

TREEDC Annual Report 2014

Tennessee Renewable
Energy and Economic
Development
Council



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Elementary School Forums

TREEDC held its first 2014 elementary school forum at the W.E.B. Du Bois Consortium Elementary School in Memphis on February 7, 2014. Over 100 elementary school students heard presentations about compressed natural gas from TREEDC Board Member/Gibson County Utilities General Manager Pat Riley and energy conservation from Brooke Barton of Tennessee Department of Environment & Conservation. School Principal Audrey Hudson and Memphis Councilman Dr. Edmund Ford, Jr. organized the event. Students also learned about water conservation, energy efficiency and solar energy. TREEDC plans to establish an Energy Allowance program for students and their parents as well as conducting a renewable energy essay contest at the school.





Milan Middle School students competed in a state-wide essay writing. Pictured from left, TREEDC Board Member Pat Riley, Milan Chamber Director Julie Allen Burke, Kate Allen Johnson, Ms. Jana Coleman, Laci Bartholomew, Jaquelyn Zarate, Steven Ballard, Michael Schaeffer, Jackson Nelson, Sam Young, Brian Torres and MMS Principal Sam Rhodes.

Essay Contest

As one of more than 25 state consortia nationwide, TEICC's mission is to build awareness of energy careers through strategic, statewide partnerships. The collaborative efforts emphasize STEM educational pathways, which lead to high-demand career opportunities. These are careers that require post-secondary training offered through apprenticeships that can result in diplomas, certifications, associate degrees or advanced degrees.

Participating students described the energy sectors that hire those positions and which career(s), if any, she/he might be interested in and why. The students were provided a video overview at the [Get into Energy](#) website. Students then viewed the [Energy Careers section](#) and reviewed the various energy careers such as Line worker, Technician, Power Plant Operator, Pipefitter or Engineer.

First, second and third place prizes were awarded in each of the three regions of the state.

The regional "Careers in Energy Week" initiative for 2014 is the initial phase of an on-going project. TEICC, TREEDC and partners plan to launch another round in other counties all across Tennessee. Eventually, these events are intended to culminate in a statewide proclamation by the Governor for "Careers in Energy Week."



Forums and Conferences



TREEDC Conference at Hiwassee College

The Mayors of TREEDC held their first 2014 Community Energy forum at Hiwassee College in April. TREEDC 2014 Founding members Hiwassee College, Gibson County Utility District and the University of Tennessee's Institute for Public Service sponsored this free community outreach forum for Hiwassee College students, staff and Monroe County area clean energy stakeholders. Presentations consisted of best campus practices of renewable energy and the State of Tennessee Energy initiatives. The history of TREEDC, TREEDC successes, renewable energy activities, and the TREEDC International Exchange program were discussed at this forum. There were also many presentations about various energy efficiency initiatives. This forum was a success!

Asian Clean Energy Forum, June 2014

On June 20, 2014, TREEDC International Affairs Director Doug Jackson gave a presentation about the TREEDC International work before several hundred attendees at the 9th Annual Asia Clean Energy Forum in Manila, Philippines. This forum was sponsored by the Asian Development Bank, U.S AID to International Development and the World Energy Council. Jackson, a retired TVA official participated in the International Collaboration on Energy Technology Development and Deployment Panel. He was joined on the panel with representatives from the International Energy Agency and Meralco, the Philippines' largest distributor of electrical power. The TREEDC presentation provided a chronology of the International Exchange Program. Jackson also provided a review of the public-private approach by TREEDC to advance renewables in the Philippines through its educational outreach, social responsibility and project assistance for its Tennessee members in the Philippines.



University of Tennessee
President Emeritus Joe
Johnson speaks at
Hiwassee College

TREEDC International Conference, October 2014

Filipino delegates representing local governments, academia, and the media joined with TREEDC members in an International Conference from October 10-17, 2014. The conference showcased a tour of renewable energy facilities and sharing best practices. During the conference, Philippine and Tennessee renewable energy stakeholders developed an action plan to help each other advance renewable energy by creating more educational awareness and initiating socially responsible programs that facilitate energy efficiency, biomass, and solar related projects. There were 90 participants and all of the powerpoint presentations from the conference are available on www.treedc.us.

