

**Pacific High-level Policy Dialogue on
“The Role of Macroeconomic Policy and Energy Security in supporting
Sustainable Development in the Pacific”**

8-9 October 2012, Nadi, Fiji

**Jointly organized by
UN ESCAP and Sustainable Development Working Group of the Council of Regional
Organizations in the Pacific (CROP)**

Session 2 – Enhancing Energy Security for Sustainable Development

Presentation

**Managing the Ecosystem Implications of Energy Policies in the Pacific
Island States**

by
Taholo Kami
Regional Director, IUCN Oceania

October 2012



Energy, Ecosystems and Sustainable Livelihoods Initiative

Managing the Ecosystem Implications of Energy Policies in the Pacific Island States

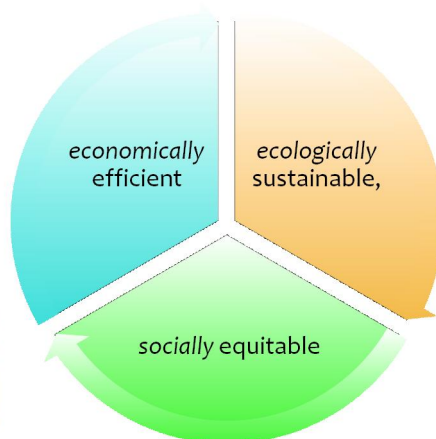
Phase I update



Energy, Ecosystems and Sustainable Livelihoods Initiative

Vision

EESLI will accelerate the transition to energy systems that are





Energy, Ecosystems and Sustainable Livelihoods Initiative **PROJECT LOCATIONS**



Energy, Ecosystems and Sustainable Livelihoods Initiative **PALAU** Energy Efficiency through home loans

Palau National Energy Policy

*Target: 30% reduction in
national energy
consumption by 2020*

*Improving energy
efficiency has greater
short term fuel
savings than any
other action*



3 Palau Housing Authority Homes



Energy, Ecosystems and Sustainable Livelihoods Initiative

PALAU

Energy Efficiency through home loans



- * **63** energy efficient homes
 - * 3 energy *model* homes
 - * 8 housing authority homes
 - * 26 NDBP homes
 - * 37 energy efficient homes
 - * + 26 under construction
- * Economic benefits to local industry & residents
- * Community can *see* efficiency

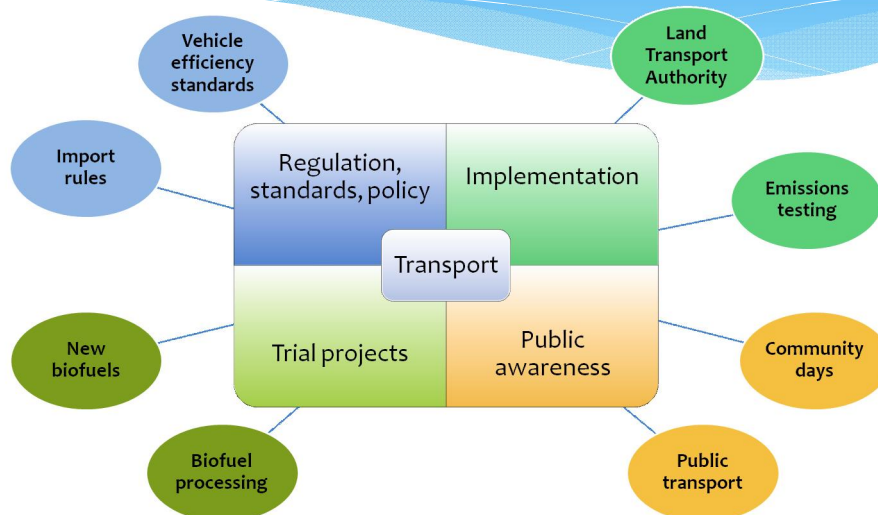
Interest all around the Pacific: Financing institutions looking to replicate



