



## TREEDC Newsletter July 2022



### TREEDC President Land appointed to Flood Mitigation Task Force



The Tennessee Emergency Management Agency (TEMA) and Tennessee Department of Environment and Conservation (TDEC) have created a *Waverly/Humphreys County Flood Recovery & Mitigation Task Force* to coordinate local, state and federal activities in support of communities impacted by the unprecedented flash flood of Aug. 21, 2021. TREEDC President Dwain Land was appointed by the state to involve local, state and federal officials with a focus on developing a road map to reduce flood risk and identifying ways to promote long-term recovery for the community. President Land is also leading TREEDC's efforts with the Statewide Tennessee Flood Ready Coalition ([Plan. Prepare. Protect. \(floodreadytn.com\)](https://www.floodreadytn.com))

*TREEDC Chairman/UT-Martin Chancellor Dr. Keith Carver and TREEDC President Dwain Land.*

### TREEDC Member City of Knoxville Installing Solar Atop Cal Johnson Recreation Center



*Knoxville,  
Tennessee  
Mayor Indya  
Kincannon*

---

TREEDC member City of Knoxville will soon be able to offset a portion of power that runs Cal Johnson Recreation Center with a planned solar array. The new 20.5-kilowatt (kW) array to be installed by Solar Alliance Southeast (SASE) will help the city work toward its goal of improving sustainability throughout the community.

City of Knoxville Sustainability Director Brian Blackmon said, “Increasing renewable energy production was a priority of Mayor Kincannon’s Climate Council and is a core part of my team’s emission reduction strategy. This turnkey project is a cost-effective way for the city to generate its own carbon-free electricity and reduce our utility costs.

SASE has been chosen by the City of Knoxville to design and install a system of 48 photovoltaic modules atop the popular recreation center at 507 Hall of Fame Drive. Cal Johnson Recreation Center houses one of the city’s largest community gymnasiums. It also includes a large multipurpose room, fitness center and computer access for visitors. The facility underwent a major renovation in 2020.

---

### **TREEDC Member Woodland Mills Completes Installation of Emergency Battery Operated/ Solar Generator for Civic Center**

On June 17, 2022, the Town of Woodland Mills installed 3 Bronco Power Boost Eco Solar Generators for the William R. Nanney Civic Center. Woodland Mills Mayor/TREEDC Member Joseph Lewis and the Board of Alderman recently converted the civic center to serve also as the designated community emergency shelter during natural disasters. These battery-operated generators will provide automatic backup power for the emergency shelter’s refrigerator, lighting, receptacles for cellphones and laptops and heat for citizens staying in the shelter during emergencies.

Earlier in January 2022, Woodland Mills became the first local government in Tennessee to adopt by resolution a TREEDC/MTAS Community Resiliency Program. This innovative pilot program consists of a three-tier approach for the city to prepare for natural disasters. The resolution calls for 100 percent of electricity is derived from renewable energy sources by the year 2035, calls for preparation of a climate action plan and sets a goal to equip all municipal, commercial and residential structures with a Bronco Power Boost Eco battery generation that does not emit emissions and works automatically during power outages.



*From left to right: Woodland Mills Mayor Joseph Lewis, Billy Whittaker, Bronco Power Boost as Woodland Mills Alderman Todd Wade*



*Nanney Civic Center Back-up Power for 15,000 square foot facility*

---

## TREEDC Member Bolivar Receives Community-Wide Assessment Grant

Bolivar Mayor/TREEDC West Tennessee Coordinator Mayor Julian McTizic recently announced on May 27<sup>th</sup> that the City of Bolivar had been awarded a Community-Wide Assessment Grant in the amount of \$500K from the United States Environmental Protection Agency (EPA). The grant projects, commonly referred to as Brownfield projects, can range from cleaning up buildings with asbestos or lead contamination, to assessing and cleaning up abandoned properties that once contained or managed hazardous chemicals. Once assessed and cleaned up, these properties can be redeveloped with productive uses such as grocery stores, affordable housing, health centers, museums, and parks.

The purpose of this grant is to conduct community-wide environmental assessments of sites in and around Bolivar. The former Armira Corporation land, known as the tannery building, will be the first site in Bolivar to be assessed. Future development of the area will depend largely upon the results of these assessments, which will include water and soil samples.

Mayor McTizic was appointed last year to serve on the EPA's Local Government Advisory Committee and currently vice-chairs the EPA's Small Community Advisory Board and serves as TREEDC's West Tennessee Coordinator.



