

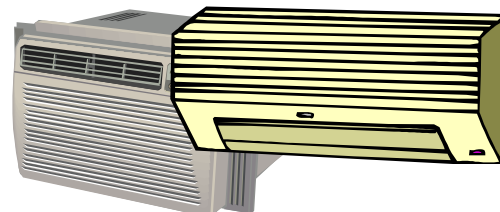
Recent Development of The Joint Crediting Mechanism (JCM)

January 2014
Government of Japan

All ideas are subject to further consideration and discussion with host countries

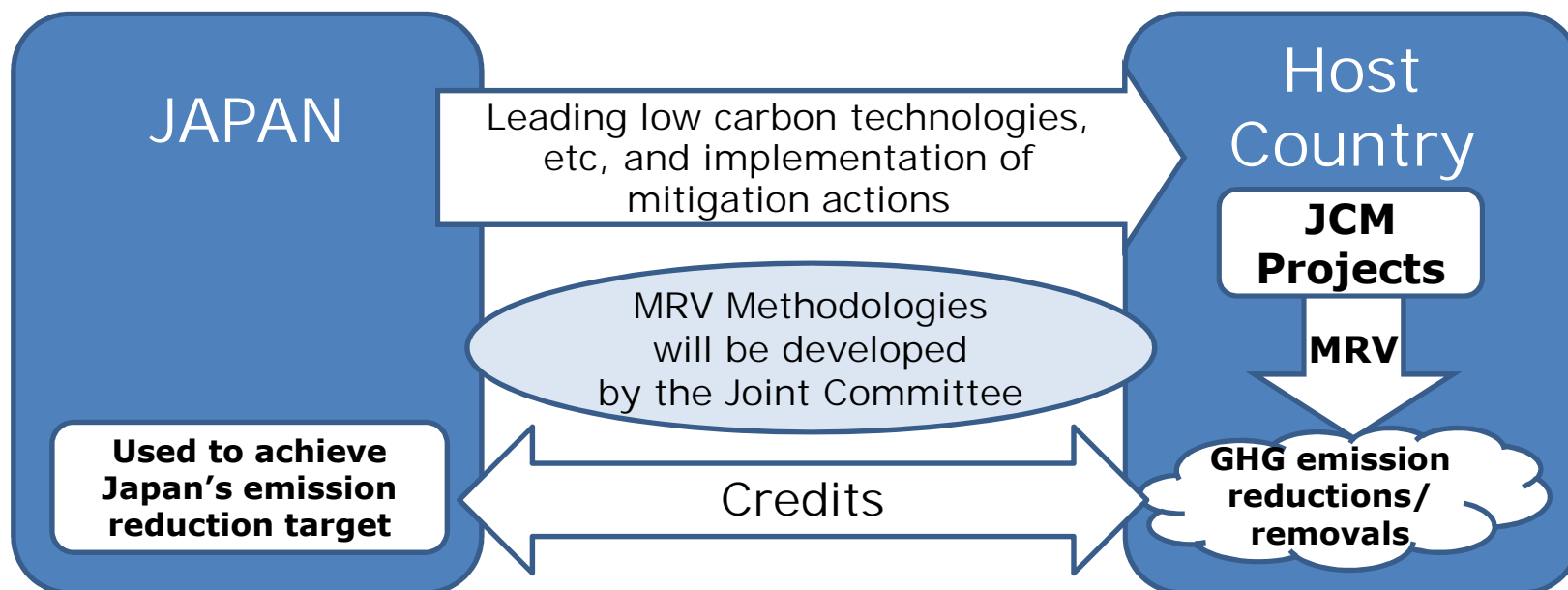
Low-Carbon Growth

- In order to effectively address the issue of climate change, it is necessary for both developed and developing countries to achieve low-carbon growth all around the world by fully mobilizing technology, markets and finance.
- Widespread use of advanced low-carbon technologies and products in various fields including renewable energy, highly efficient power generation, home electronics, low-emission vehicles, and energy-savings in factories must be accelerated.
- Realizing a low carbon society by combining these technologies and products with appropriate systems, services, and infrastructure is also crucial.

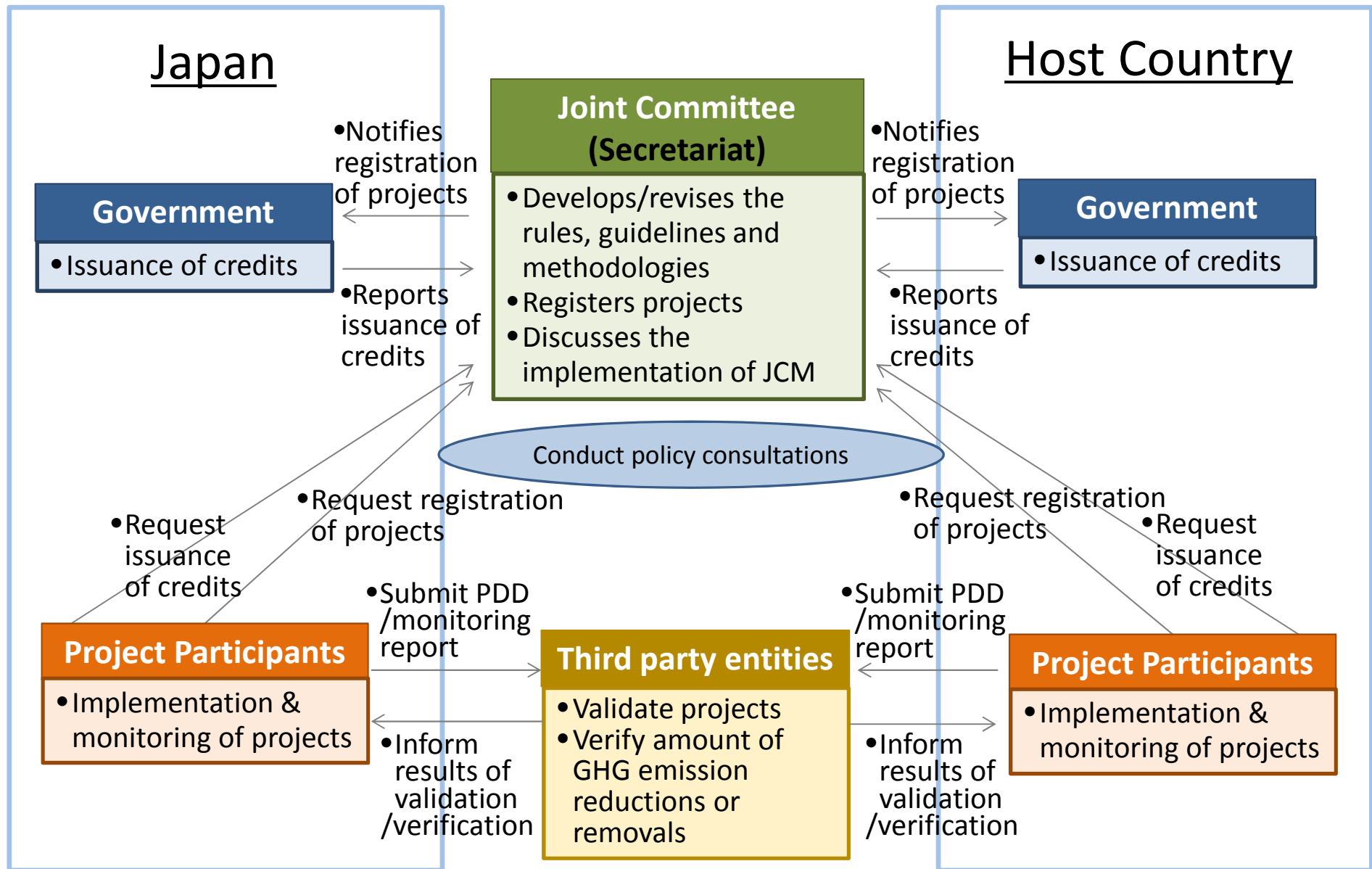


Basic Concept of the JCM

- Facilitating diffusion of leading low carbon technologies, products, systems, services, and infrastructure as well as implementation of mitigation actions, and contributing to sustainable development of developing countries.
- Appropriately evaluating contributions to GHG emission reductions or removals from Japan in a quantitative manner, by applying measurement, reporting and verification (MRV) methodologies, and use them to achieve Japan's emission reduction target.
- Contributing to the ultimate objective of the UNFCCC by facilitating global actions for GHG emission reductions or removals, complementing the CDM.



Scheme of the JCM



The role of the Joint Committee and each Government

- The Joint Committee (JC) consists of representatives from both Governments.
- The JC develops rules and guidelines necessary for the implementation of the JCM.
- The JC determines either to approve or reject the proposed methodologies, as well as develops JCM methodologies.
- The JC designates the third-party entities (TPEs).
- The JC decides on whether to register JCM projects which have been validated by the TPEs.
- Each Government establishes and maintains a registry.
- On the basis of notification for issuance of credits by the JC, each Government issues the notified amount of credits to its registry.

