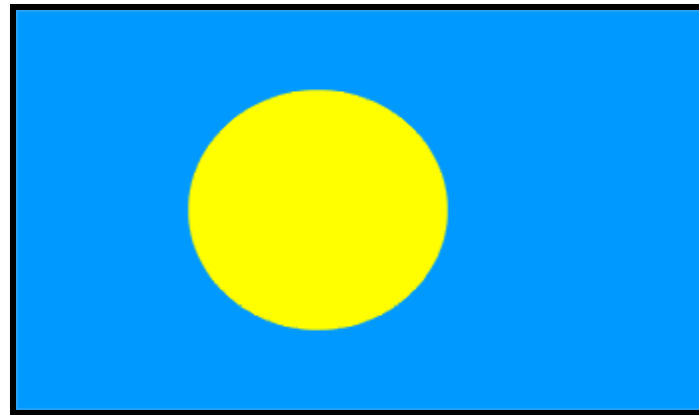




# EXPERT CONFERENCE on DEVELOPMENT of ISLAND'S SUSTAINABLE SOCIETIES in OKINAWA 2014



Republic of Palau

By: Greg Decherong

# Outline

- Palau – National Circumstance
- Overview of Energy in Palau
- National Efforts
  - Energy
  - Environment
- Gaps and Constraints
- Gains from this training program
- Conclusion





# Palau - National Circumstance

- Palau consist of over 200+ islands, of which only 9 are inhabited;
- Land area: 459 sq. km/
- Made up of 5 geological island types: volcanic, high limestone, low limestone, atolls, and a combination of volcanic and limestone;
- Climate: tropical rainy climate;
- Temperature: mean is 82°F;
- Rainfall: 150 inches per year;
- Population: 20,273 (median projections)
- Main industry: Tourism
- GDP per capita: \$8,392.65 (OPS projections)

# Overview of Energy in Palau

- 98% of Palau has accessibility to grid electrification.
  - However power generated by diesel engines using ADO
    - Which puts us at the MERCY of DIESEL PRICES!
  - Palau's southwest outer-islands make up the remaining 2%
    - Using Stand-Alone Solar PV systems
  - Grid-connected solar PV makes up 2% of Peak Demand
    - Projected to reach 4% by 2012
  - Almost all of Palau's diesel consumption is for power generation
  - Gasoline is primarily used for transportation sector
    - Especially in the Tourism Industry
  - Diesel and gasoline are both taxed at \$0.05/gal, No price controls
  - LPG is also imported and used primarily for cooking
  - Biogas pilot project for small piggeries
  - No Immediate Potential for Hydro, Wind, Wave, OTEC nor Biodiesel

"No Island left behind"

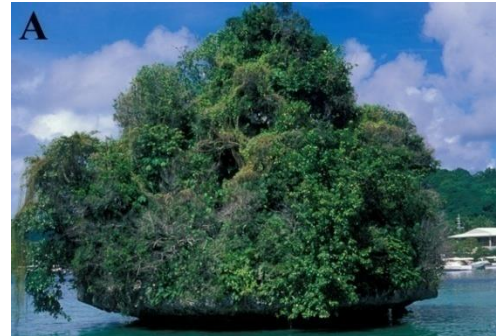




# Our Vulnerability to Climate Change



Drought  
Sea Level Rise  
Coral Bleaching  
Natural Disasters  
Food Security  
Economic instability



These effects of Climate Change not only threaten our livelihood but also threaten the future of our existence as a Nation.

"No Island left behind"





# Palau's Energy Efforts

- **Palau National Energy Policy 2010**
  - Green Energy Micronesia
  - 20-30-20 by 2020
- **Renewable Energy Technology**
  - Currently Solar PV is the only proven tech. for Palau
  - Renewable Energy Subsidy Program at NDBP
  - Projected to reach 4% by end of 2012
- **Energy Efficient Technology**
  - Compact Fluorescent Lamps (CFL)
  - LED Lighting
  - Energy Efficiency Subsidy Program at NDBP
- **Palau Energy Conservation Strategy (PECS)**
  - Focuses on the Government Sector
- **Energy Efficiency Action Plans (EEAP)**
  - CFL (20,000) Island wide distribution
  - Retrofitting government offices





# Palau's Environmental Efforts

## Protected Areas Network (PAN)

- State level initiative

## Micronesian Challenge 30-20-20

- (Regional Initiative)
  - 30% conservation of near-shore marine
  - 20% conservation of terrestrial land
  - By the year 2020

## Green Fee

- \$15 collection from all visiting tourists to contribute in the sustainability and preservation of the Palau's pristine environment

## Green Revolution

- Movement to plant more fruit bearing trees, vegetation and crops to ensure Palau's Food Security for future generations