Energy, Ecosystems and Sustainable Livelihoods Initiative

SAMOA

Greenhouse gas abatement through energy efficiency and biofuel applications in the land transport sector





Energy, Ecosystems and Sustainable Livelihoods Initiative

SAMOA

Greenhouse gas abatement through energy efficiency and biofuel applications in the land transport sector



RESULTS

- * Regulatory review: vehicle emission standard
- * Transport modelling to support policy
- * Biodiesel: Coconut fuel (B50) powered vehicles
- * Community open days



Energy, Ecosystems and Sustainable Livelihoods Initiative

THE Republic of the MARSHALL ISLANDS

GHG abatement through Energy Efficiency

175 W x 800 mercury/sodium vapour lamps

511 MWh/year



78%

689 LED lamps (50W x 500 and 30W x 189)

112 MWh/year

319 t CO₂ saved each year



Energy, Ecosystems and Sustainable Livelihoods Initiative

TONGA

Solar Rehabilitation and Solar Home Systems



Solar Home System Rehabilitation

*Mango & Mo'unga'one: 64

*Lofanga: 43



Energy, Ecosystems and Sustainable Livelihoods Initiative

TONGA

Solar Rehabilitation and Solar Home Systems

Solar systems rehabilitated

Lights at night

No need for
kerosene

School children can
study

Mat weaving, traditional
crafts by mothers and
grandmothers

Greenhouse gas
emissions avoided



Energy, Ecosystems and Sustainable Livelihoods Initiative

TUVALU

Photovoltaic Electricity Network Integration Project



Energy, Ecosystems and Sustainable Livelihoods Initiative

TUVALU

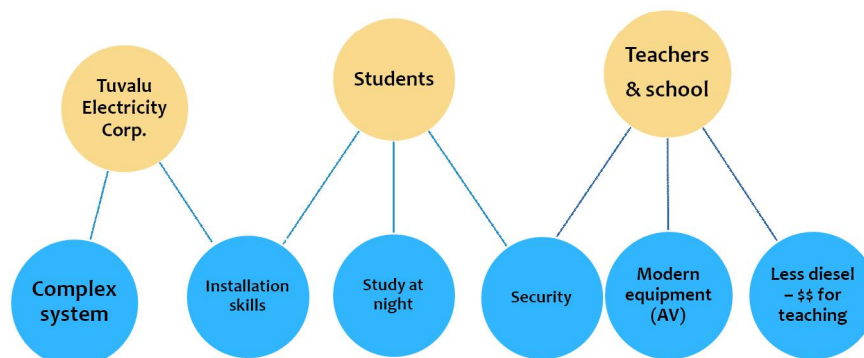
Photovoltaic Electricity Network Integration Project

Achievements

Motufoua Secondary School

46 kW grid-parallel PV system

10 Solar street lights





Energy, Ecosystems and Sustainable Livelihoods Initiative

VANUATU

Renewable Energy Projects

Solar rehab: schools, health centres

- Better education
- Night health care
- Quieter

Talise micro- hydro

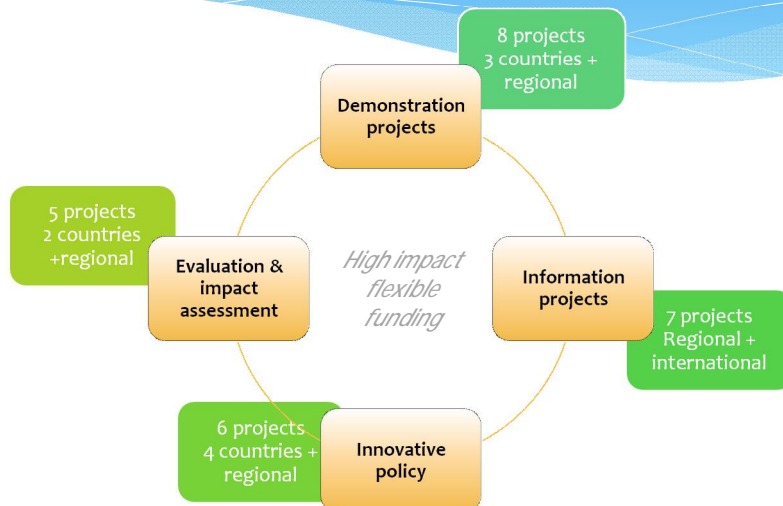
- In progress
- Self-sufficient
electricity supply

