Outcomes of COP16/CMP6 and related UN Climate Change Conferences

The Second CDM Training Programme

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Contents of presentation

• Background information on Climate Change negotiations
• Outcomes of COP16/CMP6
• Outcomes of related UN Climate Change Conferences (AWGs)
• Expected future framework (post Kyoto)
• Submission on New Market-based Mechanism
• Japan’s Initiative on Bilateral Offset Credit Mechanism (BOCM)
Brief history of Climate Change Negotiations

- **UNCED (1992)**: Negotiation on the protocol
- **COP1 (1995)**: Kyoto Protocol adopted
- **COP4 (1998)**: Negotiation on rules of the Kyoto Mechanisms
- **COP11 CMP1 (2005)**
- **COP13 CMP3 (2007)**
- **COP15 CMP5 (2009)**
- **COP16 CMP6 (2010)**
- **COP17 CMP7 (2011)**

- **UNFCCC** adopted (entered into force in 1994)
- **Marrakesh Accords adopted (CDM/JI started)**

- **Negotiation on New framework (AWG-LCA)**
- **Negotiation on 2nd Commitment period (AWG-KP)**
Relationship between COP and AWG

- Conference of Parties of UNFCCC (COP)
- Conference of Parties serving as Meeting of Parties (COP/MOP)
- Subsidiary Body for Implementation (SBI)
- Subsidiary Body on Technical and Scientific Advices (SBSTA)
- Ad Hoc Working Group on Long-term Cooperative Actions under the Convention (AWG-LCA)
- Ad Hoc Working Group on Further Commitments for Annex I parties under the Kyoto Protocol (AWG-KP)

Meeting frequency:
- Once a year
- Twice a year
Negotiation Blocs

Non Annex I

G77 & China
- China, India, Asian Countries
- LDCs: Bangladesh, Nepal, Ethiopia, Yemen, etc.
- Oil Exporters: Saudi Arabia, UAE, Qatar, etc.
- SIDS (AOSIS): Tuvalu, Samoa, Fiji, Jamaica, PNG, etc.

Africa
- South Africa, Tanzania, Ghana, Uganda, etc.
- Latin America & Caribbean: Brazil, Argentina, etc.

Annex I

EU

Umbrella
- KP ratification: Japan, NZ, Russia, Norway, Ukraine, Kazakhstan, Australia, Canada
- Non Parties: USA

Environmental Integrity Group
- Switzerland, Mexico, Rep of Korea etc.

* Depending on issues, countries change their groups.
### UNFCCC meeting schedule in 2009-11

<table>
<thead>
<tr>
<th>Date</th>
<th>Meeting</th>
<th>Venue</th>
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</thead>
<tbody>
<tr>
<td>Dec. 2009</td>
<td>COP15/CMP5</td>
<td>Copenhagen, Denmark</td>
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<tr>
<td>Apr. 2010</td>
<td>AWG-KP11/LCA9</td>
<td>Bonn, Germany</td>
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<tr>
<td>Jun. 2010</td>
<td>SB32/AWG-KP12/LCA10</td>
<td>Bonn, Germany</td>
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<td>Aug. 2010</td>
<td>AWG-KP13/LCA11</td>
<td>Bonn, Germany</td>
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<tr>
<td>Oct. 2010</td>
<td>AWG-KP14/LCA12</td>
<td>Tianjin, China</td>
</tr>
<tr>
<td>Dec. 2010</td>
<td>COP16/CMP6</td>
<td>Cancun, Mexico</td>
</tr>
<tr>
<td>Apr. 2011</td>
<td>AWG-KP16/LCA14</td>
<td>Bangkok, Thailand</td>
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<tr>
<td>Jun. 2011</td>
<td>SB34/AWG-KP16/LCA14 (part2)</td>
<td>Bonn, Germany</td>
</tr>
<tr>
<td>Oct. 2011</td>
<td>AWG-KP16/LCA14 (part3)</td>
<td>Panama city, Panama</td>
</tr>
<tr>
<td>Dec. 2011</td>
<td>COP17/CMP7</td>
<td>Durban, South Africa</td>
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</tbody>
</table>
Discussion of CDM issues at CMP6

