

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 in February 2014.

TREEDC also participated in the Philippine Investment Forum in Manila where TREEDC President James Talley spoke about the TREEDC International Exchange Program. He announced that TREEDC selected the Philippines as its Pilot Country because of its vast potential of renewable energy resources, high energy costs and frequent brownouts.



L-R photo: Jessica Klein, German Energy Agency; Mary Shaffer Gill, ARIES Energy (Tennessee); Carlos Mayer, Vis Solis (Tennessee); Warren Nevad, University of Tennessee MTAS/TREEDC; Doug Jackson, TREEDC International Affairs Director; Ducktown Tennessee Mayor James Talley, TREEDC President

He emphasized that TREEDC is very interested in coordinating social responsibility projects with Philippine corporations to help enhance the quality of life and to craft its long term strategic plans to implement its community education and economic development goals in the Philippines.

TREEDC also followed up with member cities Naga City and Mabalacat to provide updates and to make plans for future projects and visits.

TREEDC and REAP officials flew Butuan City in Mindanao on February 19, 2014 for the 2nd Caraga Renewable Energy Forum. During a press conference held at the Philippine Electronics and Communication Institute of Technology (PECIT) Conference Room, TREEDC, REAP, PECIT and other guests discussed the potentials and benefits of renewable energy in the region and the need for active collaboration between government agencies, technology providers, the private sector and media to encourage its widespread utilization. Several media networks including the Philippine 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 together with PECIT President, Engineer Romeo Zerrudo; GNN-TV Naga President Alfredo Perdon, Renewable Energy Association of the Philippines President, Engineer Olegario S. Serafica; and officials from the Dept. of Science and Technology, and local governments.



L-R photo: Dr. Steve Thornberry, IMT Solutions; President Mayor Talley; Director Warren Nevad; PECIT President Engineer Romeo Zerrudo; Fred Perdon, GNN Network/Naga City; REAP President Oly Serafica; TREEDC International Director Doug Jackson

TREEDC President Talley stated that Mindanao has vast renewable energy resources with good potential for business and investments which many foreign companies are eager and willing to develop. TREEDC takes a step further by conducting educational awareness forums to present available systems and technologies, explain issues and concerns to establish trust among stakeholders in the development of their resources while protecting and preserving the environment. Mary Shaffer Gill discussed her firm's interest in learning about the renewable energy needs in Mindanao. Warren Nevad, TREEDC executive director mentioned that REAP President Oly Serafica and TREEDC have been coordinating with the local officials here since 2013 and reported that the Caraga region offers excellent opportunity for Tennessee technology providers. Engr. Romeo Zerrudo, Philippine Electronics and Communication Institute of Technology (PECIT) President disclosed that his school has been using renewable energy, solar and wind, which resulted in savings from electricity expenses and freedom from brown-outs. REAP President Oly Serafica urged local government officials and media to promote the application and use of renewable energy and challenged all concerned to join hands to bring renewable to those who need it most but could least afford it.

The Caraga Renewable Energy Conference started in the afternoon at the Balanghain Convention Center in Butuan City. The forum with a timely theme of "Exploring Available and Potential Resources and Capabilities for Rural Development" was aimed to help and support Local Government Units (LGUs) in plan and implement renewable energy projects. The forum featured community-based renewable energy systems for rural communities. The Conference was sponsored by Tennessee Tech University, TREEDC, IMT Solutions and Vis Solis. REAP President Serafica and PECIT Executive Assistant Ana Ebo spearheaded the organization, promotion and coordination activities for the conference.

A few highlights from the agenda included presentations by the following participants:

- 1) Spearheading Private Sector Initiatives; by President Serafica, REAP;
- 2) Manpower & Skills Development through Education and Training; by Atty. Teodoro Pascua, Deputy Director General, TESDA;
- 3) Solar Energy Systems for Rural Communities; by Erel Narida , CEO, One Renewable Energy Enterprise;
- 4) Solar Thermal Systems – Cooling and Heating; by Ricky Cordova, CEO, Edward Marcs;
- 5) Waste to Energy Conversion; by Steve Thornberry, President, IMT Solutions;
- 6) Financing Renewable Energy Projects; by Enrico Samaniego of the Land Bank of the Philippines; and Paul Lazaro, First Vice-President, Development Bank of the Philippines;

- 7) TREEDC Social Responsibility Goals; by Douglas Jackson, TREEDC;
- 8) Vis Solis Solar Developments in the Philippines; by Tim Hayes , President, Vis Solis;
- 9) ARiES Energy Cellulose to Hydrogen Project and Opportunities for Women in Renewable Energy; by Mary Shaffer Gill, Vice President, ARiES Energy..

