





## The Energy – Environment Nexus A sustainable approach for the Pacific

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ITALIAN AGENCY FOR DEVELOPMENT COOPERATION Energy, Ecosystems and Sustainable Livelihoods Initiative (EESLI) in the Pacific



**Phase I: over M€ 4,5 Phase II:** @ M€ 5

**Participating Countries** 







**IUCN** 

<u>Phase II</u>: 10 countries: Federated States of Micronesia, Fiji, Kiribati, Marshall Is., Palau, Papua New Guinea, Samoa, Tonga, Tuvalu and Vanuatu

#### The objective

To help accelerating the transition within participating Pacific SIDS to energy systems that are ecologically efficient, sustainable and socially equitable, by:

(i) supporting partner countries in developing and implementing environmentally sound, sustainable energy policies; and

(ii) implementing renewable energy pilot projects focusing on ecosystem conservation and livelihood enhancement.



#### ITALIAN AGENCY FOR DEVELOPMENT COOPERATION

#### **Italian Support to SIDS**

- Energy and environmental linkages in SIDS: a key issue since
  2006 In 2007, EESLI formulation
- Italy founding member of the Global Island Partnership, active supporter GLISPA Secretariat and strong advocate of SIDS priorities
- Since 2006, specific programmes of the Italian Cooperation to target SIDS needs and in support of GLISPA strategic issues
- O Italy portfolio to Pacific: about M€ 15 + M€ 5 for Caribe and other SIDS
- New engagements, e.g., SDG14 T5 Coastal protection



ITALIAN AGENCY FOR DEVELOPMENT COOPERATION

### Energy, Ecosystems and Sustainable Livelihoods Initiative (EESLI) in the Pacific



- Promoting the conservation agenda and dialogue
- Positioning natural resources management at the heart of countries response to energy needs
- Building knowledge on how critical ecosystem services are in supporting livelihoods
- Awareness raising on the potential impacts of energy projects on the environment but also practical solutions
- Contributing to building Climate Change resilience in Pacific



OOPERATION

#### **Lessons Learned**

- National/ Regional Energy Frameworks/ Pathways (Energy Mapping) are essential to define impact of current and alternative sources and solution (e.g., Vanuatu National Energy Road Map or Samoa Low Carbon Policy Framework)
- Knowledge mapping and sharing (regional capacity)
- Demand and supply, plus environmental impact and livelihoods, to be central in the national and regional debate
- Environmental issues: clean energy production but also waste management, sustainable delivery systems, modern services, reduced dependence on imported fuel, impact on biodiversity
- How to scale up pilot projects and to transform their results into effective national strategies?
- In the fragile Pacific SIDS ecosystems, lifestyles are critical
- New opportunities created by Agenda 2030 (SDG 7b)



PFRATION

#### Some practical cases Samoa

- Jatropha and coconut: successful biofuel production (SROS)
- Twelve cars and a tractor running on it plus other ecoservices
- How to increase productivity under local conditions?
- Now in experimental farm, is it possible more farming with limited impact on the environment and food security?
- What is the potential role in Samoa Low Carbon Policy?
- O What infrastructures & knowhow needed?
- Are available locally?
- Biofuel or biomass (technology)?





#### Some practical cases Vanuatu

- **o 75** kW Micro hydropower system, 300 households benefitting
- Solar power system rehabilitation serving 25 schools and 15 clinics: 1.000 beneficiaries + 5.000 others
- What is the right mix between solar and diesel in space and time?
- How to further distribute the energy according to capacity, needs, but also to enhance livelihoods (public/ private use) and to limit the environmental impact?
- What infrastructures & knowhow needed?
- Are available locally?





#### Some practical cases Tonga

- Solar water pump system with training of operators and leaders
- What is the right mix between solar and diesel in space and time?
- How to distribute the energy according to capacity, needs but also environmental impact?
- Which are best batteries and how to properly discard them (technology)?
- Donors alignment



# That's all folks!!!