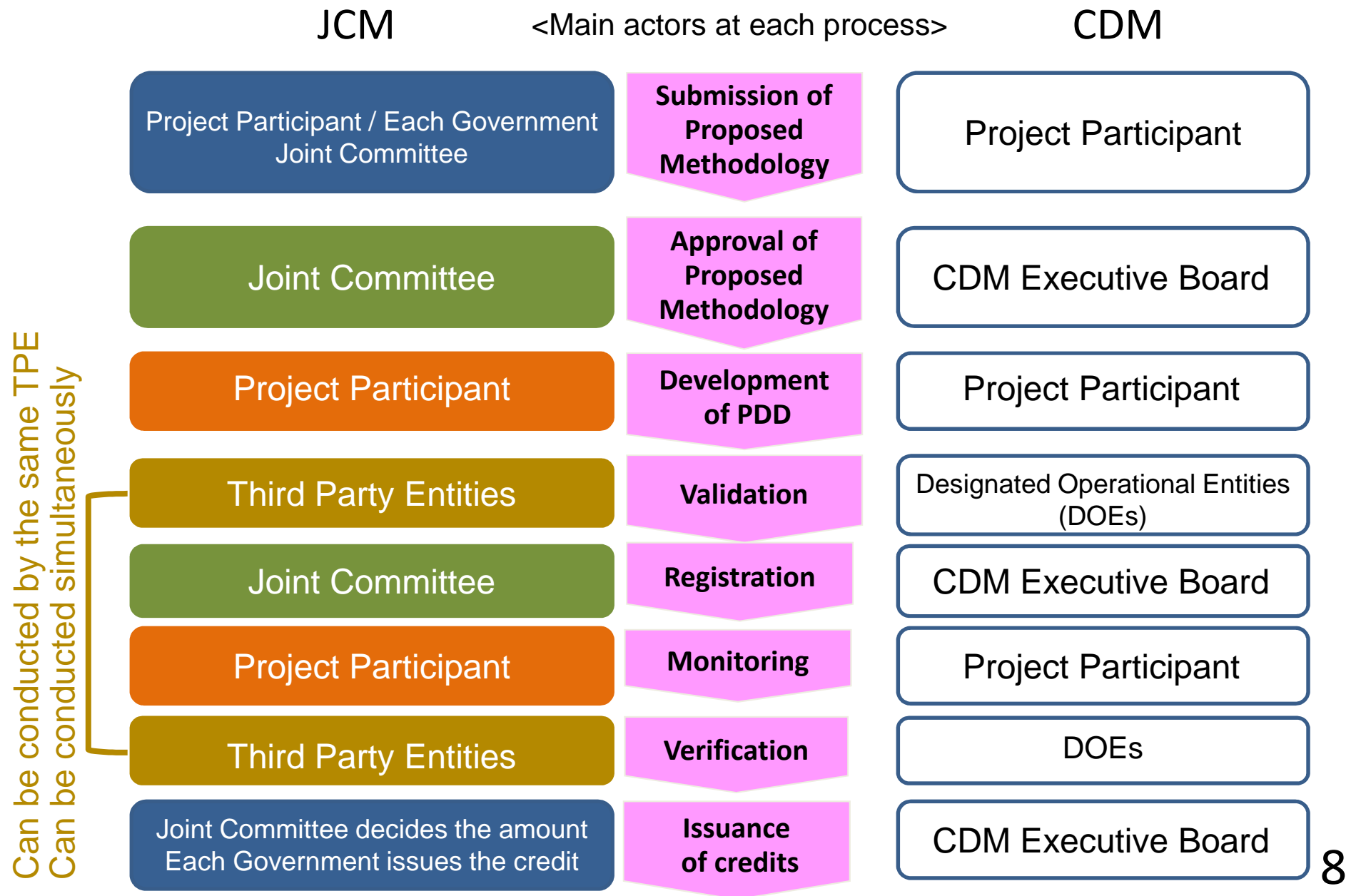
Approaches of the JCM

- The JCM should be designed and implemented, taking into account the followings:
 - (1) Ensuring the robust methodologies, transparency and the environmental integrity;
 - (2) Maintaining simplicity and practicality based on the rules and guidelines;
 - (3) Promoting concrete actions for global GHG emission reductions or removals;
 - (4) Preventing uses of any mitigation projects registered under the JCM for the purpose of any other international climate mitigation mechanisms to avoid double counting on GHG emission reductions or removals.

Features of the JCM

- (1) The JCM starts its operation as the non-tradable credit type mechanism.
- (2) Both Governments continue consultation for the transition to the tradable credit type mechanism and reach a conclusion at the earliest possible timing, taking account of implementation of the JCM.
- (3) The JCM aims for concrete contributions to assisting adaptation efforts of developing countries after the JCM is converted to the tradable credit type mechanism.
- (4) The JCM covers the period until a possible coming into effect of a new international framework under the UNFCCC.

Project Cycle of the JCM and the CDM

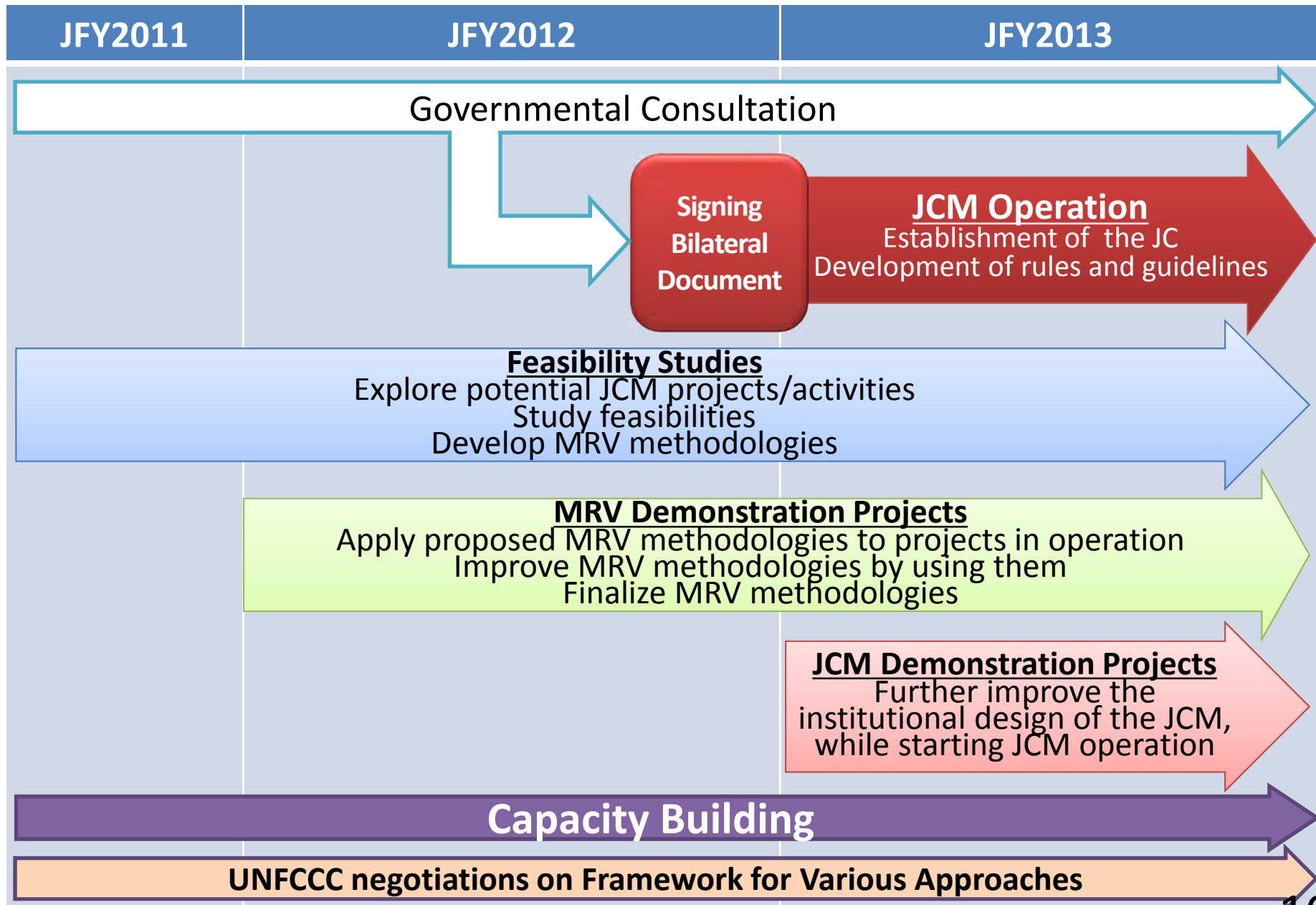


Key features of the JCM in comparison with the CDM

(Subject to further consideration and discussion with host countries)

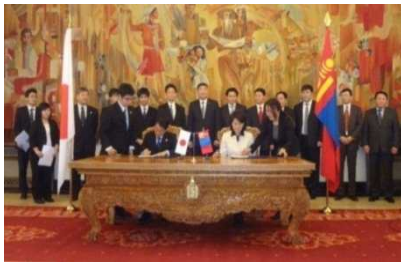
	JCM	CDM
Governance	- “de-centralized” structure (Each Government, Joint Committee)	- “centralized” structure (CMP, CDM Executive Board)
Sector/project Coverage	- Broader coverage	- Specific projects are difficult to implement in practice (e.g. USC coal-fired power generation)
Validation of projects	- In addition to DOEs, ISO14065 certification bodies can conduct - Checking whether a proposed project fits eligibility criteria which can be examined objectively	- Only DOEs can conduct - Assessment of additionality of each proposed project against hypothetical scenarios
Calculation of Emission Reductions	- Spreadsheets are provided - Default values can be used in conservative manner when monitored parameters are limited.	- Various formulas are listed - Strict requirements for measurement of parameters
Verification of projects	- The entity which validated the project can conduct verification - Validation & verification can be conducted simultaneously	- In principle, the entity which validated the project can not conduct verification - Validation & verification must be conducted separately

Roadmap for the JCM



Countries with which Japan has signed on bilateral documents

- Japan has held consultations for the JCM with developing countries since 2011 and signed the bilateral document for the JCM with Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica and Palau.



