Overview of the MOEJ's Study Programme and Financing Programme in 2013

JAPAN PAVILLION SIDE EVENT at COP19, WARSAW

Development of the Joint Crediting Mechanism (JCM) project and its methodology through JCM Promotion Schemefor FY 2013

11th November 2013, Warsaw

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as the Secretariat of the JCM FS Programme

Background

Joint Crediting Mechanism (JCM):

- 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.

JCM Promotion Scheme by MOEJ

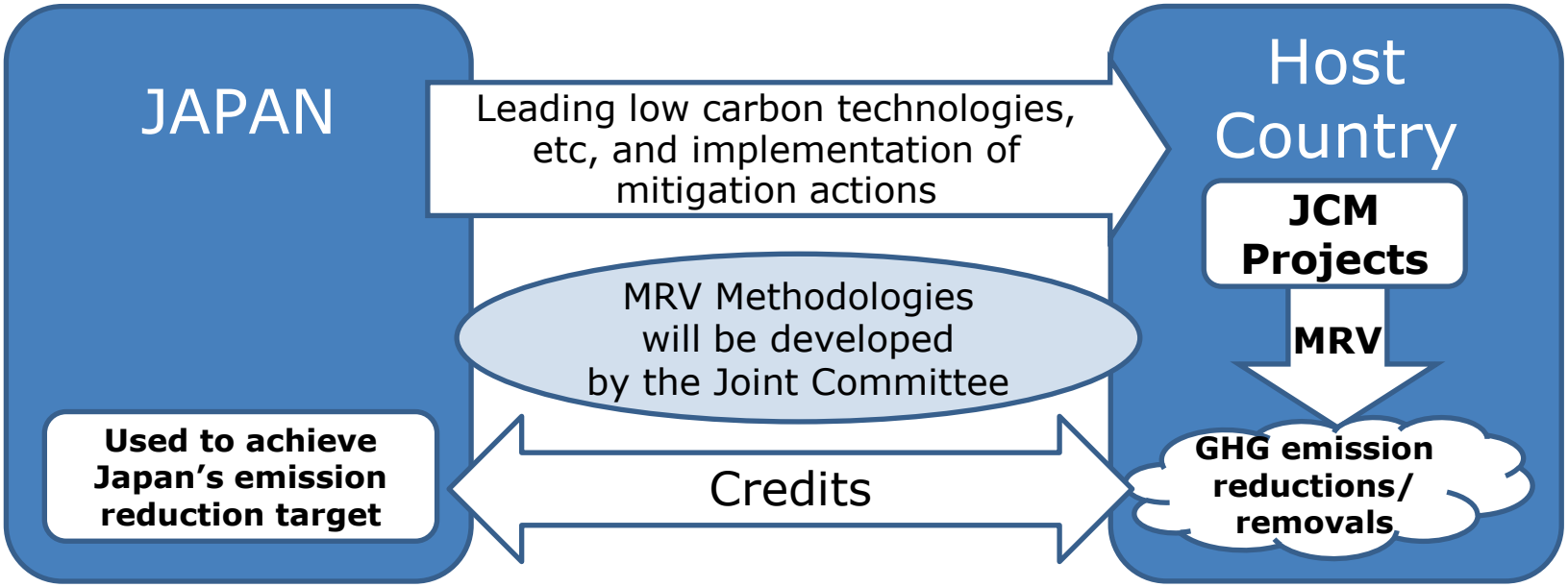
- The Ministry of the Environment Japan (MOEJ) launched:
  - Financing Programme for JCM Model Projects;
  - Study Programme for JCM Projects;
  - Capacity Building Programmes for the JCM.

Global Environment Centre Foundation (GEC):

- The Secretariat of Financing Programme and Study Programme for the JCM, commissioned by the Ministry of the Environment Japan (MOEJ)

