

# Current updates of post-2012 negotiations and new market-based mechanisms



JICA Seminar

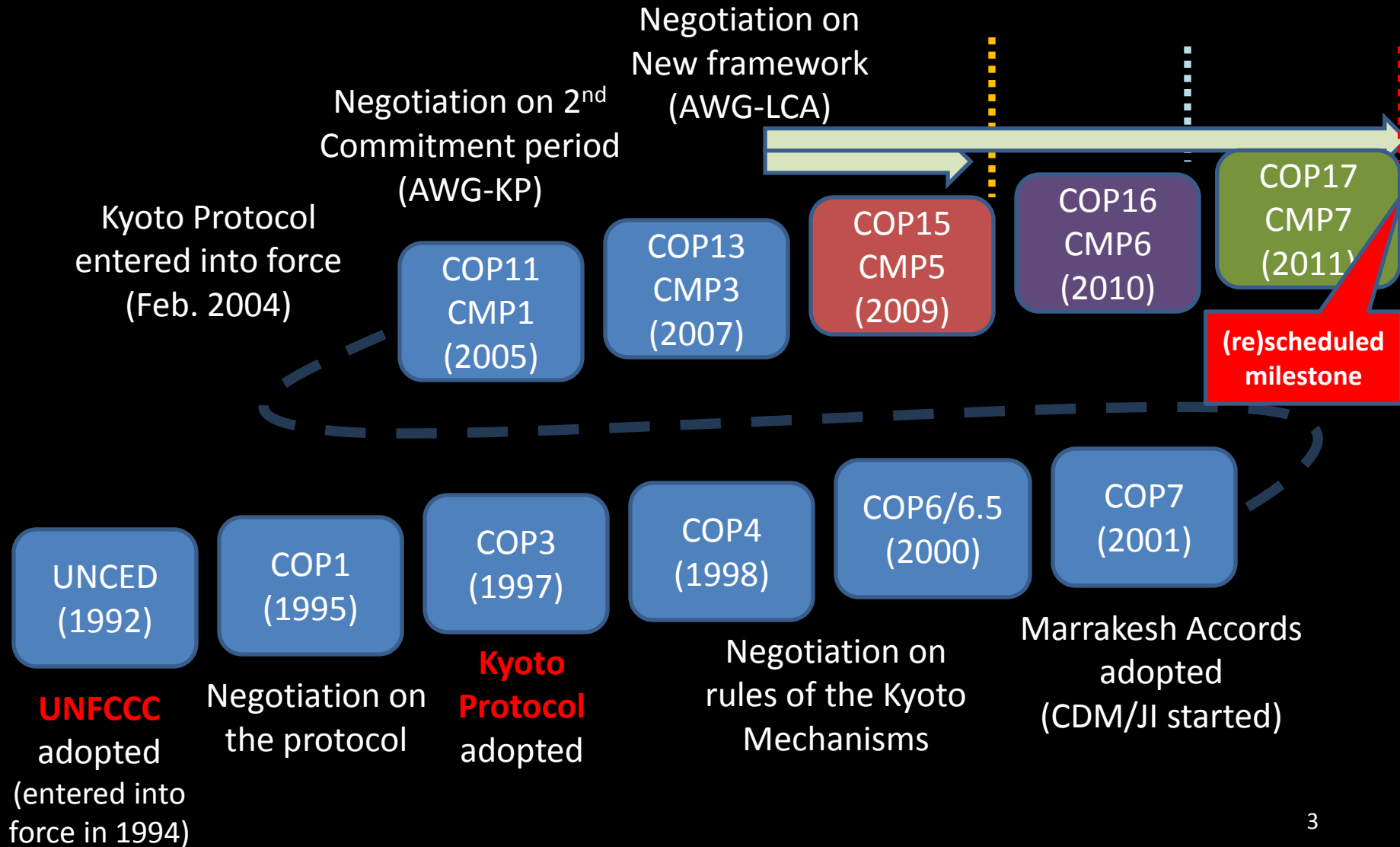
Thursday, 21 July 2011

Satoshi Iemoto, JICA Expert Team

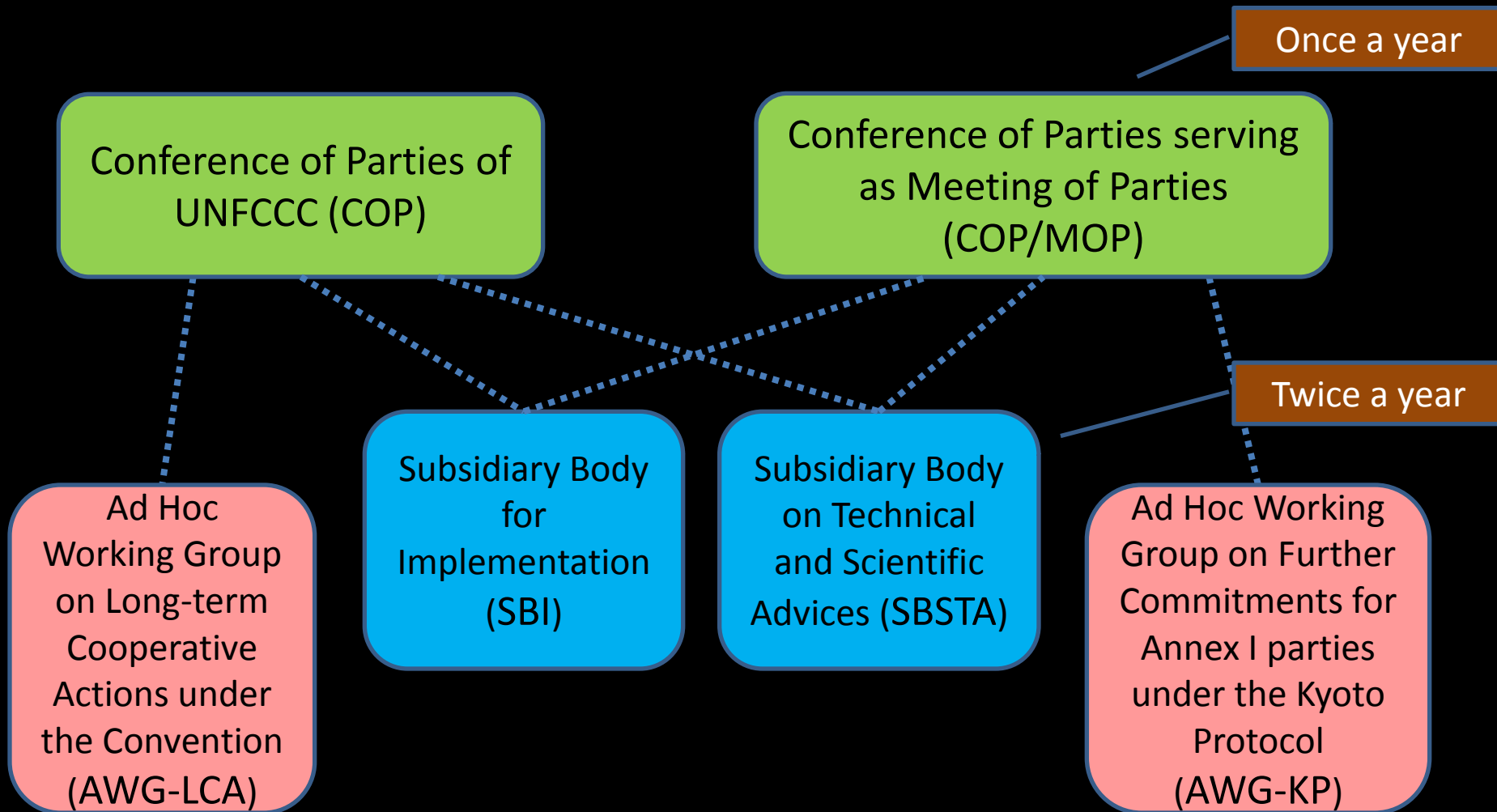
# Contents of presentation

- 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



# Relationship between COP and AWG



# Negotiation Blocs

Sri Lanka

Non Annex I

Annex I

G77 & China

China, India,  
Asian Countries

Africa

South Africa,  
Tanzania, Ghana,  
Uganda, etc.

LDCs

Bangladesh, Nepal,  
Ethiopia, Yemen, etc.

Oil Exporters

Saudi Arabia,  
UAE, Qatar, etc.

Latin America &  
Caribbean

Brazil, Argentina, etc.

EU

Umbrella

KP ratification

Japan, NZ, Russia,  
Norway, Ukraine,

Kazakhstan,

Australia  
Canada

Non Parties  
USA

SIDS (AOSIS)

Tuvalu, Samoa, Fiji, Jamaica, PNG, etc.

Environmental Integrity Group

Switzerland, Mexico, Rep of Korea etc.

\* Depending on Issues, Countries changes their groups.