• CDM matters
  – Appeal Process → Continue to discuss
  – Loan Scheme → Agreed
  – Standardized Baseline → Agreed
  – Eligibility of CCS → Agreed

• Market Mechanism for after 2013
  – Mechanisms under Kyoto Protocol → Continue to discuss
  – Mechanisms under UNFCCC → Agreed to establish
**CDM Loan Scheme**

- Loan coverage: From PDD development to 1\textsuperscript{st} CER issuance (incl. validation and 1\textsuperscript{st} verification cost)
- Eligibility (Host country): Fewer than 10 registered project countries as of 1 January (each year)
- Eligibility (Project): 15,000 CO2t/year (7,500 CO2t/year for LDC/SIDS)
- Conditions: Free of interests, Reimbursement will start after 1\textsuperscript{st} CER issuance
CDM Loan Scheme (cont.)

* Implementing Agency is not yet consigned/ designated. (World Bank and regional development banks (ADB, etc) are leading candidates.)
Standardized baseline

• Define baseline and additionality demonstration as one methodology
• Proposal will submit to CDM-EB through host country’s DNA
• Reduce the cost for methodology development, improve objectivity and predictability
Standardized baseline (cont.)

- CDM Executive Board
- Approval, Support development
- Propose
- Non-Annex I (Host) Country’s DNA
- Methodology development
- Government, Private Sector, International Organization, NGO, etc.

<Standardized Baseline>

Baseline Scenario and Emission
- (e.g. Use of incandescent lamp and CO2 emission calculation)

Additionality Demonstration
- (e.g. Penetration level is less than 5% of use of fluorescent lamp)
Appeal process

• Further guidance relating to the CDM (decision -/CP.16):
  – 18. *Requests* the SBI to make recommendation to CMP for appeal against EB decisions;
  – 19. *Invites* Parties, intergovernmental organizations and admitted observer organizations to submit to the secretariat, by 28 March 2011, their views on this matter;

→ Still under discussion

(Which organization will be a body for appeal process (aside from CDM-EB/UNFCCC Secretariat)???)
Carbon Capture and Storage (CCS)

Carbon dioxide capture and storage in geological formations as CDM project activities (decision -/CP.16):

1. Decides the CCS is eligible as project activities under the CDM...
2. Requests the SBSTA35 to elaborate modalities and procedures for inclusion of CCS as project activities under the CDM...
3. Decides that the modalities and procedures...the following issues:
   - Selection of storage site, monitoring plan, criteria for site selection, boundaries, risk and safety assessment, short-, medium- and long-term liability for leakage, etc.

→ PP have to wait for the outcome of above issues. (Not yet to ready for registration by CDM-EB.)
Continuation of Market Mechanism

- No parties against continuation of CDM at CMP6. (Many parties supported continuation of CDM after 2013.)
- CER will be generated and issued after 2013.
- Generation of ERU (JI) limited from 2008 to 2013.
### Discussion at AWG-KP and AWG-LCA

<table>
<thead>
<tr>
<th>AWG-KP</th>
<th>AWG-LCA</th>
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<tbody>
<tr>
<td>CDM options (draft)</td>
<td>Consider establishment of Kyoto Mechanism at COP17</td>
</tr>
<tr>
<td>- Nuclear, Co-benefit, Utilize CERs from limited number of parties (LDCs, SIDS, etc.), Discount of CERs, etc.</td>
<td>- Current scheme (CDM, JI and IET) will utilize for future</td>
</tr>
<tr>
<td>JI options (draft)</td>
<td>- Further consideration of Market Mechanisms</td>
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<tr>
<td>- Nuclear, Co-benefit, etc.</td>
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<tr>
<td>Others (draft)</td>
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<tr>
<td>- Carry-over, Charging to AAU and RMU, New Market Mechanisms, Complementarity</td>
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**Not agreed (remain conflict of opinions)**
Treatment of Market Mechanism issues at AWG-LCA

COP decision (decision -/CP.16):

– 80. Decides to consider the establishment, at COP17 of one or more market-based mechanisms to enhance the cost-effectiveness of, and to promote, mitigation actions, ...