*From left to right West Tennessee Coordinator/Bolivar Mayor Julian McTizic, Chattanooga Sustainability Director Erik Schmidt and University of Tennessee MTAS Management Consultant Warren Nevad at 2021 TML Conference*

---

## TREEDC Member Tennessee Tech University Planning New Wind Tunnell Research Facility



A new wind tunnel research facility will allow [Tennessee Tech University](#) researchers, students and industry partners to do hands-on, large-scale research that could shape developments in wind engineering, aerospace, electric vehicle research and other areas. “The tunnel and facilities will increase our ability and capacity in performance computing and will also enhance teaching,” said Tech President Phil Oldham. “We continue to increase our courses in this area. In addition to new opportunities for our students and faculty researchers, the wind tunnel is another of many efforts to focus on helping the Upper Cumberland. Rural areas and businesses can transform with Tech’s help.”

The Tennessee Tech Foundation plans to purchase approximately four acres of land in nearby Crossville along with existing structures that will provide teaching spaces and opportunities to work with physical models for which the campus does not otherwise have space.

Click [here](#) to learn more about the plans.

---

## Northeast State Community College Receives Funding to Integrate EV Technology Into Automotive Curriculum



The National Science Foundation (NSF) recently awarded Northeast State Community College a \$349,340 grant to integrate EV technology into the college’s current automotive programs. The project is funded by NSF’s Advanced Technological Education program that focuses on training in advanced technology fields that drive the nation’s economy. As envisioned, the College will work with industry partners to develop/adapt curriculum and train EV maintenance and repair technicians to meet employment needs statewide and beyond.

The College will also be a part of the National Electric Vehicle Consortium, a new diverse network of academic and industry experts funded through a separate NSF award to develop national standards for EV training across a variety of fields, including manufacturing, maintenance and repair, vehicle conversion, safety and standards, and emerging technological advances. According to NSF, there is an immediate shortage of skilled technical workers across almost every sector required to support the EV industry. Workforce projections estimate that the EV sector will add 250,000 to 500,000 high-paying jobs by 2030.

---

## TREEDC Member University of Tennessee Center for Industrial Launches Connex

The University of Tennessee Center for Industrial Services (UT CIS) and the [Tennessee Manufacturing Extension Partnership](#) that it operates have launched a new resource named “[CONNEX™ Tennessee](#)” in collaboration with the Tennessee Chamber of Commerce and Industry. Described as “a powerful online manufacturer-supplier database and connectivity platform provided as a no-cost resource for Tennessee manufacturers and suppliers,” CONNEX™ Tennessee is the only supply chain tool specifically promoting the capabilities of Tennessee’s manufacturing industry.

The cloud-based platform is intended to connect manufacturers, suppliers, and buyers in a searchable database to quickly post and respond to needs, visualize supply chain risk, search for qualified manufacturers, and discover new business opportunities. “CONNEX™ Tennessee’ puts you deep into Tennessee’s supply chain network and seamlessly integrates with the highly respected CONNEX™ Marketplace, sponsored by the National Association of Manufacturers (NAM),” UT CIS writes. Access to CONNEX™ Tennessee is complimentary for Tennessee manufacturers. More details on the program that officially launches later this month are available [here](#).



---

## Tennessee Partners Launch ‘Second Life’ Battery Storage Project as Electric Vehicle Adoption Grows

Nissan, Middle Tennessee Electric, the University of Tennessee-Oak Ridge Innovation Institute, Tennessee State University and Seven States Power Corporation are teaming up to launch an innovative second-life battery storage project.

The rapid transition to electric vehicles and the escalating need for energy storage is driving demand for innovative approaches to repurposing used electric vehicle (EV) batteries to enhance the resilience of America’s electric grid. This partnership seeks to build a solution that can be helpful locally and modeled globally.

Used battery packs from [Nissan](#)’s all-electric LEAF – the first mass-produced EV in the U.S. - will be used to construct two Battery Energy Storage Systems (BESS) at Nissan America’s headquarters in Franklin, Tenn. The retrieved packs will undergo testing and be assembled in modular, scalable storage systems. The BESS systems will provide supplemental power supply and peak demand shaving\* for Nissan’s facilities and support the Middle Tennessee electric grid.

---

This project will repurpose Nissan’s used EV batteries, giving them a “second life” as a BESS for the Nissan electrical system. The group will also research how to best reduce energy usage, improve battery life, optimize energy distribution within the system and into the grid, house and scale the packs and system, in addition, make it easy and safe for consumers to connect to the electric grid.

The project leverages a circular process model. Batteries lose capacity to fully charge over time. When EV batteries reach that point, the battery’s performance is no longer ideal for use in the vehicle and the battery is replaced. These used batteries have an opportunity to be repurposed in other long-life applications.

