# Asian Perspective of Climate Change: Implication for Post-2012 Climate Regime

## Hitomi Kimura, Researcher (L L.M.), IGES

East Asia Summit: 7th Energy Cooperation Task Force Meeting International Seminar: *Energy Future: Turning Challenge into Opportunity*, June 27th, 2008, Seoul Hosted by Ministry of Knowledge and Economy (MKE) and Korea Energy Economics Institute (KEEI)

## Emissions in Asia from IGES White Paper 2008

- GHG emissions in Asia: <u>27%</u> of the world total (2005), estimated to increase up to <u>40%</u> (2030)
- Low per capita emission: 2.7tCO2/Pop. (world average 4.2)
- High rate of forest loss: >1.5%/year (REDD)
- Emission reduction opportunity by 10% by 2030 without additional efforts

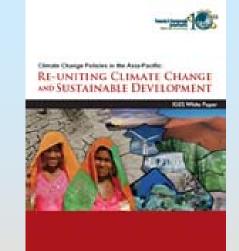


Table 2.1. Energy-related CO₂ emissions by region in 2005

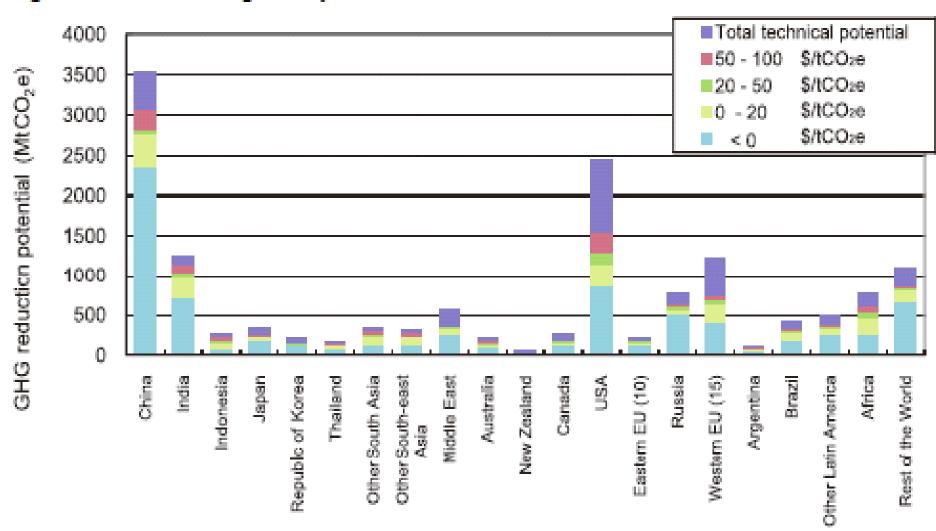
Region	Total CO <sub>2</sub> Emissions (million tonnes)	CO₂/ Pop. (tCO₂/ capita)	CO <sub>2</sub> / GDP (kgCO <sub>2</sub> / 2000\$)	CO <sub>2</sub> / GDP (PPP) (kgCO <sub>2</sub> / 2000\$ PPP)
World	27,136	4.22	0.75	0.50
OECD (excluding Japan and the Republic of Korea)	11,247	11.29	0.49	0.43
Middle East	1,238	6.62	1.58	0.91
Former USSR	2,303	8.08	4.39	1.10
Non-OECD Europe	263	4.87	1.73	0.61
Asia	9,295	2.75	0.97	0.48
Latin America	938	2.09	0.58	0.29
Africa	835	0.93	1.14	0.40

Source: IEA (2007)

## High mitigation potential in Asia

from IGES White Paper 2008

Figure 2.1. GHG mitigation potentials in 2020



Source: Hananka et al. (2008)

## IGES Asia-Pacific Consultations on Climate Regime Beyond 2012

#### Objective

- To contribute to shaping

   a future climate regime
   that reflects concerns and
   developmental aspirations
   in Asia-Pacific
- To facilitate a dialogue
   on national concerns,
   aspirations and priorities
   among key stakeholders
   (e.g., policymakers,
   academics, NGOs,
   businesses)

#### • Round I (2005)

Country-specific: Korea, Indonesia, India,
 China, Viet Nam, Japan

Outreach: COP11/COPMOP1 and CSD-14

#### • Round II (2006)

- Sub-regional: South Asia (India), Northeast
   Asia (China), Southeast Asia (Thailand)
- Assessment of proposals: CDM, Adaptation,
   TT, Energy security and development

Outreach: COP12/COPMOP2 and CSD-15

#### • Round III (2007)

- Theme-based consultations in China and India
- Proposals: Sectoral Approaches, Low carbon technology, Adaptation financing, Co-benefits

Outreach: COP13/COPMOP3 and G8 summit

## Views on KP and Post-2012 regime

- Recognized achievements through the UNFCCC/KP, but concerned about actual <u>implementation</u>
- ♣ Few development/declaration on specific position on the post-2012 regime due to various barriers

The Cheurte Begi

- Insufficient reflection of Asian interests and priorities in the current regime
  - → more consideration after 2013
- Consider multi-stage, multi-track
   and inclusive framework
- 5 Key issues covered in the dialogue; Energy Security/development (Co-benefits), CDM, Sectoral Approaches, Technology, Adaptation

## 1. Energy Security

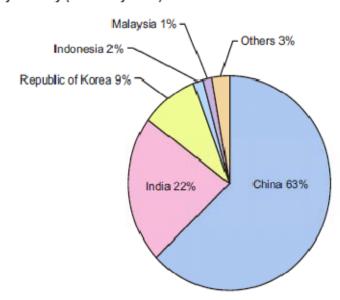
& Development (Co-benefits)

