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)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Steel</th>
<th>MtCO2</th>
<th>Cement</th>
<th>MtCO2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China</td>
<td>290</td>
<td>China</td>
<td>500</td>
</tr>
<tr>
<td>2</td>
<td>Russia</td>
<td>91</td>
<td>USA</td>
<td>104</td>
</tr>
<tr>
<td>3</td>
<td>Japan</td>
<td>88</td>
<td>India</td>
<td>78</td>
</tr>
<tr>
<td>4</td>
<td>USA</td>
<td>75</td>
<td>Japan</td>
<td>70</td>
</tr>
<tr>
<td>5</td>
<td>India</td>
<td>59</td>
<td>South Korea</td>
<td>42</td>
</tr>
</tbody>
</table>

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).
- Canalizing private funds is essential.
- Could induce major emitting countries’ participation.
<table>
<thead>
<tr>
<th>Stab level (ppm CO₂-eq)</th>
<th>Global Mean temp. increase at equilibrium (°C)</th>
<th>Year CO₂ needs to peak</th>
<th>Year CO₂ emissions back at 2000 level</th>
<th>Reduction in 2050 CO₂ emissions compared to 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>490 – 535</td>
<td>2.4 – 2.8</td>
<td>2000 - 2020</td>
<td>2000- 2040</td>
<td>-60 to -30</td>
</tr>
<tr>
<td>535 – 590</td>
<td>2.8 – 3.2</td>
<td>2010 - 2030</td>
<td>2020- 2060</td>
<td>-30 to +5</td>
</tr>
<tr>
<td>590 – 710</td>
<td>3.2 – 4.0</td>
<td>2020 - 2060</td>
<td>2050- 2100</td>
<td>+10 to +60</td>
</tr>
<tr>
<td>710 – 855</td>
<td>4.0 – 4.9</td>
<td>2050 - 2080</td>
<td>2050- 2100</td>
<td>+25 to +85</td>
</tr>
<tr>
<td>855 – 1130</td>
<td>4.9 – 6.1</td>
<td>2060 - 2090</td>
<td>2060- 2100</td>
<td>+90 to +140</td>
</tr>
</tbody>
</table>

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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