

# TREEDC January Newsletter

January 2016

From left to right: Doug Jackson, TREEDC International Affairs Director, TREEDC President/Dunlap Mayor Dwain Land, Warren Nevad, The University of University of Tennessee MTAS/TREEDC Director, Thomas Austin, ACRES Energy



## TREEDC Creates Strategic Alliance with Acres Energy

**TREEDC President/Dunlap Mayor Dwain Land recently announced that ACRES Energy will be working closely** with TREEDC by assisting member cities and colleges with development of clean and renewable energy. ACRES Energy will provide members with one-on-one consultation efforts to ensure that those consumers are matched with the energy provider best suited to meet the consumer's need. President Land has stressed the importance of aligning collaborative efforts, roles, and mutual interests to further advance renewable energy and economic development through cooperative capability building, intelligent partnerships, and knowledge sharing activities embodied in such initiatives as the Tennessee Initiatives and the Philippines International Exchange Program.

ACRES Energy will be accompanying the TREEDC return trade mission to the Philippines in February. Contact [warren.nevad@tennessee.edu](mailto:warren.nevad@tennessee.edu) for more information about ACRES Energy.



## TREEDC Members Hannah Solar and NORESKO Host Reception

On December 13, 2015, TREEDC Founding Members hosted a welcoming reception at the TREEDC 2<sup>nd</sup> Annual Conference held at TREEDC member Tennessee Tech University. The reception also welcomed our visitors from the Philippines. President Land expressed his appreciation to our members and volunteers during the reception. Thank you NORESKO and Hannah Solar!

## TREEDC Welcomes New Members

**The 96 mayors of TREEDC are proud to announce our newest members to help our communities advance renewable energy worldwide. Thanks to the grassroots organizing efforts of our volunteers, TREEDC was able to welcome the following new members at our Annual Conference held at Tennessee Tech University on December 14-15, 2015:**

**Dunlap Natural Gas** The Dunlap Natural Gas System serves portions of Marion, Sequatchie, and Bledsoe Counties. Gas is purchased from East Tennessee Natural Gas. The Dunlap Natural Gas System has received numerous awards over the years.

**Siemens Energy** is incorporated in Germany and has its corporate headquarters in Munich. It has operations in around 190 countries and approximately 285 production and manufacturing facilities. It is the largest engineering company in [Europe](#). The principal divisions of the company are *Industry, Energy, Healthcare, and Infrastructure & Cities*, which represent the main activities of the company.

**Tennessee Risk Management Pool** provided insurance services to many of the TREEDC cities across the state. Their mission continues to be to passionately provide the very best in Risk Management products and services, expert claims administration and comprehensive insurance options with absolute integrity.

**Tennessee Solar Solutions** offer turn-key solar solutions for residential, commercial & farm properties. Ginny Kincer, Chief Operations Officer also was a key conference organizer. Tennessee Solar Solutions will also be joining TREEDC members Hannah Solar, Vis Solis and ACRES Energy in the TREEDC International Exchange Program in the Philippines. The next Philippine trade mission will occur in February.

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# TREEDC Holds Second International Conference at Tennessee Tech

Bannered under the theme of “The Future Energy Revolution *NOW*” and billed as “Tennessee’s Clean Energy Conference,” it brought together leadership from the EPA, TVA, TVPPA, Tennessee Electric Cooperative Association, TREEDC, Tennessee Environmental Council, solar industry, various agencies of the State of Tennessee such as the Department of Environment and Conservation and national agencies, including the Ex-Im Bank and the Small Business Administration.

Keynote addresses were presented by Pete Marte, CEO of Hannah Solar on Monday and former Commissioner Matt Kisber, of the Tennessee Department of Economic and Community Development on Tuesday. The EPA Clean Power Plan was featured in break-out sessions and a general session by the EPA from a national perspective and an on-the-ground, Tennessee understanding by TDEC.

