

TREEDC NEWSLETTER

July 2013 - Volume 3

Upcoming TREEDC Events:

Sept 21-Oct 4 –

**TREEDC-
Philippines
Forums**

Oct 16-17 –

**TREEDC Annual
Board Meeting/
Retreat**

TREEDC Holds First Elementary School Renewable Energy Forum at Graysville City Hall

TREEDC held its inaugural elementary school forum at the new Graysville City Hall on May 21, 2013. Graysville is one of the original 4 founding cities of TREEDC

back in 2007. TREEDC founding members Tennessee Valley Authority (TVA), Tennessee Department of Environment and Conservation (TDEC) and ARIES Energy gave educational presentations to 104 fourth



and fifth graders. TREEDC Advisory Board Member/ Graysville Mayor Ted Doss emceed the forum. The City of Crossville illustrated the benefits of biodiesel made from recycling cooking oil. Students

also learned about water conservation, energy efficiency and solar energy. Wampler's Sausage sponsored the forum and the hungry students enjoyed the Wampler's Pork Burgers.

TREEDC plans to hold more ele-

mentary school renewable energy forums in member communities. Please let us know if you are interested in hosting a forum.

New TREEDC Board Member Wins Prestigious Natural gas Award



The Tennessee Gas Association recently announced that Pat Riley, General Manager of Gibson County Utility District / TREEDC board member as its esteemed 2013 Silver Flame Award recipient at the annual meeting of delegates at the Peabody Hotel in Memphis, Tennessee. The TGA Silver Flame Award is a prestigious award reflecting the recipient's exemplary support and dedication to the Association and the natural gas industry and is selected by his industry peers. Criteria for this prestigious award, cherished since 1990, includes being a corporate member of the Association for at least five years, serving on Committees and the Board of Directors, being active in the.... Continued on pg. 5

New TVA Board Member Mike McWherter Speaks at TREEDC — Jackson forum

TVA Board Member Mike McWherter spoke at the Tennessee Renewable Energy Economic Council (TREEDC) Renewable Energy Luncheon on April 22, 2013 at the Double Tree Hilton Hotel in Jackson, Tennessee. A total of 80 interested attendees also witnessed the TREEDC launch of Tennessee Department of Environment and Conservation's (TDEC) Energy Education Initiative. This Initiative will be delivered in connection with TREEDC Diamond Member Pathway Lending and other statewide energy resource providers and will provide in depth training and educational tools.

Joe Bond of Johnson Controls and Greg Palko of Oak Ridge National Laboratory provided a powerpoint presentation of ORNL's energy efficiency and renewable energy programs. The luncheon powerpoints will be available shortly at http://www.treedc.us/newsletters_reports/

forum _ presentations/index.html. Attendees also participated in an interactive energy survey conducted by Rick Marsh, Director, Industrial Energy Efficiency Network. Molly Cripps and



Katie Southworth of TDEC shared details of the state's qualified energy conservation bond program which has a \$64 million dollar allocation. The University of Tennessee Center For Industrial Services Consultant Keith Groves also discussed his agency's E3 initiative. The E3 Initiative which stands for Economy, Energy and Environment is an

innovative program that supports manufacturing leadership through sustainability. Pat Riley with TREEDC Gold Member Tennessee Gas Association gave a thorough presentation about the environmental and economic benefits of natural gas for fleets.

Mr. McWherter also expressed his appreciation to the University of Tennessee, Johnson Controls, the TREEDC mayors and TREEDC Legal Affairs Coordinator/Jackson Councilman Ernest Brooks, II for organizing the luncheon. He also added that TREEDC has successfully helped signed up over 100 new TVA Green Power switch customers last year and urged TVA to continue its support of the 92 TREEDC mayors. The Tennessee Soybean promotion Board also sponsored the luncheon forum.

TREEDC Holds First forum at Bethel University

TREEDC Mayors McKenzie Mayor Jill Holland, Carroll County Mayor Kenny McBride and Huntingdon Mayor Dale Kelley recently organized a forum held on May 17, 2013 at Bethel University. A total of 51 interested attendees heard presentations from the Tennessee Technology of McKenzie, Tennessee Gas Association, Mid South Compressed Natural gas Vehicles (CNGV), Maynard Select, ARIES Energy and PHG Energy.

The Tennessee Department

of Environment and Conservation's (TDEC) Energy Education Initiative also sponsored an afternoon workshop consisting of energy efficiency and grant writing tips for the attendees. The TREEDC-Bethel University was the second out of 5 forums organized under the Tennessee Energy Education Initiative. This Initiative will be delivered in connection with TREEDC Diamond Member Pathway Lending and other statewide energy resource providers and will provide in depth training and educational tools. Lori

Munkeboe, Director of TDEC Office of Sustainable Practices stated in her keynote presentation that great customer service makes it possible to fulfill TDEC'S mission, and is a priority for Governor Haslam and will make TDEC more effective.



