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Scaling up CFL Programs in Asia-Pacific with Regional Quality (The Philippine Energy Efficiency Project)

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Phasing-in Quality: *Establishing a Quality Identification System for CFLs in Asia*
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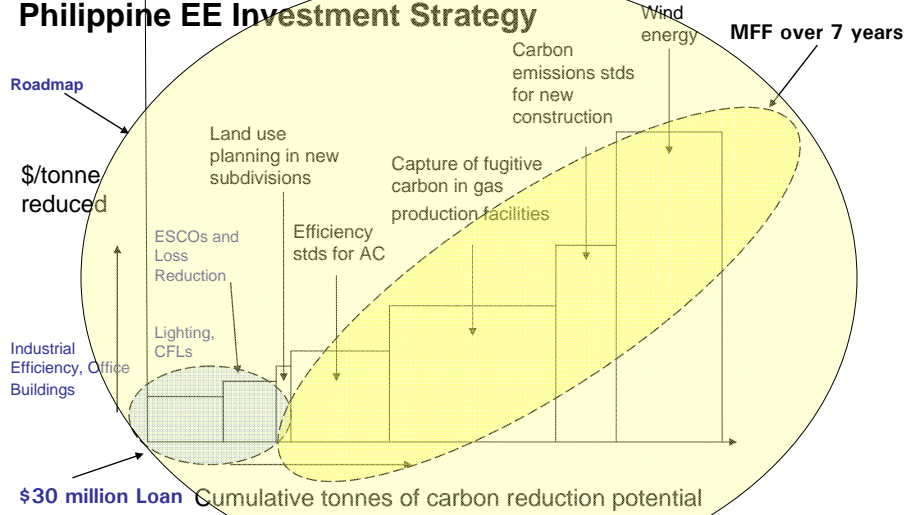


ADB's Energy Efficiency Initiative (EEI)

- Policy and financial interventions in 6 priority DMCs (PR China, India, Indonesia, Pakistan, Philippines, Viet Nam)
- EEI target: \$ 1 billion/year in clean energy investments starting 2008
- Key strategy: Focus on scaled-up deployment of pre-commercial EE technologies (supporting market transformation on a massive scale)



Philippine EE Investment Strategy



\$30 million Loan



Phasing-in Quality: Establishing a Quality Identification System for CFLs in Asia

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Philippine Energy Efficiency Project (2009-2010)

- Retrofit government office buildings
- Nationwide CFL distribution program
- Public lighting retrofits
- EE testing and lamp waste management
- EE financing facility
- Green building program
- Communication and social mobilization



Phasing-in Quality: Establishing a Quality Identification System for CFLs in Asia

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Nationwide CFL distribution program – Emerging design

- Executing agency – Department of Energy
- Implementing agency – National Electrification Administration
- 9,000,000 CFLs through 3 procurement packages
- 63 distribution utilities (60 cooperatives, 3 private)
- Incandescent bulbs to be collected for CDM credits
- Maximum of 2 bulb swaps per household connection via program vouchers (bill inserts)
- National and local marketing support



CFL Specifications

- Wattage: 13-14-15
- Color temperature: cool daylight
- Rate life: 10,000 hours
- Efficacy, lumen depreciation, color rendering index, safety and other energy performance specifications to be based on ELI and MEPS (Philippine National Standards)
- CFL marking: hologram and serial number
- CFL packaging: uniform design to promote program
- Warranty period: 2 years



Incandescent bulb (IB) collection

- Collected IBs will be made “in-operable”
- Stored in specially designed colored containers for each IB wattage
- IB inventories will be audited independently under CDM-approved arrangements to enable carbon credits to be obtained
- IBs to be crushed (by contract or DU)



Program Schedule

Activity / Milestone	Target Schedule
Package 1 Procurement & Distribution (3 million CFLs across 63 DUs)	Q1, 2009
Assessment Workshop	April 2009
Package 2 Procurement & Distribution (3 million CFLs across 63 DUs)	Q3, 2009
Package 3 Procurement & Distribution (3 million CFLs across 63 DUs)	Q4, 2009
Monitoring & Verification (63 DUs)	Q1-Q2, 2010
Destruction of IBs	Q2, 2010



Program Benefits

Parameter	Target Impact
Annual energy savings per retrofit	\$ 11 / CFL
Annual reduction in energy consumption	453 GWh / yr
Reduction in peak demand (67% coincidence)	276 MW
GHG reduction	245,000 tCO2e/yr



CFL Quality – Issues

- Warranty return mechanism
- Life testing for new 10,000-hour models
- Mutual recognition agreements for lamp testing in place
- Should energy performance specifications (efficacy, lumen maintenance, CRI, etc.) be above MEPS?



Other issues

- Marketing and distribution roles for CFL supplier
- Lamp waste collection and recycling
- Scale-up opportunity – 59 million IBs still in the Philippine market?
- CDM eligibility beyond phase-out period



Thank you...

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