TREEDC proudly welcomed the following members of the Filipino Delegation:

- *Naga City Philippines Mayor John Bongat*
- *Maritime Academy of Asia and the Pacific President VADM Eduardo Ma. R. Santos AFP(Ret)*
- *Philippine Association of Extension Program Implementers, Inc President Dr. Angelica M. Baylon, Maritime Academy of Asia and the Pacific*
- *University of Pasig City Philippines President Dr. Amihan April Alcazar*
- *Attorney Richard Anthony D. Alcazar (Tan Acut Lopez and Pison Law Offices)*
- *Technological University of the Philippines President Dr. Adora S. Pili*
- *Technological University of the Philippines Director of international Linkages Dr. Gina Lapaz-Basa*
- *Philippine Department of Science and Technology Regional Director Dr. Victor Mariano*
- *Philippine Electronics and Communication Institute of Technology President Romeo Zerrudo*
- *Philippines GNN News Network General Manager/Central Bicol State Univ. Fred Perdon*
- *Philippine Normal University Vice President Rebecca C. Nueva Espana*
- *Philippine Normal University Executive Director Marites C. Geronimo*
- *Polytechnic University of the Philippines Vice President Dr. Manuel Muhi*
- *TREEDC International Director Douglas Jackson*



Tennessee Tech VP Dr. Bharat Soni addresses the audience of the TREEDC Conference



Members of the Filipino Delegation at the TREEDC Conference

International Exchange Program

Tennesseans Visit the Philippines

The TREEDC International Exchange program was very successful in 2014. Members from Philippine universities, private businesses, and local governments visited Tennessee in October for the inaugural TREEDC Conference at Tennessee Technological University, discussed above. A group from TREEDC, the University of Tennessee, and Tennessee Technological University visited the Philippines in February, June, and December to attend several conventions and summits about green energy in the Philippines. 2014 was a great year for the TREEDC International Exchange Program.

June Visit to the Philippines

During June 2014, TREEDC International Affairs Director Douglas Jackson and Warren Nevad, TREEDC Director/University of Tennessee MTAS Consultant toured the Pasig City University and Technological University of the Philippines campuses. The purpose of the visits was to follow-up on prior initiatives and to invite presenters for the TREEDC International Conference to be held at Tennessee Tech University from October 12 – 14, 2014.



TREEDC Director Warren Nevad visits Pasig City University



Doug Jackson and Warren Nevad enjoying the Philippines

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Member Projects and Awards

TREEDC welcomed several new members in 2014. E3 Integrated Solutions Inc., the Chattanooga Lookouts, and NORESO joined the TREEDC family.

E3 Integrated Solutions Inc. joined TREEDC as a Founding Gold Member. The firm participated with TREEDC in the International Exchange Program in the Philippines. They provide sustainable, clean, and renewable energy services to direct municipalities and commercial customers across the Philippines and South East Asia. E3 Integrated Solutions is at the forefront of developing local renewable energy recovery plants for all types of organic waste recovery.

The Chattanooga Lookouts are a Double-A affiliate of the Dodgers Major League Team. In May 2014, the Lookouts hosted a "Go Green Night," which was a great success!

NORESCO is one of the largest and most experienced Energy Services Companies in the world and has helped hundreds of clients leverage energy savings to fund infrastructure upgrades. NORESCO offers a full suite of sustainable and renewable design consulting services and as a unit of United Technologies, has guaranteed more than \$3 billion in savings at more than 7,000 sites worldwide. NORESCO is opening up operations in Tennessee this summer.



Knoxville Wins Statewide Sustainability Award

In June, Knoxville was awarded an Excellence in Green Leadership Award by the Tennessee Municipal League. In 2013, Knoxville updated their Energy and Sustainability Work Plan and Emissions Inventory, won an IBM Smarter Cities Challenge technical assistance grant and mobilizing a community-wide effort to improve energy efficiency services for Knoxville's lower income residents, partnered with the University of Tennessee to launch ZipCar, working with TREEDC on educational outreach activities, hiring an Alternative Transportation Engineer, expanding recycling facilities, launching recycling at city parks, and creating a new educational website on e-waste. We are very proud of the City of Knoxville and their sustainability work!



From left to right- TREEDC Board Member/Memphis Councilman Dr. Edmund Ford, Jr, Energy Fund Manager Dr. Olin Ivey, Warren Nevad, MTAS/TREEDC and Vivian Wilhoite, Tennessee Regulatory Authority

TML Celebrates 75 Years

Congratulations to the Tennessee Municipal League (TML) for celebrating 75 years in June. TML celebrated by hosting their annual conference in Chattanooga in which several hundred local officials from across the state participated.



Gibson County Utility Breaks Ground on New Energy Complex

In September 2014, the Gibson County Utility District Board of Commissioners broke ground on the Gibson County Energy Complex. The \$1.5 million natural gas fueling station is located in Trenton. This energy complex will be the greenest natural gas refueling station in Tennessee.

Ducktown Wins EPA Award

In April 2014, Ducktown, Tennessee was presented with the Environmental Protection Agency's Clean Air Excellence Awards. This award recognizes 9 projects and one individual from across the United States for their work on clean air and climate initiatives. Ducktown was awarded with a Community Action Award for its development of a 28- kilowatt solar photovoltaic system. The project has created \$9,000 in revenue, which offsets approximately 45% of the energy costs. The system has avoided more than 35 tons of greenhouse gases. Congratulations to Ducktown, Tennessee!