Mongolia
On January 8, 2013
(Ulaanbaatar)



Bangladesh
On March 19, 2013
(Dhaka)



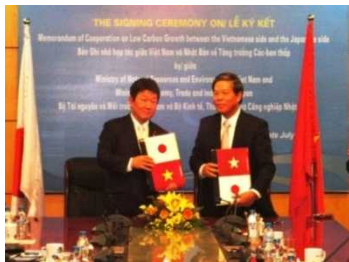
Ethiopia
On May 27, 2013
(Addis Ababa)



Kenya
On June 12, 2013
(Nairobi)



Maldives
On June 29, 2013
(Okinawa)



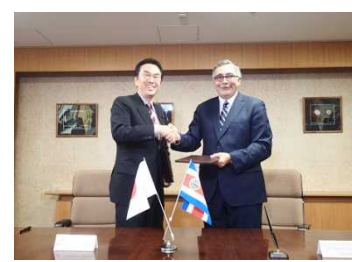
Viet Nam
On July 2, 2013
(Hanoi)



Lao PDR
On August 7, 2013
(Vientiane)



Indonesia
On August 26, 2013
(Jakarta)



Costa Rica
On December 9, 2013
(Tokyo)



Palau
On January 13, 2014
(Ngerulmud)

- Japan held the 1st Joint Committee with Mongolia, Bangladesh, Ethiopia, Kenya, Viet Nam and Indonesia respectively.

The current status of UNFCCC negotiation (1/2)

Decision 1/CP18

41. *Acknowledges* that **Parties, individually or jointly, may develop and implement various approaches, including opportunities for using markets** and non-markets, to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of developed and developing countries;
42. *Re-emphasizes* that, as set out in decision 2/CP.17, paragraph 79, all such approaches must meet standards that deliver real, permanent, additional and verified mitigation outcomes, avoid double counting of effort and achieve a net decrease and/or avoidance of GHG emissions;
44. *Requests* the SBSTA to conduct a work programme to elaborate a framework for such approaches, drawing on the work of the AWG-LCA on this matter, including the relevant workshop reports and technical paper, and experience of existing mechanisms, with a view to recommending a draft decision to the COP for adoption at its 19th session;
45. *Considers* that any such framework will be developed under the authority and guidance of the Conference of the Parties;

The current status of UNFCCC negotiation (2/2)

Decision 1/CP18

46. *Decides* that the work programme referred to in paragraph 44 above shall address the following elements, inter alia:

- (a) The purposes of the framework;
- (b) The scope of approaches to be included under the framework;
- (c) A set of criteria and procedures to ensure the environmental integrity of approaches in accordance with decision 2/CP.17, paragraph 79;
- (d) Technical specifications to avoid double counting through the accurate and consistent recording and tracking of mitigation outcomes;
- (e) The institutional arrangements for the framework;

- The JCM is one of various approaches Japan and partner countries are jointly developing and implementing , and Japan intends to contribute to elaborating the framework for such approaches under the UNFCCC.
- Japan also intends to report to the COP regarding the use of the JCM in Biennial Reports including the Common Tabular in line with Decision 19/CP18.

Technical Details Currently Considered for the JCM

(Subject to further consideration and discussion with host countries)

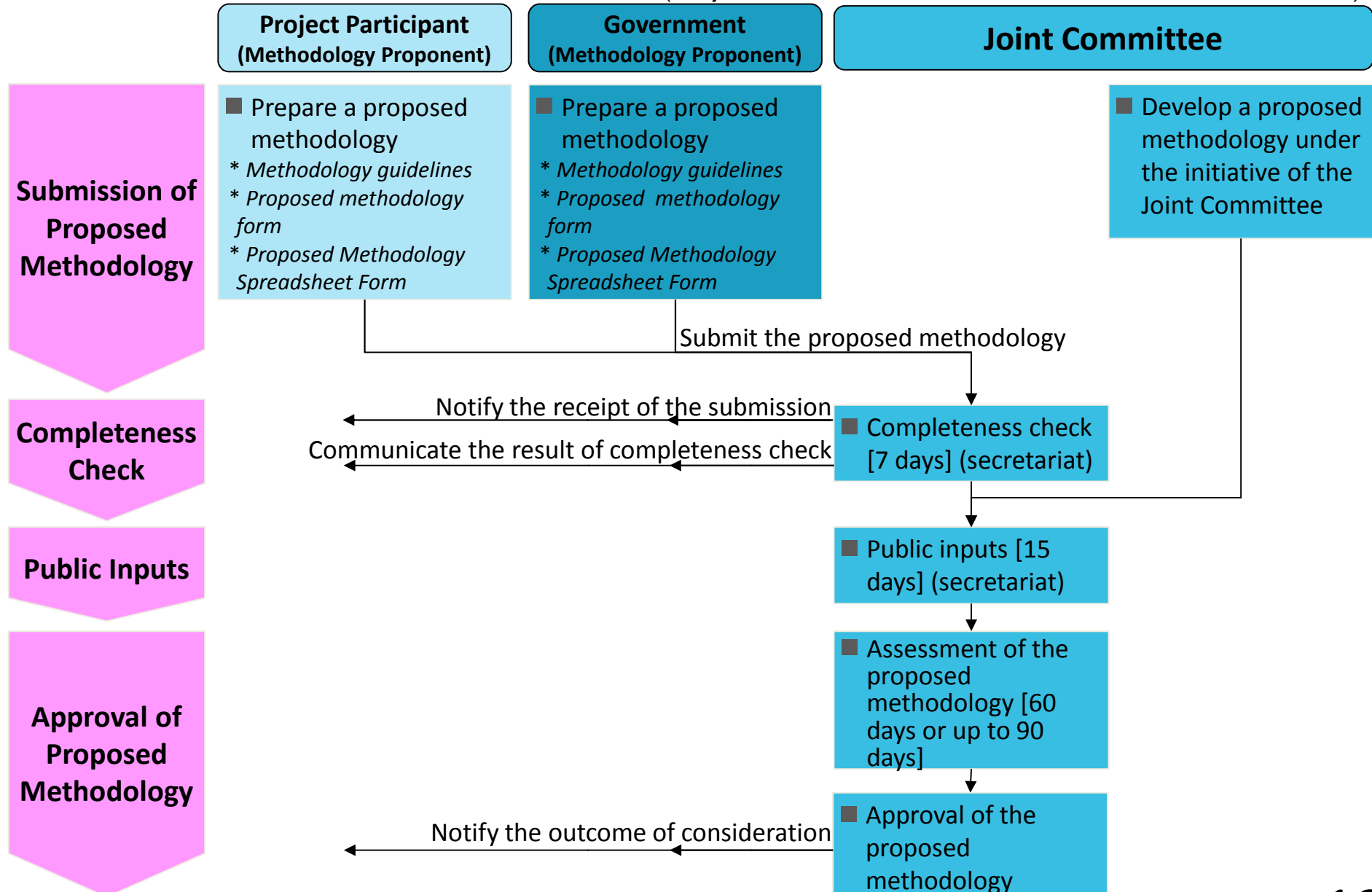
Necessary documents for the JCM

(Subject to further consideration and discussion with host countries)

		Rules and Guidelines
Overall		<ul style="list-style-type: none"> ✓ Rules of Implementation ✓ Project Cycle Procedure ✓ Glossary of Terms ✓ Guidelines for Designation as a Third-Party Entity (TPE guidelines)
Joint Committee		<ul style="list-style-type: none"> ✓ Rules of Procedures for the Joint Committee (JC rules)
Methodology		<ul style="list-style-type: none"> ✓ Guidelines for Developing Proposed Methodology (methodology guidelines)
Project Procedures	Developing a PDD	<ul style="list-style-type: none"> ✓ Guidelines for Developing Project Design Document and Monitoring Report (PDD and monitoring guidelines)
	Monitoring	
	Validation	<ul style="list-style-type: none"> ✓ Guidelines for Validation and Verification (VV guidelines)
	Verification	

Methodology Development Procedure of the JCM

(Subject to further consideration and discussion with host countries)



Note: Asterisk (*) indicates documentation relevant for each step of the procedure

Registration & Issuance Procedure of the JCM (1/2)

(Subject to further consideration and discussion with host countries)

Project Participant

Third-Party Entity

Joint Committee

Government

Development of PDD

- Complete a PDD and develop a monitoring plan
 - * PDD form and Monitoring Spreadsheet
 - * PDD and monitoring guidelines
- Complete an MoC Form
 - * MoC Form

Submit the draft PDD and MoC, and request for validation and public inputs

Notify the receipt of the submission

Validation

Validation and verification can be conducted simultaneously or separately.

