









This document aims to provide a comprehensive and easy-to-understand description of the Joint Crediting Mechanism (JCM). It should be noted that this document does not replicate in the exact manner all the texts agreed upon in the international negotiations. Also, there are issues yet to be settled in the international negotiations regarding detailed interpretations and processes. As for the details and exact expressions in the agreed texts, please refer to the respective documents available on the website of the JCM <<u>https://www.jcm.go.jp></u>.

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JCM in Charts for Thailand ver.1.0

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# **Abbreviations and Acronyms**

JCM	Joint Crediting Mechanism
GHG	Greenhouse gas
JC	Joint Committee
MoC	Modalities of Communication
PCP	Project Cycle Procedure
PDD	Project design document
PPs	Project participants
TPE	Third party entity
UNFCCC	United Nations Framework Convention on Climate Change
VV	Validation and Verification

# **Reference documents**

A	ctivity	<b>Reference Rules/Guideline Document</b>	Form
General		<ul> <li>Bilateral Cooperation on the Joint Crediting Mechanism for the Low Carbon Growth Partnership between Japan and the Kingdom of Thailand</li> <li>Rules of Implementation for the Joint crediting Mechanism (JCM)</li> <li>JCM Glossary of Terms</li> </ul>	
Joint Commit	tee	JCM Rules of Procedures for the Joint Committee	
Project	Overall	JCM Project Cycle Procedure	
Procedures	Developing a Methodology	JCM Guidelines for Developing Proposed Methodology	<ul><li>JCM Proposed Methodology Form</li><li>JCM Proposed Methodology Spreadsheet Form</li></ul>
Developing a PDD		JCM Guidelines for Developing Project Design Document and Monitoring Report	<ul> <li>JCM Project Design Document Form</li> <li>JCM Modalities of Communication Statement Form</li> </ul>
	Monitoring	JCM Project Cycle Procedure	<ul> <li>Monitoring Plan Sheet</li> <li>Monitoring Structure Sheet</li> <li>Monitoring Report Sheet</li> </ul>
TPE, Validation and Verification		<ul> <li>JCM Guidelines for Designation as a Third-Party Entity</li> <li>JCM Guidelines for Validation and Verification</li> </ul>	<ul> <li>JCM Application Form for Designation as a Third-Party Entity</li> <li>JCM Validation Report Form</li> <li>JCM Verification Report Form</li> </ul>
	Registration	JCM Project Cycle Procedure	<ul> <li>JCM Project Registration Request Form</li> <li>JCM Post-Registration Changes Request Form</li> <li>JCM Registration Request Withdrawal Form</li> <li>JCM Project Withdrawal Request Form</li> </ul>
	Credit Issuance	JCM Project Cycle Procedure	<ul><li>JCM Credits Issuance Request Form</li><li>JCM Issuance Request Withdrawal Form</li></ul>

# **Chapter 1. The Joint Crediting Mechanism (JCM)**

# **1-1. Bilateral document**

- ◆ Japanese government and Thai government signed on the "Bilateral Cooperation on the Join Crediting Mechanism for the Low Carbon Growth Partnership between Japan and the Kingdom of Thailand" on 19 November 2015.
- In order to promote investment and deployment of low carbon technologies, products, systems, services and infrastructure to achieve low carbon growth in the Kingdom of Thailand, establish a JCM and implement it in accordance with the relevant domestic laws and regulations in force in respective countries. [BC, para 3]
- Verified reductions or removals from the mitigation projects under the JCM can be used as a part of their own internationally pledged greenhouse gases mitigation efforts. [BC, para 5]
- Both governments ensure the robust methodologies, transparency and the environmental integrity of the JCM and maintain the JCM simple and practical, to promote concrete actions for global GHG emissions reductions or removals [BC, para 6]
- ◆ The JCM starts its operation as the non-tradable credit type mechanism. [BC, para 9]
- This Bilateral Cooperation covers the period until 31 December 2030. Both sides consider possible extension of the above-mentioned period and reach a conclusion by 2030. [BC, para 11]