Collierville wins "Best Main Street in America"

Parade Magazine awarded Collierville, Tennessee as the winner of "America's Best Main Street." Parade Magazine says, "In the summer, neighbors gather on their Collierville square, a picturesque park at the heart of the community, for free concerts. Local pride springs from the town's rich history but also its promising future: Since the 1990s, the population has tripled as corporations like FedEx have moved to town, and the local economy is still thriving. But the success of downtown is not accident. Credit also goes to a roster of programs that promote smart development." Congratulations to the Town of Collierville!



TREEDC Recognized at UEDA

The University of Tennessee Institute for Public Service (IPS) and TREEDC earned a nomination as a finalist for the University Economic Development Association (UEDA) award of Leadership and Collaboration. Each year, universities and organizations across North America submit nominations for innovative programs that focus on developing economic prosperity in their communities and beyond. A panel of university and economic development professionals have chosen 19 finalists from the group of nominated projects. IPS and TREEDC were recognized for their innovative international exchange program, which builds a bridge of economic development and educational opportunities for stakeholders in Tennessee and the Philippines. Warren Nevad, the University of Tennessee MTAS Consultant and TREEDC Director and Ducktown Mayor James Talley, TREEDC President, gave a presentation in Santa Fe, New Mexico in September about TREEDC and the International Exchange Program.

The UEDA awards are designed to help accelerate these programs by recognizing cutting edge initiatives, and to promote their adoption by other universities and communities. Program categories include: Community Connected Campuses, Innovation and Entrepreneurship, Leadership and Collaboration, Research and Analysis, Talent Development.

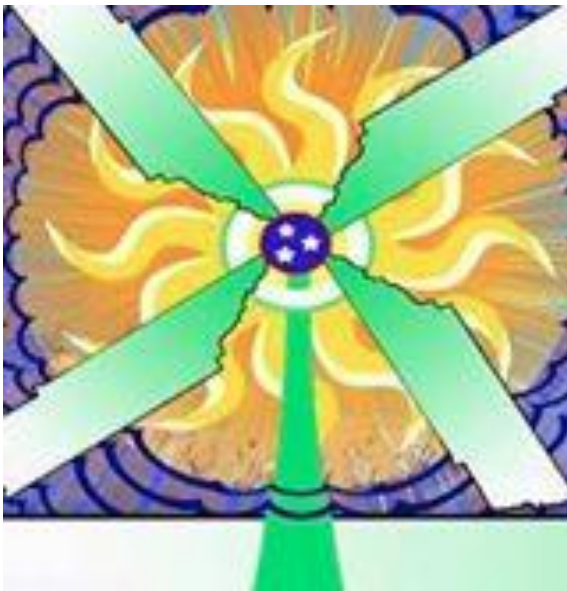


UT-IPS Assistant Vice President Chuck Shoopman and TREEDC President James Talley at the UEDA Annual Summit



Pathway Lending Awarded Grant to Expand Tennessee Business

The United States Department of Treasury's Community Development Financial Institutions Fund (CDFI) awarded \$1.75 million to Pathway Lending to expand support of Tennessee business. The CDFI awards grants across the county to increase their lending and investments in low-income and economically distressed communities. Pathway Lending is one of just 38 business loan funds to be awarded in FY 2014 and is the only recipient in Tennessee. Pathway Lending will be able to expand their capacity to provide affordable financial products and services to small and growing businesses in Tennessee using this award.



Jackson and Tennant Awarded at TREEDC Conference

During the TREEDC International Conference with Tennessee Tech University, Dr. Dennis Tennant and Douglas Jackson were awarded the TREEDC Champion Award. Dr. Dennis Tennant is the TTU Interim External Relations Director. Dr. Tennant was given this award for his hard work organizing the TREEDC International Conference, for his assistance in establishing the International Exchange Program in the Philippines and for helping coordinate the statewide student career essay-writing contest with TREEDC Board Member Pat Riley. Douglas Jackson is the TREEDC International Affairs Director and was presented with the Champion Award for his efforts partnering with Philippine universities and cities in 2014. He has also helped coordinate TREEDC relief efforts for typhoon victims in Tacloban. Congratulations to Dr. Dennis and Doug!

Memphis and Shelby County Receive GOLD in Valley Sustainable Communities Program

TREEDC member Memphis-Shelby County has been designated as a Valley Sustainable GOLD Community in Tennessee Valley Authority's (TVA) economic development program. The goal of this program is to document a community's assets and increase the likelihood that they will be viewed as progressive and competitive by companies looking to invest in new or expanding locations. Memphis-Shelby County has develop a Sustainability Shelby Plan, a Mid-South Regional Greenprint, increased greenways and bike lanes, and reduced energy use in government buildings.