– 81. Requests the AWG-LCA to elaborate the mechanism or mechanisms referred to in para 49 (NAMA by NAI), with a view to recommending a draft decision or decisions to the COP for consideration at COP17;
Treatment of Market Mechanism issues at AWG-LCA (cont.)

COP decision (decision -/CP.16):

– 82. Invites Parties and accredited observer organizations to submit the secretariat, by 21 February 2011, their views on matters referred to in para 81 above;

– 83. Undertakes, in developing and implementing the mechanism or mechanisms referred to in para 80, to maintain and build upon existing mechanisms, including those established under the Kyoto Protocol;
Scenarios for Market Mechanisms (2013-)

**Scenario 1**
- AWG-KP
- Emission Cap
- \[\text{CDM} + \text{JI} + \text{IET}\]

**Scenario 2**
- AWG-KP + AWG-LCA
- Emission Cap
- Pledge & Review
  \[\text{CDM} + \text{JI} + \text{IET} + \text{New Market Mechanism}\]

**Scenario 3**
- AWG-LCA
- Pledge & Review
- New Market Mechanism + modified \[\text{CDM} + \text{JI} + \text{IET}\]

(Above scenarios are made by IGES)

- CDM will continue at any scenario.
- New Market Mechanisms includes NAMA, SCM, REDD+, etc.
- JI and IET will available with Emission Cap (If no Emission Cap, JI and IET doesn’t work)
- Management of Unit (CER, ERU, AAU, etc.) will continue after 2013.
Topics for further negotiations

CDM

• Request for further improvement of management and regional distribution issues
• Delayed process, unclear EB’s decision-making and further confidence building measures are keys to improve current situation

JI

• Unclear of JI management after 2013
Topics for further negotiations

Market Mechanism after 2013

• “Cancun Agreement” clarified the direction
• Expand Market Mechanism through “Bilateral Crediting Mechanism (BOCM)”, “Sectoral Crediting Mechanism” etc.
• Still several Parties (Bolivia, Venezuela, Cuba, etc.) against for market mechanism issue
Background of Bangkok AWG

AWG-LCA14/AWG-KP16 (3-8 April 2011 @Bangkok)

• First UNFCCC negotiation meeting after the COP16@Cancun (Dec. 2010).
• Expected for materialize the “Cancun Agreement” and negotiate for further agreement.
• Bangkok AWG meeting planned to decide the workload of first half of the year 2011.
• COP17 is the deadline for agreement of new framework after 2013 (if no agreement at COP17, we’ll face the “gap” (no commitment) between 1st and new/2nd Commitment period).
Outcome of Bangkok AWG

- **AMG-LCA14**
  - Annex I: Start negotiation based on “Cancun Agreement”
  - NAI: Start negotiation based on “Bali Action Plan”
  - They couldn’t negotiate the issues. Only agreed for agenda items for next AWG session.
Outcome of Bangkok AWG

• AMG-KP16
  – NAI: Annex I should agree on set up 2\textsuperscript{nd} Commitment period of KP (after 2013). NAI Parties requested to deliver the political will at COP17.
  – Japan and other AI Parties repeated their position.
    • Cannot accept 2\textsuperscript{nd} Commitment Period. Establish a new legally-binding framework impartiality and effectiveness (with participation of all major economies).
Outcome of Bangkok AWG

• Pre-sessional Workshops
  – Workshop on assumptions and conditions related to the attachment of quantified economy-wide emission reduction targets by developed country Parties
  – Workshop on nationally appropriate mitigation actions submitted by developing country Parties, underlying assumptions, and any support needed for implementation of these actions
  – Expert workshop on the Technology Mechanism
Outcome of Bangkok AWG

• Pre-sessional Workshops (cont.)
  – Parties delivered presentation of views and policies for their target/action (based on the request by “Copenhagen Accord” for explain their position to other countries. Not for negotiation).
  – 17 Parties delivered presentation of emission reduction target (developed country)
  – 12 Parties delivered presentation of NAMA (developing country)

All presentation materials are available at:
http://unfccc.int/meetings/awg/items/5928.php
Background of Bonn SB/AWG

SB/I34/SBSTA34 and AWG-LCA14/AWG-KP16 (part2) (6-17 June 2011 @Bonn)

