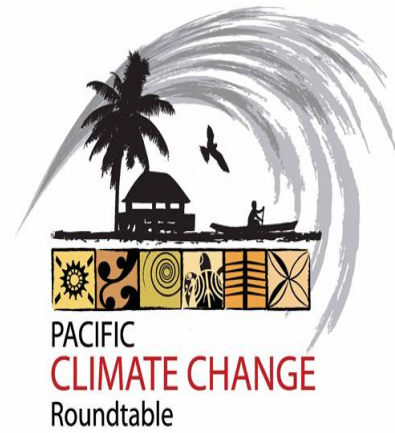




Effort to phase out inefficient appliances and lights from the PICTs



Presentation looks at the experiences encountered from major regional Energy Efficiency projects over the past 3 years:-

PEEP 2 – Promoting Energy Efficiency in the Pacific (Phase 2) 2011-2014

PALS – Pacific Appliance Labelling project 2012-2015

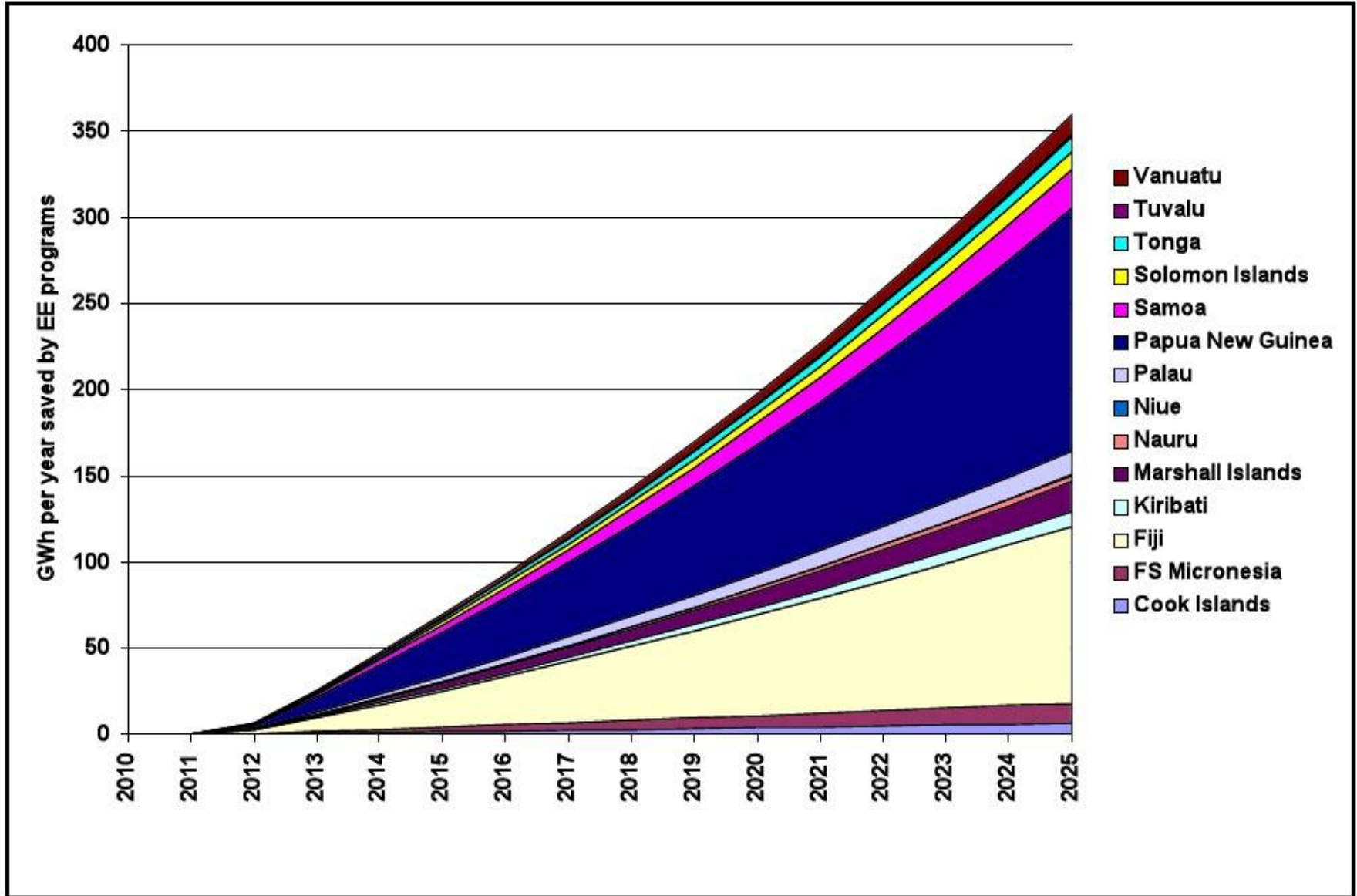


Figure 17. Projected electricity savings from energy efficiency measures, by PIC

Source: The costs and benefits of introducing standards and labels for electrical appliances in Pacific Island countries - 2011

