



IIEC

International Institute for Energy Conservation



Promoting Energy Efficiency in the Pacific - Phase 2 (PEEP2)

Implemented by
International Institute of Energy Conservation (IIEC)

**Pacific Power Association – 21st Annual Conference and 6th Engineer's
Workshop**

*Warwick Le Lagon Spa & Resort, Port Vila, Vanuatu
17th of July 2012*



What is PEEP2 ?

- Technical Assistance Project sponsored by The Asian Development Bank (ADB), in cooperation with the Global Environment Facility (GEF) and the Government of Australia
- Conducted under GEF's Pacific Alliance for Sustainability and covers five Pacific Developing Member Countries (PDMCs)
 - Samoa
 - Cook Islands
 - Tonga
 - Vanuatu
 - Papua New Guinea
- Three-year program to promote and implement energy efficiency



PEEP2 Objectives

Implement energy efficiency (EE) measures in the five countries to:

- Contribute to achieving the overall goal of 10% reduction in average monthly energy consumption in the residential, commercial and public sectors
- Establish the policy and implementation frameworks to move towards the goals of reducing fossil fuel imports by 10%, achieving total energy savings of 45 GWh, and reducing GHG emissions by 30,000 tons CO₂ equivalent per year by the end of 2018.



Project Components

COMPONENT	DESCRIPTION
1	Development of Energy Use Database
2	Development of Energy Efficiency Policies and Procedures
3	Implementation of Energy Efficiency Programs
4	Information Dissemination and Public Awareness



Expected Outputs - Summary

- An established energy end use database in the five PDMCs with provision for expansion to other PDMCs
- National energy policies with established practical and implementable EE targets
- Established government policies and procedures for use of EE appliances, incorporation of EE best practices in building codes, and capacity building of service providers
- Large-scale implementation of EE projects in residential, commercial and government sectors and in public lighting (street-lighting and traffic lights).
- Comprehensive information dissemination program
- Leveraging other regional energy programs to maximize benefits to all PDMCs



Output 1 – Energy Database

Key Activities:

- Review data collected in Phase1
- Conduct in-country surveys
- Design and develop energy end-use database
- Populate, update and maintain database
- Train stakeholders



Output 2 – Energy Policy and Procedures

- Key Activities:
 - Establish EE Targets in National Energy Policies and Plans
 - Suppress Sales of high energy consumption equipment and appliances (Energy Standards and Labelling)
 - EE Best Practices for new construction – residential, commercial and government buildings
 - Develop and Conduct Training Program for Local Experts
 - Support the Development of motivated and organized Service Providers



Output 3 – Implementation of EE Programs

- Key Programs
 - EE Street Lighting
 - EE Lighting in Residential, Commercial and Government Sectors
 - Implementation of EE measures in Hotels and Commercial Sectors
 - Implementation of EE Measures in Public Sector
- Implementation support
 - GEF allocation of \$2.4M – separate allocation for each country
 - Co-financing from respective governments/stakeholders



Output 4 – Information Dissemination

- Key Activities
 - Local Meetings and Workshops in each PDMC
 - Workshops on selected topics for Stakeholders
 - Public Awareness and Communication program
 - Incorporating EE in Education Curricula
 - Regional Workshops and Training
 - Pacific Power Association Annual General Meeting
 - Electric Utility Training Programs



Grant Funding

- ADB, in collaboration with GEF will provide partial grant funding for exemplary projects
- Government projects eligible for up to 100% grant, maximum of US\$100,000
- Private sector projects eligible for equipment financing grant of up to 50% of total cost, maximum US\$100,000
- Projects will be selected competitively based on energy savings, cost-effectiveness, new or innovative technology, replicability potential in Samoa and in the Pacific Region, and stakeholder involvement
- Project team will help prepare funding applications



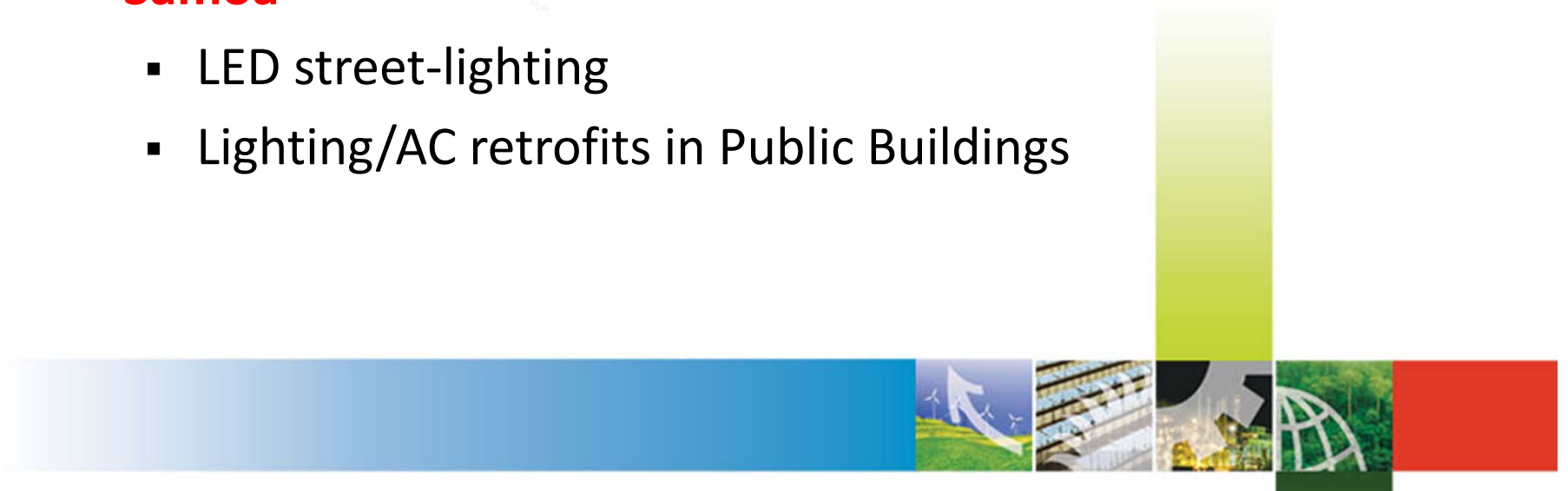
Near-term Project Activities

- **Cook Islands**

- PV/LED Lighting in Marina, Airport and Market
- Refrigerator Replacement Program (1/2 star – 3/4 star)
- Lighting/AC retrofits in Public Buildings

- **Samoa**

- LED street-lighting
- Lighting/AC retrofits in Public Buildings



Near-term Project Activities

- **Tonga**
 - Residential Lighting – T5 Retrofit
 - Large scale LED street-lighting
- **Vanuatu**
 - Residential – CFL Program
 - PV/LED and LED street-lighting
- **PNG**
 - Residential – EE Awareness



Benefits to Pacific Islands

- Program Design models for use in PICs
- Sharing of information with PICs
- Case studies of implemented projects
- Options for joint projects on common technologies (e.g. CFLs, LED street lighting)





IIEC

International Institute for Energy Conservation



Thank You

