TREEDC

Tennessee Renewable Energy Economic Development Council

RESULTS OF CAREERS IN ENERGY WEEK STATEWIDE ESSAYS: "ENERGY WORK-ERS MAKE A WORLD OF DIFFERENCE"

In an effort to address the impending workforce needs in the energy sectors, Tennessee Energy, Industry and Construction Consortium (TEICC), Tennessee Renewable Energy and Economic Development Council (TREEDC) and several key partners - Tennessee Department of Labor and Workforce Development, Tennessee Department of Education, Tennessee Valley Authority (TVA) and Gibson County Utility District recently launched a "Careers in Energy Week" essay contest among seventh and eighth grade students in targeted counties located in west, middle and east Tennessee.

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.

TREEDC Members Ron Woody, Roane County Executive, Milan Mayor Chris Crider, Trenton Mayor Tony Burriss, Algood Mayor Terry Fouch and Cookeville Mayor Matt Swallows each declared a Proclamation announcing February 10-14, 2014, as "Careers in Energy Week." TEICC, TREEDC and the statewide partners challenged middle school seventh and eighth grade students across the state to write an essay describing how "Energy Workers Make a World of Difference.

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.

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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.

April 2014

Upcoming **Events**

- USDA Rural Development Conference Murfreesboro, TN -April 28-29, 2014
- Chattanooga Lookouts Go Green Night, Chattanooga, TN -May 21, 2014
- TREEDC International Annual Conference, Cookeville, TN - October 12-14, 2014

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TREEDC Board Member/Memphis Councilman Dr. Edmund Ford, Jr. and MTAS Consultant Warren Nevad enjoy the festivities with the students at W.E.B. Du Bois

TREEDC HOLDS 1ST 2014 ELEMENTARY SCHOOL RENEWABLE ENERGY FORUM IN MEMPHIS

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.

THE CHATTANOOGA LOOKOUTS JOIN TREEDC

The Chattanooga Lookouts, a Double-A affiliate of the Los Angeles Dodgers Major League baseball team recently joined TREEDC as a member. We are pleased to announce that the Lookouts will hold their first Go Green Night at AT&T Field on May 21, 2014. The Lookouts will face the Mississippi Braves.TREEDC members will receive tickets by contacting warren.nevad @tennessee.edu. Join the Lookouts for this inaugural event celebrating environmen-tally friendly organizations, businesses, clubs and more! For more information or how to get involved, contact the Group Sales Department at (423) 267-2208



RESULTS OF CAREERS IN ENERGY WEEK STATEWIDE ESSAYS Cont.

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."

TREEDC and TEICC appreciate the excellent coordination by Dr. Dennis

Tennant, Gibson County Utilities Director Pat Riley, Julie Allen Burke with Milan Chamber of Commerce and Danice Turpin of Roane County with their respective communities.

The winners from Roane County (East TN) are:

3rd Place

Halev Belew

	1st Place	Casey Gaines	Cherokee Middle School
	2nd Place	Sarah Davenport	Oliver Springs Middle School
	3rd Place	Dawson Seiber	Oliver Springs Middle School
The two winners from Putnam and White County (Middle TN) :			
	1st Place	Zach Smith	White County Middle School
	2nd Place	Sarah Davenport	White County Middle School
The winners from Gibson County are:			
	1st Place	Trevor Boals	Medina Middle School
	1st Place	Alex Jones	Dyer Middle School
	2nd Place	Aubrie Croom	Dyer Middle School

Bradford Middle School

SAVE THE DATE: OCTOBER 12 – 14th, 2014

Please mark your calendar for October 12 - 14, 2014 for our Inaugural Annual International Conference at Tennessee Tech University in Cookeville. Please see attached notice link below and let us know if you are interested in being a sponsor and/or presenter at this event. We have various sponsorship pricing levels. Early bird indi-vidual registration is only \$89. We will cover all clean energy technologies and will share Tennessee, national and international best practices in renewable energy.

