

TREEDC PHILIPPINES
HIWASSEE COLLEGE
APRIL 4, 2014



TREEDC ORIGINS

- 2008: Formed by University of Tennessee Former President Dr. Joe Johnson, MTAS and 4 rural area mayors scattered across the state
- Mission: Promote and educate renewable energy with economic development and energy efficiency
- 2014 – 96 mayors/ 30 Universities- Projects: Waste to energy, Solar for public buildings, Geothermal awareness, Alternative fuels- CNG , biodiesel, educational Forums – Annual Conference- Oct 12-14
- International Exchange Program: 5 countries : 1)- Philippines; 2) Peru; 3) India; 4) Germany and 5) Kenya

Factors in Selecting Philippines as Pilot

- High Energy costs > 25 cents kilowatt
- Frequent blackouts – many rural communities off the grid
- English speaking
- Developing country
- Social responsibility needs
- Vast resources for renewables
- Renewable Energy Law of 2008 Implementation
- Urgency of Governmental officials to fight climate change
- Tremendous opportunities for our Tennessee business members

PHILIPPINE EXCHANGE PROGRAM

Objectives

- Awareness: Information and technology exchange between sister cities and colleges
- Showcase Tennessee technology providers/ Attract multinational corporations
- Corporate Social Responsibility
- Replicate TREEDC model

Members and growing

- 6 cities Mabalacat , Sorsogon, Naga, Daet, Pasig, Paranaque
- 12 colleges
- Central Philippine Univ
- Polytechnic Univ of Philippines, BPSU, LPU
- Technological Univ of Philippines, Pasig Univ.
- PECIT, MAAP, PNU
- Univ of Philippines
- Central Bicol Univ.
- Systems Plus Group

CHRONOLOGY IN THE PHILIPPINES

- **October 2012 – TREEDC Establishes Program**
- **October 2012 – Ex. Director establishes contacts with REAP and DOE to gauge interest- strategy**
- **January 2013 – TREEDC meets Doug Jackson – approach build university membership then cities (opposite of Tennessee approach due to national elections)**
- **March 2013 –Met with Philippine Universities and Mabalacat to enlist honorary members**



CHRONOLOGY IN THE PHILIPPINES CONT.

- **April 2013 – Jackson attends Solar conference and conducts follow-up site visits to cities**
- **June/July 2013 – Asian Energy Forum/ Spoke at Corp. Soc. Resp. Forum – open local Office-**
- **Sept/Oct 2013 – TREEDC conducts 3 forums- Typhoon Relief**
- **Feb 2014 – 2 forums- solar/waste to energy**



TREEDC- PHILIPPINES – SEP/OCT 2013

Map



Delegation

- Mayor James Talley, TREEDC
- Warren Nevad, MTAS
- Doug Jackson, TREEDC International Consultant
- Dennis Tennant, TTU
- Tim Hayes, Vis Solis
- Oly Serafica, Renewable Energy Assoc of Philippines



Past TREEDC Visits

September 25th

Polytechnic University of the Philippines- Sta. Mesa, Manila City



September 30/Oct. 1

Central Bicol State University- Naga City, Camarines Sur
(282.58 km from Manila)