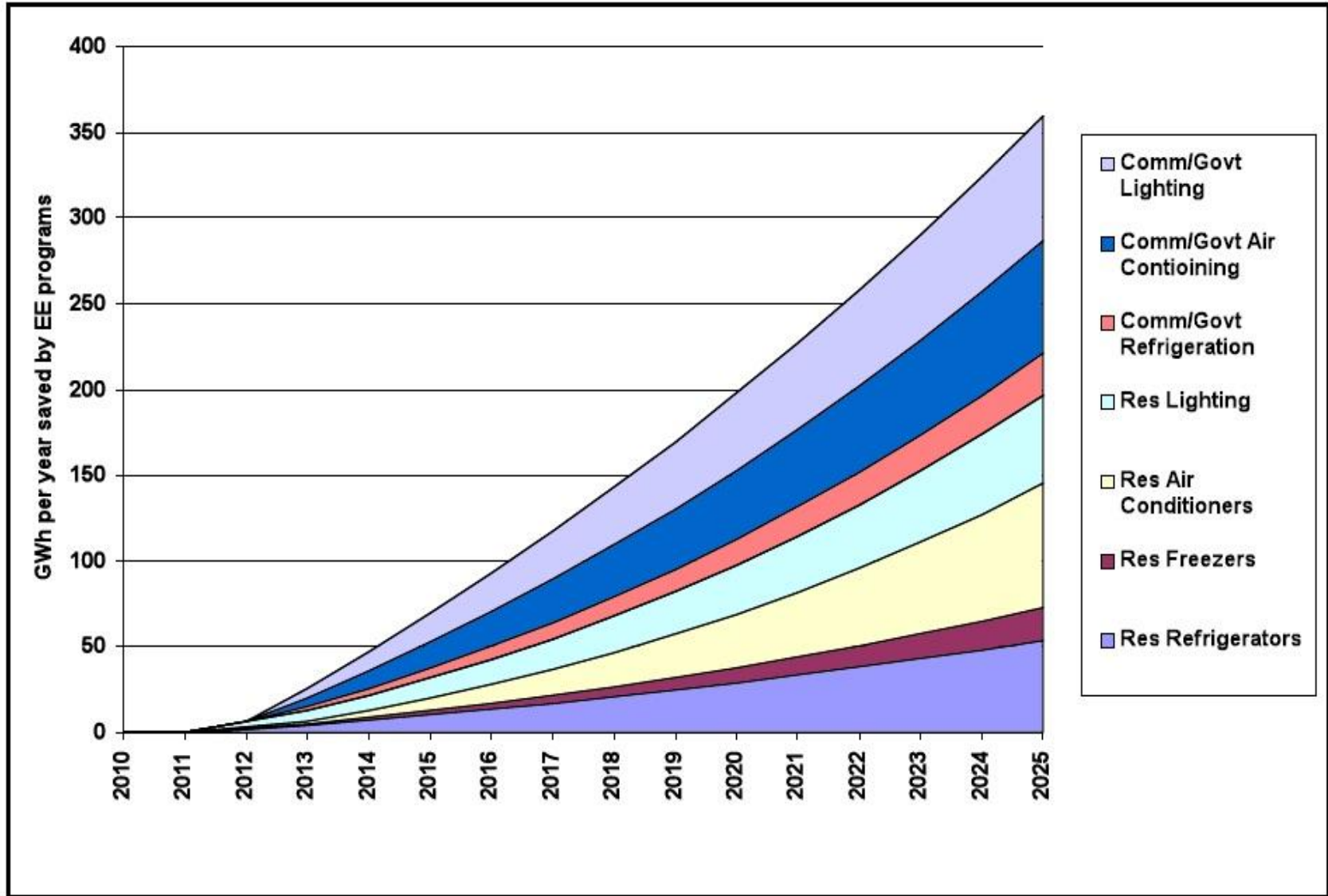