• 2nd official UNFCCC negotiation meeting in 2011.
• Expected for improve the negotiation from Bangkok’s AWG session and materialize the “Cancun Agreement” and negotiate for further agreement.
Outcome of Bonn SB/AWG

- Didn’t improve the situation from Bangkok AWG
  - Annex I and NAI Parties remain divided over the negotiation process
  - Bolivia strongly opposed the adoption of agenda (Bolivia taking an opposite standpoint for Cancun Agreement)
  - Substantive negotiation was stuck
  - Took time for unify the negotiation position among negotiation bloc (especially “G77 and China”)

→ AWG-LCA14/KP16 will continue to October session, “Part3” at Panama
Options for future framework

- Option A: Ideal but difficult and takes time
- Option B-1: Not easy and takes time
- Option B-2: Internationality and legality are issues
- Option C: Possibility to become a chaotic situation

(Above options are made by IGES)
Options for Internationally-binding regime

• A regime of “Internationally-bindedness for all major economies with the Common But Differentiated Responsibility Principle” such as:
  – Developed countries: numerical target based on the Cancun Agreement with some consequences of non-compliance
  – Emerging countries: numerical international target based on the Cancun Agreements without any consequences of non-compliance (Unilateral Declaration)

(Above options are made by IGES)
Submission on New Market-based Mechanisms

• Based on the decision at COP16, invited Parties to submit their views on matters relating to the establishment of one or more market-based mechanisms to enhance the cost-effectiveness of, and to promote, mitigation actions.

• The following 19 Parties submitted:
  – Australia, Bangladesh, Bolivia, China, Colombia, Ecuador, AOSIS, EU, Japan, New Zealand, Norway, Papua New Guinea, Peru, Republic of Korea, Saudi Arabia, Singapore, Switzerland, Turkey and Venezuela.
Submission on New Market-based Mechanisms

• EU
  – Voluntary participation supported by the promotion of fair and equitable access for all Parties
  – Complementing other means of support for nationally appropriate mitigation actions by developing county Parties
  – Stimulating mitigation action across broad segments of the economy
  – Safeguarding environmental integrity
  – Ensuring a net decrease and/or avoidance of global greenhouse gas emissions

(Full documents are downloadable from http://unfccc.int/resource/docs/2011/awglca14/eng/misc02.pdf)
Submission on New Market-based Mechanisms

• Japan
  – Efficient and facilitative nature
  – Technology neutrality
  – Ensuring flexibility to accommodate each country’s circumstances and ensuring transparency
  – Ensuring the environmental integrity
  – Synergy with the existing market-based mechanisms

(Full documents are downloadable from http://unfccc.int/resource/docs/2011/awglca14/eng/misc02.pdf)
Submission on New Market-based Mechanisms

• China

– The possible market-based mechanism to be established under the Convention aims to help developed country Parties

– The precondition for the establishment of market-based mechanism is that the developed country Parties that are not Parties to the Protocol undertake internationally legally binding economy-wide emission reduction commitments after 2012

– Emission reduction commitments of the developed country Parties shall be achieved mainly through domestic efforts and the market-based mechanism could only play a complementary role

– All developing country Parties should have equal access to the possible market-based mechanism to be established, and necessary capacity building activities should be provided

– The utilization of any market-based mechanisms to be established under the Convention should not lead to double counting

(Full documents are downloadable from  http://unfccc.int/resource/docs/2011/awglca14/eng/misc02.pdf)
Submission on New Market-based Mechanisms

• Bangladesh
  – To allow supplementary of GHG emission reductions through market-based mechanisms up to maximum 20% of national commitments; the remaining 80% has to be reduced domestically
  – To make future market-based mechanisms as free of distortions and more efficient, the experience of various market-based mechanisms under the existing Kyoto and other emissions trading schemes need to be critically reviewed by a committee under the SBI
  – Existing CDM functioning needs to be reformed and expanded;
    • Moving beyond project-based CDM and upscale programmatic CDM that will provide credits for a number of small-scale projects distributed over time and space
    • Introducing Policy-based CDM: Parties may receive credits from implementing policies and measures that reduce emissions and are additional to base-levels
  – The distribution of existing registered CDM projects are highly skewed in favor of a very few countries. To address such spatial inequity, measures should be taken for capacity-building in LDCs and SIDS for them to effectively take part in CDM activities with a certain quota being kept for such countries