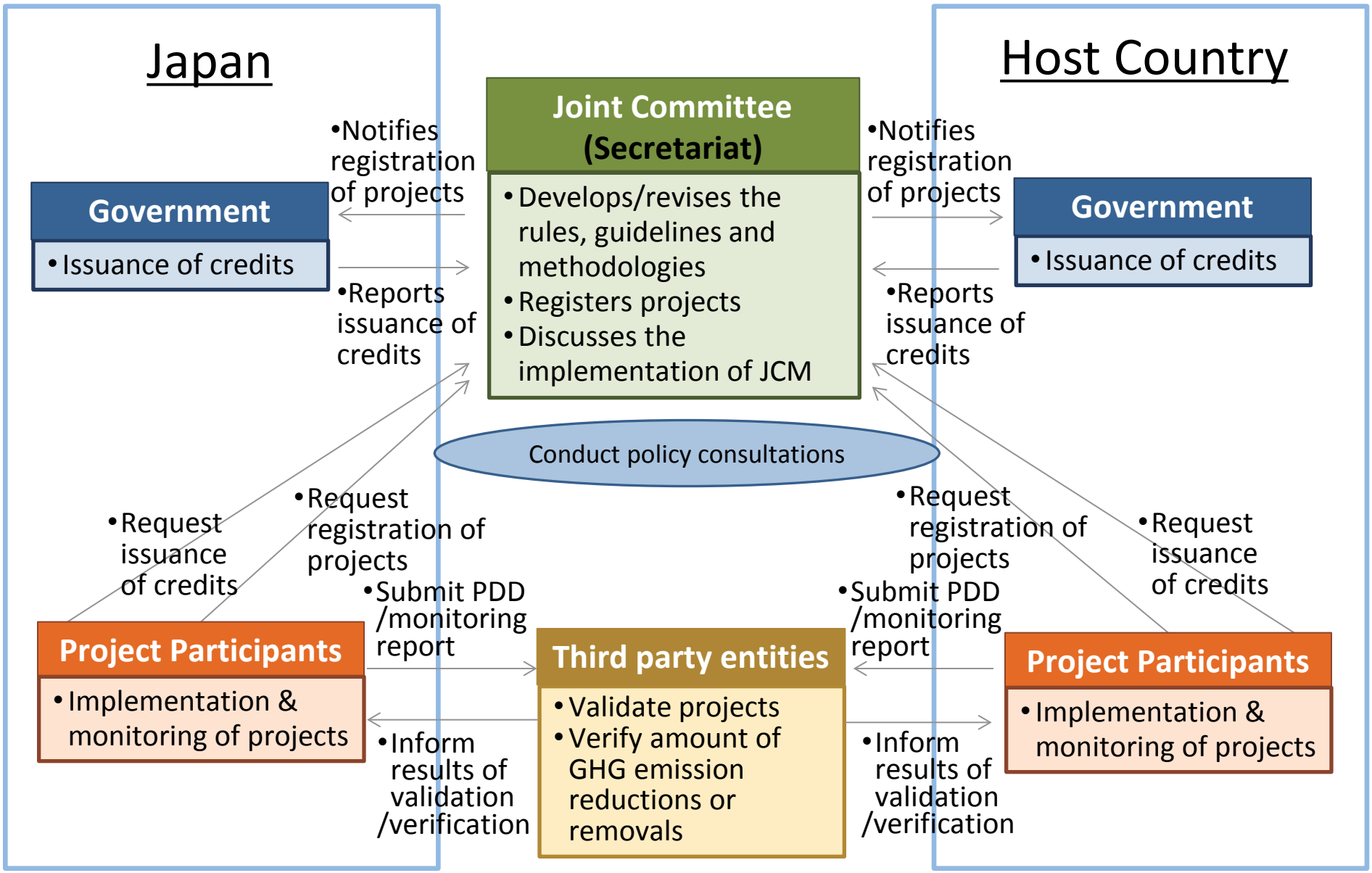
Basic Concept of the JCM

- 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.



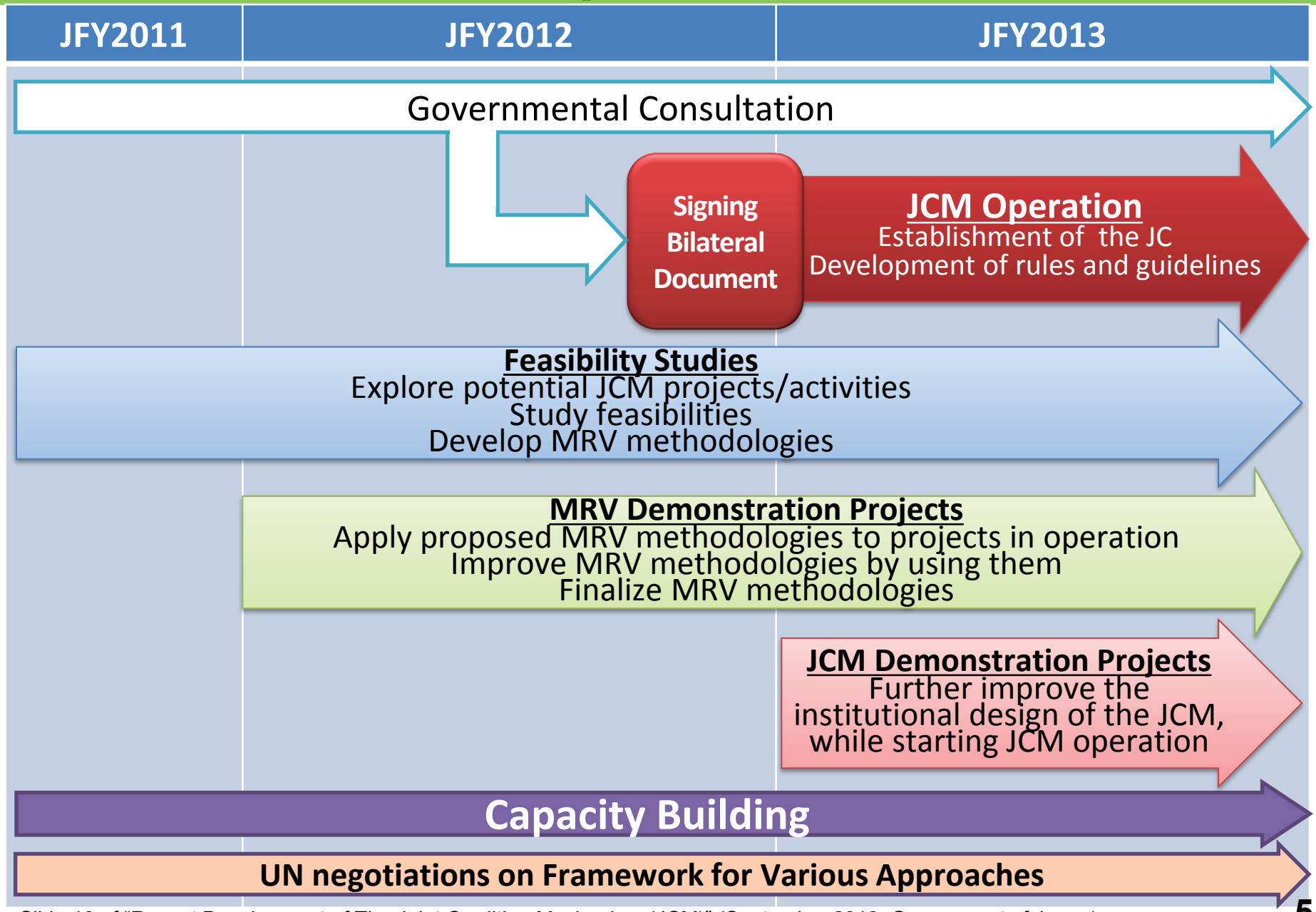
Slide 3 of "Recent Development of The Joint Crediting Mechanism (JCM)" (September 2013, Government of Japan)