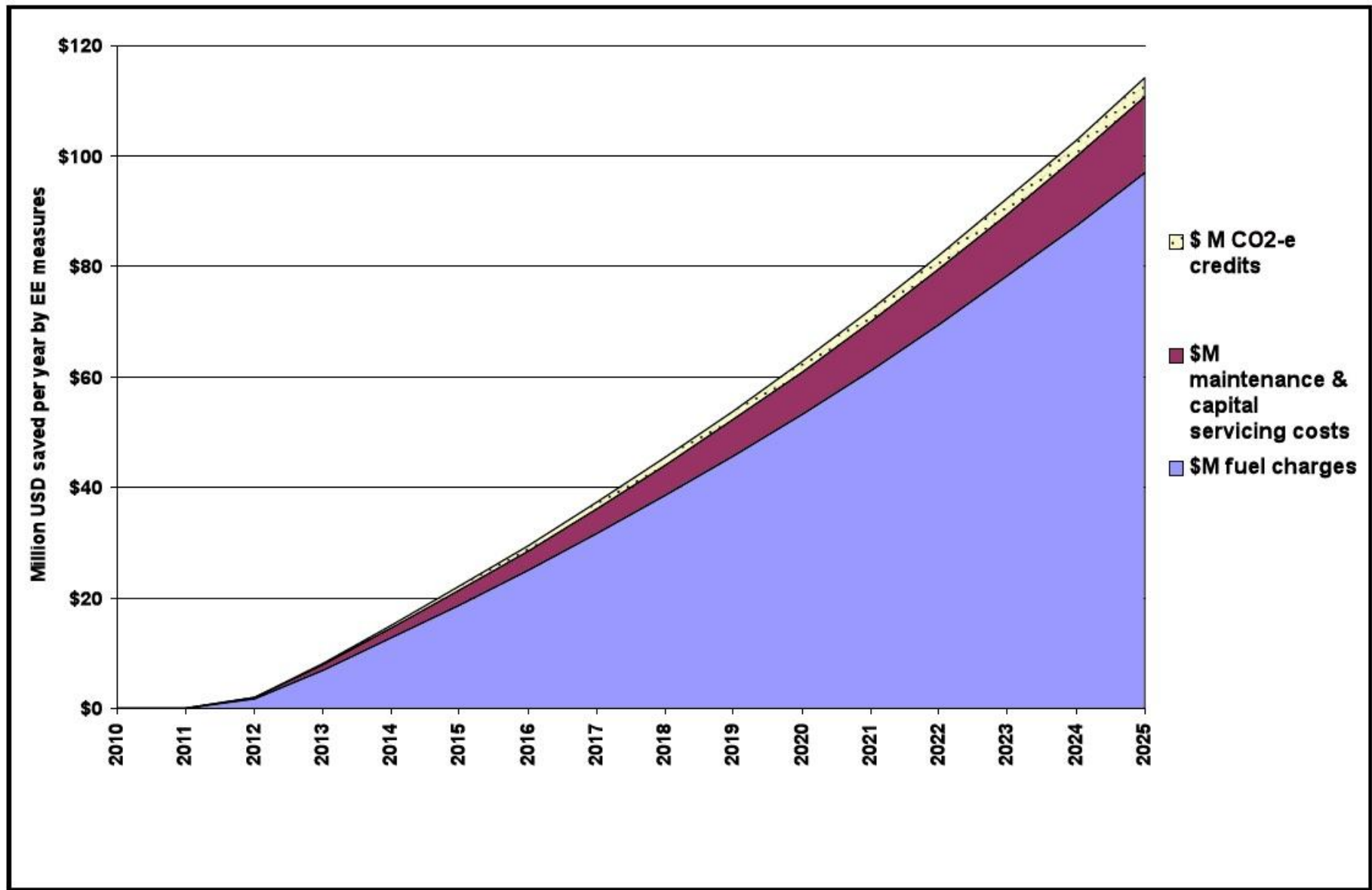


