority will be installing its first owned and operated energy storage system near an industrial complex in Vonore, Tennessee, about 35 miles southwest of Knoxville.

Known as the Vonore Battery Energy Storage System, the project will use 40 MWh of lithium-ion batteries. When the facility is operational in 2022, the batteries will provide high-quality power to local industrial customers served by Loudoun Utilities Board. The Vonore BESS will improve the quality of electrical service provided to local manufacturing facilities without building additional transmission lines.



The Vonore BESS will also serve as a test bed as TVA prepares to meet future energy needs. The Vonore BESS will be TVA’s first battery to go online, but not the only grid-scale storage system that TVA will use. In February, TVA announced a solar project in Lowndes County, Mississippi, for its Green Invest programs that will include 200 MWh of battery energy storage.

Both battery storage projects are part of the 2019 TVA Integrated Resource Plan, a comprehensive study that shapes how TVA will provide low-cost, reliable and clean energy for the next 20 years.

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## More Pictures from UT President Randy Boyd’s Visit to TREEDC President/ Dunlap Mayor Dwain Land



*From left to right President Boyd, Nevad, Billy Whittaker, Bronco Power Boost and TREEDC President/Dunlap Mayor Land*



*The University of Tennessee MTAS Director, Margaret Norris, and Randy Boyd*