

# ADB Energy Efficiency Initiative

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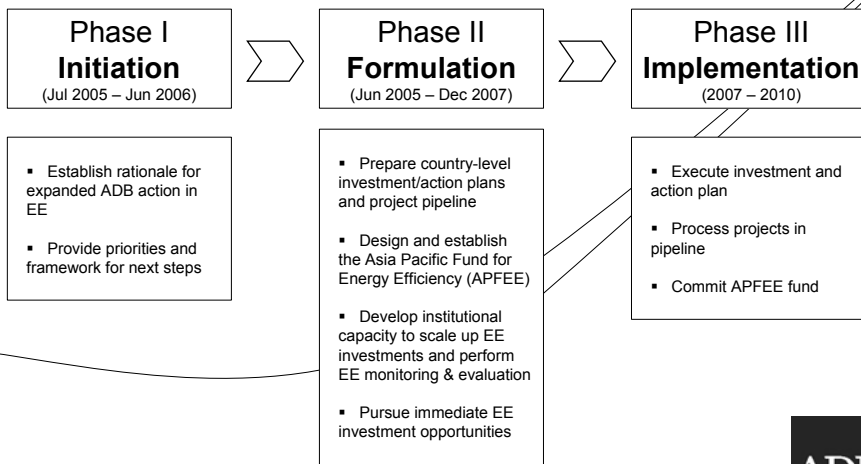
## ADB's Energy Efficiency Initiative (EEI)



- ADB launched EEI in July 2005
- Expand EE operations to \$1 billion/yr
- Both supply-side and demand-side EE (including RE)



# Mainstreaming EE in ADB Operations



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## Asia Pacific Market Challenges for EE Investments

- **Technical** – small project size for EE Projects, high cost of clean energy technologies, lack of firm output in many RE technologies, cost of migration to new technologies
- **Financial** - Risk aversion of financiers for off-balance sheet financing, under developed capital markets and venture capitalists, lack of understanding of technology risk by financiers
- **Policy** – Lack of clear policy on off-take, subsidy policy for marginal technologies, absence of pollution taxes, absence of regional emission trading, complexities of accessing CDM financing

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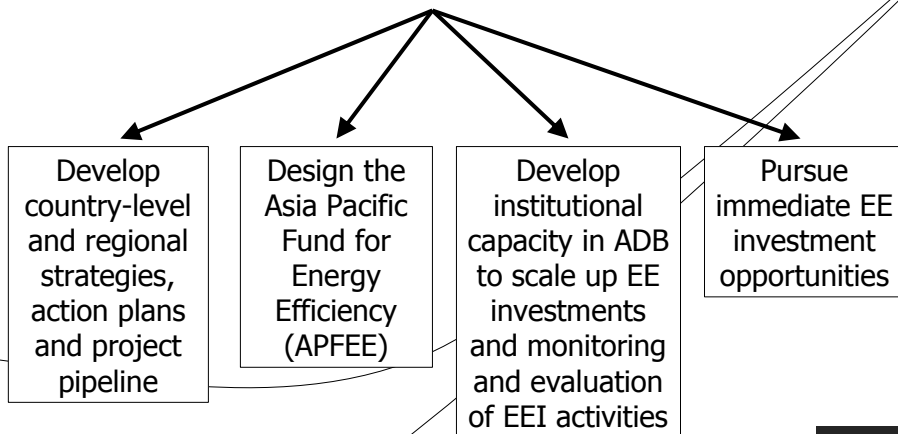
## **ADB's comparative advantage in promoting EE**

- Knowledge of DMCs and energy sectors
- Innovation – new investment modalities
- Mobilize public and private sector investments and partnerships
- Mobilize donor funds
- Combine investment with TA programs



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## **EEI Phase II** (ongoing since June 2006)



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## **Country-level and Regional Strategies and Action Plans**

- Develop EE investment plans and project pipeline for 2007-2010
- EEI inception in DMCs will be supported by two RETAs:
  - \$600,000 (approved Sep 2006)
  - \$2.3 million (2007)



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## **APFEE Goals**

- Increase the use of non-polluting clean energy sources
- Decrease energy intensity in industry, commercial buildings, municipalities, agriculture and transport sectors
- Intensify ADB lending operations promoting the use of clean energy
- Reduce GHG emissions
- Improve peoples' living standards through better provision of energy services