- Validate a project
- Prepare a validation report
 - * Validation and verification guidelines
 - * Validation report form

- Public inputs[30 days] (secretariat)

Submit the validation report

Registration

- Complete a registration request form
 - * Registration request form

Submit registration request form, the validated PDD and MoC, and the validation report and request for registration

Notify the receipt of the request

Notify the conclusion

Notify the registration

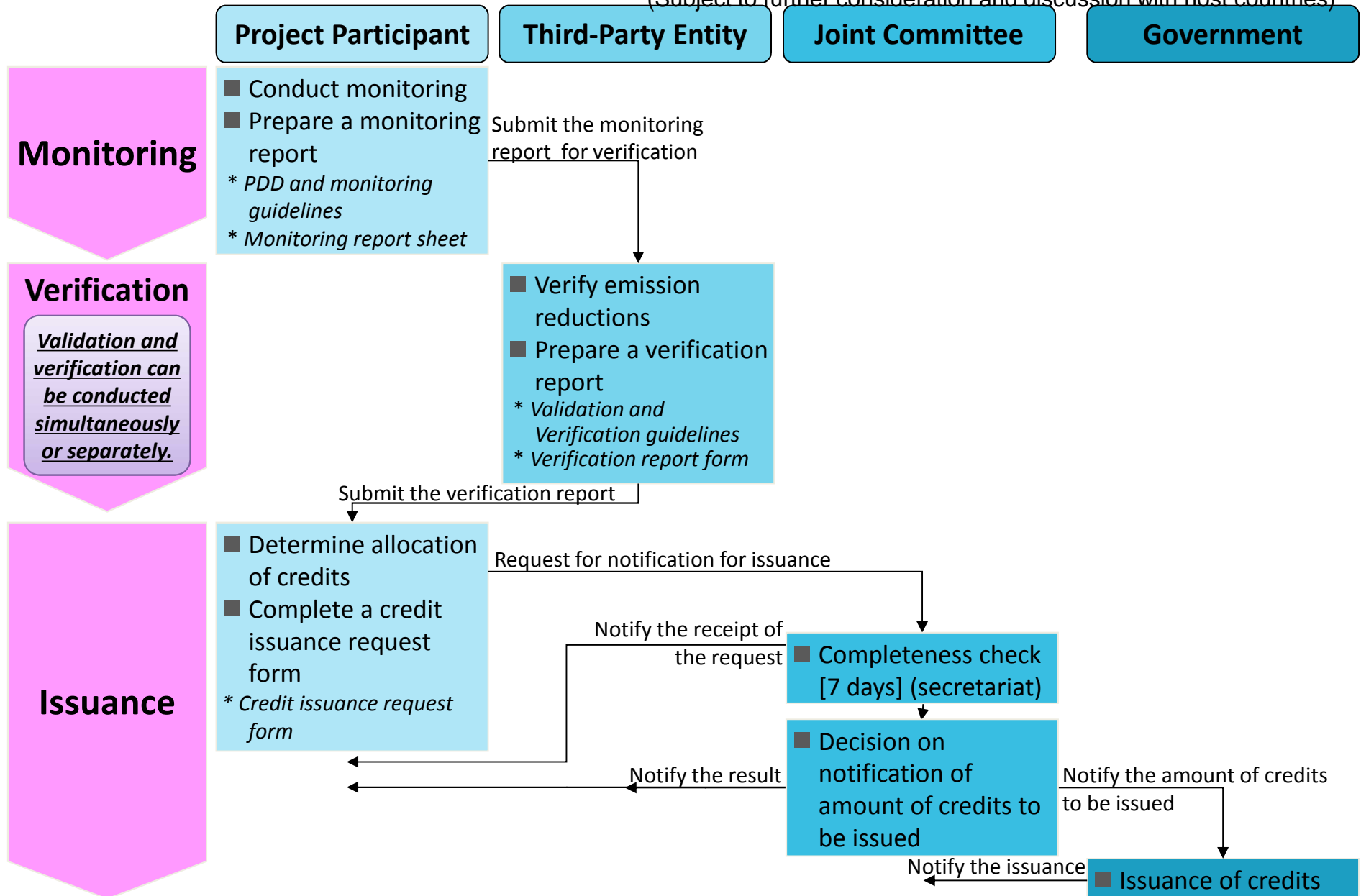
- Completeness check [7 days] (secretariat)

- Registration

Notify the registration

Registration & Issuance Procedure of the JCM (2/2)

(Subject to further consideration and discussion with host countries)



Rules of Procedures for the Joint Committee

(Subject to further consideration and discussion with host countries)

Members

- The Joint Committee (JC) consists of representatives from both Governments.
- Each Government designates members, which may not exceed [10].
- The JC has two Co-chairs to be appointed by each government (one from the host country and the other from Japan). Each Co-Chair can designate an alternate from members of the JC.

Decision making in the JC

- The JC meets no less than once a year and decision by the JC is adopted by consensus.
- The JC may adopt decisions by electronic means in the following procedure:
 - (a) The proposed decisions are distributed by the Co-Chairs to all members of the JC.
 - (b) The proposed decision is deemed as adopted when,
 - i) no member of the JC has provided negative assertion within [20] calendar days after distribution and both Co-Chairs have made affirmative assertion, or
 - ii) all members of the JC have made affirmative assertion.
- If a negative assertion is made by one of the JC members, the Co-Chairs take into account the opinion of the member and take appropriate actions.
- The JC may hold conference calls to assist making decisions by electronic means.

External assistance

- The JC may establish panels and appoint external experts to assist part of its work.

Languages: English **Secretariat:** The secretariat services the JC.

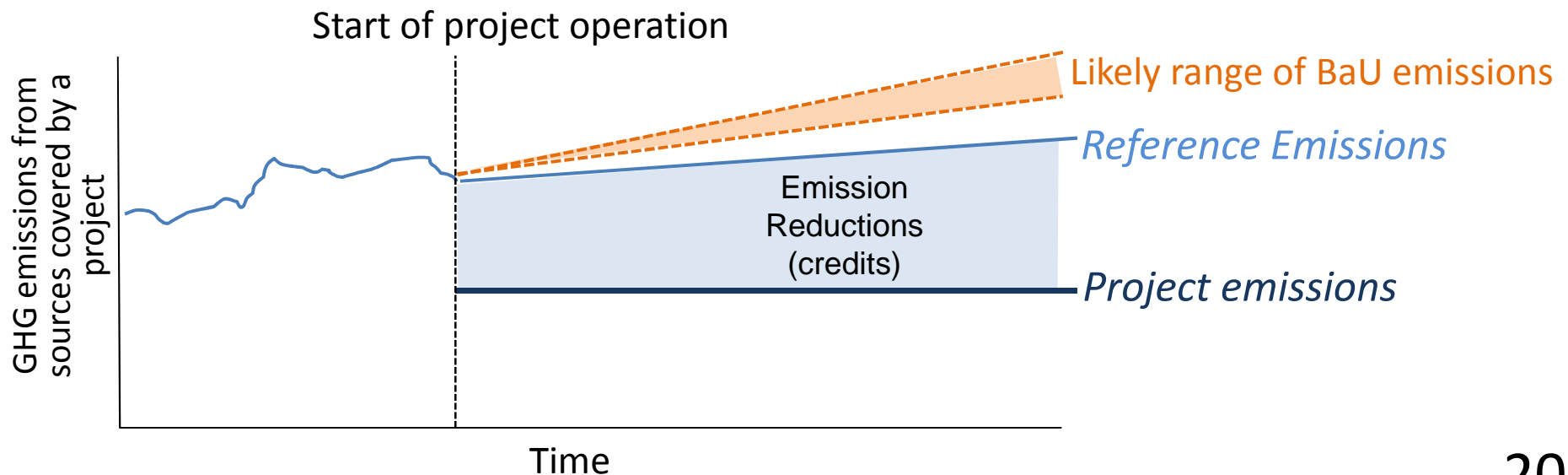
Confidentiality: Members of the JC, Secretariat, etc. respect confidentiality.

Record of the meeting: The full text of all decisions of the JC is made publicly available.

Basic Concept for Crediting under the JCM

(Subject to further consideration and discussion with host countries)

- In the JCM, emission reductions to be credited are defined as the difference between “reference emissions” and project emissions.
- The reference emissions are calculated below business-as-usual (BaU) emissions which represent plausible emissions in providing the same outputs or service level of the proposed JCM project in the host country.
- This approach will ensure a net decrease and/or avoidance of GHG emissions.