Japan's Intended Nationally Determined Contributions (INDC) towards post-2020 GHG are those gases of carbon GHG emission reductions is at the level of a reduction of 26.0% by fiscal year (FY) dioxide ( $CO_2$ ), methane ( $CH_4$ ), nitrous 2030 compared to FY 2013 (25.4% reduction compared to FY 2005) (approximately oxide (N<sub>2</sub>O), hydrofluorocarbons 1.042 billion t-CO<sub>2</sub>eq. as 2030 emissions), ensuring consistency with its energy mix, (HFCs), perfluorocarbons (PFCs), set as a feasible reduction target by bottom-up calculation with concrete policies, sulphur hexafluoride (SF<sub>6</sub>) and measures and individual technologies taking into adequate consideration, inter alia, nitrogen trifluoride (NF<sub>3</sub>) [Rol ver.2, para technological and cost constraints, and set based on the amount of domestic emission 2] reductions and removals assumed to be obtained. • The JCM is not included as a basis of the bottom-up calculation of Japan's emission reduction target, but the amount of emission reductions and removals acquired by Japan under the JCM will be appropriately counted as Japan's reduction. Apart from contributions achieved through private-sector based projects, accumulated emission reductions or removals by FY 2030 through governmental JCM programs to be undertaken within the government's annual budget are

estimated to be ranging from 50 to 100 million t-CO<sub>2</sub>. [GoJ Sep 2015]

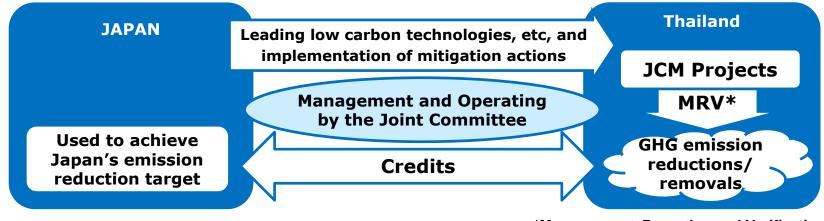
# **1-2. Concept of the JCM**

The JCM has the following purposes [Rol ver.2, para 1]:

- 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 the Kingdom of Thailand;
- To appropriately evaluate contributions to GHG emission reductions or removals from Japan in a quantitative manner, through mitigation actions implemented in the Kingdom of Thailand and use those emission reductions or removals to achieve emission reduction targets of the countries involved;
- To contribute to the ultimate objective of the UNFCCC by facilitating global actions for emission reductions or removals.

The JCM starts its operation as the non-tradable credit type mechanism. Both sides continue consultation for the transition to the tradable credit type mechanism and reach a conclusion of such consultation at the earliest possible timing, taking into account of implementation of the JCM. [BC, para 9]

- Both sides aim for concrete contributions to assisting adaptation efforts of the Kingdom of Thailand, through the JCM after the JCM is converted to the tradable credit type mechanism. [BC, para 10]
- Each side checks the status of the issuance and use of credits and makes sure that no double counting is discovered. [Rol ver.2, para 40]

