

## CDM for Sustainable Development: Perspectives from Asia

Climate Policy Project  
IGES

IGES Side Event:  
CDM for Sustainable Development: Dream or reality?  
Hilton Nairobi, 8 November 2006

### Outline

- I. IGES activities on CDM
  - CDM Methodological issues (Phase 1)
  - Capacity building initiative (ICS-CDM/JI)
  - Consultations on future climate regime
- II. CDM status in Asia
- III. SD assessment in selected countries
- IV. SD benefits from selected projects
- V. Concluding remarks

## I. IGES efforts in strengthening CDM (a) ICS-CDM/JI (Integrated Capacity Strengthening for CDM/JI):

**Principles:** Synergy, Simplicity and Sustainability

**Sectors:** Waste to Energy; Biomass and other renewable sources; Small-scale CDM projects

**Host countries:** Cambodia, China, India, Indonesia, the Philippines and Thailand

**Duration:** October 2003~

**Sponsor:** Ministry of the Environment, Japan

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## ICS-CDM Objectives

To strengthen Asian **institutional and human capacities** for implementing CDM *within the context of sustainable development* through

- raising **awareness on CDM** opportunities among stakeholders (policy makers, private sector, NGOs/academia)
- supporting **institutional networks** (DNA, CDM promotion agencies in central and state governments)
- **enhancing competitiveness** within the CDM market (through assistance for baseline establishment & PIN/PCN/PDD training), and
- supporting **CDM project identification**, development, implementation and outreach (e.g., CDM country guides)



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**URL:** <http://www.iges.or.jp/en/cdm/index.html>

## Unique Features of ICS-CDM

- Country-driven, comprehensive approach
- Emphasis on sustainable development (SD) with focus on sectors that received less investor attention so far
- Focus on reducing transaction costs & risks
- Flexibility to adjust capacity building initiatives in relation to evolving CDM rules
- Not a one-off workshop, but aims to create a self-sustaining mechanism

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## (b) IGES consultations on climate regime beyond 2012 (2005~ )

- Part of the initiative is on CDM
- Asian concerns, interests and priorities for CDM (2005)
- Options for strengthening CDM based on assessment of 29 proposals (2006)
  - Credible signal for continuity of CDM
  - Widening the scope and reducing geographic inequity within the region
  - Financing options such as multi-source funding of projects with high SD benefits

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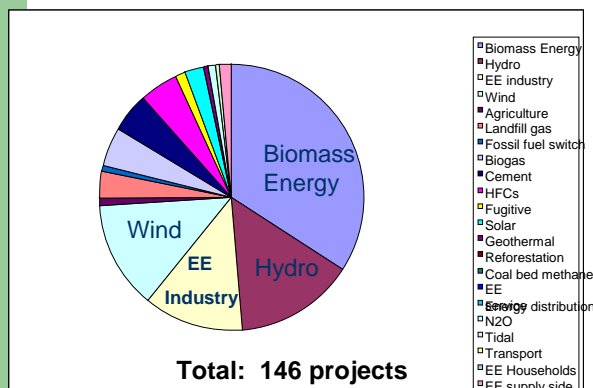
## II. CDM Status in Asia (1)

- Goal: To assist Annex I countries by providing cost-effective opportunities for GHG emissions reduction while achieving **sustainable development** in Non-Annex I
- Progress: DNAs were established in most Asian countries along with approval procedures, including development of **SD criteria**  
→ Expectations for achieving SD through CDM are high!!!
- Weaknesses:
  - **Lack of effective integration** of CDM into the national SD plans
  - **Weak coordination** among ministries responsible for environmental and developmental issues

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## CDM status in Asia (2)

Sector-wide distribution of CDM projects in Asia Pacific (**number**)



Almost **60% of the projects** are based on **renewable sources of energy** (especially biomass, wind and hydro) and **energy efficiency**.

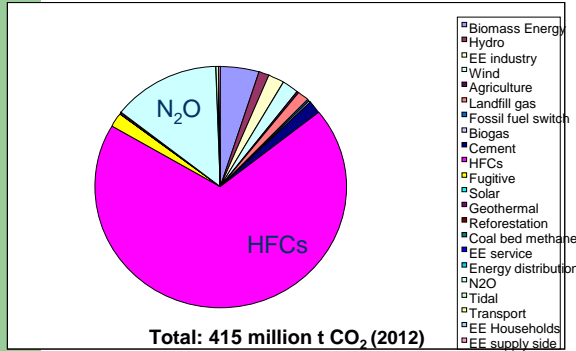
*Can they contribute to SD? May be!!*

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Source: UNEP RISOE, CDM Pipeline Overview (as of 14 September 2006)

## CDM Status in Asia (3)

Sector-wide distribution of CDM projects in Asia Pacific (**CER volume**)



However, almost **80% of emission reductions** are expected to be realized through **HFCs and N<sub>2</sub>O projects**.