Scheme of the JCM



Slide 4 of "Recent Development of The Joint Crediting Mechanism (JCM)" (September 2013, Government of Japan)

Roadmap for the JCM



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JCM Promotion Scheme by MOEJ

Financing Programme for JCM Model Projects

GEC

MOEJ will finance part of an investment cost (up to the half), as premises for seeking 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 CO_2 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

GEC

JCM Project Planning Study (PS)	The study for development of a Model Project in the near future.
JCM Methodology Demonstration Study (DS)	The study to check the practicality of the draft methodology by applying existing projects under operation.
JCM Feasibility Study (FS)	The study to promote potential JCM projects and to survey its feasibility.

Capacity Building Programmes for the JCM

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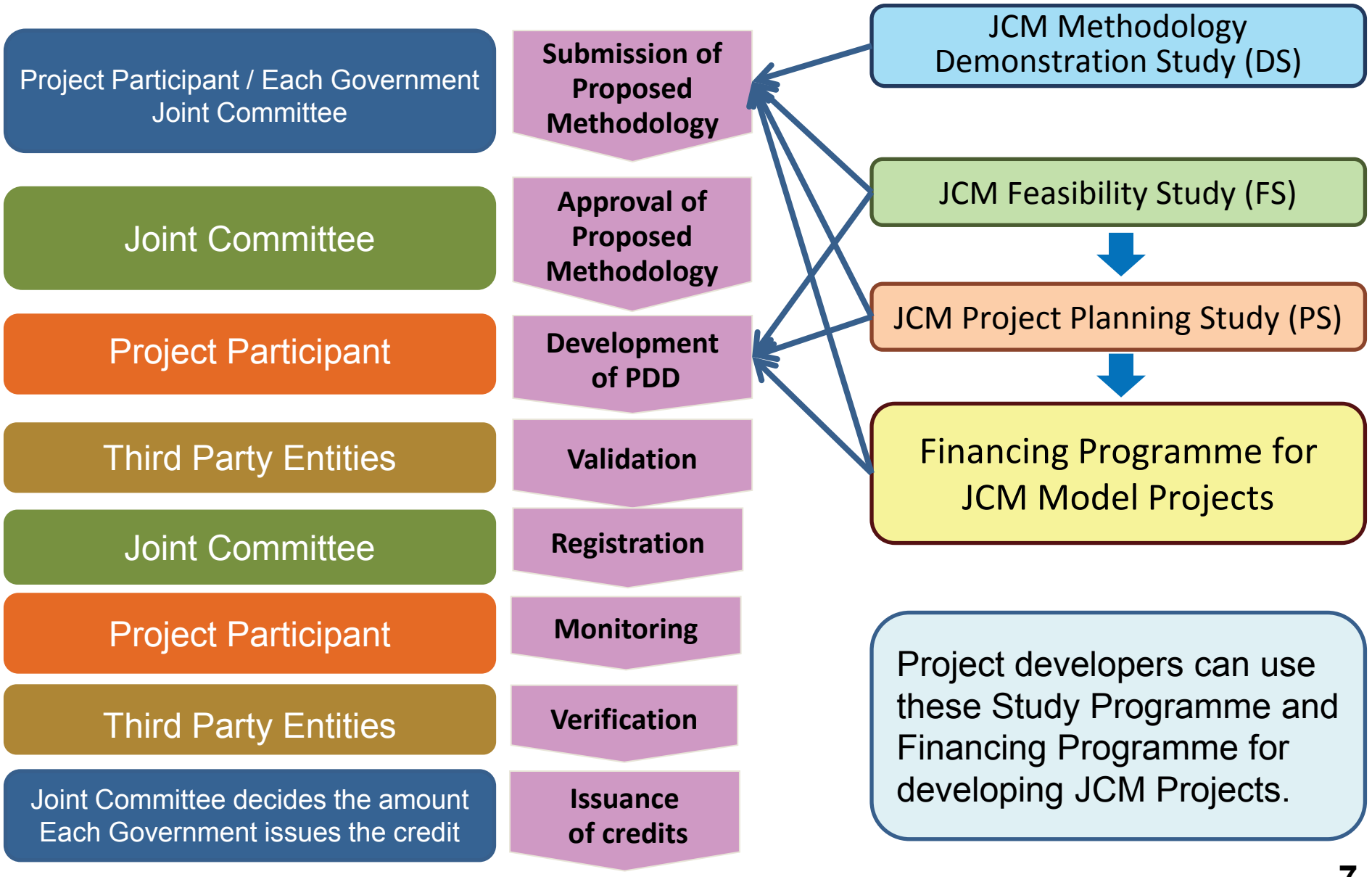
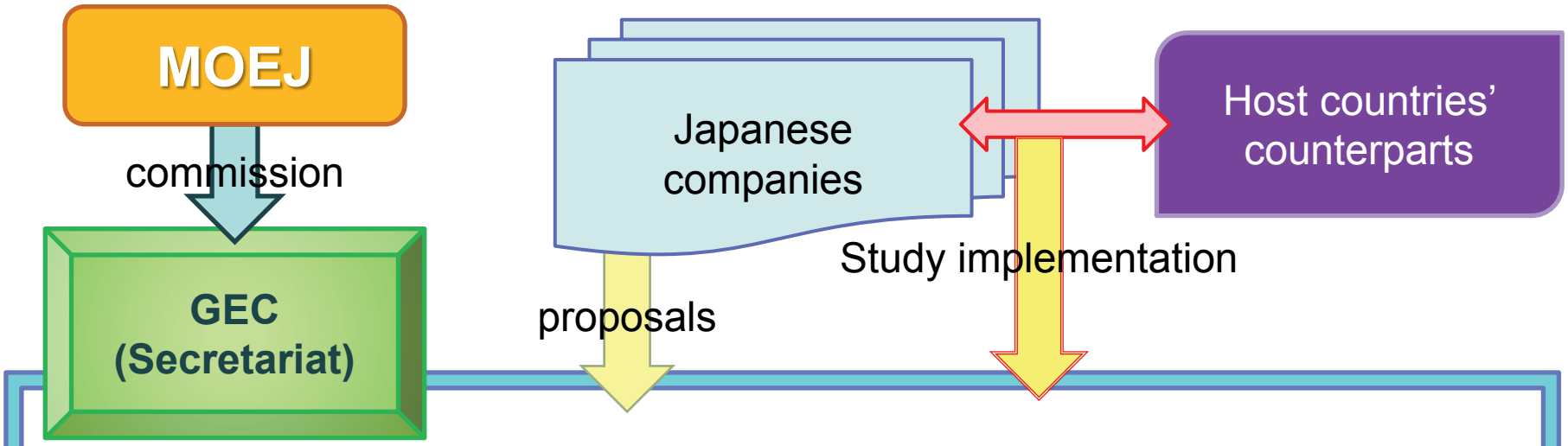
Project Cycle and JCM Promotion Scheme