Crediting Threshold

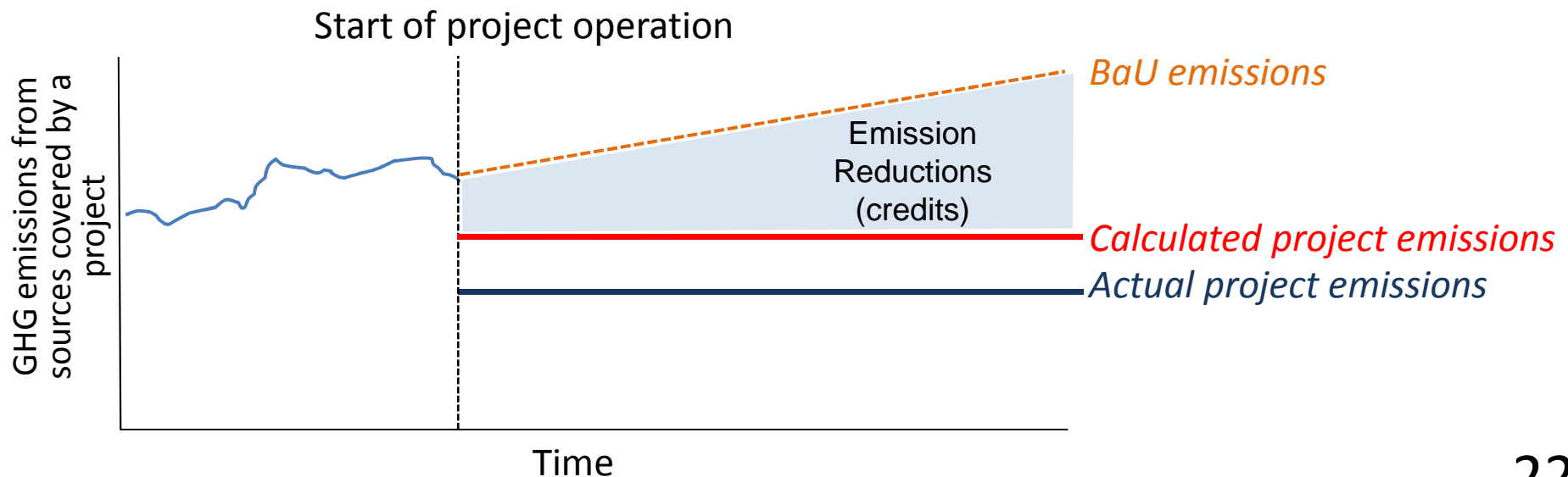
(Subject to further consideration and discussion with host countries)

- Reference emissions are calculated by multiplying a “crediting threshold” which is typically expressed as GHG emissions per unit of output by total outputs.
- A crediting threshold should be established *ex ante* in the methodology applicable for the same project type in the host country. It should also be established conservatively in order to calculate reference emissions below BaU emissions.
- This standardized approach will greatly reduce the burden of analyzing many hypothetical scenarios for demonstrating additionality of the proposed project such as under the CDM, whereas increase transparency for calculating GHG emission reductions.

Addendum: ways to realize net reduction

(Subject to further consideration and discussion with host countries)

- A net decrease and/or avoidance of GHG emissions can be realized in alternative way, instead of calculating the reference emissions below BaU emissions.
- Using conservative default values in parameters to calculate project emissions instead of measuring actual values, will lead calculated project emissions larger than actual project emissions.
- This approach will also ensure a net decrease and/or avoidance of GHG emissions, as well as reduce burdens of monitoring.



JCM Methodology

■ Key Features of the JCM methodology

- The JCM methodologies are designed in such a way that project participants can use them easily and verifiers can verify the data easily.
- In order to reduce monitoring burden, default values are widely used in a conservative manner.
- Eligibility criteria clearly defined in the methodology can reduce the risks of rejection of the projects proposed by project participants.

Eligibility criteria	<ul style="list-style-type: none">• A “check list” will allow easy determination of eligibility of a proposed project under the JCM and applicability of JCM methodologies to the project.
Data (parameter)	<ul style="list-style-type: none">• List of parameters will inform project participants of what data is necessary to calculate GHG emission reductions/removals with JCM methodologies.• Default values for specific country and sector are provided beforehand.
Calculation	<ul style="list-style-type: none">• Premade spreadsheets will help calculate GHG emission reductions/removals automatically by inputting relevant values for parameters, in accordance with methodologies.

Basic concept of Eligibility criteria in JCM methodology

(Subject to further consideration and discussion with host countries)

The eligibility criteria in each JCM methodology should be established, in order to reduce emissions by:

- accelerating the deployment of low carbon technologies, products and services, which will contribute to achieving net emission reductions;
- facilitating the nationally appropriate mitigation actions (NAMAs) in host countries.



1. Both Governments determine what technologies, products, etc should be included in the eligibility criteria through the approval process of the JCM methodologies by the Joint Committee.
2. Project participants can use the list of approved JCM methodologies, similar to positive list, when applying for the JCM project registration.

Eligibility Criteria of the JCM

(Subject to further consideration and discussion with host countries)

- Eligibility criteria in JCM methodologies shall contain the following:
 1. The requirements for the project in order to be registered as a JCM project. *<Basis for the assessment of validation and registration of a proposed project>*
 2. The requirements for the project to be able to apply the JCM methodology. *<same as “applicability condition of the methodology” under the CDM>*
- Examples of eligibility criteria 1.
 - Introduction of xx (products/technologies) whose design efficiency is above xx (e.g. output/kWh) *<Benchmark Approach>*
 - Introduction of xx (specific high efficient products/technologies, such as air conditioner with inverter, electric vehicles, or PV combined with battery) *<Positive List Approach>*
- Examples of eligibility criteria 2.
 - Existence of historical data for x year(s)
 - Electricity generation by xx (e.g. PV, wind turbine) connected to the grid
 - Retrofit of the existing boiler

Image of Eligibility Criteria

- Simple check list is provided for project participants to determine the eligibility of a proposed project under the JCM and applicability of the methodology.
- All the criteria have to be met in order to apply a methodology.

Example: Building energy management system

Criterion 1	<ul style="list-style-type: none">• Energy Management System is to be introduced in already existing buildings.
Criterion 2	<ul style="list-style-type: none">• The operation and control of equipment and facilities to reduce energy consumption for indoor environments are to be carried out by Energy Management System itself, not just upgrading equipments for energy consumption.
Criterion 3	<ul style="list-style-type: none">• Be able to identify all energy consumption in the building(s) having equipment controlled by Energy Management System.

Overview of JCM Methodology, Monitoring Plan and Monitoring Report

(Subject to further consideration and discussion with host countries)

■ JCM methodology consists of the followings.

- Approved Methodology Document
- Monitoring Spreadsheet
 - Monitoring Plan Sheet (including Input Sheet & Calculation Process Sheet)
 - Monitoring Structure Sheet
 - Monitoring Report Sheet (including Input Sheet & Calculation Process Sheet)

Approved Methodology Document

The image shows a grid of pages from the Approved Methodology Document. The pages contain detailed text, tables, and diagrams related to the methodology. Key sections visible include:

- 1. Introduction:** Overview of the methodology and its purpose.
- 2. Scope and Application:** Details on the project types and sectors covered.
- 3. Methodology:** Detailed description of the calculation methods and data sources.
- 4. Data Requirements:** Tables listing required data points, units, and sources.
- 5. Monitoring and Reporting:** Guidelines on how to collect and report data.
- 6. Quality Assurance:** Procedures to ensure the accuracy and reliability of the data.

Monitoring Spreadsheet

The image shows a screenshot of the Monitoring Spreadsheet, which is divided into several sheets:

- Monitoring Report Sheet:** The top sheet showing monitoring data for various parameters. It includes columns for Monitoring point No., Parameters, Description of data, Estimated values, Units, Monitoring option, Source of data, Measurement methods and procedures, Monitoring frequency, and Other comments.
- Monitoring Structure Sheet:** A sheet titled "[Attachment to Project Designe Document] Monitoring Structure Sheet" containing a table for responsible personnel.
- Monitoring Plan Sheet:** A sheet titled "1. Monitoring and input data after project start" containing a table for monitoring data.

Monitoring Structure Sheet Table:

1	[Attachment to Project Designe Document] Monitoring Structure Sheet	
2	Responsible personnel	
3	Project Manager	Role
4	Project Manager	Responsible for project planning, implementation, monitoring results and reporting. Appointed to be in charge of approving the
5	Project	
6	Facility	
7	Operat	
8	N/A	
9	N/A	
10	N/A	
11		

Monitoring Plan Sheet Table (Partial):

Monitoring point No.	Parameters	Description of data	Estimated values	Units	Monitoring option	Source of data	Measurement methods and procedures	Monitoring frequency	Other comments
(1)	PO ₂	Project production volume at the HPP during the period of year y	20,000	ty	Option A	Historical data	Calculating electricity consumption data with verified national weighing scale and having it to an agreed level annually. Verified scales are checked and they are calibrated. Verification and calibration shall make operational evidence of monitoring instrument. Verification and calibration shall make operational evidence of monitoring instrument. Verification and calibration shall make operational evidence of monitoring instrument.	once a year	
(2)	IFC ₂	Project fuel fuel consumption to the HPP	500	ty	Option B	Historical data	Calculating electricity consumption data with verified national weighing scale and having it to an agreed level annually. Verified scales are checked and they are calibrated. Verification and calibration shall make operational evidence of monitoring instrument. Verification and calibration shall make operational evidence of monitoring instrument. Verification and calibration shall make operational evidence of monitoring instrument.	once a month	
(3)	IFC ₃	Project electricity consumption to the HPP	500	MWhy	Option C	Historical data	Calculating electricity consumption data with verified national weighing scale and having it to an agreed level annually. Verified scales are checked and they are calibrated. Verification and calibration shall make operational evidence of monitoring instrument. Verification and calibration shall make operational evidence of monitoring instrument. Verification and calibration shall make operational evidence of monitoring instrument.	once a month	