TREEDC Members

Government Sector

Local Governments:

- Alexandria
- Algood
- Allardt
- Bartlett
- Baxter
- Benton
- Bledsoe County
- Brentwood
- Byrdstown
- Celina
- Chattanooga
- Clarksville
- Clay County
- Cleveland
- Collierville
- Copperhill
- Coppertown
- Covington
- Crab Orchard
- Crossville
- Dayton
- Decatur
- Ducktown
- Dunlap
- East Ridge
- Englewood
- Erwin
- Farragut
- Fayetteville
- Franklin
- Gainesboro
- Gallatin
- Gatlinburg
- Germantown
- Greenback
- Goodlettsville
- Graysville
- Harriman
- Henderson County
- Hendersonville
- Huntington
- Jackson
- Jamestown
- Jasper
- Johnson City
- Kingsport
- Kingston
- Knoxville
- Lakeland
- La Vergne
- Lebanon
- Lewisburg
- Lincoln County
- Livingston
- Madisonville
- Madison County
- Manchester
- Marion County
- Marshall County
- Maryville
- McKenzie
- McNairy County
- Medina
- Memphis
- Milan
- Monterey
- Monroe County
- Montgomery County
- Morrison
- Morristown
- Niota
- Oakdale
- Oliver Springs
- Oneida
- Paris
- Pickett County
- Pikeville
- Pleasant Hill
- Rockwood
- Sequatchie County
- Shelby County
- Shelbyville
- Smithville
- Somerville
- Spencer
- Spring City
- Stanton
- Sunbright
- Sweetwater
- Thompson's Station
- Vonore
- Wartburg
- Weakley County
- White County

State/ Federal Agencies:

- Greater Nashville Regional Council
- Oak Ridge National Laboratory
- Southeast Tennessee Development District
- Tennessee Department of Agriculture
- Tennessee Department of Economic and Community Development
- Tennessee Department of Environment and Conservation
- Tennessee Valley Authority
- Upper Cumberland Development District
- USDA Rural Development

Academic Sector

Colleges and Universities:

- Arkansas State University
- Austin Peay State University
- Bethel University
- Carlos Hilado Memorial State College
- Central Bicol State University
- Central Philippine University
- Chattanooga State Community College
- Christian Brothers University
- Cleveland State Community College
- Columbia State Community College
- Hiwassee College
- Jackson State Community College
- Johnson University
- Maritime Academy of Asia and the Pacific
- Maryville College
- Middle Tennessee State University
- Mississippi State University
- Northern Negros State College of Science and Technology
- Pasig City University
- Pellissippi State Community College
- Philippine Electronics and Communication Institute of Technology
- Philippine Normal University
- Philippine Normal University Visayas
- Polytechnic University of the Philippines
- Roane State
- San Beda College- Manila Philippines
- Systems Plus College Foundation
- Technological University of the Philippines
- Tennessee Tech University
- The University of Memphis
- The University of Philippines Los Banos
- The University of Tennessee at Chattanooga
- The University of Tennessee (UT) Institute for Public Service
- UT Center for Industrial Services
- UT County Technical Assistance Service
- UT Municipal Technical Advisory Service

Commercial and Utilities Sector

Business:

- 49 Green
- Ameresco
- ARiES Energy
- Asset and Equity Corporation
- Baker Donelson
- Efficient Energy of Tennessee
- Energy Source Partners
- Farmer Morgan
- Frontline Bioenergy
- Genera Energy
- Hannah Solar
- Harrelson and Associates
- Husch Blackwell
- InfoStructure
- Johnson Controls
- Lightwave Solar
- LTA Consulting
- Michael Brady, Inc.
- Memphis Bioworks
- Mid State Construction
- NORESO
- Pathway Lending
- PHG Energy
- Roane Alliance
- Select Air Geothermal
- Signal Energy
- Sustainable Future
- Tellico Reservoir Development
- Tennessee Energy Industry and Construction Consortium
- Tetra Tech
- Thompson Engineering
- Vis Solis
- Wampler Sausage
- Wyndham Resorts

Utilities:

- Columbia Power and Water Systems
- Cookeville Electric
- Gibson County Utilities
- Jackson Energy Authority
- Knoxville Utilities Board
- Memphis Light, Gas, and Water
- Mount Pleasant Power Systems
- Nashville Electric Service
- Tennessee Association of Utility Districts

Association Sector

Organizations:

- 25x'25 Initiative
- East Tennessee Clean Fuels Coalition
- Jackson Area Chamber of Commerce
- Middle Tennessee Clean Fuels Coalition
- Tennessee Advanced Energy Business Council
- Tennessee Gas Association
- Tennessee Municipal League
- Tennessee Solar Energy Association
- Tennessee Soybean Association
- Tenneseia
- West Tennessee Clean Fuels Coalition

International Sector

Organizations:

- German Energy Agency
- International Biomass Council
- Renewable Energy Association of the Philippines