**Can they contribute to SD? May not be!!**

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Source: UNEP RISOE, CDM Pipeline Overview (as of 14 September 2006)

## III. SD Assessment in selected countries (1)

### ● Cambodia

SD Matrix as a *tool*

- **23 indicators** (environmental, social, economic, technological)
- Rating of indicators on a scale of -3 to +3.
- Project developers submit a **self-SD evaluation**

### ● China

Priority Areas

- Energy efficiency, new & renewable energy, methane recovery and utilization

Levies on CER sales

- HFC and PFC: 65%, N<sub>2</sub>O: 30%, others: 2%
- Levy will be used as **SD fund** to **support financing climate mitigation activities**

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## SD Assessment in selected countries (2)

- **India**
  - **Four types of SD Indicators (42 indicators)**  
(social, economic, environmental, *technological*)
  - No taxation on CERs
- **Indonesia**
  - Four groups of indicators  
(environmental, economic, social, and *technological*)
  - Public consultations & public comments
- **Philippines**
  - **Submission of SD Benefits Description (SDBD)**
    - Description of SD impacts of the proposed CDM project.
    - **Small-scale:** General info., economic, environmental, and social dimensions with overall SD impact
    - **Large-scale:** Measures to mitigate negative impacts of the project and monitoring measures besides general info., economic, environmental, and social dimensions with overall SD impact.

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## IV. SD benefits from selected projects (1)

### **Case 1: Cambodia (Biomass cogeneration)**

- Rice husk to be used to generate 1.5 MW power and heat
- Reduce abandoned risk husk and in turn avoid methane emissions.

### **Case 2: Indonesia (Solar cookers)**

- Introduction of 1,000 newly developed solar cookers and heat retention containers for cooking, heating, water sterilization, and food preservation
- Replace harvested fuel wood

### **Case 3: China (HFC)**

- Collect HFC from HCFC22 production process and decompose it in an incinerator

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## SD benefits from selected projects (2)

	<i>Economic</i>	<i>Social</i>	<i>Environmental</i>
<b>Biomass cogeneration project in Cambodia</b>	<ul style="list-style-type: none"> <li>• Decreased dependency on imported fossil fuels</li> <li>• Savings due to effective use of rice husk</li> </ul>	<ul style="list-style-type: none"> <li>• Less expensive electricity to the community</li> <li>• Support local livelihoods and businesses</li> <li>• Technology Transfer</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement of air quality</li> <li>• Reduce solid waste (rice husk)</li> </ul>
<b>Solar cookers project in Indonesia</b>	<ul style="list-style-type: none"> <li>• Savings due to reduced fuel wood use</li> <li>• Effective use of renewable energy</li> <li>• Income generation through local employment</li> </ul>	<ul style="list-style-type: none"> <li>• Better sanitation and family health to rural households</li> <li>• Reduce time for fuel wood collection that leads to an increase in time for education, women's activities and stable communities</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce indoor pollution</li> </ul>
<b>HFC project in China</b>	Not specified	Technology transfer	Not specified
65% of CER revenue will be used as <b>climate fund</b> to support financing of <b>SD-oriented climate mitigation activities</b>			

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## V. Concluding remarks - I

- Concept of SD is still complex but flexible enough to be twisted to get approval (due to lack of consensus on ways to measure SD); Perspectives of Asian DNAs on SD are diverse.
- Conflicting CDM objectives – projects with high SD benefits often have low volumes of CERs and vice versa; Many projects with high CER seem to favour the goal of cost-efficient emission reductions rather than SD *per se*.
- Conflicts exist among stakeholders in terms of their understanding of project objectives and SD priorities.
  - Some host countries are **loosening SD criteria** in order to improve international market competitiveness
  - Some Annex I countries are **ignoring SD** in their urgency to purchase credits at minimum possible cost

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## V. Concluding remarks - II

- Projects with high SD benefits are being marginalized but some governments are taking corrective measures.
- Post-evaluation of SD benefits from CDM projects may be the future concern.
- Harmonization of requirements for SD in post-2012 regime is becoming crucial. However, proliferation and imposition of criteria must be avoided.
- SD through CDM in Asia – **A mosaic of dreams and realities!!!!**

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Thank you  
for your attention!

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