Monitoring Report Sheet

Monitoring Structure Sheet

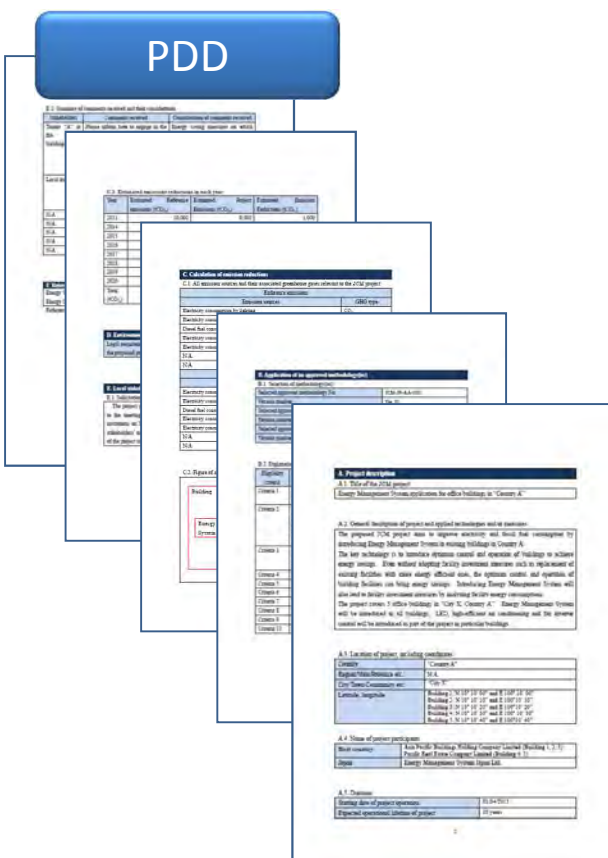
Monitoring Plan Sheet

Cells for data & information input

PDD and Monitoring Plan

(Subject to further consideration and discussion with host countries)

- Developing a Project Design Document (PDD) and a Monitoring Plan
 - A PDD form should be filled in with information of the proposed project.
 - A Monitoring Plan consists of Monitoring Plan Sheet and Monitoring Structure Sheet, and it should be filled in as well.



PDD

Monitoring Structure

Monitoring Structure Sheet	
Responsible personnel	Role
Project Manager	Responsible for project planning, implementation, monitoring results and reporting.
Project Deputy Managers	Appointed to be in charge of approving the archived data after being checked and corrected when necessary.
Operators	Appointed to be in charge of monitoring structure (data collection and storage), including
N/A	
N/A	
N/A	

Monitoring Plan

Monitoring point No.	Parameters	Description of data	Estimated Values	Units	Monitoring option	Source of data	Measurement methods and procedures	Monitoring frequency	Other comments
(1)	PC _y	Project production volume at the HPIIF during the period of year y	20,000	y	option C	monitored data	- Collecting electricity consumption data with verified/calibrated weighing scale and inputting it to an spread sheet electronically. - Verified scales are installed and they are calibrated once a year. - Verification and calibration shall meet international standard on corresponding monitoring devices. - Project deputy managers double check the input data with logbooks every 6 months.	once a month	
(2)	PFC _y	Project fossil fuel consumption by the HPIIF	500	y	option B	purchase records	- Collecting the purchase amount from retailer invoices and inputting it to an spread sheet manually. - Project deputy managers double check the input data with invoices every 6 months.	once a month	
(3)	PEC _y	Project electricity consumption by the HPIIF	500	MWh/y	option C	monitored data	- Collecting electricity consumption data with verified/calibrated electricity monitoring devices and inputting to an spread sheet electronically. - Verified monitoring devices are installed and they are calibrated once a year. - Verification and calibration shall meet international standard on corresponding monitoring devices.	continuous	

Cells for data input (ex ante)

Other necessary information on parameters to be monitored are:

- Monitoring options
- Source of data
- Measurement methods and procedures
- Monitoring frequency

Roles and responsibilities of personnel for monitoring should be described

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Monitoring Report

(Subject to further consideration and discussion with host countries)

■ Making a Monitoring Report

- A Monitoring Report should be made by filling cells for data input (ex post) in the Monitoring Report Sheet with monitored values.
- Project participants prepare supporting documents which include evidence for stated values in the cells for data input.

Monitoring Report

Cells for data input (ex post)

	(a) Monitoring period	(b) Monitoring point No.	(c) Parameters	(d) Description of data	(e) Monitored Values	(f) Units	(g) Monitoring option	(h) Source of data	(i) Measurement methods and procedures	(j) Monitoring frequency	(k) Other comments
2	HH/2013-YY/HH/2014	(1)	PO _v	Project production volume at the HPIF* during the period of year Y	20,000	ty	Option C	monitored data	- Collecting electricity consumption data with verified/calibrated weighing scale and inputting it to an spreadsheet electronically - Verified scales are installed and they are calibrated once a year - Verification and calibration shall meet international standards on corresponding monitoring devices. - Project deputy managers double check the input data with logbooks every 6 months	once a month	
4	HH/2013-YY/HH/2014	(2)	FFCO _v	Project fossil fuel consumption by the HPIF	500	ty	Option B	purchase records	- Collecting the purchase amount from retailer invoices and inputting it to an spreadsheet manually - Project deputy managers double check the input data with invoices every 6 months	once a month	
5	N/A	(3)	PECO _v	Project electricity consumption by the HPIF	500	MWh/ty	Option C	monitored data	- Collecting electricity consumption data with verified/calibrated electricity monitoring devices and inputting to an spreadsheet electronically - Verified monitoring devices are installed and they are calibrated once a year - Verification and calibration shall meet international standards on corresponding monitoring devices	continuous	

* HPIF refers to High-Performance Industrial Furnace

2. CO2 emission reductions	
CO2 emission reductions	Units
22,881	tCO2/ty

Other necessary information on monitored parameters are to be filled in:

- Monitoring options
- Source of data
- Measurement methods and procedures
- Monitoring frequency

Possible Contents of the JCM PDD

A. Project description

(Subject to further consideration and discussion with host countries)

- A.1. Title of the JCM project
- A.2. General description of project and applied technologies and/or measures
- A.3. Location of project, including coordinates
- A.4. Name of project participants
- A.5. Duration
- A.6. Contribution from developed countries

B. Application of an approved JCM methodology(ies)

- B.1. Selection of JCM methodology(ies)
- B.2. Explanation of how the project meets eligibility criteria of the approved methodology

C. Calculation of emission reductions

- C.1. All emission sources and their associated greenhouse gases relevant to the JCM project
- C.2. Figure of all emission sources and monitoring points relevant to the JCM project
- C.3. Estimated emissions reductions in each year

D. Environmental impact assessment

E. Local Stakeholder consultation

- E.1. Solicitation of comments from local stakeholders
- E.2. Summary of comments received and their consideration

F. References

Annex

Approved Methodology Spreadsheet consists of Monitoring Plan Sheet, Monitoring Structure Sheet and Monitoring Report Sheet, and it shall be attached to the PDD.

References

- ◆ Feasibility Studies
- ◆ Capacity Building

JCM Promotion Scheme by METI

JCM Demonstration Projects

- JCM Demonstration Projects are implemented by NEDO (New Energy and Industrial Technology Development Organization), which supports the project costs necessary to verify the amount of GHG emission reduction in line with JCM rules and guidelines.
- The budget for FY 2013: 3.5 billion JPY (approximately \$38 million)
- Coverage of project cost: Cost of the JCM Demonstration Projects necessary for MRV
e.g. Cost of design, machines, materials, labor, travel, etc.
- Eligibility for the JCM Demonstration Projects:
 - Concrete Projects to demonstrate the effectiveness of leading Japanese technologies and/or products installed and operated in the projects, and the amount of their GHG emission reduction with MRV methodology by actual operation
 - Project Participants consist of entities from both countries, only the Japanese entities can apply for the JCM Demonstration projects. The projects shall be completed within 3 years.

JCM Feasibility Study (FS)

- The study to promote potential JCM projects and to survey their feasibility as well as to check the practicality of the MRV methodology.