Overview of Study Programme for JCM Project (1/2)



- Invite public proposals from Japanese companies
- Select the proposals to be officially adopted as qualified Studies (funded to implement studies)
- Provide advice and supervision to the Studies
  - Through an expert committee
- Consult with host countries to promote cooperative relationships
- Outreach the Study results
  - Through GEC website, UNFCCC Side Events, Carbon Forum, etc.

Overview of Study Programme for JCM Project (2/2)

Objectives:

- To develop **JCM methodology**
- To make **JCM Project Design Document (PDD)**
- To accumulate knowledge and experience

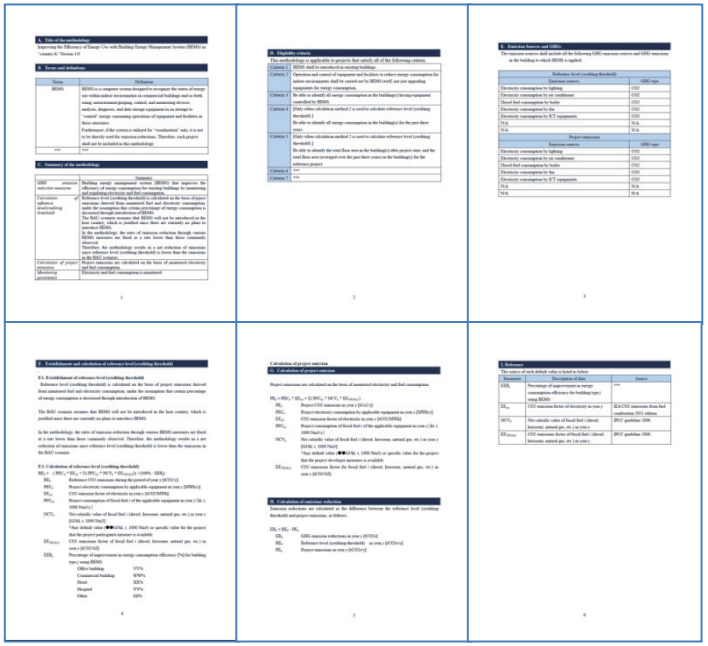
- JCM Project Planning Study (PS)
  - ➔To finalize concrete project plan which is considering finance, construction, operation and MRV plan
  - ➔To assess the possibility of each project to be implemented under the JCM
- JCM Methodology Demonstration Study (DS)
  - ➔To develop practical JCM methodologies whose applicability have been demonstrated by model projects in operation
- JCM Feasibility Study (FS)
  - ➔To find possible JCM projects, with the consideration of concrete project planning for future implementation
  - ➔To assess the feasibility of each project to be implemented under the JCM