Figure 16. Projected electricity savings by end use

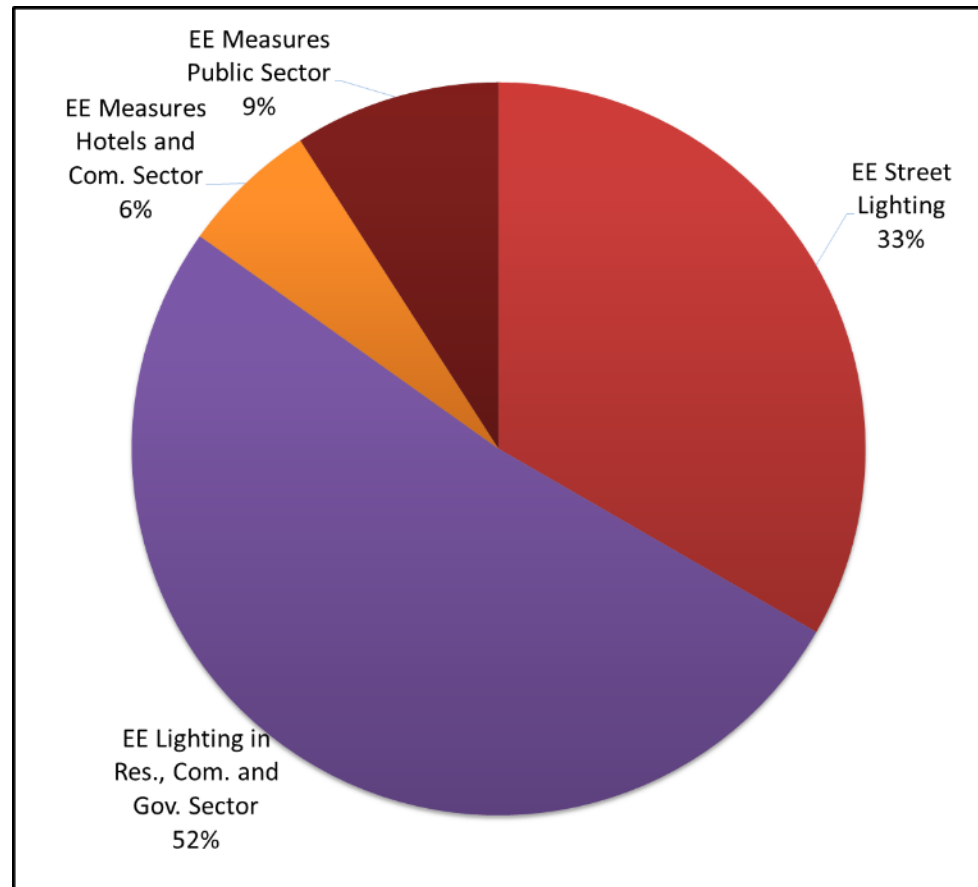
Source: The costs and benefits of introducing standards and labels for electrical appliances in Pacific Island countries - 2011



Source: *The costs and benefits of introducing standards and labels for electrical appliances in Pacific Island countries - 2011*

PEEP 2 Projects Approved in 5 countries

- **Total No. of 34 EE Projects:**
- **Estimated Savings:**
 - **3,761,509 kWh / Year**
 - **1,888,764 USD / Year**
 - **3,017 Tons CO2 / Year**