TREEDC Returns to Franklin, Tennessee

The Tennessee Renewable Energy and Economic Development Council (TREEDC) held its 3rd forum at the Franklin Police Conference Center on June 12, 2013. A total of 53 attendees gathered together to hear presentations from leading Middle Tennessee businesses including Energy Source Partners, Nissan North Americas, PHG Energy, Rhoades Car International, Whole Foods, and Wilmont Inc. Franklin Mayor and TREEDC Middle Tennessee Coordinator/ Franklin Mayor Ken Moore, Franklin Sustainability Coordinator An-

drew Orr, (MTAS) Management Consultant/TREEDC Director Warren Nevad and L.K. Browning



of the Tennessee Valley Authority crafted the agenda.

The Tennessee Department of Environment and Conservation's (TDEC) Energy Education Initiative also sponsored presentations regarding qualified conservation bonds and energy awareness. The TREEDC-Franklin forum was the third out of 5 forums organized under the Tennessee Energy Education Initiative. This Initiative will be delivered in connection with TREEDC Diamond Member Pathway Lending and other statewide energy resource providers and will provide in depth training and educational tools.

TREEDC Welcomes St. Joseph's Episcopal School of Florida



TREEDC recently conducted its second elementary school forum by organizing an educational session for fifth and sixth graders at St. Joseph's Episcopal School in Delray Beach, Florida. St. Joseph's mission is to educate the whole child in mind,

body, and spirit in a safe, Christian environment. The school is designed to provide a well-rounded educational environment that will help children develop into responsible leaders as well as grow intellectually, emotionally, socially, physically, and spiritually. TREEDC now has members in Arkansas, Florida, Kentucky, Mississippi, Tennessee and the Philippines.

TREEDC Returns to Clarksville

The Tennessee Renewable Energy and Economic Development Council (TREEDC) returned to Clarksville on July 9, 2013. TREEDC Mayors Kim McMillan and Carolyn Bowers organized the free community renewable energy forum at Freedom Point Park. A total of 70 attendees gathered together to hear presentations from leading Middle Tennessee businesses including PHG Energy, Rhoades Car International, Smithfield Manufacturing, Ameresco and Global

Green Lighting. Montgomery County Sustainability Coordinator Michelle Newell and (MTAS) Management Consultant/TREEDC Director Warren Nevad crafted the agenda. The keynote presentation was given by Gresham, Oregon Mayor Shane Bemis who is also the Chairman of the U.S Conference of Mayors Energy Committee.

The Tennessee Department of Environment and Conservation's (TDEC) Ener-

gy Education Initiative also sponsored presentations regarding qualified conservation bonds and energy awareness. The TREEDC-Clarksville forum was the fourth out of 5 forums organized under the Tennessee Energy Education Initiative. This Initiative will be delivered in connection with TREEDC Diamond Member Pathway Lending and other statewide energy resource providers and will provide in depth training and educational tools.

TREEDC Founding Member PHG Energy Partners with General Electric

General Electric (GE) Power & Water and PHG Energy, a Nashville-based alternative energy equipment company, have successfully collaborated on an innovative project to produce electricity from waste material by employing gasification technology to power GE's Clean Cycle heat-to-power generator.

The Clean Cycle heat-to-power generator is used worldwide to convert waste heat into electricity. The new system PHG Energy (PHGE) developed starts with gasification of wood waste or other biomass to provide a clean-burning producer gas. That fuel is then combusted in a heating unit which supplies the Organic Rankine Cycle (ORC) with the thermal source it needs to operate efficiently, producing enough electricity to supply approximately 50 homes. The system integrates three proven technologies: GE's heat

-to-power generator, PHG Energy's gasifier and a standard heat exchanger. The combined GE and PHGE project is being conducted in Gleason, Tenn., at a facility owned by Boral Brick Corporation. Six industrial grade PHGE biomass fueled gasifiers, which were used to offset natural gas consumption in kiln firing, are currently being tasked for research and development by PHGE until the plant re-opens with recovery of the housing industry. Electricity produced with GE's heat-to-power generator unit is added to the grid through an agreement with the Tennessee Valley Authority. Configuring such a system commercially is currently underway in Covington, Tenn., where the city has engaged PHG Energy to build a waste-to-energy facility using both wood waste and sewage sludge as its fuel sources. The new plant will provide electric power

and simultaneously save the city hundreds of thousands of dollars annually in disposal costs and landfill fees. From a sustainability standpoint, the new system will not only divert material from a landfill, it also will eliminate the release of more than 450 tons of carbon into the air each year.