Overview of JCM Methodology, Monitoring Plan and Monitoring Report

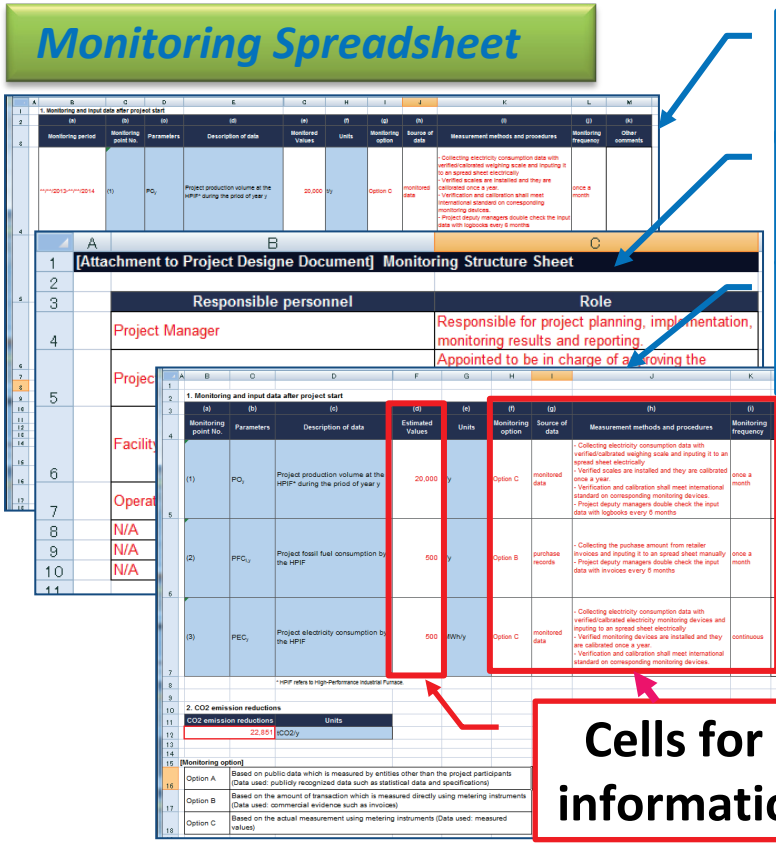
(Subject to further consideration and discussion with host countries)

- 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



Monitoring Spreadsheet



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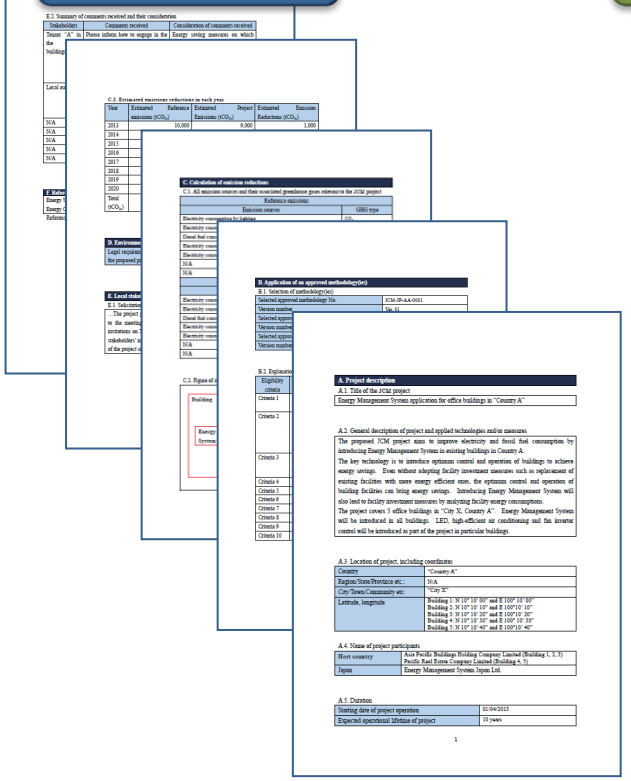
PDD and Monitoring Plan

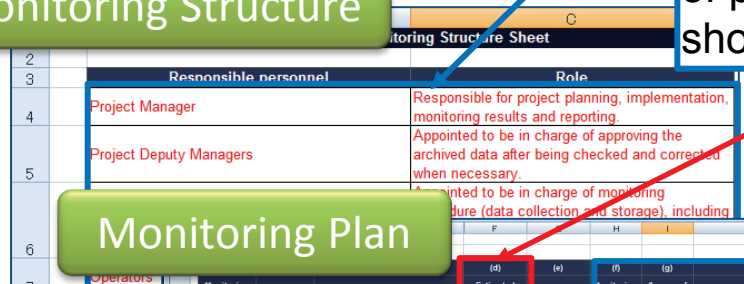
(Subject to further consideration and discussion with host countries)

