TREEDC Newsletter
January 2023

TREDC Hosts Annual Conference/ Awards Reception

From left to rick: Former Cookeville Mayor Ricky Shelton, TREEDC President Dwain Land, University of Tennessee MTAS Executive Director Margaret Norris and TREEDC Chairman/University of Tennessee Martin Chancellor Dr. Keith Carver at the 2022 TREEDC Annual Conference at Tennessee Tech University

On December 1, 2022, the Tennessee Renewable Energy & Economic Development Council (TREEDC) partnered with Tennessee Tech University (TTU) and the Energy Services Coalition (ESC) to host its annual conference and awards reception in Cookeville, Tennessee. The theme of the conference was "Creating New Energy and Economic Opportunities". It brought together leadership from The University of Tennessee (UT) Municipal Technical Advisory Service (MTAS), United States Department of Agriculture (USDA) Rural Development, UT-Martin, Tennessee Tech University, and the Tennessee Valley Authority (TVA), Presentations were given regarding local government opportunities in clean energy resulting from the Inflation Reduction Act, and updates on Tennessee Flood Ready, the MTAS Tennessee Retail Alliance, and TVA's economic development activities. CMTA discussed net zero energy schools. Wilmot reviewed its solar developmental activities in Nashville. Performance Services sponsored the reception.

Attendees introduced themselves and shared progress regarding their projects. TREEDC appreciates folks attending our conference and we enjoyed the comraderies among our stakeholders. After the presentations and networking session, TREEDC President Dwain Land and TREEDC Chairman Dr. Keith Carver presented the annual awards.

The following individuals received awards for their hard work in 2022 and support of TREEDC during 2022:

1) TREEDC Environmental Legacy Award Ricky Shelton
2) TREEDC Excellence in Community Resiliency Woodland Mills Mayor Joseph Lewis
3) TREEDC Excellence in Innovation: Billy Whittaker, Bronco Power Boost
4) TREEDC Champion: John Werner, Cumberland Securities
5) TREEDC Champion: Emily Bryan, Cooley Public Strategies
6) TREEDC Excellence in Community Development Dunlap Commissioner Becky Card

Dr. Dennis Tennant, Tennessee Tech University and Brian Stone, Performance Services review the Inflation Reduction Act

TREEDC President Land and 2022 TREEDC Environmental Legacy Award Winner Former Cookeville Mayor Ricky Shelton

TREEDC Launches 2023 Membership Campaign

TREEDC Chairman/UT-Martin Chancellor Dr. Keith Carver and MTAS Consultant/TREEDC Director Warren Nevad

TREEDC Chairman/University of Tennessee at Martin Chancellor Dr. Keith Carver and TREEDC President/Dunlap Mayor Dwain Land have officially launched our 2023 membership campaign. The TREEDC board has kept the 2023 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 business matchmaking program.

During 2022, TREEDC embarked on a new strategic partnership with the Energy Services Coalition (ESC) to help match local community energy needs with appropriate renewable energy technologies to reduce costs and emissions. TREEDC and ESC promoted Commercial Property Assessed Clean Energy (C-PACE) as a financing mechanism used by local governments to advance renewable energy. In 2023, TREEDC is poised to assist our members with the implementation of funding opportunities generated from the recent passage of the Bipartisan Infrastructure and Inflation Reduction Acts of 2022. This year marks the 15th anniversary of TREEDC's mission to connect economic development with clean energy across Tennessee.

TREEDC is a 501 C 3 charitable organization. For more information regarding 2023 membership opportunities click http://treedc.us/membership/index.html

TREEDC and TN Flood Ready Hosts Community Resilience Roundtables in Hamilton and Putnam Counties

Hamilton County Roundtable hosted by State Senator Bo Watson and Representative Greg Vital

Recently, TREEDC partnered with TN Flood Ready to host two roundtables in Chattanooga and Cookeville. TREEDC is grateful for the leadership of State Senator Bo Watson and State Representatives Ryan Williams and Greg Vital for their leadership in moderating these roundtables. These state leaders gathered local and regional leaders from across their districts and the surrounding region to discuss the challenges we face from flooding in our communities. The goal of the TN Flood Ready Coalition is to improve flood resilience across Tennessee. During these roundtables, attendees discussed how more intense and frequent rainfalls are straining infrastructure.

Discussion also involved how we must target specific mitigation projects, secure funding, and then put those projects in place to provide additional resources to communities before disasters strike.