# UNFCCC meeting schedule in 2009-11

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

# Discussion of CDM issues at CMP6

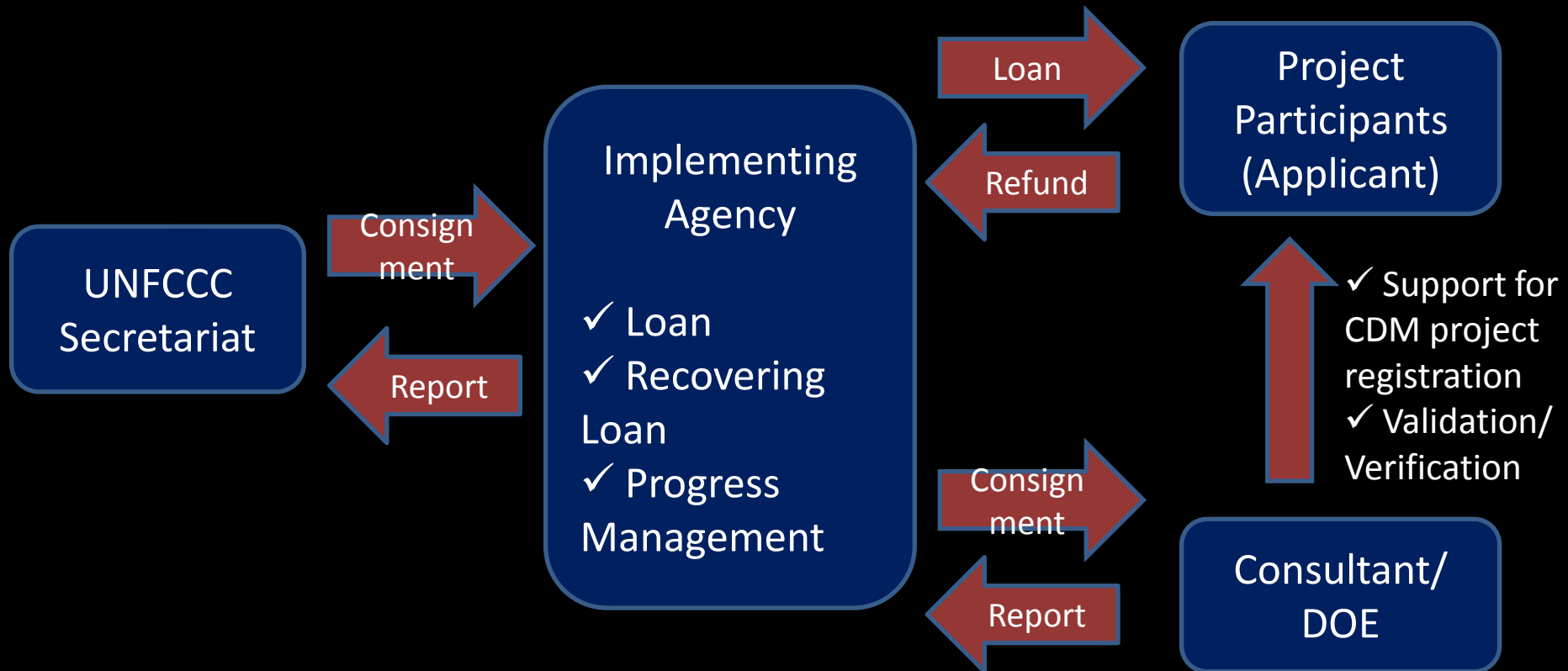
- CDM matters
  - Appeal Process → Continue to discuss
  - Loan Scheme → Agreed
  - Standardized Baseline → Agreed
  - Eligibility of CCS → Agreed
- Market Mechanism for after 2013
  - Mechanisms under Kyoto Protocol → Continue to discuss
  - Mechanisms under UNFCCC → Agreed to establish

# CDM Loan Scheme

- Loan coverage: From PDD development to 1<sup>st</sup> CER issuance (incl. validation and 1<sup>st</sup> verification cost)
- Eligibility (Host country): Fewer than 10 registered project countries as of 1 January (each year)
- Eligibility (Project): 15,000 CO<sub>2</sub>t/year (7,500 CO<sub>2</sub>t/year for LDC/SIDS)
- Conditions: Free of interests, Reimbursement will start after 1<sup>st</sup> CER issuance