- 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

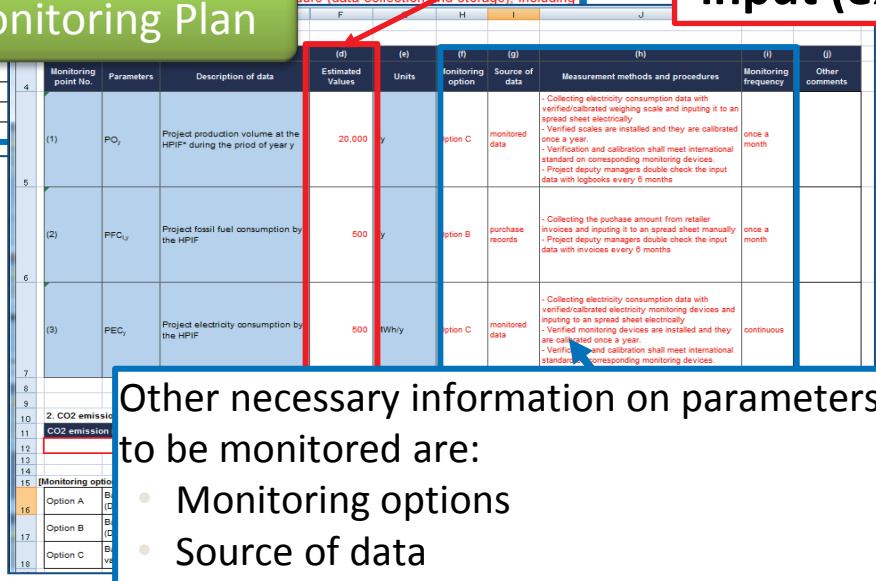


Monitoring Structure



Roles and responsibilities of personnel for monitoring should be described

Monitoring Plan



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

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	• 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)	• 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	• Premade spreadsheets will help calculate GHG emission reductions/removals automatically by inputting relevant values for parameters, in accordance with methodologies.

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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

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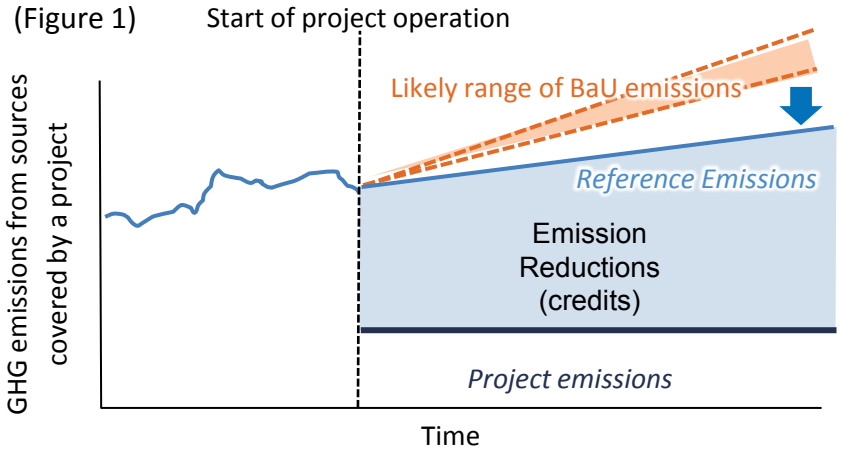
Basic Concept for Crediting under the JCM

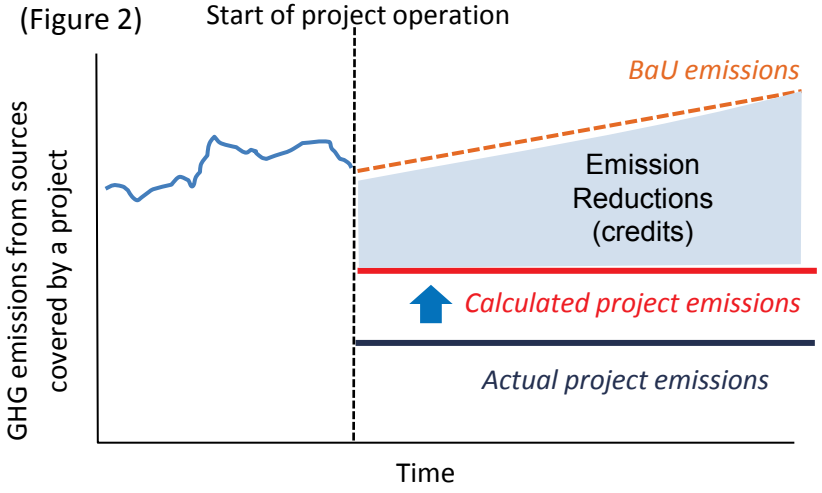
In the JCM, emission reductions to be credited are defined as the deference between "reference emissions" and project emissions.

There are two conservative ways of calculation of emission reductions or removals in the JCM.