(Full documents are downloadable from http://unfccc.int/resource/docs/2011/awglca14/eng/misc02.pdf)
Japan’s Initiative on CC issues

• Adaptation
  – Global and Regional Adaptation Network
  – Support to UNFCCC Workshops

• Mitigation
  – Bilateral Offset Credit Mechanism (BOCM)
  – Co-benefit Approach
  – Workshop on Greenhouse Gas Inventories in Asia (WGIA)
Japan’s Bilateral Offset Credit Mechanism (BOCM)

• Background
  – Current CDM should be improved
    • lengthy procedures
    • limited project types
    • too costly
  – CDM will remain important
    • Rich experiences of GHG reduction project
    • Established many rules and procedures by CDM-EB

→ Japanese gov’t will try to utilize both CDM and BOCM (not only BOCM)
Japan’s Bilateral Offset Credit Mechanism (BOCM)

[Requirement]
• Be consistent with post 2012 framework
  – GHG reductions with environmental integrity and quantifiable evaluation
  – Able to conduct MRV under international standards

[Aim]
• Establish ‘win-win’ relations between developed and developing countries through promotion of technology transfer and emission credits
Image of a Bilateral Offset Credit Mechanism (BOCM)

Support for planning and technological assistance

Financing for global warming countermeasures:
- ODA (yen loans, grants)
- OOF (JBIC loans, etc.)
- Other public funds
- Private-sector funds

Japan’s advanced low-carbon technologies, products, and systems

Technologies, products, and systems

Developing countries

GHG emission reduction projects in:
- Power sector
- Transportation sector
- Industrial sector
- Agricultural sector
- Environment & sanitary sector

MRV of GHG emission reductions

Used to help achieve Japan’s target
Progress in International Negotiations

• Cancun Agreements (COP16 Decisions)
  ✓ It was agreed that the Conference of the Parties (COP) “decides to consider the establishment, at its seventeenth session, one or more market-based mechanisms”.

• High-Level Agreements on Bilateral Cooperation
  ✓ India: “The two Prime Ministers reaffirmed the importance of strengthening bilateral discussions on climate change on various occasions, including a possible establishment of a framework of comprehensive bilateral cooperation.”
  ✓ Vietnam: “The two sides agreed to task relevant agencies of the two countries to exchange views for the realization of these objectives* including the potential establishment of a bilateral offset credit mechanism”. (*Making the environment and economy compatible, thereby addressing the climate change issues while achieving sustainable growth.)

• Multilateral Agreement
  ✓ Japan and Mekong region countries agreed to “promote the development of bilateral offset mechanisms”
Feasibility Studies for Bilateral Offset Credit Mechanism (BOCM)

- Japanese gov’t (METI and MOE) have started to fund feasibility studies since FY2010
- The studies are conducted by Japanese private companies in cooperation with organizations in developing countries with a view to exploring and designing possible joint GHG reduction projects and bilateral offset credit mechanism
- Total budget: 10mil USD (FY2010), 3bil USD (FY2011)
- Purpose:
  - To explore and design possible joint GHG reduction projects in such sectors as power, steel, cement, electric appliances
  - To develop appropriate measurement and monitoring methodologies of GHG and to estimate GHG emission reduction potential
  - To evaluate financial aspects of projects, including the use of offset credits generated from GHG reduction projects
Feasibility Studies for Bilateral Offset Credit Mechanism

China:
- Introduction of high efficiency motor system
- Energy saving housing (eco-friendly house)

Asia (Vietnam, Laos, Malaysia, China):
- Trial introduction of Digital Tachograph

Maldives:
- Energy consumption reduction of air conditioners by using deep seawater

Laos:
- Biomass
- NAMA FS on transportation in Laos

Brazil:
- REDD+

India:
- Highly efficient coal power plant (Ultra supercritical)
- Introduction of energy efficient technologies at iron and steel plant

China:
- Introduction of high efficiency motor system
- Energy saving housing (eco-friendly house)

