

# Energy Efficiency in Asia-Pacific - ESCAP

Global Energy Efficiency 21  
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# Overall context: Asia-Pacific Region

- Poverty Reduction is a main priority for many countries:
  - About 45% of the global average GDP/capita (1990)
  - 800 million people without access to electricity
  - 1.7 billion people relying on traditional biomass
  - Indoor air pollution causing 407,100 deaths in India and 394,200 in China (WHO)
- Combating Climate change:
  - CO<sub>2</sub> emission increased by average 3.2% between 1990 and 2004. 96% of the emission is attributed to the energy sector.
  - One estimate: energy savings of about 25% by 2020 and over 40% by 2050
- Financing energy sector development:
  - Mobilizing financial resources to meet future energy infrastructure needs, estimated at USD 9 trillion up to 2030

# A low carbon development path

- Attempt to meet the challenges of Asia-Pacific region:
  - Applying low carbon technologies (energy efficiency and renewable energy) in a more integrated manner that could balance developmental needs and climate change actions
- Energy Efficiency in Asia-Pacific
  - Policy/legislative
  - Programmes - financing
  - Institutional mechanism
- Financing Energy Efficiency:
  - Asian Development Bank
    - Clean Energy over USD 3 billion (2003-2008), one of the components is Energy Efficiency Initiative aiming for 1 billion/yr for 2008-10.
  - GEF
    - USD 371 million on Energy Efficiency (Global)
    - USD 17 million for Asia and the Pacific

# ESCAP's work on energy efficiency

- Strengthening Institutional Capacity to Support Energy Efficiency in Selected Asian Countries:
- Focus on strengthening institutional mechanism to support implementation of energy efficiency policies/programmes.
- South-East and South Asia, and Central Asia
- Partnership with subregional organizations such as ASEAN and SAARC essential for the success of the project
- Ultimately, policy makers are expected to recommend strategies and policy options for strengthening institutional support to promote energy efficiency.
- Challenges for these countries will be to identify an institutional mechanism that would be financially sustainable and provide the services to both the Government and private sector.

# Case of Thailand

## Energy Conservation Promotion Fund

### Objectives

- Promotion of energy efficiency and renewable energy
- Energy conservation promotion including research study, development, demonstration projects, incentives (grants/soft loans), capacity building and policy studies.

### Source of fund:

- Collect 0.05-0.25 baht per litre (fixed) – equivalent to about 0.17% of the gasoline price as of June 2009
- Annual revenue: around 2-2.5 billion baht (USD58-73 million)

# Programmes under the Energy Conservation and Promotion Fund

- Revolving Fund Programme:
  - Low interest rate loan for energy efficiency via financial institutes
    - Less than 4% interest, up to 7 years with one year grace period and up to USD 1.3 million
    - Between 2002-08, 250 projects supported, approximately USD150 million used to support USD500 million investment
    - Resulting in USD 120 million/year.
- ESCO Fund:
  - Co-investment fund with private sector/investors
  - Set up with initial budget of USD15 million
- Demonstration of High and Advanced EE Technology
  - Demonstration of 8 technologies at 12 sites. Savings of 1 million USD/year with 2.4 million USD investment.