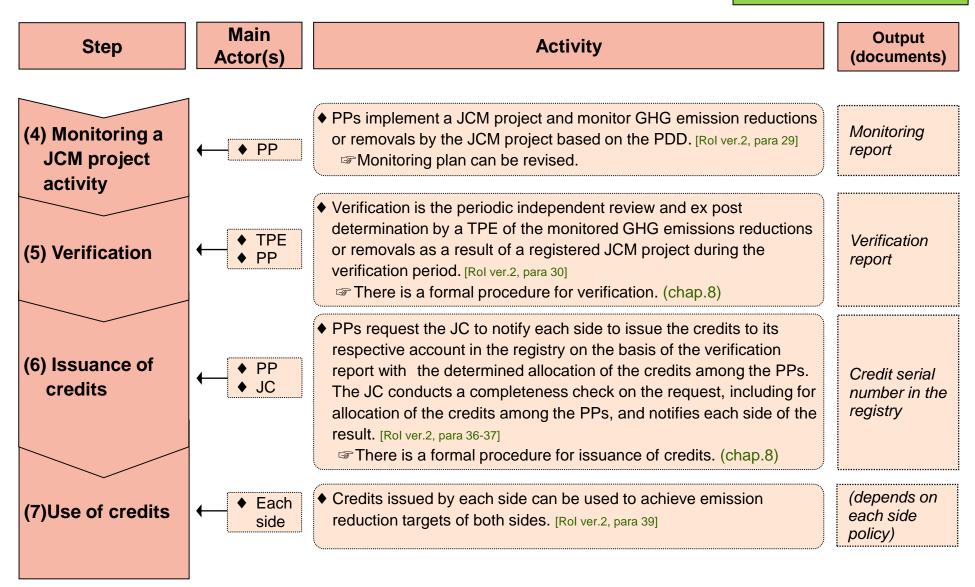


\*Measurement, Reporting and Verification

Figure: the JCM scheme between Thailand and Japan

# Chapter 2. JCM project cycle

Step	Main Actor(s)	Activity	Output (documents)
(0) Development of methodologies	← <mark>◆ PP</mark> ◆ JC	<ul> <li>The proposed methodology, after its completeness being checked as applicable, goes through public comment process. After the public comment process, the proposed methodology is reviewed by the JCM secretariat before the JC approval. The JC determines either to approve or reject the draft methodology. [Rol ver. 2, para 19-20]</li> <li>There is a formal procedure for submission of a proposed methodology (chap.4)</li> </ul>	1. Proposed methodology 2. Proposed Methodology Spreadsheet
(1) Making the project design document (PDD)	← ◆ PP	<ul> <li>PPs prepare a draft project design document (PDD), which consists of a completed JCM PDD Form and Monitoring Plan for a JCM project activity. [PCP ver.2, para 34]</li> <li>The PDD presents information on the essential technical and organizational aspects of the project activity and is a key input into the validation, registration, and verification of the project.</li> <li>The PDD contains information on the project activity and the approved methodology applied to the project activity.</li> <li>There is a formal procedure for submission of a PDD Form and Monitoring Plan (chap.5)</li> </ul>	1. PDD and Monitoring Spreadsheet 2. MoC
(2) Validation	← <mark>◆ TPE</mark> ◆ PP	<ul> <li>Validation is the process of independent evaluation of a proposed JCM project by a third-party entity (TPE) against the validation guidelines as developed by the JC on the basis of the PDD. [Rol ver.2, para 23]</li> <li>There is a formal procedure for validation. (chap.6)</li> </ul>	Validation report
(3) Registration	← ◆ JC	<ul> <li>Registration is the formal acceptance by the JC of a validated project as a JCM project. [Rol ver.2, para 26]</li> <li>There is a formal procedure for request for registration. (chap.6)</li> <li>If there are changes from the project activity as described in the registered PDD, PPs can notify and request approval of such changes. (chap.7)</li> </ul>	Project reference number



### BOX: JCM project cycle procedure (PCP) version 02.0 [PCP ver.2]

This procedure describes the administrative steps to follow for PPs, TPEs, other stakeholders, the JC, the secretariat and both sides for approval of a methodology, registration of a JCM project, issuance of credits and related actions.

# **3-1. Japanese government and Thai government**

# ♦ Both sides [BC, para 2-10]

- Hold close policy consultations at various levels for cooperation toward low carbon growth under the United Nations, at the regional and bilateral frameworks, including the East Asia Low Carbon Growth Partnership.
- Setablish the JC to operate the JCM.
- Work in close cooperation to facilitate financial support necessary for the implementation of the JCM. The Japanese side will facilitate technological and capacity building support to the Thai side for the implementation of the JCM.
- Continue consultation for the transition to the tradable credit type mechanism and reach a conclusion of such consultation at the earliest possible timing, taking into account of implementation of the JCM.
- Aim for concrete contributions to assisting adaptation efforts of Thai through the JCM after the JCM is converted to the tradable credit type mechanism.
- In conjunction with meetings of the Joint Committee, both sides conduct policy consultations about the relevant policy measures of the JCM. [Rol ver.2, para 11]