Capacity Building Programmes

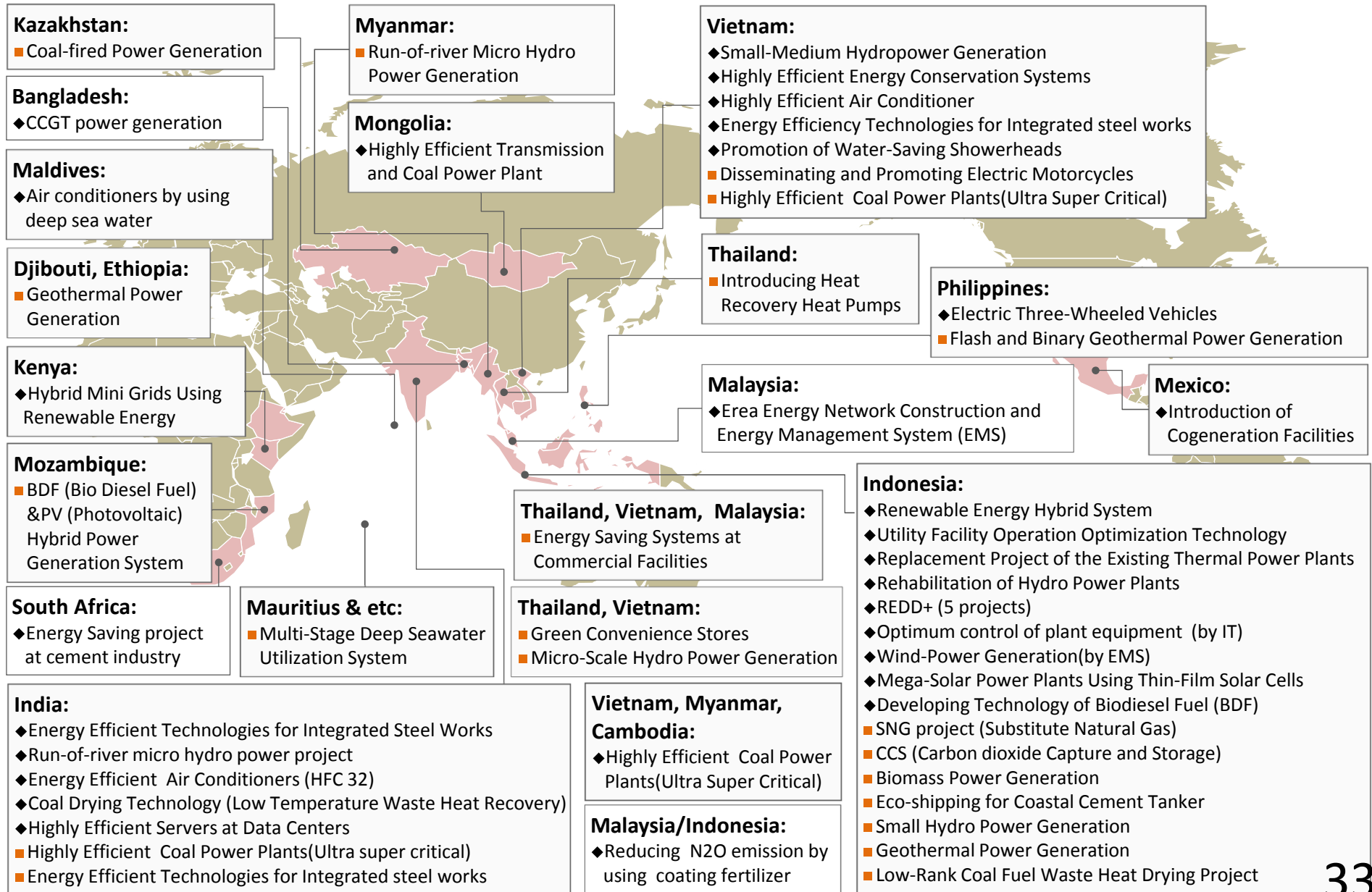
- Variety of capacity building activities to increase technical experts (e.g.,) Experts on measuring amount of emission reductions by introducing low carbon technologies and products in the host country.

JCM Feasibility Studies (FSs) by METI & NEDO in FY2012

54 projects were selected (19 countries)

◆→ METI's FSs for Policy Recommendation (33 projects)

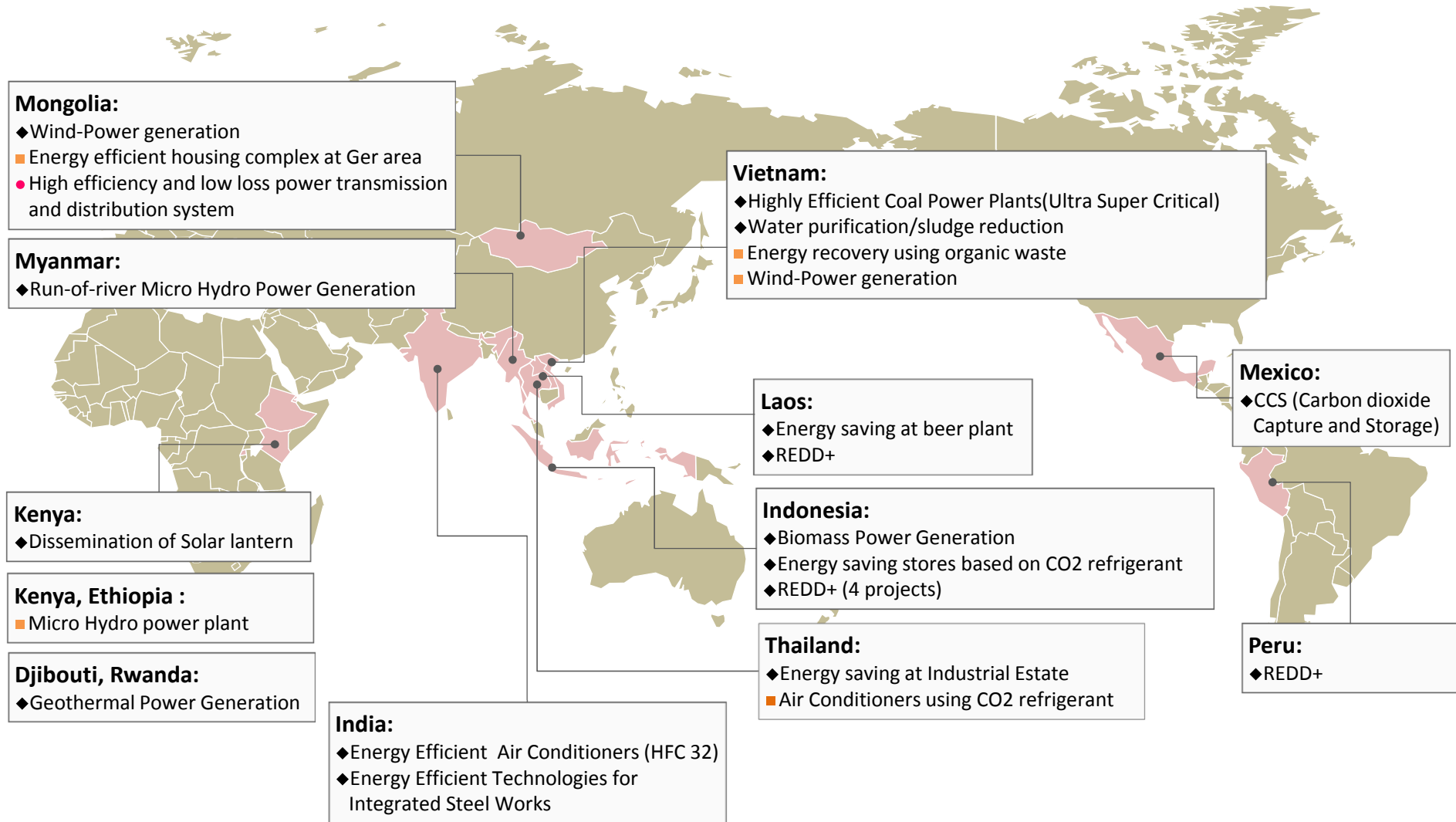
■→ NEDO's FSs for Project Exploration /Development (21 projects)



JCM Feasibility Studies (FSs) by METI & NEDO in FY2013

25 projects were selected (13 countries)

- ◆→ METI's FSs for Policy Recommendation (19 projects)
- NEDO's FSs for Project Exploration /Development (5 projects)
- NRDO's Demonstration Project (1 project)



Capacity Building Activities by METI

METI engages in a variety of capacity building activities, such as seminars, dispatch of experts, invitation of technical experts, joint researches on MRV methodologies, and government-private sector dialogues:

(Purposes)

- ✧ To provide technical know-how necessary to implement GHG emissions reduction projects under the JCM
- ✧ To establish MRV methodologies for the JCM
- ✧ To train experts on MRV methodologies for the JCM
- ✧ To deepen understanding on the institutional and technical aspects of the JCM both at government and private sectors.

■ Capacity building activities by METI in FY2013

METI

* Other projects are under consideration in counterpart countries.

Medium-sized wind power generation (Maldives)

Highly efficient servers at data centers (India)

■ Capacity building activities by METI in FY2012

METI

Highly efficient transmission and coal power plant (Mongolia)

Eco-friendly driving using digital tachograph (Vietnam)

Reduce power transmission loss by using highly efficient transformer (Vietnam)

Highly efficient coal power plant (Ultra super critical) (Vietnam)

Energy saving project at cement industry (South Africa)

Highly efficient servers at Data Centers (India)

Energy efficient technologies at Steel plant (India)

JCM Promotion Scheme by MOEJ

Financing Programme for JCM Model Projects

MOEJ will finance part of an investment cost (up to the half), on the premise that recipients seek to deliver JCM credits (half of issued) to the Government of Japan.

- The budget for FY 2013: 1.2 billion JPY (approximately \$13 million)
- Recipient: International consortiums which include Japanese entities
- Scope of the financing: Facilities which reduce CO₂ from fossil fuel combustion as well as construction cost for installing those facilities
- Eligible Projects : Starting construction after the adaption of the financing, and finish construction within FY2013 (one year extension may be approved)

Study Programmes for JCM Projects

JCM Project Planning Study (PS)

The study for development of a Model Project in the next fiscal year at the earliest.

JCM Methodology Demonstration Study (DS)

The study to check the practicality of draft methodologies by applying existing projects under operation.

JCM Feasibility Study (FS)

The study to promote potential JCM projects and to survey their feasibility.

Capacity Building Programmes for the JCM

JCM Model Projects in 2013 by MOEJ

Mongolia:

◆ Upgrading and Installation of Centralized Control System of High-Efficiency Heat Only Boiler (HOB)

The high-efficiency Heat Only Boilers (HOBs) will replace outdated low-efficiency HOBs, to supply heated water for winter indoor heating. The project will also introduce centralized control system for the integrated heat supply in collective buildings.