# CDM Loan Scheme (cont.)

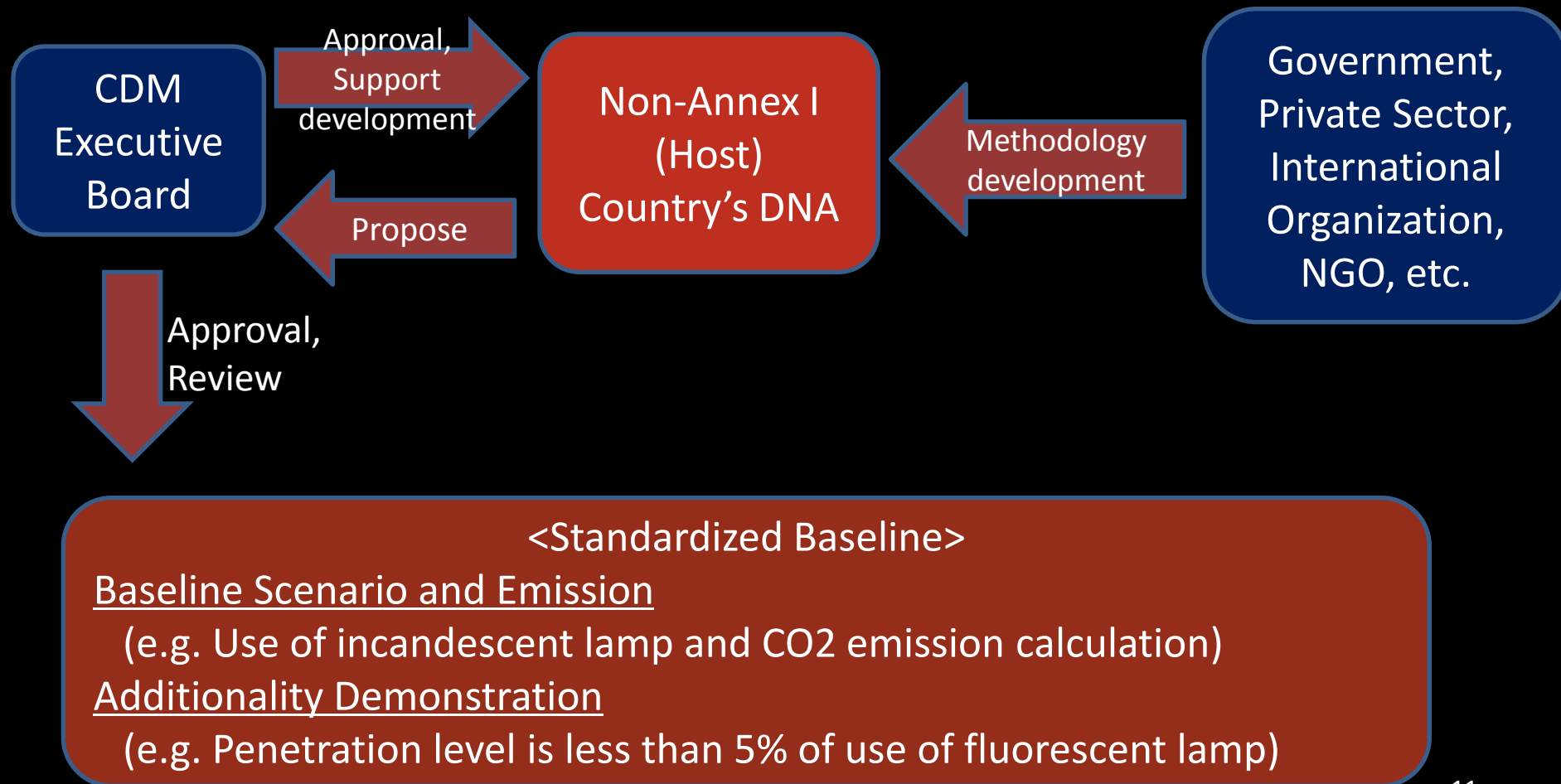


\* Implementing Agency is not yet consigned/ designated. (World Bank and regional development banks (ADB, etc) are leading candidates.)

# 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
- CDM-EB adopted the “guidelines for establishment of sector specific standardized baselines”

# Standardized baseline (cont.)



# Appeal process

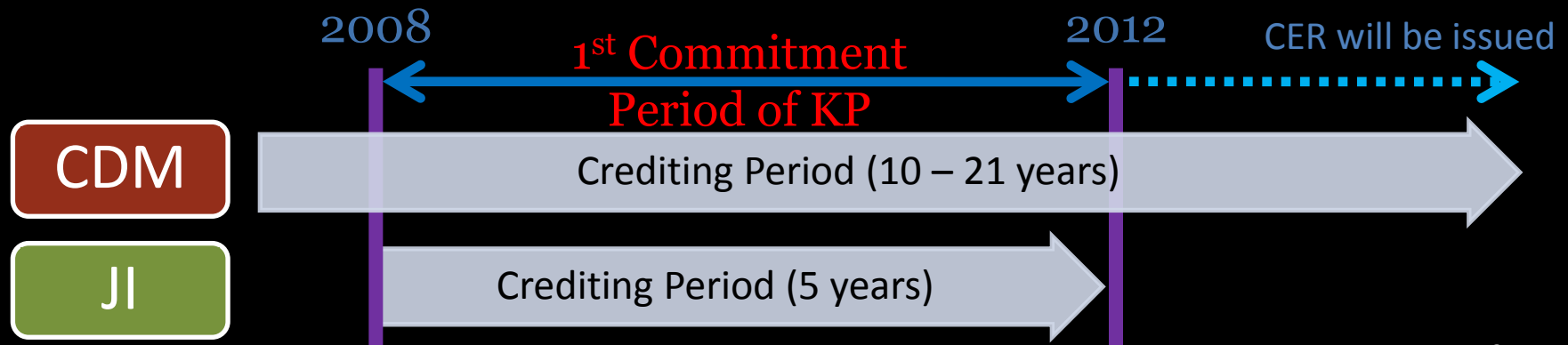
- Further guidance relating to the CDM (decision -/CP.16):
  - 18. *Requests* the SBI to make recommendation to CMP for appeal against EB decisions;
  - 19. *Invites* Parties, intergovernmental organizations and admitted observer organizations to submit to the secretariat, by 28 March 2011, their views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

