# Public Seminar – Challenges in Mainstreaming Disaster Risk Management

Presentation 3 - DRM in the Pacific Energy Sector



Roberto G. Aiello Senior Energy Specialist October 5, 2015

#### **Outline**

- A. WBG products and services
- B. Pacific Energy Program
- Examples of mainstreaming disaster risk reduction in the power sector



#### A. WBG Products and Services

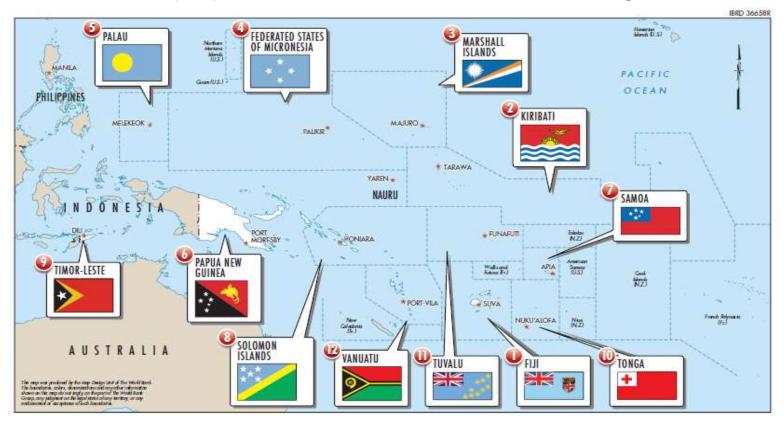
IBRD/IDA	MIGA	IFC
IBRD Loan	Political Risk Insurance	IFC Loans
<b>IDA Credit and Grants</b>	expropriation	IFC Equity
Interest rate and currency swaps Guarantees → partial risk → partial credit Tech. Assistance	<ul> <li>→ transfer restriction</li> <li>→ breach of contract</li> <li>→ war &amp; civil disturbances</li> <li>→ Sub-sovereign guarantees without government counter guarantee</li> </ul>	IFC Guarantees (partial credit structures – offshore & local financing) Interest Rate and Currency swaps PPP Transaction Advisory



## B. Pacific Energy Program

The Pacific Energy Program is currently active in 9 countries – Fiji, FSM, Kiribati, PNG, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

In FY15 - 15 active projects\* and a total investment lending >US\$70 M





#### WB Energy priorities in the Pacific

- 1. Strengthen <u>energy planning</u>, including integrating <u>natural</u> <u>hazards and gender</u>, and promote <u>policy</u>, institutional and <u>regulatory</u> frameworks, aiming to <u>enhance energy security</u>.
- Improving <u>utilities</u>' <u>performance</u> and <u>sustainability</u>.

These areas help underpin other objectives:

- Facilitating <u>least-cost power infrastructure</u>, including through smart PPPs; and
- Increasing <u>access</u> to affordable, reliable and sustainable electricity services.



#### C. Example 1: DRM in Power Sector

- "Tuvalu Energy Sector Development Project "
- Objective: To enhance Tuvalu's energy security by reducing its dependence on imported fuel for power generation and by improving the efficiency and sustainability of its electricity system.
- Implementation Agency: Tuvalu Electricity Corporation (TEC)
- Project Cost: USD 9.1 million. 2 sources of funds
  - USD 7 m grant (IDA)
  - USD 2.1 m grant (SIDS DOCK)
- Project Duration: 4 years (2015-2019)





#### Key features

- Renewable Energy investments
   Power-generation and grid-management equipment
- 2. Energy Efficiency Investments Prepayment meters and selected EE investments
- 2. TA and project mgmt. support

Investments to consider climate-proof technologies and installations









#### C. Example 2: DRM in Power Sector

- "Sustainable Energy Industry Development Project"
- Objective: To increase the data availability and capacity of power utilities of the PICs and PNG to enhance their ability to incorporate and manage renewable energy technologies and long-term disaster risk planning.
- Implementation Agency: Pacific Power Association (PPA)
- PACIFIC POWER

- Project Cost: USD 5.66 million. 3 sources of funds
  - USD 3.47m grant (SIDS DOCK)
  - USD 1.92m grant (SREP) under the Strategic Climate Fund (SCF)
  - USD 0.27m grant from the Global Facility for Disaster Reduction and Recovery (GFDRR) Japan-World Bank Program for Mainstreaming DRM in Developing Countries.
- Project Duration: 5 years (2015-2020)



## Key features

#### 1. Renewable Energy Resource Mapping

Phase I: Preliminary modelling – desk top

Phase 2: Ground-based data collection

Phase 3: Production of maps and reports



- (i) RE integration;
- (ii) online power benchmarking platform;
- (iii) industry guidelines and competency standards;
- (iv) power utilities' career development assessment plan;
- (v) disaster-recovery and risk-reduction activities as part of the Japan–World Bank Program for Mainstreaming DRM in Developing Countries.



# Thank you

Roberto G. Aiello Senior Energy Specialist Tel: +61 2 9223 7773

raiello@worldbank.org