Current Situation - Street Lighting Installations

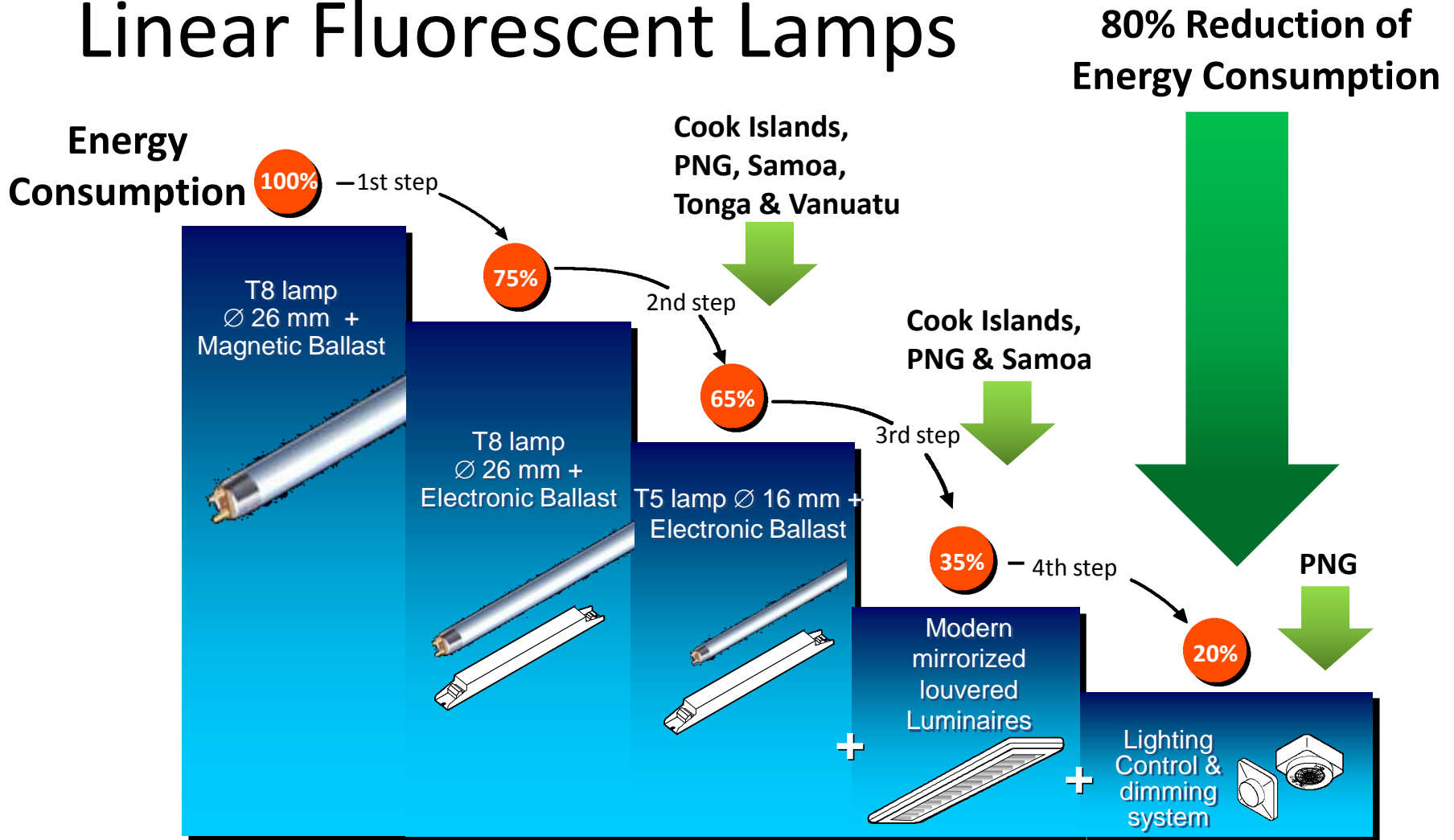


LED Street Lighting Equipment

Installation and M&E commences in Samoa



EE Lighting Options for Linear Fluorescent Lamps



Energy Audit Training Workshops



Source: PEEP 2 Presentations

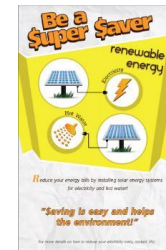
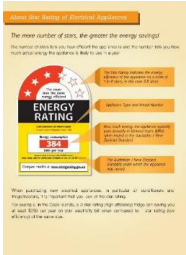
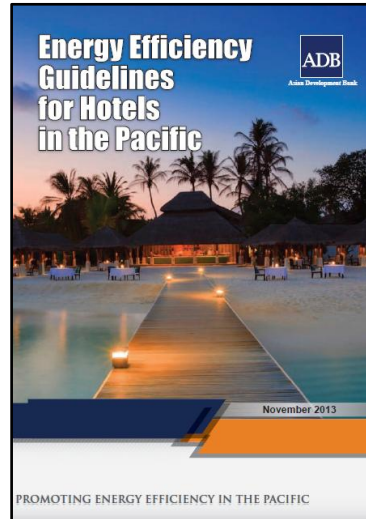
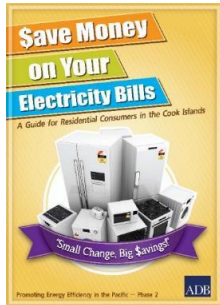
Energy Efficiency in Buildings Workshops – Papua New Guinea



Home Energy Guide



Energy Efficiency Guidelines

Energy Savings Tips for Utility Bills



Safe Disposal of Lamp Waste

Guide on Disposal of Fluorescent Lamps and CFLs



Guide on Fluorescent Lamps and CFLs

About Mercury

- Mercury is a natural element found throughout the world.
- Human sources represent about 30% of the total amount of mercury emissions each year.
- The main human sources of mercury are small-scale gold mining and coal burning.
- Followed by the production of metals and ceramics.
- Mercury is widely used in a range of products, including batteries, dental amalgam, paints, switches, electrical and electronic devices, thermometers, fluorescent and energy-saving lamps, pesticides, medicines, and cosmetics.
- Once used, many of these products go to landfills or are incinerated.
- In landfills or following incineration, the mercury contained in these products may come in contact with water, thereby converting the mercury into its toxic form.

About Fluorescent Lamps

- All fluorescent lamps contain small amounts of mercury, which can be released into the environment when the fluorescent lamp breaks, or if they are improperly disposed of at the end of their lifetime.
- An average fluorescent tube lamp typically contains between 7 to 40 milligrams of mercury, while an average Compact Fluorescent Lamp (CFL) contains about milligrams of mercury.
- By comparison, older mercury thermometers contain about 500 milligrams of mercury - an amount equal to the mercury in over 100 CFLs.