→ **Still under discussion**

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

# 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.



# COP16 decision on Market Mechanism issues

## 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;

# COP16 decision on Market Mechanism issues

## 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**

+

CDM+JI+IET

## Scenario 2

**AWG-KP +**

**AWG-LCA**

Emission Cap

+

**Pledge & Review**

(CDM+JI+IET+

New Market

Mechanism)

## Scenario 3

**AWG-LCA**

Pledge & Review

+

New Market

Mechanism +

modified

CDM+JI+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 (April 2011)

## 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 1<sup>st</sup> and new/2<sup>nd</sup> Commitment period).

# Outcome of Bangkok AWG (April 2011)

- 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 (April 2011)

- AMG-KP16
  - NAI: Annex I should agree on set up 2<sup>nd</sup> 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<sup>nd</sup> Commitment Period. Establish a new legally-binding framework impartiality and effectiveness (with participation of all major economies).

# Background of Bonn SB/AWG (June 2011)

SBI34/SBSTA34 and AWG-LCA14/AWG-KP16  
(part2) (6-17 June 2011 @Bonn)

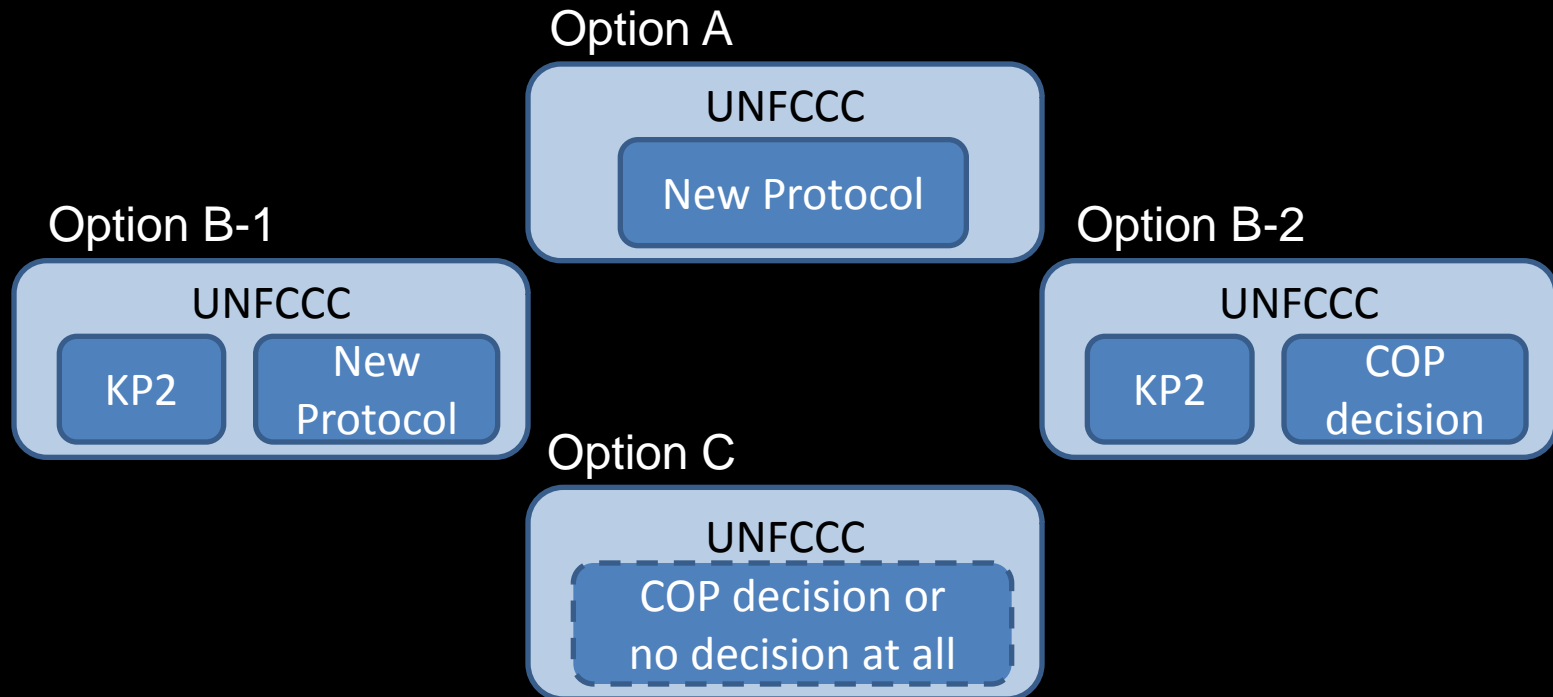
- 2<sup>nd</sup> official UNFCCC negotiation meeting in 2011.
- Expected for improve the negotiation from Bangkok's AWG session and materialize the "Cancun Agreement" and negotiate for further agreement.