A special feature was back-to-back presentations by Jack Simmons, CEO and President of both TVPPA [Tennessee Valley Public Power Association] and Seven States Power Corporation and Joe Hoagland, Vice President, Stakeholder Relations, of TVA. Afterwards, they were joined for a discussion on Emerging Energy Configurations by David Callis, Tennessee Electric Cooperative Association, Ken Mitchell of Region 4, EPA, and John McFadden, CEO, Tennessee Environmental Council.

A first-hand report was given by Sandy Kurtz on the then-just-concluded 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, held in Paris, France (COP21).

This Year’s Conference welcomed a delegation of educational leaders from the Philippines. Members of the delegation met for consultation with those seeking to do business in The Republic of the Philippines. Their visit is being reciprocated in February 2016 by a Tennessee delegation to the Philippines.

Four Centers of Excellence from within Tennessee Tech displayed the potential for breakthroughs in their fields of concentration. These were The Center for Manufacturing Research, Center for Energy Systems Research, Center for the Management, Utilization, and Protection of Water Resources, and iCube.

Organized by East Tennessee Clean Fuels Coalition, an Alternative Fuel Vehicles (AFV) Showcase provided opportunity to learn about, see, and drive the Alternative Fuel Vehicles (AFVs) on display.

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## Continued

Sponsors of the Conference were

- Gibson County Utility District
- NORESKO
- Hannah Solar
- Tennessee Solar Solutions
- EES: Energy Efficiency and Sustainability Consulting
- The POOL
- DRIVE! for the Future
- Vis-Soils
- Tennessee Tech
- City of Dunlap
- Siemens
- PHG Energy
- Silicon Ranch
- The University of Tennessee
- Tennessee Tech University
- TVA
- USDA
- The Center for Manufacturing Research
- Center for Energy Systems Research
- Center for the Management, Utilization, and Protection of Water Resources
- iCube.

The Conference was jointly organized and presented by the Tennessee Renewable Energy and Economic Development Council (TREEDC) and The Tennessee Environmental Council.

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From left to right: Matt Kisber, Silicon Ranch, Dr. Maria Validor, Technological University of the Philippines, Dr. Selfa Briones, Technological University of the Philippines, Jackson and Nevad



## TREEDC 2015 Champions: Pat Riley and Dr. Olin Ivey

During the 2015 TREEDC Annual Conference, TREEDC President Dwain Land awarded two (2) TREEDC Champions for 2015. These 2015 TREEDC Champions are Pat Riley and Dr. Olin Ivey. Pat Riley has been a champion in promoting clean affordable natural gas for vehicle transportation for TREEDC municipal and county business members across the State. Pat was able to tie solar energy into the Gibson County Utility District's state of the art compressed natural gas station built in 2015. Pat's role as a TREEDC board member has resulted in the development of various community based renewable energy technologies such as waste to energy, wind development and energy efficiency.

Dr. Olin Ivey has overseen TREEDC's energy financing programs and was the Annual Conference coordinator for 2015. Olin has been a tireless worker in promoting TREEDC's mission. He is the founder of Urban Century Institute. The mission of Urban Century Institute is to develop, implement, and disseminate integrated solutions to the challenges associated with rapid urbanization.



From left to right: Pryia Narapareddy, MTAS Intern, Pat Riley, TREEDC Board Member/Gibson County Utility District and Olin Ivey, TREEDC Energy Fund Manager and Nevad

## TREEDC Member PHG Energy on the Move

Sevier Solid Waste in Pigeon Forge, TN, has engaged PHG Energy (PHGE) to build a new biomass gasification plant capable of cleanly converting more than 30 tons of composted material daily into thermal energy while producing a valuable high-carbon biochar.

Sevier Solid Waste operates an industry-recognized and innovative garbage composting plant that processes more than 100,000 tons annually from the Sevierville, Gatlinburg, Pigeon Forge and the Great Smokey Mountains National Park. All the municipal solid waste (MSW) is processed through the plant, with 60% of it being made into compost.