(Figure 1)



(Figure 2)



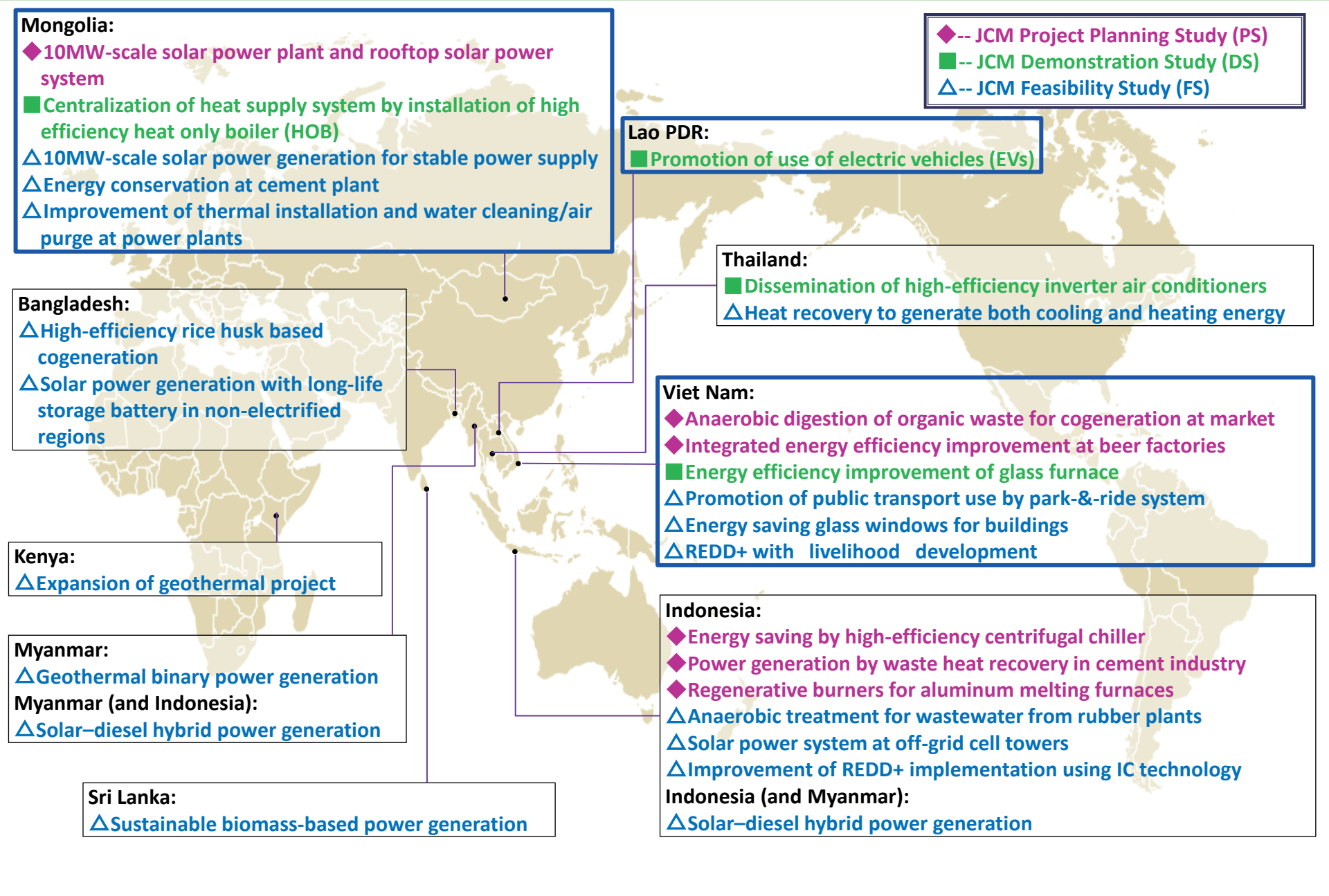
All ideas are subject to further consideration and discussion with host countries

Figure 1 shows an example of a conservative way of calculation of emission reductions. The reference emissions here are set below the likely range of business-as-usual (BAU) emissions – which represent plausible emissions in providing the same outputs or service level of the project under the mechanism – by, for instance, discounting certain percentage points from BaU emissions. In this case, emission reductions to be credited are calculated as the difference between the reference emissions and the project emissions.

In another example showed in Figure 2, project emissions are calculated larger than actual project emissions by applying conservative default values for parameters to calculate project emissions instead of monitoring actual values. In this case, emission reductions to be credited are calculated as the deference between the BaU emissions and the project emissions calculated in a simple and conservative manner.

View on a framework for various approaches Submissions form Parties. [FCCC/SBSTA/2013/MISC.11] page 27

JCM Feasibility Studies in FY2013



◆-- JCM Project Planning Study (PS)
■-- JCM Demonstration Study (DS)
△-- JCM Feasibility Study (FS)

Mongolia:
◆10MW-scale solar power plant and rooftop solar power system
■Centralization of heat supply system by installation of high efficiency heat only boiler (HOB)
△10MW-scale solar power generation for stable power supply
△Energy conservation at cement plant
△Improvement of thermal installation and water cleaning/air purge at power plants

Lao PDR:
■Promotion of use of electric vehicles (EVs)

Thailand:
■Dissemination of high-efficiency inverter air conditioners
△Heat recovery to generate both cooling and heating energy

Bangladesh:
△High-efficiency rice husk based cogeneration
△Solar power generation with long-life storage battery in non-electrified regions