# Outcome of Bonn SB/AWG (June 2011)

- 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 take time
- Option B-2: Internationality and legality are issues
- Option C: Possibility to become a chaotic situation



# 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)

# 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 country 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

# 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

# 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

# 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

# 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)

Japan

Agreements, etc.

Developing countries

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

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

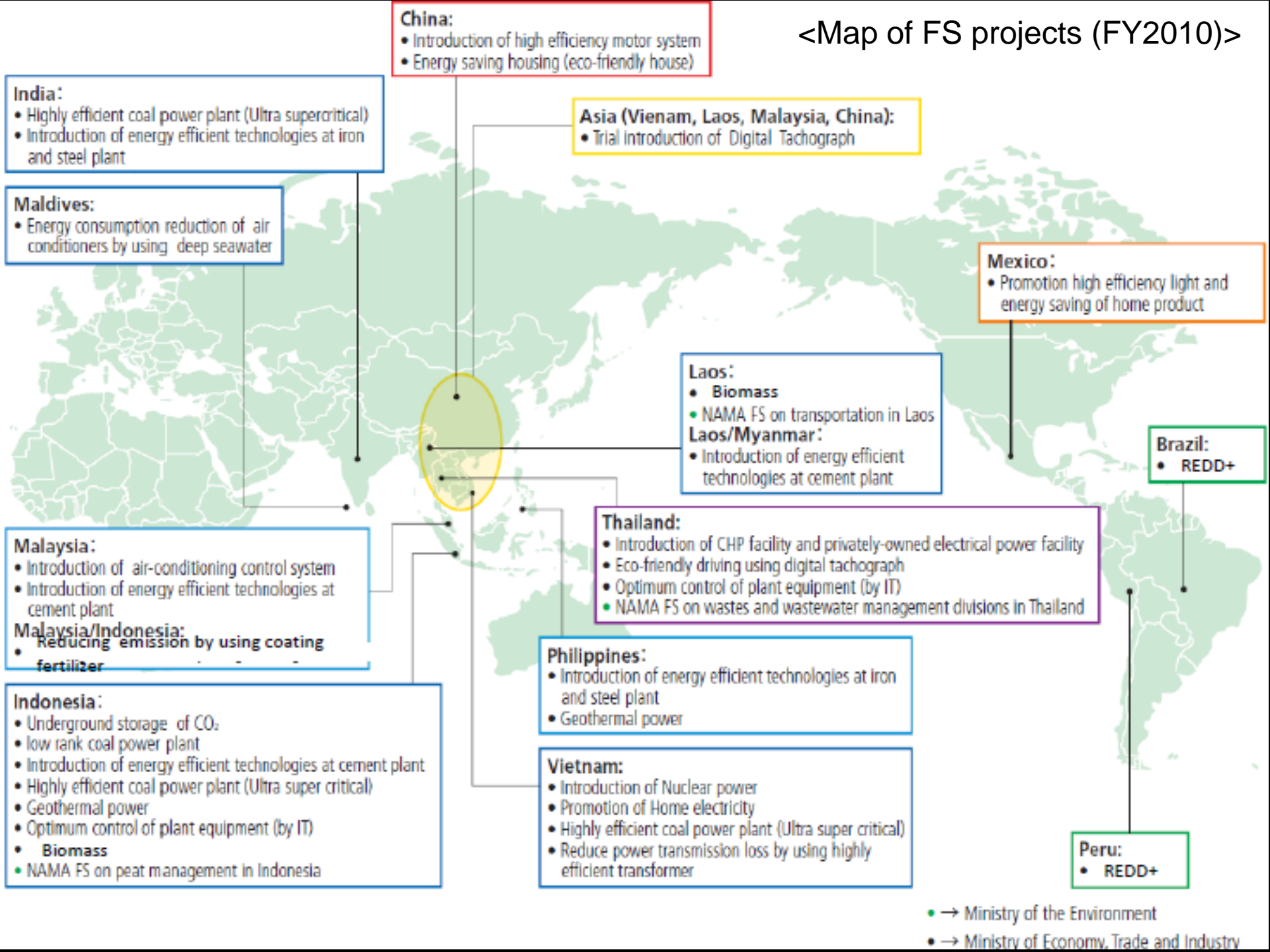
# Progress in International Negotiations

- 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

# <Map of FS projects (FY2010)>



**China:**

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

**Asia (Vietnam, Laos, Malaysia, China):**

- Trial introduction of Digital Tachograph

**India:**

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

**Maldives:**

- Energy consumption reduction of air conditioners by using deep seawater

**Mexico:**

- Promotion high efficiency light and energy saving of home product

**Laos:**

- Biomass
- NAMA FS on transportation in Laos

**Laos/Myanmar:**

- Introduction of energy efficient technologies at cement plant

**Brazil:**

- REDD+

**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

**Malaysia:**

- Introduction of air-conditioning control system
- Introduction of energy efficient technologies at cement plant