## Each side [Rol ver.2, para 13-15, 33]

- Based on the rules and guidelines as developed by the JC and/or in accordance with relevant domestic laws and regulations in respective countries for the implementation of the JCM:
  - a) Prepares draft methodologies and submits them to the JC
  - b) Establishes and maintains a registry in line with the common specifications for registries, as developed by the JC
  - c) On the basis of notification for issuance of credit by the JC (including for allocation of credits among participants), issues the notified amount of credits to its registry.
- Promptly informs the JC on the issuance of credits under the JCM.
- Takes necessary measures to ensure transparency in the implementation of the JCM.
- Establishes a registry to record and use the credits.
- Neither side uses any mitigation projects registered under the JCM for the purpose of any other international climate mitigation mechanisms to avoid double counting. [BC, para 7, Rol ver.2 para 16]

### BOX: Support by Japanese government (FY2018) [GoJ Jul 2018] [https://www.carbon-markets.go.jp/document/20180810\_JCM\_goj\_eng.pdf]

## Finance support

- Financing Programme for JCM Model Projects
- Collaborative Financing Programme (JICA and other governmental affiliated financial institute)
- ADB trust fund (JF JCM)
- JCM Demonstration Projects

### Capacity building

Feasibility study

# **3-2. JCM Joint Committee (JC)**

[BC, para 4, Rol ver.2, para 5-10]

- The JC consists of representatives from both sides.
- Rules of procedures of the JC, including its membership, are formulated through consultations between both sides.
- ♦ The JC:
  - Develops guidance and rules and guidelines regarding the JCM, methodologies to quantify amount of GHG emission reductions or removals, requirements for designation of TPEs, and other matters relating to the implementation and administration of the JCM as necessary.
  - Convenes meetings on regular basis to evaluate the implementation of the JCM.
  - May modify the rules of Implementation and other rules and guidelines necessary for the implementation of the JCM.
  - The second secon
  - On the basis of a request for registration of JCM projects submitted by PPs, registers JCM projects which were validated by the TPE.
  - On the basis of a request for notification to each side for issuance of credits submitted by PPs, the JC notifies both sides to issue the credits which were verified by the TPE.
  - Develops reports on the status of the implementation of the JCM and, where necessary, discusses issues related to the operation and management of the JCM.

### Members of the JC [RoP ver.1, para 4-8]

- The JC consists of representatives from the Japanese side, the Thai side and other persons designated by each side as necessary.
- Members of the JC designated by each side may not exceed 10. Members may be increased, decreased, or changed as long as they stay within the allowed number at any time with prior written notification of both sides.
- Each member of the JC should have no personal or direct financial interest in any matter under consideration by the JC.
- The JC has two Co-Chairs to be appointed by each side upon notification of each other with one of the Co-Chairs appointed by the Thai side and the other appointed by the Japanese side, respectively. In case a Co-Chair resigns, the side which appointed the leaving Co-Chair, appoints his or her replacement.
- Each Co-Chair may designate an alternate from members of the JC from each side to perform the function of the Co-Chair. Such designation is distributed electronically or otherwise, in written form.

3-2. JCM Joint Committee (JC)