October 2

Technological University of the Philippines - Manila
Taguig Campus



TREEDC- PUP FORUM- 9-25-13

**300 engineering students
Manila, Philippines**



Tennessee Tech Sister College



POWER TRENDS CONFERENCE

9/26-27

Tennessee Businesses



Renewable Energy Assoc. of Philippines



TREEDC-CENTRAL BICOL STATE UNIVERSITY FORUM 9-30

Sorsogon mayor



GNN Network



TOUR OF CENTRAL BICOL STATE 10-1

Pig Farm



Campus



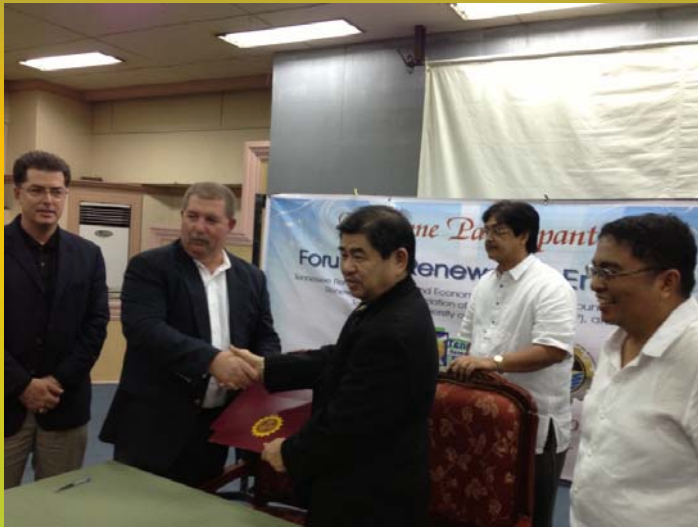
TREEDC SISTER CITY: MABALACAT

- Ducktown, Tennessee and Mabalacat, Pampanga
- Office – Delegation to Tennessee
- Projects – Clark Zone, Waste to Energy Development, Energy Efficiency upgrades and Solar



TREEDC-TUP FORUM- 10-2-13

Technological Univ of Philippines- 210 attendees



Traditional Dance



INTERNATIONAL RESEARCH PRESENTATION – MANILA HOTEL- 10-3

6000 attendees



Audience



TREEDC- PHILIPPINES – FEBRUARY 2014

Map



Delegation

- Mayor James Talley, TREEDC
- Warren Nevad, MTAS
- Doug Jackson, TREEDC International Consultant
- Mary Gill, ARiES Energy
- Carlos Mayer, Vis Solis
- Tim Hayes, Vis Solis
- Jessica Klein, German Energy Agency
- Fred Perdon, GNN Network
- Paul Lazaro, Development Bank of the Philippines
- Tomas Deleon, Land Development Bank of the Philippines
- Steve Thornberry, E3 Integrated Resources
- Oly Serafica, Renewable Energy Assoc of Philippines