**Malaysia/Indonesia:**

- Reducing emission by using coating fertilizer

**Philippines:**

- Introduction of energy efficient technologies at Iron and steel plant
- Geothermal power

**Indonesia:**

- Underground storage of CO<sub>2</sub>
- 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

**Vietnam:**

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

**Peru:**

- REDD+

• → Ministry of the Environment  
 • → Ministry of Economy, Trade and Industry

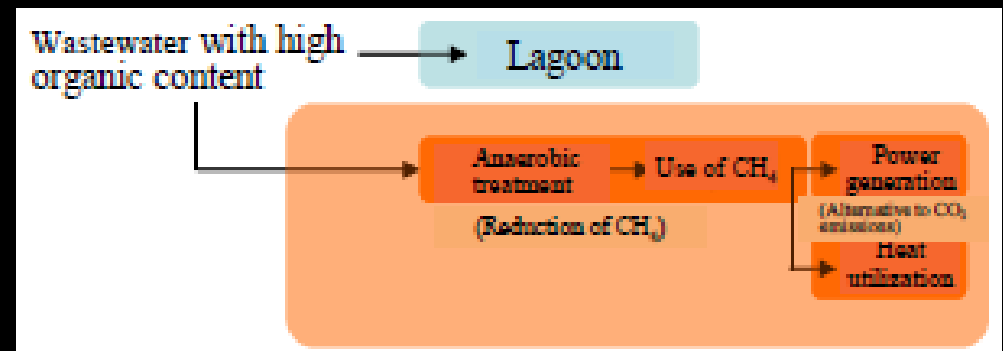
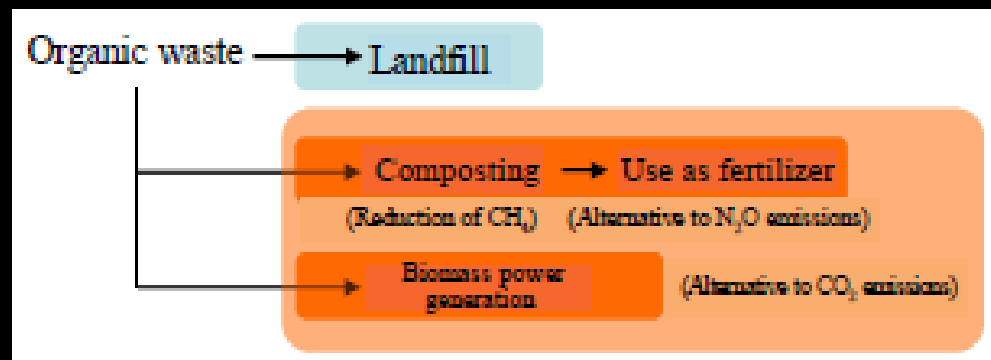
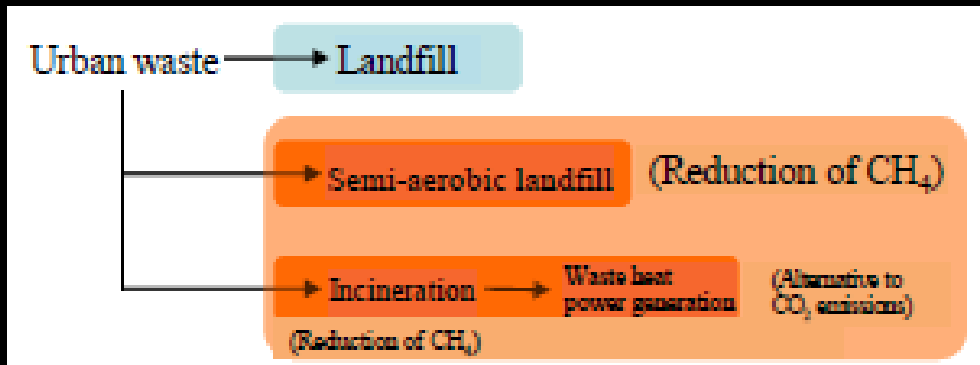
# [NAMA-FS Case example]

## 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 tCO<sub>2</sub> 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. 440,000tCO<sub>2</sub> 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