Bangladesh:

◆ Brick Production based on Non-Firing Solidification Technology

In place of the existing brick production with the firing process with the combustion of coal, the new brick production with the non-firing solidification technology will be introduced.

Viet Nam:

◆ Integrated Energy Efficiency Improvement at Beer Factory

A set of high performance equipment for energy efficiency improvement and renewable energy generation will be introduced in beer factories. Before the installation, the potential of energy saving and possible high potential points in the beer production process will be identified by using the energy structure analysis simulation technology.

◆ Energy Efficient NH₃ Heat Pumps to Marine Products Processing Industry

The high efficient heat pump using ammonia (NH₃) as a refrigerant will be introduced to save their energy consumptions.

Cambodia:

◆ Small-scale Biomass Power Generation by Using Stirling Engines

The introduction of small-scale biomass power generation systems with stirling engines will replace diesel-based power generation at rice mills. The stirling engine, external-combustion engine, is suitable for the utilisation of biomass such as rice husk.

Indonesia:

◆ Energy Saving for Air-Conditioning and Process Cooling at Textile Factory (in Batang city)

The high performance refrigerating machine with efficient compressor and economizer cycle will be introduced for factory air-conditioning.

◆ Energy Savings at Convenience Stores

The latest high-efficiency chillers with natural refrigerant (CO₂ refrigerant), inverter-controlled air-conditioners, and LED lighting will be introduced in convenience stores. Rooftop photovoltaic power generation systems will also be introduced.

◆ Energy Efficient Refrigerants to Cold Chain Industry

The advanced energy efficient non-fluorocarbon cooling system using NH₃ and CO₂ will be introduced in the food industry and logistics industry. A screw compressor and an IPM (interior permanent magnet synchronous) motor are adopted and operated integrally, to achieve high efficient operation of the cooling facility.

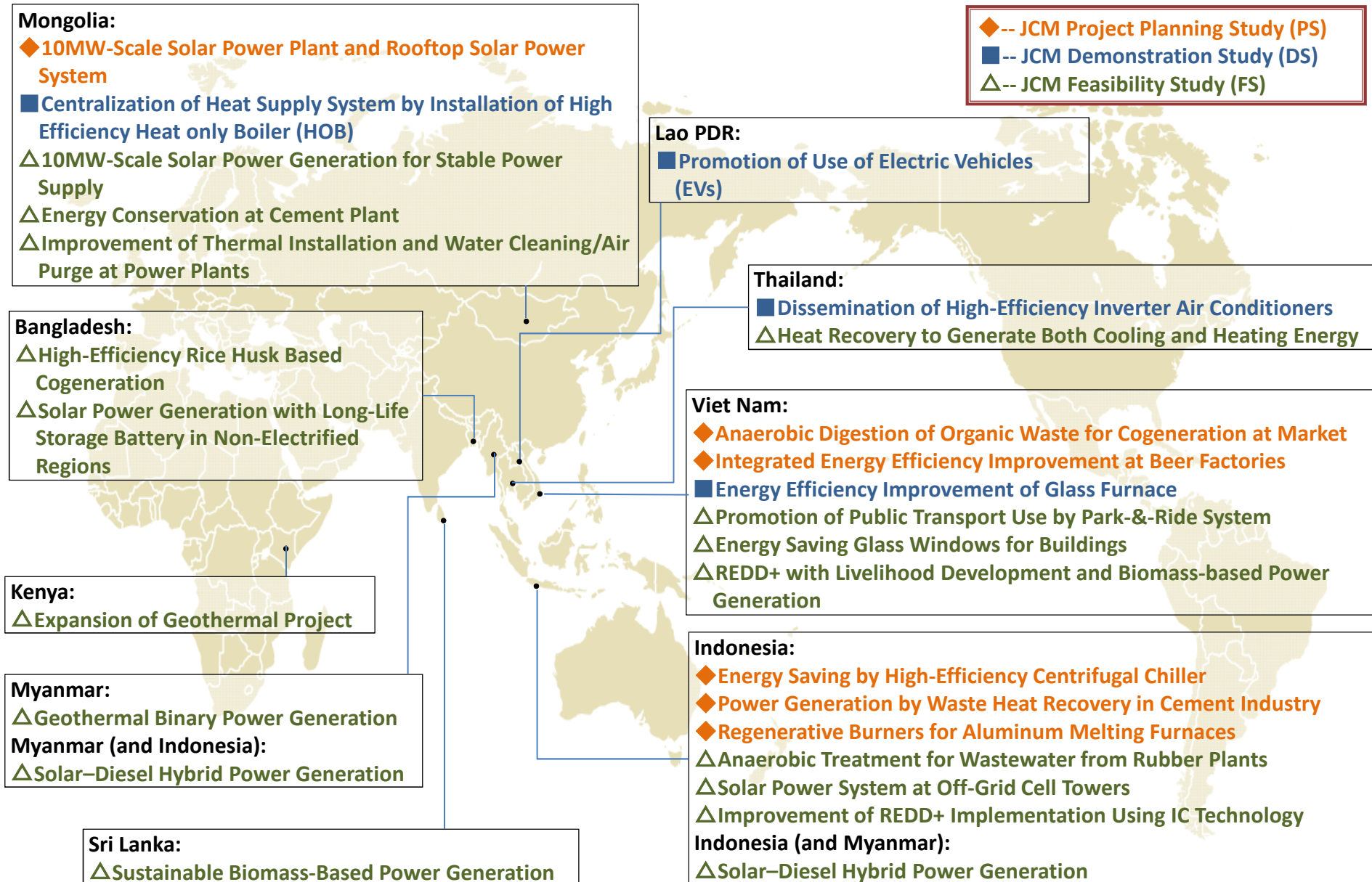
◆ Energy Saving by Double Bundle-Type Heat Pump at Beverage Plant

A double bundle-type heat pump, generating both heating and cooling energy, will be installed to reduce energy consumption.

◆ Energy Saving for Air-Conditioning and Process Cooling at Textile Factory (in West Java province & Banten province)

The high performance refrigerating machine with efficient compressor and economizer cycle will be introduced for factory air-conditioning.

Overview of JCM Planning/Demonstration/Feasibility Studies in 2013 by MOEJ



New Mechanisms Information Platform

The screenshot displays the homepage of the New Mechanisms Information Platform, specifically the Joint Crediting Mechanism (JCM) section. The page features a navigation menu with links for Joint Crediting Mechanism (JCM), Support Programmes, Information on NAMAs, Useful Experiences, Useful Calculation Methodology, and REDD/REDD+. The main content area includes a section titled 'About JCM' with a list of proposed elements and their objectives. Below this is a diagram illustrating the JCM process: Japan provides leading low carbon technologies and implements mitigation actions, while the Host Country develops JCM projects. MRV methodologies are developed by the Joint Committee, and credits are transferred from the Host Country to Japan. The Host Country also achieves GHG emission reductions/removals. A table of relevant documents is provided, listing dates and titles of recent developments. The page also includes a section for JCM Partner Country Information, listing countries like Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Laos, Indonesia, and Costa Rica. Finally, there is a section for Methodologies and Projects Information, with links to Methodologies and Projects.

HOME > Joint Crediting Mechanism (JCM)

Joint Crediting Mechanism (JCM)

◉ About JCM

- ◉ Proposed Elements of the Joint Crediting Mechanism (JCM)
- ◉ To facilitate diffusion of leading low carbon technologies, products, systems, services, and infrastructure as well as implementation of mitigation actions, and contributing to sustainable development of developing countries.
- ◉ To appropriately evaluate contributions to GHG emission reductions or removals from developed countries in a quantitative manner, through mitigation actions implemented in developing countries and use those emission reductions or removals to achieve emission reduction targets of the developed countries.
- ◉ To contribute to the ultimate objective of the UNFCCC by facilitating global actions for emission reductions or removals.

Japan → Leading Low Carbon Technologies, etc. and implementation of mitigation actions → Host Country

Host Country: JCM Project → MRV → GHG emission reductions / removals

Japan: Used to achieve Japan's emission reduction target

MRV Methodologies will be developed by the Joint Committee

Credits

◉ Relevant documents of the JCM

Date	Title
Sep 12, 2013	Recent Development of The Joint Crediting Mechanism (JCM)
Jul 10, 2013	Recent Development of The Joint Crediting Mechanism (JCM)
May 23, 2013	Recent Development of the Joint Crediting Mechanism (JCM) / Bilateral Offset Credit Mechanism (BOCM)
Mar 8, 2013	Recent Development of the Joint Crediting Mechanism (JCM) / Bilateral Offset Credit Mechanism (BOCM)

Relevant Documents:

Gov't of Japan | Submissions to the UNFCCC | MOEJ | MOFA

◉ JCM Partner Country Information

Mongolia | Bangladesh | Ethiopia | Kenya | Maldives | Viet Nam

Laos | Indonesia | Costa Rica

◉ Methodologies and Projects Information

Methodologies | Projects

- [New Mechanisms Information Platform](http://www.mmechanisms.org/e/initiatives/index.html) website was established to provide the latest movements and information on the JCM.
- [Help Desk](#) also accepts and answers inquiries regarding the JCM.
- Another dedicated website for the JCM will be launched. In the meantime, all the documents regarding the JCM development (e.g. outcome of the JC, decisions, methodologies, and projects) are uploaded on this website.
- URL:
<http://www.mmechanisms.org/e/initiatives/index.html>