Meeting [RoP ver.1, para 9-15]	
♦ Schedule	
<ul> <li>The JC meets as necessary but no less than once a year.</li> <li>The Co-Chairs give notice of the date of each meeting no less than two week</li> </ul>	ake prior to the date of the meeting
The Co-Chairs provide the agenda of each meeting no less than two weeks	
documents for the meeting no less than five working days prior to the date of	
Decision in the meeting	g.
The construction of the JC is adopted by consensus.	
The Co-Chairs ascertain whether consensus has been reached. The Co-Ch	nairs declare that a consensus does not exist if
there is a stated objection to the proposed decision by a member of the JC.	
Attendance	
An alternate of each member of the JC from the respective side may attend	
the member of the JC. Such substitution is informed by electronic means or meeting.	otherwise in written form prior to the concerned
Meetings of the JC may be open to observers approved by both sides, exce	ept where otherwise decided by the JC. Observers
may make presentations upon request by the Co-Chairs during the meeting	
Decision by electronic means and conference call	
[RoP ver.1, para 16-18]	[RoP ver.1, para 24-25]
	Members of the JC, the JCM secretariat or
The JC may adopt decisions by electronic means provided that all the following procedures are made:	any other bodies or persons that have been
(a) The proposed decisions are distributed by the Co-Chairs to all	delegated the work to assist the JC respect
members of the JC by electronic means.	the confidentiality of all confidential
(b) The proposed decisions are deemed as adopted when, (i) no	information acquired in his/her position and
member of the JC has provided negative assertion by electronic	not make improper use of or disclose such confidential information to third parties.
means within 10 calendar days after distribution of the proposed	The full text of all decisions of the JC is
decisions and both Co-Chairs have made affirmative assertion by	made publicly available immediately after
electronic means, or (ii) all members of the JC have made	
	the decisions are adopted.
affirmative assertion by electronic means. If a negative assertion is made by one of the members of JC, the Co-	
<ul> <li>affirmative assertion by electronic means.</li> <li>If a negative assertion is made by one of the members of JC, the Co- Chairs take into account the opinion of the member and take appropriate</li> </ul>	
<ul> <li>affirmative assertion by electronic means.</li> <li>If a negative assertion is made by one of the members of JC, the Co-Chairs take into account the opinion of the member and take appropriate actions.</li> </ul>	
<ul> <li>affirmative assertion by electronic means.</li> <li>If a negative assertion is made by one of the members of JC, the Co- Chairs take into account the opinion of the member and take appropriate</li> </ul>	

# **3-3. The Support Structure of JC**

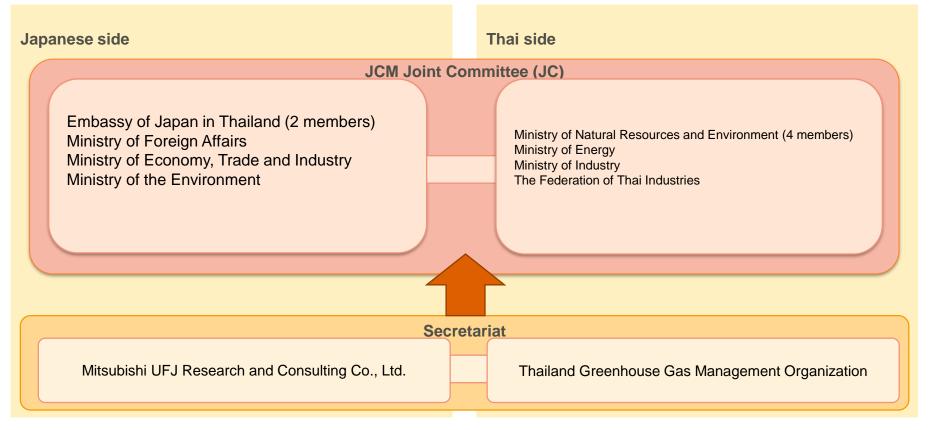
[RoP ver.1, para 21-23]

### Secretariat

The JCM secretariat services the JC by performing the work for the implementation of the JCM.

- External assistance
- The JC may establish panels necessary to assist it in the performance of its functions. The rules and procedures of such panels are decided by the JC.
- The JC may decide to appoint external experts to assist part of its work on a case-by-case basis.

### The support structure of JCM JC [JC2, p1-2, https://www.jcm.go.jp/jc\_decisions/914/JCM\_TH\_JC01\_Mtg\_Rep.pdf]



### ♦ A TPE that is designated by the JC [Rol ver.2, para 17, 21-22]

- (a) On the basis of requests from PPs, validates the project as described in a PDD prepared by the PPs, in line with the guidelines for the validation as developed by the JC, and informs the validation result to the PPs;
- (b) On the basis of requests from PPs, verifies GHG emission reductions or removals achieved by the JCM project as described in the monitoring report prepared by the PPs, in line with the guidelines for the verification of GHG emission reductions or removals as developed by the JC, records the verification result in a verification report and sends the report to the PPs.
- Upon receiving an application for designation as a TPE submitted by a candidate, the JC designates a TPE in line with the guidelines for the designation as a TPE, and makes publicly available the relevant information on the designated TPE through a website (https://www.jcm.go.jp/th-jp/tpes).
- ◆ The JC may suspend or withdraw the designation of a TPE if it has found fraud, malfeasance or incompetence of the entity.