Wind monitoring

- Pre-investment
studies
- Installation
complete



Energy, Ecosystems and Sustainable Livelihoods Initiative SPECIAL INITIATIVES





Energy, Ecosystems and Sustainable Livelihoods Initiative SPECIAL INITIATIVES



Demonstration projects

- Solar streetlights
- Solar lighting
- Solar PV
- Cycling



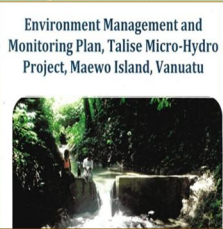
Information projects

- Partnerships
- Gender training
- Conference with University of South Pacific
- Internet videos



Innovative policy

- Strategic reviews
- Country policy support
- Guidelines
- Collaboration on ways to build environment into energy policy



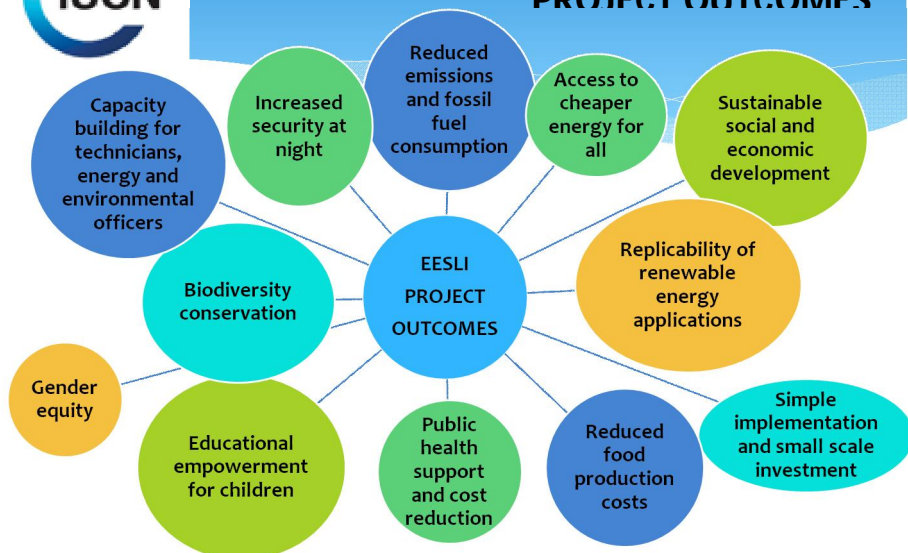
Environment Management and Monitoring Plan, Talise Micro-Hydro Project, Maewo Island, Vanuatu

Evaluation & impact assessment

- Biofuel weed risks
- Factsheets on renewables
- Environmental management plan

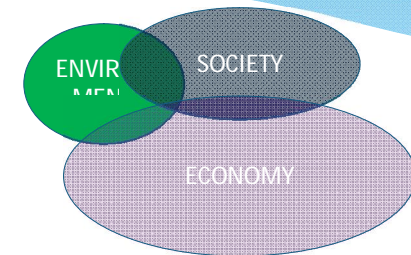


Energy, Ecosystems and Sustainable Livelihoods Initiative PROJECT OUTCOMES





Getting sustainable development right



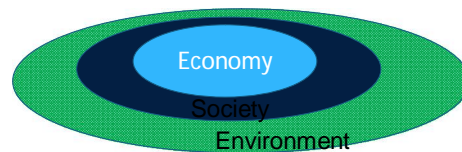
Status Quo



Greening Growth



Sustainable Development...