- A good quality CFL, uses up to 75% less energy (electricity) than an incandescent light bulb and lasts up to 10 times longer.

Source of information:
US Environmental Protection Agency (EPA)
United Nations Environment Program (UNEP)

How to proceed if you break a fluorescent lamp:



The most important steps to take when you break a fluorescent lamp:

- 1 Before cleanup**
 - Have people and pets leave the room.
 - Air out the room for 5-10 minutes by opening a window or door to the outdoor environment.
 - Shut off the air conditioning system, if you have one.
 - Prepare the materials needed to cleanup the fluorescent lamp - rubber or latex gloves and wet rag.
- 2 During cleanup**
 - Be careful in collecting broken glass and visible powder.
 - Place cleanup materials in a sealable container or plastic bag.
- 3 After cleanup**
 - Place all the broken glass and visible powder as well as the cleanup materials in garbage container outdoors. Avoid leaving any material indoors.
 - For several hours, continue to air out the room where the bulb was broken and leave the air conditioning system shut off.

Refer to do with your fluorescent lamp:

- Fluorescent Lamps should NOT be disposed in landfill.
- A Bulb Eater is being procured for safe disposal of fluorescent lamps. We kindly request households to safely store their burnt lamps (non-leaking) until these are collected in our special free in collection boxes which will be available in local supermarkets.

The information is provided by the International Institute for Energy Generation (IIEG) as part of Promoting Energy Efficiency in the Public (PEEP 2) Project



Way Forward

- Program design models for the PEEP 2 for use in other PICs
- Future work involving legislation has to be given due consideration or emphasis on the endorsement area focusing more funding support in this area to push the process through government and meeting all relevant areas such as public consultations, pushing key people in government as well as possibly identifying a strategic person to champion the cause.