PHGE's gasification plants employ a thermo-chemical process that cleanly converts biomass to a combustible fuel gas. Around 90% of the biomass that is gasified in the PHGE system becomes fuel gas, and the only remaining residue is the charcoal-like biochar, that in SSWI's case will be sold to a local industrial user as a renewable source of fuel to displace coal consumption.

The cost of the Pigeon Forge facility is \$2.25 million. The project has been awarded a \$250,000 Clean Energy Tennessee Grant through the Tennessee Department of Environment and Conservation (TDEC). PHG Energy will provide the gasifier, thermal oxidizer, material handling equipment and build the facility as general contractor.

The project will showcase PHGE's second installation of its Large Frame gasifier, believed to be the world's largest downdraft unit and capable of more than 60 tons per day throughput. Along with the facility being built in Lebanon, TN, and the operating plant in Covington, TN, PHG Energy's gasification systems are proving to be a reliable and productive way to eliminate waste going to landfills while producing clean energy.



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## Pathway Lending EE Loan Program Now Open to Local Governmental Entities

On **December 15, 2015**, Pathway Lending announced that its flagship Energy Efficiency Loan Program, the largest of its kind in the nation, is now open to local governmental entities. Under this expansion, those seeking to reduce energy consumption and costs can access affordable loan capital needed to make their projects a reality. The program offers up to six years of financing for qualified energy efficiency and renewable energy projects to Tennessee local governmental entities including municipalities, counties, school districts and other similar public agencies. The program will begin accepting applications from local governmental entities on January 4, 2016.

Launched in 2010, the loan program helps Tennessee businesses finance investments in energy efficient technologies, including energy-saving building retrofits and renewable energy systems, which reduce energy consumption and energy costs and avoid release of harmful air pollutants while spurring local job growth. The program, which has originated more than \$24 million in loans to date to both for- and non-profit businesses, now welcomes Tennessee local governmental entities to participate on a first come, first serve basis.

The Energy Efficiency Loan Program is a collaborative effort between the State of Tennessee / Tennessee Department of Environment and Conservation (TDEC), the Tennessee Valley Authority (TVA), the U.S. Department of Energy, the U.S. Economic Development Administration and Pathway Lending.

Through the Energy Efficiency Loan Program, Pathway Lending offers below-market rate loans to finance building retrofits, equipment replacements or upgrades, lighting and renewable generation. Up to 100 percent of project costs may be financed, including design and installation fees. The loans are designed to allow for energy costs savings derived from each project to provide the repayment of the loan.

The program is available to any local governmental entity or business seeking to reduce energy consumption of its Tennessee facilities through energy efficiency-improving projects. To be eligible for a loan, a governmental entity or business must have a complete third-party energy audit, assessment or vendor proposal that details estimated energy savings.

A list of energy auditors can be found at <http://www.pathwaylending.org/loans/energy/energy-resources>. To learn more about the Energy Efficiency Loan Program, please visit [www.pathwaylending.org](http://www.pathwaylending.org) or call (615) 425-7171.

# TREEDC Continues to Build More Green Energy in the Philippines

The Tennessee Renewable Energy & Economic Development Council (TREEDC), an international grassroots renewable energy organization of 96 mayors formed in 2008 by the University of Tennessee Institute for Public Service, returned to the Philippines from October 24, 2015 to November 8, 2015. In 2012, the Philippines was selected as the pilot country for TREEDC to facilitate renewable energy projects through its International Exchange Program. The TREEDC delegation consisted of TREEDC President/ Dunlap Mayor Dwain Land, The University of Tennessee MTAS Management Consultant/TREEDC Director Warren Nevad, TREEDC International Affairs Director Doug Jackson and Steve Harmon, TREEDC Member/President of Harmon Construction. The TREEDC delegation met with the Board of Directors with the United Nations of the Philippines (UNAP), Congressman Sherwin [Gatchalian](#), and the Bases Conversion and Development Authority (BCDA) President Arnel Paciano D. Casanova.