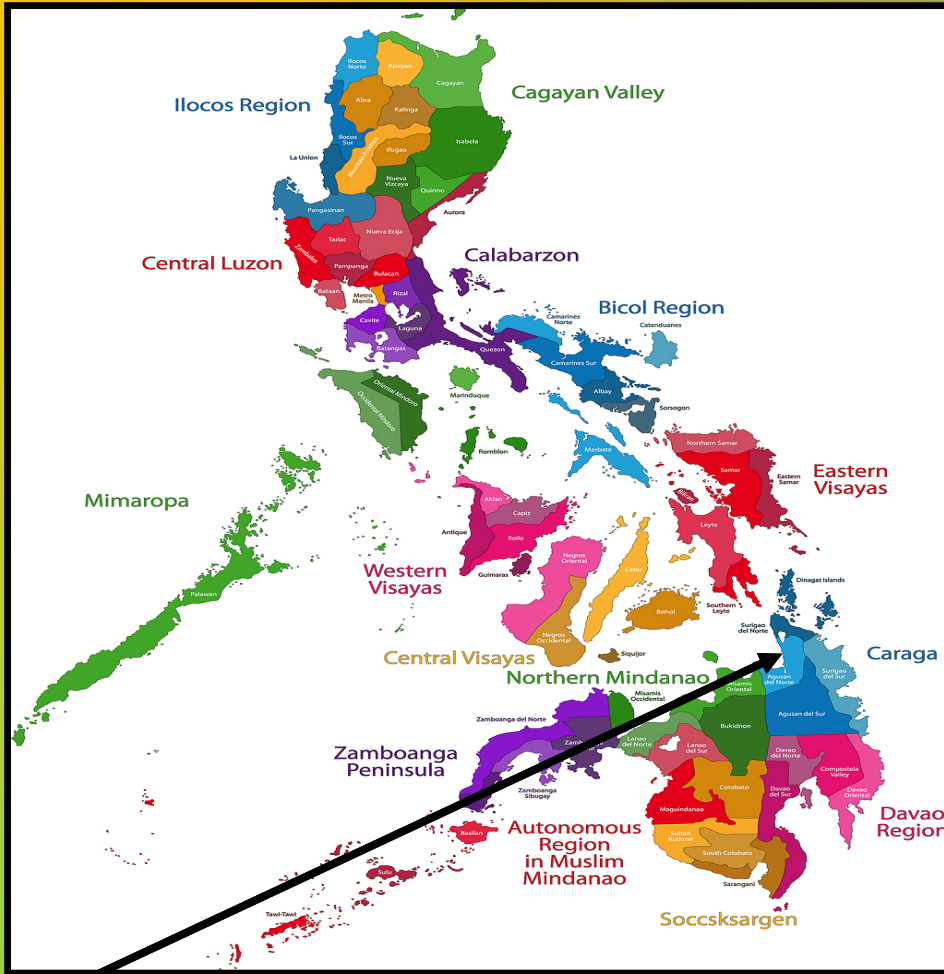
FEBRUARY 18, INVESTORS FORUM - MANILA

President Benigno Aquino

Panel Discussion – Ducktown Mayor Talley



Caraga Renewable Energy Forum



Butuan City is located in Caraga, a region located on the island of Mindanao.



On February 19th we flew to Butuan City. There are three main regions of the Philippines (similar to the 3 stars of Tennessee): Luzon, Visayas, Mindanao

At Butuan City Engineer Romeo L. Zerrudo, President of the Philippines Electronics & Communication Institute of Technology (PECIT), greeted us with a few of his students and local media.

TREEDC/TTU REGIONAL CONFERENCE – 4 DAY CONFERENCE

Mary Gill Fan Club



Audience



Caraga Renewable Energy Forum

Media outlets that attended the press conference included:

- the Philippines Information Agency of Caraga,
- Channel 5 News, a local affiliate of NBC
- and several others

Press Conference participants included:

- Mayor James Talley
- Warren Nevad
- Doug Jackson
- Steve Thornberry
- Mary Shaffer Gill
- Engineer Zerrudo, President of PECIT
- Alfredo Perdon, President of CBUSA
- President of the Renewable Energy Association of the Philippines Olegario S. Serafica



Caraga Renewable Energy Forum



TREEDC Member companies presentations included:

- Vis Solis Solar Developments in the Philippines by TIM HAYES, President, Vis Solis
- ARiES Energy Cellulose to Hydrogen Project and Opportunities for Women in Renewable Energy by MARY SHAFFER GILL, Vice President, ARiES Energy

Caraga Renewable Energy Forum



RETURN TO CENTRAL BICOL/NAGA - FEB 24

Central Bicol Property



Interview with Mary Gill



TREEDC/MARITIME ACADEMY OF ASIA AND PACIFIC – FEB 27

Bataan – Corregidor Island

6 MOAS with colleges/ Governor and Assistant Secretary of Dept of Energy



BUSINESS OPPORTUNITIES WITH TREEDC MEMBERS

- ARiES Energy, Blackhawk Powerhouse, Global Green Lighting, Harrelson & Associates, Rhoades Car International and Vis Solis
- Doug Jackson: Year round TREEDC presence in Philippines



SUMMARY

Outcomes

- 5 Educational forums at 5 different universities all over the Philippines
- TREEDC provided Typhoon Relief Assistance by donating portable solar lighting/battery charging kits
- 12 University/ colleges and 8 cities have joined TREEDC
- Positive recognition of Tennessee Tech and University of Tennessee through articles and press conferences
- Sister City – Mabalacat
- Waste to energy and Solar Project Developments
- Friends for Life

What's next

- Share information about 18MW landfill to energy project with TN technology providers
- International Consultant Jackson to conduct site visits at landfill and TREEDC Philippine cities
- Make plans for Mabalacat delegation visit to TTU, Ducktown and Nashville
- Prepare funding proposals to implement work on the International exchange Program
- Invite Philippine university officials to TTU-TREEDC Annual Conference in Oct 2014
- Develop long term strategy plan- help rebuild through renewables

Contact Information

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