Tennessee Renewable Energy and Economic Development Council International Conference Oct. 12, 13 & 14, 2014

"Facting International Excellence in Renewable Energy Through Research and Innovation"

For More Information

Dennis Tennant Tennessee Technological University 931-372-3300 DTennant@tntech.edu

Warren Nevad TREEDC 865-974-9839 Warren.Nevad@tennessee.edu



TENNESSEE TECH



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TREEDC MEMBER TENNESSEE GAS ASSOCIATION HOLDS NATURAL GAS EXPO

The Tennessee Gas Association's Natural Gas Vehicle Expo was held in Nashville on March 19,



2014. The speakers addressed the convenient availability, environmental benefits and safety advantages of compressed natural gas. TREEDC Board Member Pat Riley coordinated the event which attracted over 400 attendees.

American Public Gas Association (APGA) President Bert Kalisch, stated that APGA has been working, and continues to support a growth strategy developing hubs within metropolitan areas, mostly for fleet based vehicles (buses, waste management trucks, local trucking). He added that the next step is to add public stations within those hubs and begin to connect those cities with fueling spokes along the highways that connect them. This writer applauds the APGA for their forethought and ongoing initiatives to increase consumer availability.

TREEDC Board Member Pat Riley told the audience that Tennessee is witnessing a 'Transformation in

Transportation' within our state." Tennessee has one of the largest fleets of NGV vehicles in the country, and continues to be a leader in NGV technologies. There are currently 60 NGV fueling stations in TN with more being constructed every day.

TREEDC Board Member Pat Riley addresses the attendees at the NGV Expo

TREEDC RETURNS TO THE PHILIPPINES IN FEBRUARY 2014 TO CONTINUE ITS INTERNATIONAL EXCHANGE PROGRAM BY PARTNERING WITH MORE PHILIPPINE STAKEHOLDERS AND COMMUNITIES



Delegates from the Tennessee Renewable Energy & Economic Development Council (TREEDC) joined forces with the Renewable Energy Association of the Philippines (REAP) to conduct educational conferences in Butuan City and Mariveles, Bataan Philippines during February 2014. TREEDC also followed up with member cities Naga City and Mabalacat to provide updates and to make plans for future projects and visits. TREEDC also participated in the Philippine Investment Forum in Manila and crafted its long term strategic plan to meet its community education and economic development goals in the Philippines.

TREEDC President Talley spoke about the TREEDC International Exchange Program at the

Investors Forum. Mayor Talley advised the audience that TREEDC selected the Philippines as its Pilot Country because of its vast potential of renewable energy resources, high energy costs and frequent brownouts. He also added that TREEDC is very interested in coordinating social responsibility projects with Philippine corporations to help enhance the quality of life.

TREEDC and REAP officials arrived in Butuan City, Mindanao on February 19, 2014 to encourage government agencies to utilize renewable energy, during a press conference held at the Philippine Electronics and Communication Institute of Technology (PECIT) Conference Room. Several media outlets including the Philippines Information Agency of Caraga, Channel 5 News, a local affiliate of NBC, and several others attended the press conference. Mayor James Talley, Warren Nevad, Doug Jackson, Steve Thornberry and Mary Shaffer Gill participated in the conference with Engineer Zerrudo, President of CBUSA Alfredo Perdon, and President of the Renewable Energy Association of the Philippines Olegario S. Serafica.

The 2nd Caraga PECIT Renewable Energy Conference was started later in the day at the Balanghai Hotel & Convention Center in Butuan City. The Conference was sponsored by Tennessee Tech University, TREEDC, IMT Solutions and Vis Solis.

On February 27, 2014, The Maritime Academy of Asia and the Pacific (MAAP), entered into a Memorandum of Agreement (MOA) with Tennessee Renewable Energy & Economic Development Council (TREEDC). During this historic event, TREEDC also finalized MOAs with Bataan Peninsula State University (BPSU), Lyceum University of the Philippines, Philippine Normal University (PNU), Pamantasan ng Lungsod ng Pasig (PLP) and the Philippine Association of Extension Program Implementers (PAEPI) Honorable guests from the Deparatment of Energy (DOE), Department of Science and Technology (DOST), Governor of the Province of Bataan and TREEDC also provided various presentations. The purpose of these MOAs is to provide information and technology exchange between TREEDC and its Philippine members.