## Integrated Water Resource Management (IWRM)

# Gaps and Constraints

- ⦿ Grid electricity is heavily reliant on diesel, making Palau vulnerable to fluctuations in the price of oil.
- ⦿ There is currently no National Climate Change Policy
- ⦿ Weak statistical data collection of the overall Energy Sector.
- ⦿ Lack of analytical and statistical data to explore other means of Renewable Energy other than Solar
- ⦿ Current resources are inadequate
- ⦿ Capacity Building- Shortage of Local Expertise
- ⦿ Awareness and Education to general public and Leaders

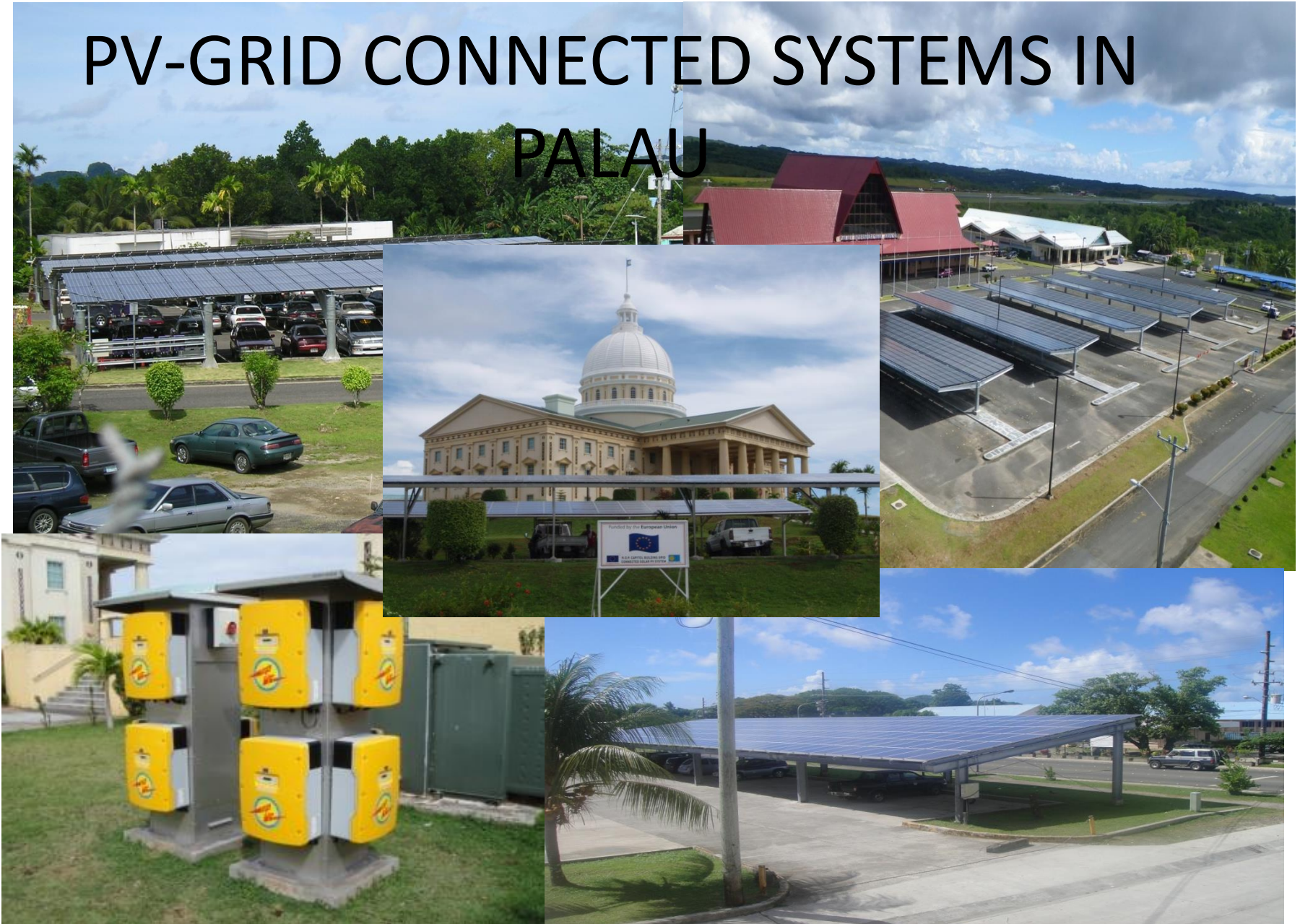


# What to gain from this program?

- Develop and Mainstream Policies in various sectors that are Complimentary and Supportive to one another
- Climate Change Policy
  - Is needed as an umbrella for mainstreaming
- Renewable Energy Policy
  - Fostering a Renewable Energy Market
  - Government Incentives for RE applications
- Green Technology
  - Solar & Wind suitable for tropical environment
  - Smart Grids
- Green Finance and Carbon Market
  - Dependent on a more structure framework
- Capacity Building and Technology Transfer



# PV-GRID CONNECTED SYSTEMS IN PALAU





# “Mesulang”

(Thank You)



***By becoming more energy conscious we leave no island left behind!  
Our islands are our home but above all, Our Identity.***