Key Takeaways

- Flooding is a regional issue and finding solutions will require a watershed-based approach.
- While flooding is a universal problem, the causes and solutions vary. We should avoid a one-size-fits-all solution and instead leverage local knowledge to inform regional solutions.
- Public infrastructure, businesses, and homes are all at risk across the region. It is urgent that we work to protect flood-prone areas before the next big flood.
- Smaller communities lack the staff capacity and expertise to work through grant applications, deal with regulations and red tape, coordinate with other jurisdictions, and complete project implementation. Support is needed to empower these communities to solve their flooding problems.
- Smaller communities struggle to find the funding and resources necessary to access grants or fund projects on their own. This is a question of staffing as well as insufficient funds for the local match many grants require.
- Other states have found ways to support communities through statewide planning, revolving loan funds, and clearing houses for grant opportunities.
- A “Tennessee Solution” to flood resilience is needed to protect our communities and save millions of taxpayer dollars in recovery.

If there is a point you would like to add to the takeaways, please let me know. We will be in touch about next steps as we work toward improved flood resilience for Tennessee. If you'd like to learn more about Flood Ready Tennessee and join the coalition, you can do so at FloodReadyTN.com.

Putnam County Roundtable hosted by Representative Ryan Williams

Woodland Mills Wins Inagural Excellence in Community Resiliency Award

Congratulations to TREEDC Member Mayor Joseph Lewis of Woodland Mills for being awarded the TREEDC Inaugural Award in Community Resiliency at Woodland Mills Board meeting on January 9, 2023. The town 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. The city used American Rescue Funds to install state – of- the-art generators at the Civic Center.

From left to right: MTAS Consultant Warren Nevad presents Woodland Mills Mayor Joseph Lewis

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.

TREEDC Member City of Chattanooga Recognized for Energy Efficiency Achievements

The Federal Government recently recognized Better Buildings Challenge partner City of Chattanooga for energy efficiency leadership across more than 200 of its municipal facilities.

Over a period of several decades, the City of Chattanooga has made significant progress in reversing the negative environmental impacts of local industry. As part of this work, the city joined the Better Buildings Challenge in 2015, committing to reduce energy intensity by 20%. After reaching this goal five years ahead of schedule in 2019, Chattanooga has since achieved 36% energy intensity savings across two million square feet of building space from a 2013 baseline.

The City's Moccasin Bend Environmental Campus exemplifies this ongoing commitment to efficiency. The campus manages and treats wastewater for six counties and is the largest energy consumer of the city's owned and operated buildings. Beginning in 2018, the Moccasin Bend Environmental Campus underwent several structural improvements to ensure long-term effective wastewater treatment for its growing population and increase resilience in times of extreme events.

To improve the facility's efficiency and performance, the City of Chattanooga installed a 10-acre solar array, upgraded the facility's equalization blower, retrofitted the building with LED lighting, improved water systems, and installed variable frequency drive controls. Chattanooga's holistic approach has resulted in 27% energy and 24% water savings annually at the campus, ultimately saving $1.4 million per year. Congratulations, Chattanooga.

TREEDC Member Maryville College Receives EPA Grant to Provide Environmental Sustainability Kits to Schools

Maryville College will use a $100,000 grant from U.S. EPA to provide reusable kits for fourth graders in area schools to learn about the environment and sustainability in the region. The college expects to reach about 960 students, with boxes going to local elementary and middle schools.

The "Out of the Box Community Sustainability" packages will focus primarily on air and water quality issues specific to East Tennessee. Expected to be about the size of a file box, each unit is designed to be ready to use, with a lesson plan and instructions for engaging activities. Within the larger topics of air and water quality, the kits will delve into subjects such as the impacts of increased sedimentation into water systems, human health impacts from air quality, food security, and climate change. The activities also are designed to develop students' critical thinking skills, such as looking at the sustainable ways of doing things that have disappeared because of convenience, such as clothes dryers replacing clotheslines in the mid-20th century, or the impact of buying groceries that are shipped long distances.