TREEDC also met with U.S Commercial Service and returned to Naga City and Mabalacat, Pampanga for further discussions relating

to pending projects. TREEDC participated in the GNN News Network 3rd annual celebration in Naga City. The event was hosted by Fred Perdon. TREEDC returned to Central Bicol State to look at some potential properties for renewable energy and met with Dr. Joel Batanes to review their biogas operations. Members of the TREEDC delegation also toured the beautiful Haciendas de Naga Golf Course Development in Bicol.

University of Pasig City Dr. April Alcazar let a tour of the Pasig City Campus with President Talley and Director Jackson on March 1, 2014.



E3 INTEGRATED SOLUTIONS JOINS TREEDC AS A GOLD FOUNDING MEMBER

E3 INTEGRATED SOLUTIONS INC recently joined TREEDC as a Founding Gold Member. The Firm recently participated with TREEDC in its International Exchange Program's activities in the Philippines. E3 INTEGRATED SOLUTIONS INC provides sustainable clean and renewable energy services to district municipalities and commercial customers across the Philippines and South East Asian region helping to reduce the impact on the environment by turning their unused local renewa-

ble resources into clean energy.

Through its global technology partnerships, E3 INTEGRATED SOLUTIONS INC is at the forefront of developing local renewable energy recovery plants for all types of organic waste recovery; SWM, Biomass and agricultural animal husbandry waste including Poultry.

Through its association with various local and international partners, E3 INTEGRATED SOLUTIONS INC also provides integrated combinations or stand alone hydro, wind, and solar energy solutions.

E3 INTEGRATED SOLUTIONS INC is also able to stay at the forefront for Renewables Energy solutions by partnering with associations like the Tennessee Renewable Energy and Economic Development Council (TREEDC) and the Renewable Energy Association of the Philippines (REAP).



TREEDC International Affairs Director Jackson, TREEDC President Talley and Steve Thornberry of E3 INTEGRATED SOLUTIONS INC.

TREEDC MEMBER CITY OF DUCKTOWN WINS PRESTIGIOUS EPA 2014 CLEAN AIR EXCELLENCE AWARD

On April 2, 2014, The U.S. Environmental Protection Agency (EPA) presented the 2014 Clean Air Excellence Awards honoring nine projects from across the United States and one individual for their work on clean air and climate initiatives. The award recognizes innovative programs that protect Americans' health and the environment, educate the public, serve their communities and stimulate the economy. The City of Ducktown, Tennessee won a Community Action Award for its development of a 28 Kilowatt Solar Array.

Located in southeast Tennessee, the City of Ducktown is a small rural community of 475 citizens. After years of environmental devastation caused by ore mining and its processing through open pit roasting, the community has undergone a complete transformation.

Over the past five decades, the area has been rejuvenated through reclamation and reforestation provided by public and private partnerships. More than 500,000 visitors from nearby metropolitan areas now come to enjoy the natural amenities annually. Building on these environmental improvements and continuing to invest in economic development, city leaders chose to pursue renewable energy projects. In partnership with the Tennessee Renewable Energy & Economic Development Council (TREEDC), city leaders have attended multiple classes and conferences, learning about renewable energy sources and alternative fuels. In 2010, Ducktown constructed its first solar project: a 28kilowatt solar photovoltaic system, through a federal grant received from the Tennessee Department of Economic and Community Development and local funds. With a total project cost of \$108,000, the city should only have been able to build a 14-kilowatt system, but by thinking out of the box, providing



TREEDC President/Ducktown Mayor James Talley receives Clean Air Excellence Award from EPA Assistant Administrator Janet McCabe

training for staff and completing construction themselves, the city was able to double the size of the system. In the first year of operation, the 28-kilowatt system created \$9,000 in revenues, offsetting approximately 45 percent of the energy cost. To date, this project has avoided more than 35 tons of greenhouse gases and other pollutants. Ducktown has also partnered with other private businesses and installed an additional 60 kilowatts of solar capacity, offsetting the total energy cost by 65 percent to date.