Viet Nam:
◆Anaerobic digestion of organic waste for cogeneration at market
◆Integrated energy efficiency improvement at beer factories
■Energy efficiency improvement of glass furnace
△Promotion of public transport use by park-&-ride system
△Energy saving glass windows for buildings
△REDD+ with livelihood development

Kenya:
△Expansion of geothermal project

Myanmar:
△Geothermal binary power generation

Myanmar (and Indonesia):
△Solar–diesel hybrid power generation

Indonesia:
◆Energy saving by high-efficiency centrifugal chiller
◆Power generation by waste heat recovery in cement industry
◆Regenerative burners for aluminum melting furnaces
△Anaerobic treatment for wastewater from rubber plants
△Solar power system at off-grid cell towers
△Improvement of REDD+ implementation using IC technology

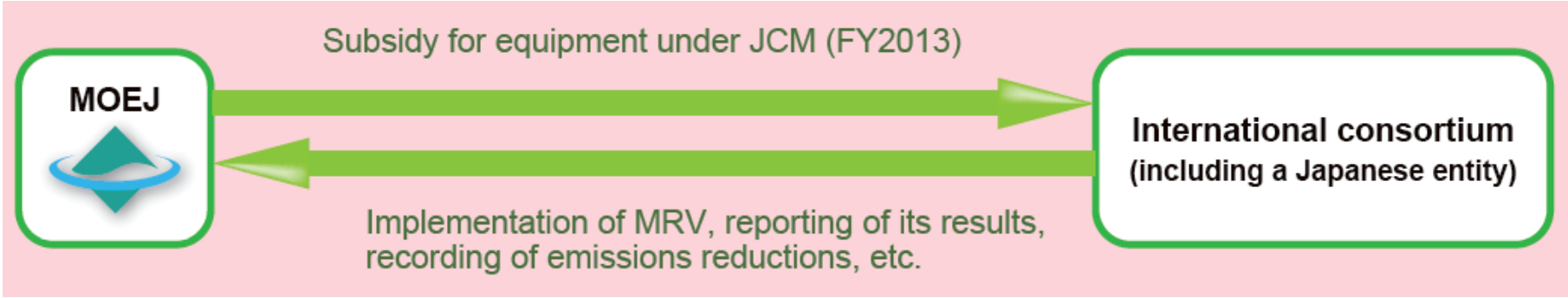
Indonesia (and Myanmar):
△Solar–diesel hybrid power generation

Sri Lanka:
△Sustainable biomass-based power generation

Financing Programme for JCM Model Projects

Objectives:

- To reduce CO2 emissions in developing countries by utilizing leading low carbon technologies, products, systems, services, and infrastructure of Japanese companies and others based on the application of the JCM.
- The JCM should be enhanced, through this Financing Programme, by accumulating knowledge related to the measurement, reporting and verification (MRV) of CO2 emission reduction and its utilization.

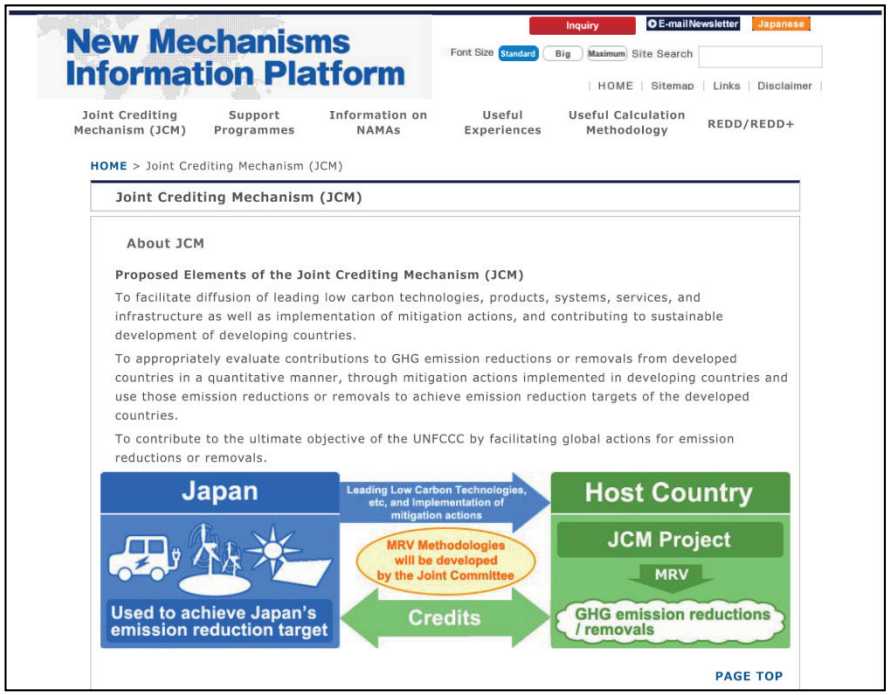


Note: A Japanese entity shall act as the representative of an international consortium, in charge of accounting and other administrative duties related to the financing programme.

Reference:

Results of each Feasibility Studies and other studies are available on GEC website. (http://gec.jp).

JCM relevant documents and JCM partner country information are available on New Mechanisms Information Platform. (http://www.mmechanisms.org/e/initiatives/index.html).



Thank you for your attention!