In addition to repurposing EV batteries, the partners will explore how best to package the battery cells to improve the ease of maintenance and to test the functionality and connectivity of control systems and building maintenance systems.

---

### Tennessee Smart Mobility Expo

TennSMART will hold the inaugural Tennessee Smart Mobility Expo from **August 4-6** at the Music City Center in Nashville. Attendees will hear from industry leaders who are charting the future of smart mobility innovations. The three-day event will feature roundtable discussions, panels, and on-site technology showcases from major automotive manufacturers, transportation and logistics companies, and research institutions. Additionally, those who attend will have dedicated time to network with industry colleagues. The day following the conference will feature a public showcase of transportation technologies being researched, developed, and deployed in Tennessee. Registration may be accessed here: <https://www.tnsmartmobilityexpo.com/>

---

### TenneSEIA Hosts Upcoming Annual Solar and Energy Storage Conference

TREEDC is a proud partner of the upcoming TenneSEIA Tennessee Valley Solar and Energy Storage Conference on October 26-27<sup>th</sup> at the Downtown Knoxville Hilton. The focus of the Tennessee Valley Solar Conference is to bring together people who are interested in growing solar business opportunities in the Tennessee Valley to discuss strategies, market trends, and policies that impact the solar industry. Attendees will participate in in-depth and forward-looking discussions on TVA policy and processes and evolving technical opportunities facing the industry in the Tennessee Valley region. Registration may be accessed here; [Conference – TenneSEIA Solar Association](#)



---

## U.S. DOT and DOE Propose New Standards for National EV Charging Network

The White House announced new steps to meet its goal to build out the first-ever national network of 500,000 electric vehicle (EV) chargers along America’s highways and in communities, a key piece of the Bipartisan Infrastructure Law. U.S. DOT, in partnership with U.S. DOE, is proposing new standards to make charging EVs convenient, reliable, and affordable for all Americans, including when driving long distances. The new standards aim to ensure everyone can use the network –no matter the location or the car driven.

The proposed standards support federal priorities to lower costs for families, create good-paying jobs, and combat climate change. Actions to support this EV charging network will spur good-paying jobs with strong workforce requirements for America’s steelworkers, electrical workers, and laborers to build, install, and maintain the network. Additionally, making chargers and EVs more accessible will help tackle the climate crisis – reducing emissions, improving air quality, and advancing the Justice40 Initiative.

This news follows the announcement earlier this year of nearly \$5 billion that will be made available to states over the next five years under the new National Electric Vehicle Infrastructure (NEVI) Formula Program, established by President Biden’s Bipartisan Infrastructure Law, to build out a national EV charging network. Click here to access the full Notice of Proposed Rulemaking (NPRM).



---

## TVA to Partner on All-Electric Rideshare Pilot Program

TVA has announced a partnership with Lyft, the Nashville Electric Service, and Middle Tennessee Electric to initiate an all-electric rideshare program in the Middle Tennessee market. This experiment is designed to support existing rideshare EV drivers in bringing new value, fun, and EV education to their electric rides, while letting riders (often in an EV for the first time) engage in a unique experience that they will want to repeat and share with others.

The project team is currently in the process of prototyping the in-car experiences with Lyft, after which the program will be rolled out in-market with the rideshare company’s EV drivers. The team will continually explore ways to improve the experience with no new effort on the part of the drivers. Click here to learn more about TVA’s efforts in the transportation electrification space.





---

## IEA Global EV Outlook 2022

The International Energy Agency (IEA) recently released the [Global EV Outlook 2022 report](#). This report is an annual publication that identifies and discusses recent developments in electric mobility across the globe. Combining historical analysis with projections to 2030, the report examines key areas of interest such as EV and charging infrastructure deployment, energy use, CO2 emissions, battery demand, and related policy developments. The report includes policy recommendations that incorporate lessons learned from leading markets to inform policy makers and stakeholders with regard to policy frameworks and market systems for EV adoption.

This edition features an in-depth assessment of the EV battery supply chain and reviews government targets and strategies in this area. It assesses charging infrastructure development targets in key regions. A section on the integration of EVs into the distribution grid is also included. Finally, the report makes available two online tools: the Global EV Data Explorer and Global EV Policy Explorer, which allow users to interactively explore EV statistics and projections as well as policy measures worldwide.

The 2022 report found that nearly 10% of global car sales in 2021 were electric, a 400% increase from 2019 market share. It also detailed how EVs are set to play a key role for road transportation to reduce emissions in line with international climate goals.

