

UT IPS/TREEDC – International Exchange Program



Arkansas State University
www.TREEDC.US
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Presentation Outline

- I. The University of Tennessee MTAS
- II. TREEDC Origins/ Objectives of International Work
- III. Chronology/Philippine Members
- IV. Renewable Energy Toolbox Approach
- V. Projects/Social Responsibility Goals
- VI. Future Initiatives



HISTORY OF MTAS

- **Established in 1949 by the Tennessee General Assembly, MTAS provides technical advice and training to cities and towns across the state: their governing bodies, mayors, city managers, city recorders, and city department heads.**

PROGRAMS

- **Administrative Hearing Officer Training**
- **Certified Municipal Finance Officer Program (CMFO)**
- **Elected Officials Academy (EOA)**
- **TREEDC – Renewable Energy**
- **Hot Topics / Specialty Training for Cities**
- **Joint City-County Training**
- **Local Government Leadership Program (LGLP)**
- **Municipal Management Academy (MMA)**
- **Municipal Administration Program (MAP)**
- **Online Training Certificate Programs**

TREEDC Origins

2008

Formed by University of Tennessee IPS and Former President and 4 rural mayors across the state – forums- UT initiatives – solar/ biofuels speed dating

2012

65 mayors -International Exchange Program: 5 countries : 1)- Philippines; 2) Peru; 3) India; 4) Germany and 5) Kenya

Today

101 mayors/ 30 Universities- Projects: Waste to energy, Solar for public buildings, CNG , Wind, TVA assistance – Solar in Phil



Mission

Promote and educate renewable energy with economic development and energy efficiency

Objectives of the International Exchange Program

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graph TD; A[Objectives of the International Exchange Program] --- B(1. Create sister city/college matches for Research and Technology); A --- C(2. Build Social responsibility Programs and Awareness); A --- D(3. Offer local communities a toolbox of clean energy solutions designed to meet local needs and resources); A --- E(4. Create market opportunities for businesses in the Philippines and Tennessee);
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1. Create sister city/college matches for Research and Technology

2. Build Social responsibility Programs and Awareness

3. Offer local communities a toolbox of clean energy solutions designed to meet local needs and resources

4. Create market opportunities for businesses in the Philippines and Tennessee

Factors in Selecting Philippines as Pilot

- High Energy costs > 25 cents kilowatt
- Frequent blackouts – many rural communities off the grid
- Renewable Energy Association of the Philippines
- 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

Chronology in the Philippines



- **March 2013** – Met with Philippine Universities and Mabalacat to enlist honorary members

- **June/July 2013** – Attended Asian Energy Forum/ Spoke at Corp. Soc. Resp. Forum – open local Office

- **Sept/Oct 2013** – TREEDC conducts 3 forums at colleges in Manila and Naga City – 600 attendees

- **Nov 2013** – Worked with DOE -Typhoon Relief

- **Feb 2014** – 2 forums- Mindanao and Baatan

- **Oct 2014** – International Conference-TTU

Chronology in the Philippines



- **December 2014 – Bacolod Green technology Forum, PAEPT Conference and Philippine Normal University Student Forum**
- **Apr 2015 – First solar project completion at Puerto Princesa City Hall**
- **July 2015 – TREEDC scholarships –**
- **Nov 2015 – PECIT – Butuan City Pico- hydro**
- **Feb 2016 – 4 U.S solar companies in Philippines – Tacloban project – TUP new campus**

Members

Bicol University
Central Bicol State University
Central Philippine University
Philippines Electronic and Communications Institute of Technology
(PECIT)
Polytechnic University of the Philippines
Maritime Academy of Asia and the Pacific Systems Plus College
Foundation
Technological University of the Philippines
The University of the Philippines Los Banos
The University of Philippines Visayas
Maritime Academy of Asia and the Pacific
Bataan Peninsula State University
Lyceum University of the Philippines
Philippine Normal University
Pamantasan ng Lungsod ng Pasig
Philippine Association of Extension Program Implementers
San Beda College, Carlos Hilado , Northern Negros, Catanduenas State
University,
Cities of Balanga ,Butuan, Daet, Mabalacat, Naga City, Sorsogoon City
& Province of Baatan



MOU Terms- Sister City/College

- **Information/Technology Exchange**
- **Reciprocal Visits**
- **Forums**
- **Project Assistance**
- **Ambassadors to Government , Cities and Corporations**

TREEDC Toolbox Approach for Members

1. Diagnosis

Energy – How much? Is it clean and reliable?

Garbage – How much? Cost? Landfill space?

Then we go to our toolbox and pull out a solution:

2. Solution Tools

– Education, Power Saving, Energy Efficiency recommendations

Solar, Waste to energy, Wind, Biodiesel, Feedstock development



Projects/Social responsibility

1. **Renewable Energy Campus Planning for Member Colleges**
2. **Solar Development for Member Cities**
3. **Waste to Energy Planning for Member City landfills**
4. **Typhoon Relief with DOE**
5. **International conference/ tours in Tennessee**
6. **Daily Dialogue with members and government**
7. **Pico Hydro – PECIT/ Student assistance**
8. **Best Practices Sharing**



Philippine delegation visit/conference

TTU Conference: TVA/IBM/NORESCO



Visits – Wampler’s Sausage Biomass



Field visits – Ducktown/Kingston

Kingston Mayor



Ducktown Solar



Middle Tennessee Visits

Hendersonville: Rhoades Car International



Fayetteville 3MW Solar Array



What's Next?

- Enroll at least 25 Cities and 30 Universities Across the Philippines
- Facilitate the development of at least 10 solar projects in the Philippines.
- 3) Develop 3 or more Biomass to energy plants in various locals in the Philippines.
 - 4) Develop several renewable energy development parks
- 5) Create internship opportunities and provide tuition assistance
- 6) Explore connecting other Southeastern Asian Countries

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