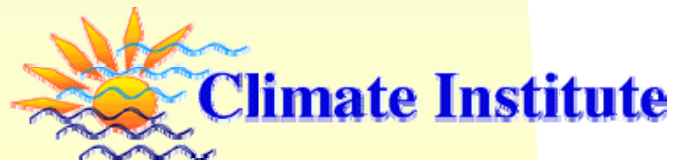


# Climate Change - A Challenge for the Pacific Nations

The Hon. Tom Roper  
Board Member, Climate Institute  
Project Leader, Global Sustainable Energy  
Islands Initiative (GSEII)

PPA CEO's Conference  
American Samoa, August 2009



# Overview

- Climate impacts
- UN and Forum decisions
- The Ministerial challenge
- Your key role
- Sharing through the PPA
- Act now



# How much action do we need?

- UNFCCC goal of “avoiding dangerous anthropogenic interference in the climate system” is already out of reach:
  - Current level of interference is dangerous.
  - Issue is whether catastrophic interference is avoidable.
- *John P Holdren, Professor of Environmental Policy, Harvard University, June 2007*

# Climate change and small island states

- Small islands are especially vulnerable to the effects of climate change, sea level rise and extreme events.
- Sea-level rise will exacerbate inundation, storm surge, erosion and other coastal hazards, threatening vital infrastructure, settlements and livelihoods.
- Increased water temperatures and chemistry changes will endanger coral reefs and fisheries
- By mid-century water resources will be reduced to where they are insufficient to meet demand during low rainfall periods – food security at risk.
- With higher temperatures, increased invasion by non-native species and diseases will occur.

# A voice at the United Nations



“We are of the firm view that the adverse impacts of climate change have very real implications for international peace and security.”

“Small islands are already experiencing the dire and immediate impacts of climate change, including the inundation of coastal areas, the submergence of islands, loss of freshwater supplies, flooding, drought, damaged crops and increased disease.”



*Ambassador Marlene Moses of Nauru*



FUNAFUTI, TUVALU, MAIN ISLAND OF NATION ONLY 4 METERS HIGH IN SO. PACIFIC, THREATENED BY SEA LEVEL RISE. © 2005 GARY BRAASCH



EXTRA HIGH TIDE FLOODS ROAD, FUNAFUTI, TUVALU (PACIFIC OCEAN) © 2005 GARY BRAASCH  
RISING SEA LEVEL DOCUMENTED BY WORLD VIEW OF GLOBAL WARMING