The final day of the conference included educational tours of PECIT's renewable energy demonstration projects and a field trip/tour of a biogas system powering a lemongrass distillery.



Speakers/Presentors with cultural entertainers at the PECIT- Caraga Conference



Mary Gill of ARiES Energy, PECIT President Zerrudo (partly hidden), Caraga Science Foundation Secretary Abely Jimiera, REAP President Serafica and TREEDC International Dir. Jackson inspect facilities during the tour of biogas plant.

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 Department 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 partners.



L-R photo : TREEDC Director Mr Doug Jackson; DOST Regional Director Hon Dr Victor Mariano ; DOE Hon ASEC Daniel Ariaso , CESO II; MTAS Management Consultant Warren Nevad of the University of Tennessee USA.; Bataan Hon Governor Abet Garcia; TREEDC President Hon Mayor James Talley of Ducktown City Tennessee USA; MAAP President/ AMOSUP Exec VP VAdm. Eduardo Ma. R. Santos, AFP (Ret) , MAAP ERO Director /PAEPI President Prof. Angelica M. Baylon ,PhD and PLP University President Atty Amihan April M. Alcazar,PhD. Standing at back of the Presidential Table were, President, Vice-Presidents or Directors representing 15 HEIS composed of 5 Private Institutions (*MAAP, Lyceum University of the Philippines –Batangas (LPU), San Beda College, University of Luzon, System Plus College Foundation and St Louis University*) and 10 State Universities (*Bataan Peninsula State University (BPSU) , Central Bicol State University , Sultan Kudarat State University , Polytechnic University of the Philippines , Isabel State University , Naval State University , Palawan State University , Philippine Normal University (PNU) , Pamantasan ng Lungsod ng Pasig (PLP) and UP Diliman* particularly the ADORE Team led by Dr Louis Angelo Danao and company

Philippine Department of Energy Assistant Secretary Daniel Ariaso presented comprehensive updates and initiatives of the Department of Energy and urged colleges and universities to become an Affiliated Renewable Energy Center (AREC) with the DOE. TREEDC President/Ducktown, TN Mayor James Talley and MAAP Professor Angelica Baylon introduced TREEDC as a statewide network of cities, academic/research institutions, private sector organizations, and key stakeholder institutions established in August 2008 by the University of Tennessee with the mission to register selected reputable Philippine colleges/universities as honorary members of TREEDC network to facilitate the



establishment of partnerships with existing TREEDC member colleges/universities in Tennessee, Mississippi, and Arkansas in creating more awareness, progress and development of renewable energy for each other.

L-R: MAAP President VADM Eduardo Ma. R. Santos, AFP (Ret), PLP President Atty Amihan April M. Alcazar, PhD; TREEDC President, Hon Mayor James Talley, Province of Bataan Governor Hon Albert Raymond “Abet” S. Garcia, DOE ASEC Daniel A. Ariaso, CESO II, MAAP ERO /PAEPI President Prof Angelica M Baylon, PhD; TREEDC Director Warren Nevad, DOST Regional Director Hon Dr Victor B. Mariano, MAAP Dean C/M Renante Garcia and TREEDC Director Mr. Doug Jackson

TREEDC also met with the U.S. Embassy Commercial Service to present and discuss its activities for coordination and possible support/guidance.

TREEDC travelled to Naga City for further discussions with the City Mayor and Council relating to pending projects, Waste to Energy conversion of their Municipal Solid Waste, and Solar Power Plant. TREEDC participated in the GNN News Network 3rd annual celebration in Naga City. The event was hosted by Fred Perdon. TREEDC re-visited Central

Bicol State University of Agriculture 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.

TREEDC met with sister-city Mabalacat City officials to discuss the proposed study visit of some officials to Tennessee to look at renewable energy systems/technologies for possible applications in Mabalacat.

University of Pasig City Dr. April Alcazar led a tour of the Pasig City Campus with President Talley and Director Jackson on March 1, 2014. Mayor Talley will provide a presentation about the TREEDC-Philippines International Exchange Program at the Tennessee Department of Environment and Conservation (TDEC) Conference on March 26th. A complete Powerpoint presentation is available upon request. Delegates from the Philippines will be visiting Tennessee next month and will return for the TREEDC Annual Conference at Tennessee Tech on October 12- 14.

The Tennessee Renewable Energy & Economic Development Council is a nonprofit grassroots organization promoting the economic and environmental benefits of renewable energy for Tennessee communities. TREEDC was formed by four (4) mayors and the University of Tennessee President Emeritus Dr. Joe Johnson in 2008. For more information, visit www.treedc.us.