The City of Covington was the awarded "Excellence in Green Leadership" at the annual Tennessee Municipal League Conference on June 25, 2013 in Memphis.



Kingston Starts Solar Farm

The City of Kingston recently started a project with TREEDC members Energy Source Partners, LLC and the Tennessee Valley Authority. This agreement allows the installation, operation and maintenance of an electricity grid-connected photovoltaic solar power system with a generating capacity rated at approximately 50 kw onsite at the city's Water Treatment Plant property located on

Highway 58. An amendment to the original agreement allows the installation, operation and maintenance of another electricity grid-connected photovoltaic solar power system with a generating capacity rated at approximately 200 kw on James Ferry Road in Kingston. The city is working with TREEDC, Rockwood Electric Company and the Tennessee Valley Authority to ensure the city's compliance with their

requirements.

Kingston also won a small city progress award by the Tennessee Municipal League due in large part toward their efforts in sustainability.

New TREEDC Board Member Wins Prestigious Natural Gas Award Cont.

community and other gas industry Associations and organizations offering outstanding service to the industry and distinguishing himself as a leader among peers in the state gas industry.

Riley was the 2004-2005 TGA President and serves on the TGA Board of Directors and Executive Committee while also serving in numerous other TGA leadership roles and committees including the Natural Gas Vehicle Committee designed to promote natural gas statewide and throughout the country as an efficient, affordable and domestic vehicle fuel. He has frequently given presentations at various events and was appointed as TREEDC's newest board member in June 2013. Congratulations, Pat!

Founding TREEDC Gold Member Tennessee Gas Association is a natural gas state association with just under 400 members comprised of municipal gas systems, utility districts, gas authorities, private and public gas companies, pipelines, gas marketers, and affiliated members. TGA was established in 1962.

From the Philippines!



TREEDC Plans Forums in the Philippines

The Tennessee Renewable Energy & Economic Development Council (TREEDC) delegation returned to the Philippines from June 26th to July 7, 2013 to provide an update to its International Exchange program with its Philippine members and to schedule 4 community educational forums at various colleges in the Metro Manila, Central Luzon, and Bicol Regions from September 25 to October 4, 2013. The purpose of these upcoming forums is to promote awareness of Tennessee

best practices in renewable energy and to connect renewable energy educational opportunities and jobs for both Philippines and Tennessee entities through outreach, business networking, student career development and collaborative projects. During the trip, Mayor Talley spoke at the League of Corporate Social Responsibility Conference in Manila about the International Exchange program. TREEDC also participated in the Asian Development Bank's Clean Energy Forum and met with

officials from Philips, Philippines.

Philippine schools involved in the TREEDC International Exchange Program include Central Bicol State University, Central Philippines University, University of Philippines Los Baños (Laguna), Philippine Electronics and Communication Institute of Technology, Polytechnic University of the Philippines, Systems Plus College Foundation and Technological University of the Philippines.



TREEDC

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Green Power Switch®

TREEDC is a statewide network of 92 city and county mayors and businesses working together to create a path to fast-track renewables in Tennessee.

Our Mission

To promote and connect renewable energy with economic development and energy efficiency for all Tennessee communities.

Ducktown, Tennessee Signs Sister City Agreement with Mabalacat,

Pampanga Philippines

TREEDC President/ Ducktown, Tennessee Mayor James Talley and Mabalacat, Philippines Mayor Marino “Boking” Morales participated in the sister city signing celebration on July 6, 2013 between Mabalacat City and Ducktown, Tennessee. Mabalacat is a city in the

northern part of the province of Pampanga, Philippines, about 90 miles north of Metro Manila. It has a population of about 215,000, covering about 32 square miles.

The memorandum of agreement for international cooperation particularly in renewable energy and environmental protection was signed in front of over 30 citizens. Mayor Talley stated



that it was an honor and unique experience to observe and participate in the Filipino traditions and culture with Mayor Morales, Vice Mayor Christian Halili the citizens of Mabalacat community. TREEDC has committed to partner with REAP to address rural community energy needs and educational awareness throughout the Philippines. TREEDC International Consultant Douglas Jackson

and Renewable Energy Association of the Philippines (REAP) President Oly Serafica will provide a frequent presence in the Philippines. Mayor Morales also provided TREEDC with an office to help sustain the TREEDC’s mission of connecting Tennessee and the Philippines with renewable energy technologies.

TREEDC plans to initially assist Mabalacat with the formation of a Sustainability Task Force, and to work with the city to develop strategies to bring waste to energy technologies to the community. Mayor Morales and Vice Mayor Halili will visit Ducktown and the rest of Tennessee in December 2013.