# The first climate refugees

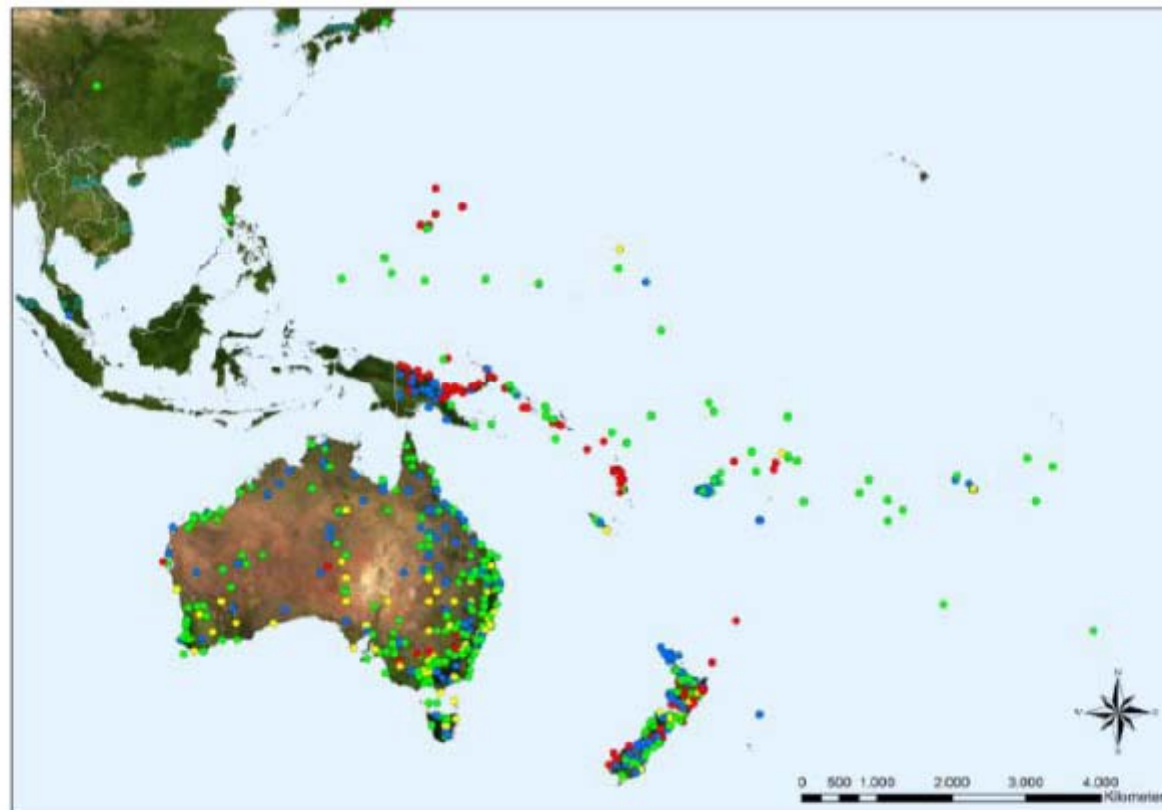


# Natural catastrophes in Australia/Oceania 1980 – 2008

Geographical overview



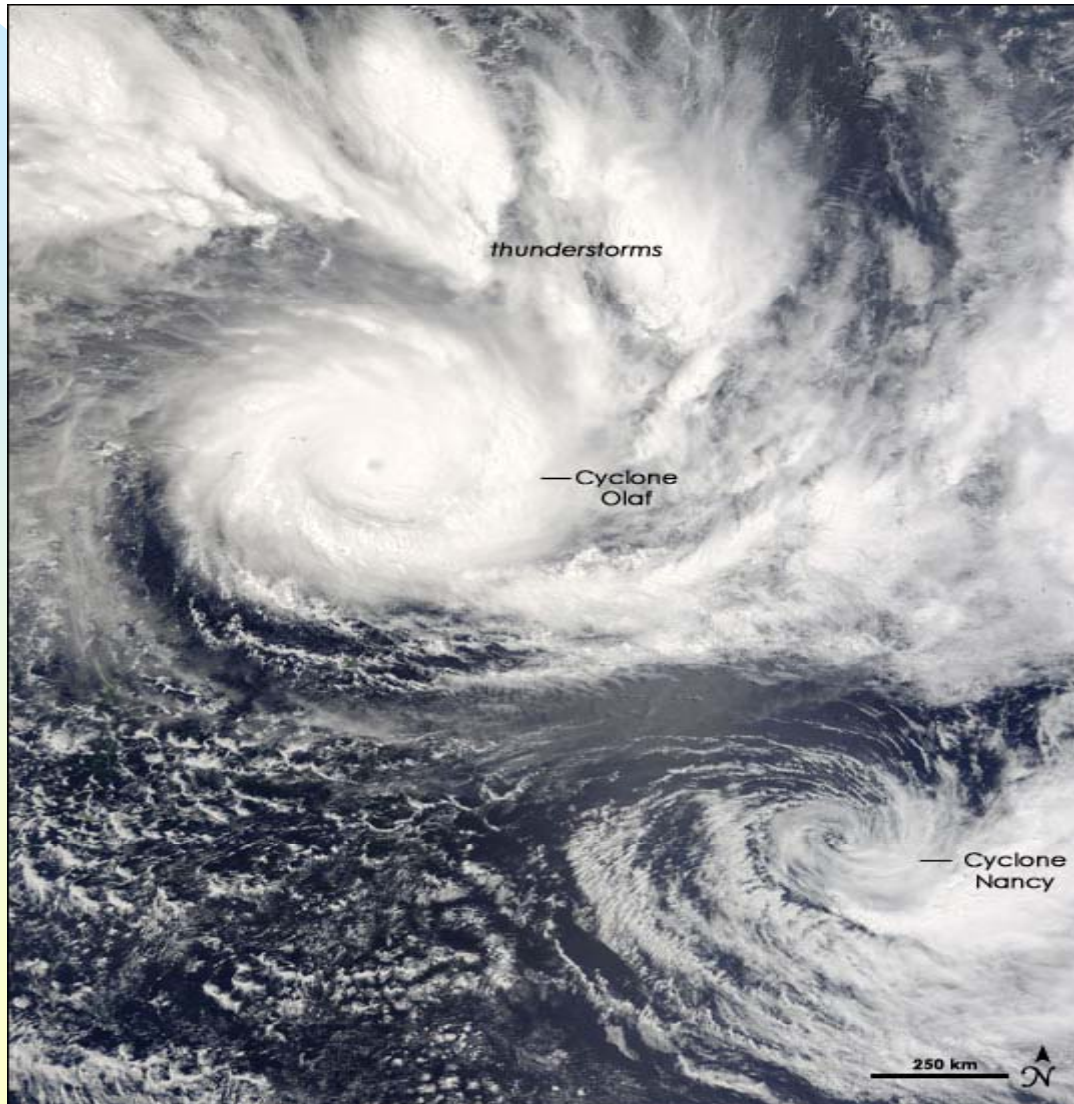
Münchener Rück  
Munich Re Group



- Geophysical events (Earthquake, tsunami, volcanic eruption)
- Meteorological events (Storm)
- Hydrological events (Flood, mass movement)
- Climatological events (Extreme temperature, drought, forest fire)