Post-2012 negotiation should consider complementarities

- Post-2012 negotiation should consider complementarities among CC, energy security and SD
- Facilitate climate-friendly energy policies
  - through sharing good practices like setting RE/EE targets & standards, developing guidelines for integration of climate concerns in energy policies
- Provide effective operational support to mainstream climate risks in development agenda
  - through maintaining a registry of SD-PAMs and identifying PAMs with synergies or tradeoffs between SD benefits and GHG mitigation.
- High attention in bio-fuels, but competition with food supply and increasing reliance on oil
- Promotion of co-benefits in EE/RE policies, sustainable transport
- Recognition/reward co-benefits through climate actions

- CDM, despite many shortcomings, is a good tool to mobilize climate-friendly policies and investments
- Huge potential in CDM in Asia: 62% in number, <u>77%</u> in CERs (Among 1,035 registered CDM as of 1 May 2008)
  →Source of future regional ETS market?
- Provide an early, credible signal on <u>continuity of CDM</u> and ensure the value of CERs after 2012
  - unilateral declaration by Annex I to extensively utilize post-2012 CER
  - extension of the period
    of the next commitment
    to 10 years or more
  - support for post-2012
     CERs by multilateral financial institutions

Figure 2.4. Distribution of CER volumes through 2012 from CDM projects in Asia by country (as of May 2008)



Source: IGES CDM project database (http://www.iges.or.jp/en/cdm/report.html)

## **2. CDM**

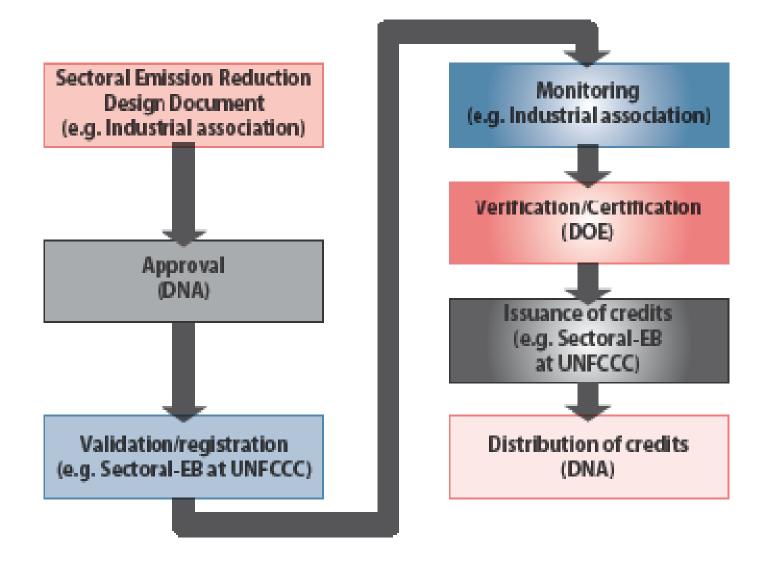
- Improving <u>SD benefits</u>
  - Quantify and provide financial support for co-benefits of CDM so that total value of projects with high SD but low CERs (EE/RE)
    could compete with those yielding high CERs (HFC, Methane)
- Improving geographical distribution of CDM
  - Expeditious registration of small-scale projects; support for bundled projects; create carbon funds targeting micro-scale CDM activities in LDCs/SIDS
- Need for innovative <u>financing</u> approaches to cover underlying <u>finance</u>
  - Strengthen synergies in the private sector between Annex I and non-Annex I countries through bilateral business agreements
  - Utilize ODA for CDM implementation especially during the early stages and in countries that are not attractive to investors from the perspective of project financing
  - utilize multi-source funding to spread risk among institutions
- Widen the scope of CDM to sector-, programme- or policy-based
   CDM from 2012

# 3. Sectoral approaches (SA)

- Good step for a broader engagement of DCs in the post-2012 regime (beyond CDM); starting from steel/aluminium/cement
- Should not replace economy-wide targets, but complement absolute target of the KP
- Need for synergies with non-UNFCCC framework (e.g., APP, IISI, WBCSD)
- Need for institutionalization of SA under UNFCCC, with support from IEA etc. due to lack of expertise of UNFCCC
- Proposes establishment of voluntary market under the UNFCCC for selling excess credits from SA

# 3. Sectoral approaches (SA)

Figure 2.2 A suggested institutional structure for implementation of sectoral approaches



# 4. Technology

- Identify options to <u>avoid technology "lock-in"</u> effects in development of new infrastructure
- Synergies among the UNFCCC/non-UNFCCC initiatives
- Provide options for additional finance through public and private support - to make the currently available technologies commercially competitive
- Treat critical low carbon technologies as global public goods and enhance the <u>flexibility of IPR</u>
  - joint ownership of IPRs with developed countries through extensive collaboration in early stages of technology development
  - creation of a multilateral technology acquisition fund to buy-out IPRs and make privately owned, climate-friendly technologies available for deployment in DCs
  - development of an international code for compulsory licensing of low-carbon technologies

5. Adaptation

- More serious impact of CC in Asia, but limited Adaptation measures taken: Few examples of development of NAPA and specific actions
- Mainstreaming Adaptation into development planning both at policy/operational levels through EIAs/SEAs and explore synergies with disaster risk management and MDG achievement plans
- Separate <u>adaptation protocol</u>
- Greater emphasis on adaptation by building on existing financial mechanisms/broadening funding (e.g., Asian catastrophic risk insurance facility)
- Develop flexible but clear guidelines to access adaptation funds
- Facilitate the use of market mechanisms and create incentives to promote <u>private sector involvement</u>