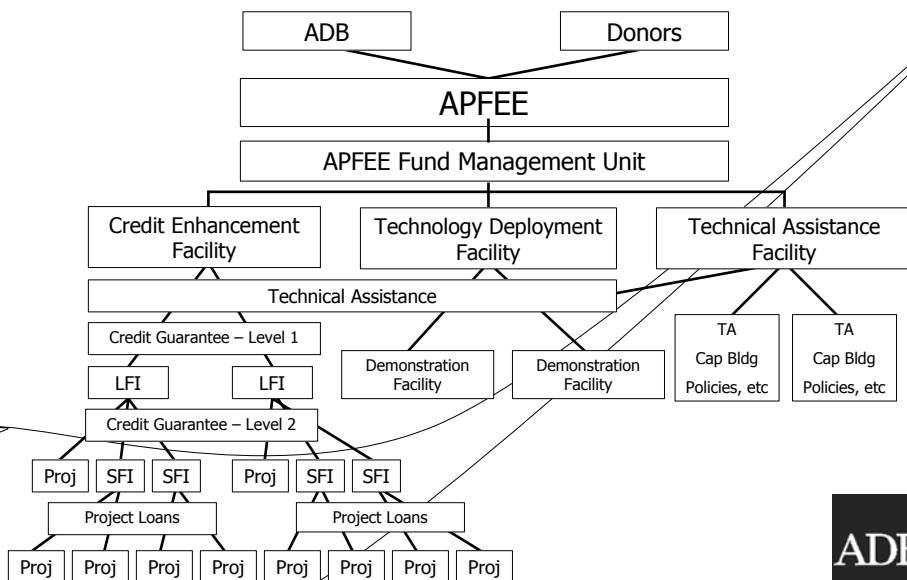
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# APFEE Design Principles

- Focused on DMCs with policy framework conducive to EE investments
- Target EE and RE investments with compelling economics
- Seek investment models that have replication and scale-up potential
- Bring value-added modality (not just funds) to motivated sponsors



# Indicative APFEE Structure



## **APFEE's 3 Facilities**

- Credit Enhancement Facility (CEF) - 50% of Fund
- Technology Deployment Facility (TDF) - 35% of Fund
- Technical Assistance Facility (TAF) - 15% of Fund



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## **Credit Enhancement Facility <sup>(1)</sup>**

- Targets numerous, small-sized, widely distributed EE and RE projects in ADB DMCs
- Provides a partial credit guarantee (PCG) for EE project borrowings, including loans to ESCOs
- Standard templates to lower transaction costs and reduce credit risk



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## **Credit Enhancement Facility** <sup>(2)</sup>

- PCG provided through 1-2 lead financial institutions (LFIs) in participating DMC
- LFIs will handle marketing, identifying, selecting and monitoring EE and RE projects based on ADB-set criteria
- If LFIs do not directly utilize PCGs for EE and RE investments, they can pass on PCGs to secondary financial institutions (SFIs)
- SFI strength – better knowledge of the companies, their management, and project implementation capacities



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## **Credit Enhancement Facility** <sup>(3)</sup>

CEF would:

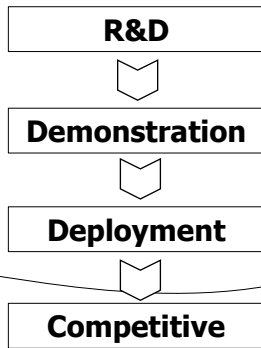
- Mobilize local sources of financing for EE and RE projects
- Catalyze LFIs to move into EE and RE financing
- Facilitate local currency financing
- Finance EE and RE investments broadly throughout the DMC markets



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## Technology Deployment Facility <sup>(1)</sup>

Stages of Technology Development



*Source: IEA Energy Technology Perspectives 2006*

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- Targets small number of high-impact large interventions that will deploy new EE technologies

- IEA identifies the crucial need for large deployment programs to bridge between EE and RE technology R&D and commercialization



## Technology Deployment Facility <sup>(2)</sup>

TDF to lower cost of capital and make EE and RE projects financially viable – through either:

- extending grants for interest buy-downs
- parallel cofinancing through ODA grants
- modified lending terms



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# Technical Assistance Facility

- Provide assistance for non-lending measures, such as:
  - policies, regulations, standards
  - institutional capacity building
  - project preparation
- Build capacity in LFIs and SFIs providing PCGs on EE and RE project borrowings
- Develop monitoring and evaluation (M&E) mechanisms for EE and RE projects

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## THANK YOU

For More Information

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