Asia (Vietnam, Laos, Malaysia, China):
- Trial introduction of Digital Tachograph

Mexico:
- Promotion high efficiency light and energy saving of home product

Thailand:
- Introduction of CHP facility and privately-owned electrical power facility
- Eco-friendly driving using digital tachograph
- Optimum control of plant equipment (by IT)
- NAMA FS on wastes and wastewater management divisions in Thailand

Philippines:
- Introduction of energy efficient technologies at iron and steel plant
- Geothermal power
- Optimum control of plant equipment (by IT)
- Biomass
- NAMA FS on peat management in Indonesia

Vietnam:
- Introduction of Nuclear power
- Promotion of Home electricity
- Highly efficient coal power plant (Ultra supercritical)
- Reduce power transmission loss by using highly efficient transformer

Indonesia:
- Underground storage of CO₂
- Low rank coal power plant
- Introduction of energy efficient technologies at cement plant
- Highly efficient coal power plant (Ultra super critical)
- Geothermal power
- Optimum control of plant equipment (by IT)
- Biomass
- NAMA FS on peat management in Indonesia

Peru:
- REDD+

→ Ministry of Environment
→ Ministry of Economy, Trade and Industry
[NAMA-FS Case example]
Waste and Wastewater Management in Thailand

• Actions
  – Introduce Japanese waste and wastewater management technologies to Thailand to help reduce GHG emission
    • Reduce methane gas emission from urban waste landfills by introducing a semi-aerobic landfill system
    • Use composting technology to turn organic waste into fertilizer and avoid methane gas emissions
    • Collect methane gas from the anaerobic treatment of waste with high organic content, and use the gas and heat for power generation and other purposes as substitutes for fossil fuel

• Estimated emission reduction
  – 6.5 to 11.5 million tCO2 between 2011-2020

• Host country counterpart
  – Thailand Greenhouse Gas Management Organization (TGO)
  – Bangkok Metropolitan Administration (BMA)
[NAMA-FS Case example]
Waste and Wastewater Management in Thailand

Color legends: Reference  NAMAs
[NAMA-FS Case example]
Transportation Management in Laos

• Actions
  – Identifying specific projects that are likely to reduce GHG emissions and estimating the amount of emission reductions with respect to the Urban Transport Master Plan (road networks, public transportation systems, and traffic management) in Vientiane
  – Master Plan outline
    • Reduce travel distance by improving road networks
    • Decreasing the number of vehicles by enhancing public transportation systems (BRT, LRT, etc.)
    • Implementing effective traffic management (parking restrictions, traffic volume control, etc.)

• Estimated emission reduction
  – Approx. 440,000tCO2 between 2012-2020

• Host country counterpart
  – Ministry of Public Works and Transport (MPWT)
  – Water Resources and Environment Administration (WREA)
[NAMA-FS Case example]
Transportation Management in Laos

Current status of traffic conditions in Laos

Public transportation systems in other country
Peatland Management in Indonesia

• Actions
  – Designating approx. 10,000ha of peatland in Jambi province on Sumatra Island, Indonesia, as the target area. This FS calls for building sluice gates (or utilizing existing ones) in the existing man-made canals thereby controlling and raising the ground water table to increase moisture content in peat soils. The construction of canals has caused the drying out of peat swamps, leading to an increase in CO2 emissions from aerobic biodegradation of dried peat soils. Thus, rewetting dried peat soils works to mitigate CO2 emissions by inhibiting biodegradation and preventing forest fires.

• Estimated emission reduction
  – 455,000tCO2 per year

• Host country counterpart
  – Ministry of Public Works (PU)
  – Provincial Government of Jambi
  – Jambi University
NAMA-FS Case example] Peatland Management in Indonesia

[Before improvement]
CO2 emissions from peatland

[After improvement]
Curving CO2 emissions by raising the water table

Reducing CO2 emissions by raising the water table within peat soils
Providing following information:

- Japanese policies and programmes on New Market-based Mechanisms (incl. Feasibility Study programmes)
- E-mail Newsletter
- Relevant event information and news etc.

http://www.mmechanisms.org/e/index.html
Thank you for your attention

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New Mechanisms Information Platform URL:
http://www.mmechanisms.org/e/index.html