U.S. DOE Annouces Funding for Clean Energy Improvements to Lower Energy Costs for K-12 Schools

U.S. DOE recently announced first-of-its-kind investments to make clean energy improvements at K-12 public schools. Funds will position school districts to make upgrades that will lower facilities' energy costs and foster healthier learning environments for students. Schools can now apply for the first round of the Renew America's Schools grant, up to $80 million of the $500 million program, to make energy improvements in the highest-need districts across the country. Eligible uses of funding include energy efficiency upgrades (envelope, HVAC, lighting, controls, etc.), ventilation, renewable energy, alternative fuel vehicles, and alternative fuel vehicle infrastructure improvements. Full applications will be due **April 21, 2023**. Click here to begin the application process.

The Energy Champions Leading the Advancement of Sustainable Schools Prize (Energy CLASS Prize) program is also accepting applications for up to 25 local education agencies to receive $100,000 to staff and train select administration and facilities personnel as energy managers. Applications are due **February 28, 2023 at 4:00 PM Central**.

U.S. DOE Announces $45 Million to Support Resilient and Efficient Building Energy Codes

U.S. DOE recently announced $45 million in competitive grants to help states and partnering organizations implement updated building energy codes and lower energy bills for American families and businesses. This funding is the first installment of a 5-year, $225 million program established by the Bipartisan Infrastructure Law to support building energy code adoption, training, and technical assistance at the state and local level.

Applicants may now apply for the Resilient and Efficient Codes Implementation Program's first $45 million disbursement, which was announced earlier this year in a Notice of Intent and shaped by responses to a Request for Information. Applicants must include a state agency to be eligible, and they may apply in strategic partnership with other organizations, such as state or local building departments, builders, contractors, architects, engineers, other design and construction professionals, academia, research, trade organizations, consumer advocates, regional energy efficiency organizations, and other stakeholder interests who play an important role supporting the successful implementation of building codes.

To apply for this Funding Opportunity Announcement, applicants must register with and submit application materials through EERE Exchange here. Applicants must submit a concept paper by **January 31, 2023 at 5:00 PM Eastern**, and full applications are due **March 27, 2023**.

Benefit 2022/2023 Funding

The Office of Energy Efficiency and Renewable Energy (EERE) is issuing, on behalf of the Building Technologies Office (BTO), a Funding Opportunity Announcement (FOA) titled "Buildings Energy Efficiency Frontiers & Innovation Technologies (BENEFIT) – 2022/2023".

The 2022/2023 BENEFIT FOA will invest up to $15.35M - $45.2M across 5 topic areas to allow all interested parties to research and develop high-impact, cost-effective technologies and practices that will reduce carbon emissions, improve flexibility and resilience, as well as lower energy costs.

- **Topic 1**: Heating, Ventilation, and Air Conditioning and Water Heating: Technologies with improved materials, components, equipment design and engineering, lower cost manufacturing processes, and easier installation.

- **Topic 2**: Thermal Energy Storage (TES): Development and validation of next generation plug-and-play TES products with improved cost and performance and ease of installation to accelerate adoption of TES in HVAC applications.
- **Topic 3**: Battery Energy Storage Systems (BESS): Development, validation, and demonstration of product innovations that reduce the cost of BESS integration, improve the coordination between distributed BESS and the electrical grid, as well as help meet building decarbonization targets.
- **Topic 4**: Plug Loads/Lighting: Integration of plug load controls with connected lighting systems in commercial buildings with minimal cost and complexity to support building electrification.
- **Topic 5**: Opaque Building Envelope: Development, validation, and demonstration of high-impact, affordable, opaque building envelope retrofit and diagnostic technologies.

BTO has compiled a teaming partner list to facilitate widespread participation in this FOA. This list allows organizations with expertise in the topics to express their interest to potential applicants and to explore potential partnerships. Concept papers are due **February 7, 2023 by 5:00 PM Eastern**, and full applications are due **April 5, 2023**. Click here to access the full FOA.

2022 Energy Efficiency Impact Report

ACEEE
American Council for an Energy-Efficient Economy

Over the decades, energy efficiency has transformed the way we use energy and has helped build a cleaner economy that is more secure, more affordable, and more productive. After several years of slowed progress, recent federal funding provides the opportunity for states, local governments, businesses, and households to further investments in energy efficiency. Given the accelerating urgency of climate change and the race to improve U.S. productivity and competitiveness in a quickly evolving international market, we need to fully capitalize on the expansive, diverse, affordable, and innovative energy efficiency toolkit.

Using 59 indicators, the Energy Efficiency Impact Report tracks progress in a variety of sectors, including utilities, buildings, industry, and transportation and examines how policy and other tools are used to incentivize energy efficiency.