# [NAMA-FS Case example]

## Peatland Management in Indonesia

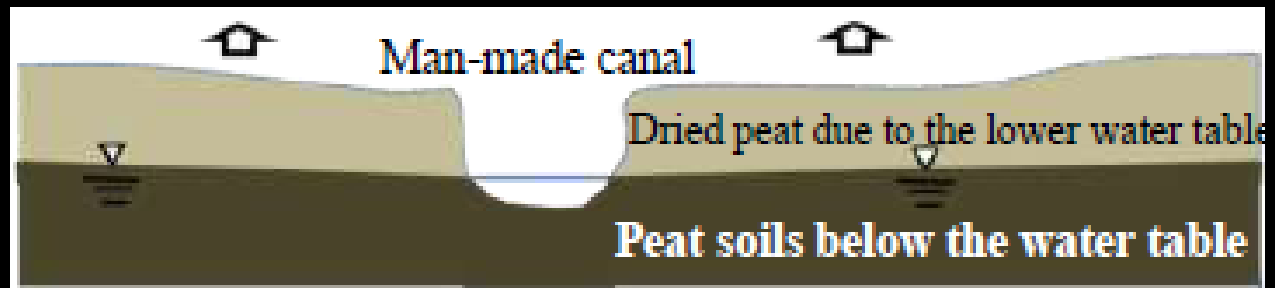
- Actions
  - Designating approx. 10,000ha of peatland in Jambi province on Sumatra Island, Indonesia, as the target area. This FS calls for building sluice gates (or utilizing existing ones) in the existing man-made canals thereby controlling and raising the ground water table to increase moisture content in peat soils. The construction of canals has caused the drying out of peat swamps, leading to an increase in CO<sub>2</sub> emissions from aerobic biodegradation of dried peat soils. Thus, rewetting dried peat soils works to mitigate CO<sub>2</sub> emissions by inhibiting biodegradation and preventing forest fires.
- Estimated emission reduction
  - 455,000tCO<sub>2</sub> per year
- Host country counterpart
  - Ministry of Public Works (PU)
  - Provincial Government of Jambi
  - Jambi University

# [NAMA-FS Case example]

## Peatland Management in Indonesia

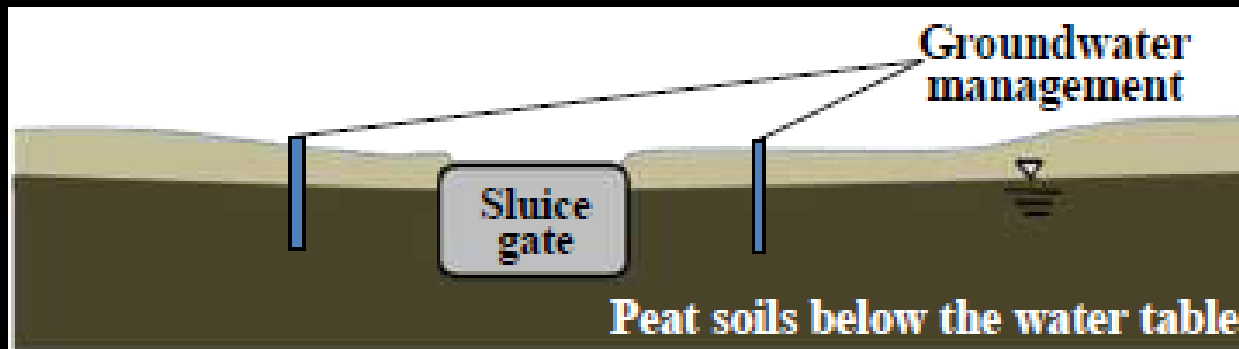
[Before improvement]

CO2 emissions from peatland



[After improvement]

Reducing CO2 emissions by raising the water table



Reducing CO2 emissions by raising the water table within peat soils

# NAMA-FS programmes in FY2011

- Total 29 projects adopted in FY2011 by Ministry of the Environment, Japan (3 projects in FY2010)
- Categories of adopted NAMA-FS project
  - ✓ Waste management
  - ✓ Biomass utilization
  - ✓ Transportation
  - ✓ Renewable energy
  - ✓ Energy efficiency
  - ✓ REDD+
- Adopted NAMA-FS project in Sri Lanka (2 projects)
  - ✓ NAMA-FS on the use of castor beans processing biomass fuel for power generation toward developing a low carbon industry in Sri Lanka
  - ✓ New Mechanism FS for the Best Grid Electricity Mix Focusing on Renewable Energy Sources in Sri Lanka



**New Mechanisms Information Platform** was established by the Ministry of the Environment, Japan (MOEJ) for disseminating information on legal and other mechanisms to address climate change. Such information includes proposed bilateral mechanisms, NAMAs, REDD, and other key areas. Also, the information platform accepts inquiries into Japan's relevant policies and support programmes, as well ways to start with collaborative work for a new stock market for emission trading.

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

### Information (Updated)

- 22 Jun 2011 - The information platform registration started.
- 15 Jun 2011 - SP3 side event "FIRST FINDINGS OF NEW MECHANISMS FS - BASED ON LAO-JAPAN COOPERATION IN TRANSPORT SECTOR -"[20:00-21:30, Sat, 11 June](Organizer: MOEJ, GEC, UNFCCC) press materials (available on the platform) and UNFCCC SB34 side events schedule.
- 31 May 2011 - Some documents have been updated.

[⇒ more](#)

### E-mail Newsletter

<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>