# Cyclones in the Pacific



# “Promote renewable energy” - says the Forum

- Renewable energy offers the promise of cost-effective, reliable energy services to rural households and will contribute to global greenhouse gas mitigation efforts. Now is the time, with appropriate technology and expanding carbon markets, to develop projects that bring renewable solutions to the region’s energy needs.
- Renewable energy targets can drive the transition of national energy sectors to a low carbon future. Tonga and Tuvalu were commended for incorporating renewable energy targets into national energy strategies.

# Islands as leaders

- Tuvalu has set a 100% renewable energy target by 2020
- It will cost \$20 million to generate all electricity from solar and wind and end dependence on diesel
- “We look forward to the day when our nation offers an example to all – powered entirely by natural resources such as the sun and the wind” Minister Natano



# The role of utilities

- Utilities are major players in island economies enabling industry development, improved lifestyles and a higher standard of living
- A badly run utility damages the economy, destroys opportunities and penalizes the less well off
- Utilities must be a key element in the National Development Plan and promote energy efficiency and renewable energy technology

# Officials urge action

- Prepare national energy policy and action plans
- Set voluntary renewable and energy efficiency targets
- Strengthen human capacity and improve the performance of power utilities
- Introduce policies, incentives and programs to improve energy efficiency
- Share experience and expertise on opportunities and lessons learned

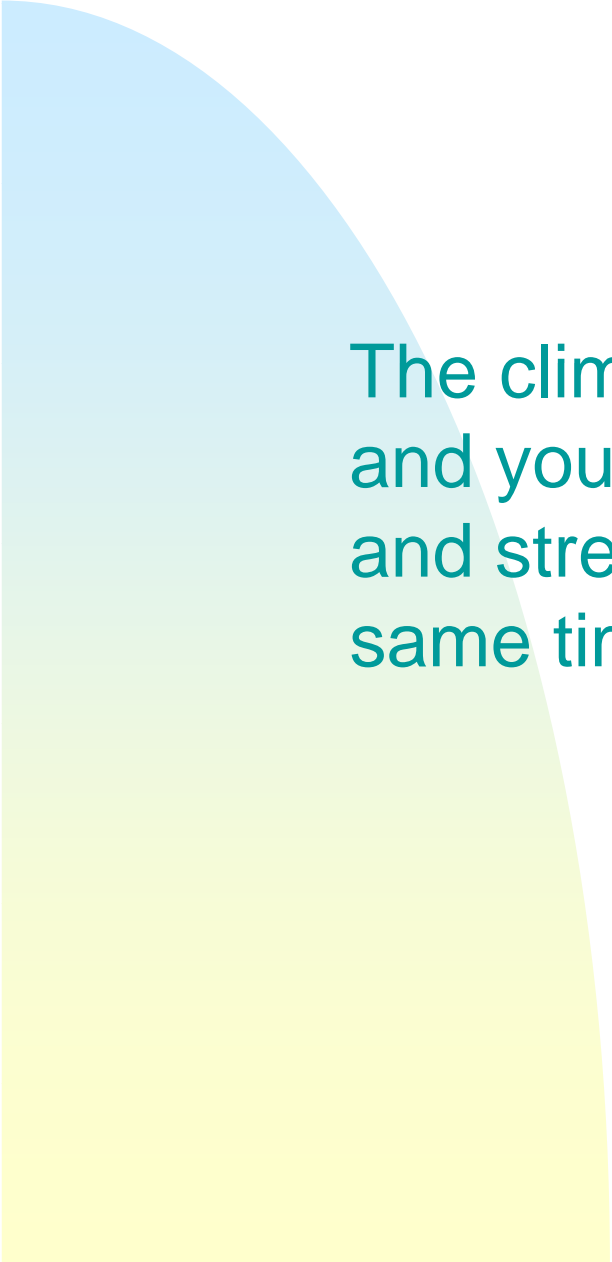
# Donors must do better

- Australia will convene an officials meeting to identify options for scaled up better coordinated financing for clean and affordable energy
- The E.U. will launch a 2<sup>nd</sup> Euro 200m. energy initiative in 2010
- The US stimulus package includes substantial funding for its territories
- The World Bank and ADB are developing enhanced programs

# A vital role for the PPA

- “Sharing knowledge and experience for practical proven solutions
- An important voice in the region and with donors
- Joint training programs with E8, REEEP
- Expertise to assist with operations and tendering
- Ensuring the involvement of the private sector – the Allied members





The climate change threat is here now  
and you and your utility can help meet it  
and strengthen your community at the  
same time.