Much needed
"Rebalancing"
of capitals

Social Capital

conomic Capital

Environment Capital

What are the new engines of growth???



Regional: A Climate Change Lens

Shift from Vulnerability to Value

- * Climate change lens - 10m people in 30m sq Km of healthy ocean
- * Per capita lens is no longer relevant
- * Does the world need a "healthy Pacific islands region"?

* More than Tuna.... Healthy ocean habitats

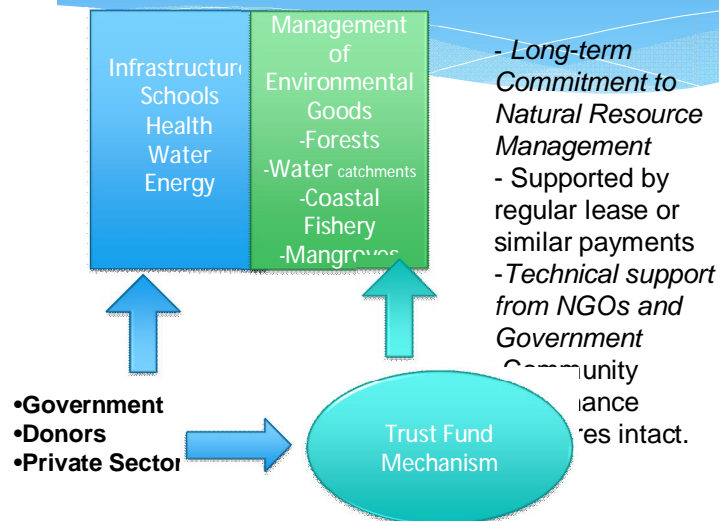
- * Support efforts for conservation and management
- * Large and small MPAs

* Global value

- * Forests / Mangroves / Seagrass – carbon sequestration
- * Healthy ocean ecosystems / fisheries
- * Minerals and natural resources

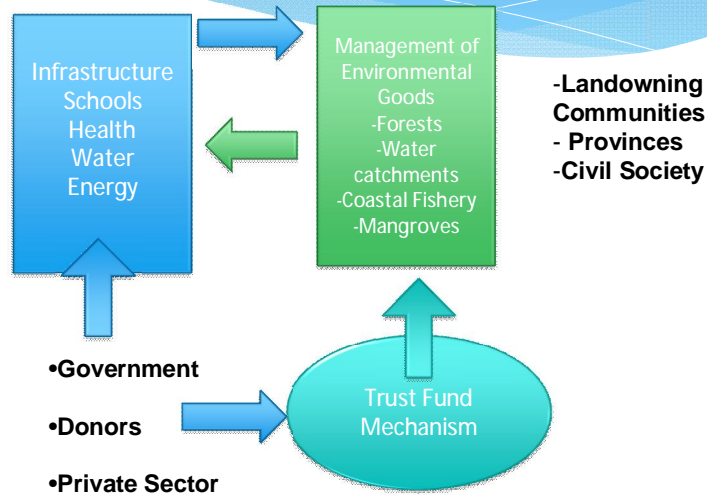


Sustainable Communities...





Development “Frontloads” a long term partnership with communities



Leveraging Energy for Sustainable Development

Urban

- * Renewable energy options bring down costs
- * Energy Efficiency
- * Greening transport
- * Tariffs and savings contribute to Rural Environment and Community Development Fund

Rural

- * Improve access to electricity
- * Communities engaged in management of environment and natural resources
- * Community governance systems reinforced to involve gender and strengthen existing systems



Concluding thoughts

- * Energy Security as practiced in the Pacific brings development but NOT necessarily Sustainability
- * A need to rethink the role of energy investments towards green Pacific economies
- * Energy security is ultimately tied to sustainable economies & communities.