TREEDC and President/Mayor Land each established five (5) college scholarships for Pasig City University on November 4, 2015. In addition, the Richard Nevad, Sr. Memorial Scholarship was established by the Nevad family during an educational forum at Catanduanes State University on October 26, 2015. The TREEDC delegation conducted business developmental meetings for commercial entities and colleges in the Bicol, Visayas and Metro Manila areas in order to continue to cultivate developmental opportunities for TREEDC American technology providers. TREEDC also met with the BCDA, a Philippine government instrumentality vested with corporate powers to transform former US military bases into alternative productive civilian use. TREEDC is collaborating with the Technological University of the Philippines to provide renewable energy sources to its future campus at the Clark Green City Project. This project will cover 9,450 hectares and is envisioned to be the first smart, disaster-resilient and green city in the Philippines. Located at the heart of Central Luzon and populated by 12 million people, Clark Green City is positioned strategically between highly urbanizing cities of San Fernando, Angeles and Olongapo in Central Luzon as well as the cities of San Carlos, Dagupan and Urdaneta in Northern Luzon.

TREEDC concluded its visit by confirming its list of Philippine visitors to the 2<sup>nd</sup> Annual international Renewable Energy Conference set for December 14-15, 2015 at Tennessee Tech University.

TREEDC President/Dunlap Mayor Dwain Land and Congressman Sherwin Gatchalian





Pasig City University  
Scholarship Ceremony



Catanduanes State University  
Forum



## Accepting Nominations for the 2016 Governor's Environmental Stewardship Awards

The Governor's Environmental Stewardship Awards recognize outstanding achievements by individuals, organizations, educational institutions and businesses for successful environmental projects and conservation measures. Nominations will be accepted through March 31, 2016, and winners will be announced in May of 2016.

The Awards cover 10 categories: Building Green; Clean Air; Energy and Renewable Resources; Environmental Education and Outreach; Environmental Education and Outreach (school category); Land Use; Materials Management; Natural Heritage; Sustainable Performance and Lifetime Achievement. Nominated entities must be located in Tennessee and projects must have been completed within the 2015 calendar year. All nominees must have a minimum of three consecutive years in overall environmental compliance with the Department of Environment and Conservation. Self-nominations are encouraged. A panel of judges representing agricultural, forestry, conservation, environmental and academic professionals will select award recipients based on criteria including on-the-ground achievement, innovation and public education.

For more information and to apply, [click here](#). For further information on eligibility requirements and evaluation criteria, please contact Kathy Glapa at 615-253-8780.

## Memphis UPS Fleet to be Fueled by Renewable Natural Gas

UPS has [partnered](#) with Memphis Light, Gas and Water and Atmos Energy Marketing LLC to utilize renewable natural gas (RNG) as fuel for its Memphis and Jackson, Mississippi based fleets. Over the course of the multi-year agreement, UPS will fuel these two fleets with an estimated 15 million diesel gallon gas equivalents of RNG. This effort is part of a [broader company goal](#) to drive 1 billion miles nationwide with alternative fuels by the end of 2017.

RNG, also known as biomethane, can be derived from many abundant and renewable sources, including decomposing organic waste in landfills, wastewater treatment and agriculture. It is then distributed through the natural gas pipeline system, making it available for use as liquefied natural gas or compressed natural gas. Capturing methane that would otherwise be released into the atmosphere and converting it to fuel showcases UPS' leadership in advancing sustainable solutions and transportation

## USDA Announces New Round of REAP Funding

The U.S. Department of Agriculture (USDA) announced \$50 million of funding under the Rural Energy for America Program (REAP) to assist agricultural producers and small business owners in applying for resources to purchase and install renewable energy systems or make energy efficiency improvements. Eligible renewable energy systems include wind, solar, renewable biomass (including anaerobic digesters), small hydro-electric, ocean, geothermal, or hydrogen derived from these renewable resources. Eligible entities are agricultural producers and rural small businesses. Learn more [here](#).

Applications are due February 1, 2016.

