# The Prospect of an International Climate Regime Beyond 2012 : From a Japanese Perspective

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# Today's topic

- Current status of the debate on post-2012 climate regime in Japan
- Perspectives and challenges for post-2012 regime

# Opinion divided (1)

- Some ambiguity in Japanese position
  - Support Kyoto-type regime?
  - How ambitious would its next commitment be?
- Opinion is divided on the effectiveness of the Kyoto Protocol and on a future regime.

# Opinion divided (2)

- Most people evaluate the Kyoto Protocol positively.
  - Important first step
  - The Protocol has delivered concrete mitigative actions all over the world.
- They support maintaining basic structure of the Protocol, although improvements are necessary to achieve our ultimate objective.

# Opinion divided (3)

- Some but strong criticisms come from industries.
  - The Protocol is not environmentally effective.
    - The Protocol covers only 30% of global emissions.
  - The Protocol is not equitable.
    - The Protocol imposes too much heavy burden on Japan.
- Oppose to continuation of the Kyoto type regime.

# Rationale for opposition (1)

- Proposal from Keidanren on 16 Oct.
  - Keidanren: Japan Federation of Economic Organization, composed of Japanese major companies.
  - “Proposal for post-Kyoto international regime”

# Rationale for opposition (2)

- 3 points of the proposal
  - “Pledge and review” instead of Kyoto type cap-and-trade system.
  - Countries choose and pledge policies and measures they consider appropriate.
    - Including sectoral approach, assistance to developing countries and development of innovative technologies.
  - Energy intensity target instead of national emission cap.
    - Countries may set its national cap on a voluntary basis.

# Rationale for opposition (3)

- General dissatisfaction with the Kyoto Protocol mainly comes from:
  - Concern for international competitiveness
  - “Inequitable” burden sharing
- Current status of the Kyoto target achievement puts more pressure on industries and thus hardens their opposition.
  - Japan’s Kyoto target: 6% down from 1990 levels.
  - Current GHG emission: 6-8% above 1990 levels.
- Such economic actors’ position exerts some influence on governmental position.

# Top 5 Emitters in Steel and Cement Sectors (2000)

| | Steel | MtC02 | Cement | MtCO2 |
|---|---|---|---|---|
| 1 | China | 290 | China | 500 |
| 2 | Russia | 91 | USA | 104 |
| 3 | Japan | 88 | India | 78 |
| 4 | USA | 75 | Japan | 70 |
| 5 | India | 59 | South Korea | 42 |

Source: CCAP (2006)

# Evolution of Carbon Market

- 850 CDM projects registered and about 2000 more projects in the pipeline.
- 2.351 GtCO2 is expected to be reduced by 2012 through CDM.
  - Corresponds to 2 year's aggregated emissions of the UK and Spain.
- In 2005, 374 MtCO2 (=US$ 2.7 billion) was transacted.(IETA and World Bank, 2006)
  - Equivalent to 4 year (2002-2006) GEF funding (GEF3).
- Windows for emission reduction in developing countries and for funding necessary for such reduction.

# Carbon Market Changes in Setting

- Evolution of carbon market changes the position of stakeholders.
  - Developing countries support continuation of the Kyoto type regime and CDM.
  - EU
  - Some business sectors such as finance sector clearly express their support to Kyoto type regime.
- Increasing support to a future climate policy centering on continuation and expansion of carbon market.

# Will Market Frame a Future Regime?

- Carbon market requires a specific regulatory framework.
  - "Somewhere, someone must have binding stringent emission reduction obligation to generate a demand for emission credits". (Bosi et al., 2005)
  - Effective enforcement to deter non-compliance is also an essential requirement.

# Prospects and Challenges (1)

- A regime centering on carbon market might be the only way forward.
  - Could provide cost effective mitigation options and thus realize more reduction more quickly.
  - Could deliver significant emission reduction in developing countries by transferring necessary funds.
    - Returning global emissions to current levels in 2030 requires additional investment and financial flows about 200 billion US dollar in 2030 (UNFCCC Secretariat, 2007).
    - Investment demand for energy infrastructure in developing countries by 2030: more than US$ 8 trillion (World Energy Investment Outlook 2003).
    - Canalizing private funds is essential.
  - Could induce major emitting countries' participation.

| Stab level (ppm CO2-eq) | Global Mean temp. increase at equilibrium (°C) | Year CO2 needs to peak | Year CO2 emissions back at 2000 level | Reduction in 2050 CO2 emissions compared to 2000 |
|---|---|---|---|---|
| 445 – 490 | 2.0 – 2.4 | 2000 - 2015 | 2000- 2030 | -85 to -50 |
| 490 – 535 | 2.4 – 2.8 | 2000 - 2020 | 2000- 2040 | -60 to -30 |
| 535 – 590 | 2.8 – 3.2 | 2010 - 2030 | 2020- 2060 | -30 to +5 |
| 590 – 710 | 3.2 – 4.0 | 2020 - 2060 | 2050- 2100 | +10 to +60 |
| 710 – 855 | 4.0 – 4.9 | 2050 - 2080 | | +25 to +85 |
| 855 – 1130 | 4.9 – 6.1 | 2060 - 2090 | | +90 to +140 |

Source; IPCC AR4(2007)

# Prospects and Challenges (2)

- Challenges we're facing:
  - Better regulation on market.
    - Ensure compliance in the fragmented world.
  - Consideration on other environmental issues and socio-economic issues impacted by the market (especially CDM).
  - More equitable burden sharing.
    - Build up common understanding on each other's situation and elaborate methodologies for burden sharing.
    - Learn from the lessons gained by EU burden sharing experience based on "Triptych".
    - Elaborate rules for broadening commitment takers according to capacity.

# Prospects and Challenges (3)

- The utmost challenge is: “How could we agree and continue to agree on more stringent reduction enough to mobilize funds and technologies until we can succeed in tackling climate change?”.
  - “[O]nly markets can mobilise capital and technological prowess on the scale needed [to dramatically reduce GHG emissions]” although “the direction and imperative must come from governments”. (Dringer, 2003)

Thank you for your attention!

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