#### Requirements for designation as a TPE: [GL TPE ver.1, para 9-11] Procedure for designation as a TPE: To be designated as a TPE, a candidate entity fulfills all requirements as [GL TPE ver.1 para 13-19] follows: **Candidate TPE** Candidate entities are either: (1) Submits an application When its contact details The Entity accredited under ISO 14065 by an accreditation body that is a form in English and ISO are changed, the TPE member of the International Accreditation Forum (IAF) based on ISO 14065 or CDM accreditation notifies the secretariat by 14064-2: or certificate to the JC. electronic means Designated Operational Entities (DOE) or operational entities accredited immediately. by the Executive Board under the Clean Development Mechanism (CDM). Candidate entities have sufficient knowledge of the JCM between of Thai and **Secretariat** Japan by reading and knowing all applicable guidance and guidelines of the (4) Notifies the decision JCM. (2) Checks whether the to the candidate entity application form is complete, and makes the relevant Sectoral scope: [GL TPE ver.1 para 14,17] and communicates the result information of the When a TPE wishes to be designated under the JCM for additional sectoral to the candidate entity within 7 designated TPE and the scopes, the TPE submits an application form and seeks its designation for days after the receipt of the sectoral scopes publicly those sectoral scopes. submission. available through the ♦ When the JC designates the candidate entity, applicable sectoral scopes JCM website. under the JCM for such entity are decided on the basis of: (a) In case the candidate entities are accredited under ISO 14065, sectoral JC competence of the candidate entities as described in their application; and (3) Decides whether to designate (b) In case the candidate entities are designated/accredited under the CDM, the candidate entity as a TPE or the sectoral scopes identical to those under the CDM unless otherwise reject the application. decided by the JC.

**3-4. Third-Party Entity (TPE)** 

### Suspension, withdrawal and reinstatement of the designation as a TPE [GL TPE ver.1, para 20]

- The designation is suspended or withdrawn under the following conditions:
  - (a) When the JC decides that the TPE no longer complies with the applicable JCM rules and guidelines following the review conducted by the JC;
  - (b) When the status of the TPE changes regarding accreditation under ISO 14065 and/or accreditation/designation under the CDM; and
  - (c) When the TPE voluntarily withdraws its designation status under the JCM.

### Procedures for suspension or withdrawal [GL TPE ver.1, para 21-22]

- The JC may conduct a review on whether a TPE continues to comply with the applicable JCM rules and guidelines. Such review may
  include on-site visits to evaluate the performance of a TPE. The JC may decide to appoint external experts or organizations which assist
  part of its work regarding the review.
- If the JC has carried out a review and found that the TPE no longer complies with the applicable JCM rules and guidelines, the JC decides on whether to suspend or withdraw the designation of the TPE for some or all sectoral scopes, but only after the TPE has had the possibility of a hearing. The suspension or withdrawal immediately commences on the date when the decision is taken by the JC.

# Procedures for suspension or withdrawal due to changes in the status of the TPE regarding accreditation under ISO 14065 and/or accreditation/designation under the CDM [GL TPE ver.1, para 23-26]

- For a TPE accredited only under ISO 14065, when its accreditation under ISO 14065 is suspended or withdrawn for some or all sectoral scopes, the designation of the TPE for the corresponding sectoral scopes under the JCM is suspended or withdrawn on the date such suspension or withdrawal commences.
- For a TPE designated only under the CDM, when the accreditation/designation is suspended or withdrawn for some or all sectoral scopes, the designation of the TPE for the corresponding sectoral scopes under the JCM is suspended or withdrawn on the date such suspension or withdrawal commences.
- For a TPE accredited under ISO14065 and designated under the CDM:
  - (a) When either accreditation under ISO 14065 or accreditation/designation under the CDM is suspended or withdrawn for some or all sectoral scopes, the designation of the TPE for the corresponding sectoral scopes under the JCM is suspended or withdrawn on the date such suspension or withdrawal commences except for the cases described in subparagraphs (b) and (c) below;
  - (b) When either the TPE voluntarily withdraws the accreditation for some or all sectoral scopes under ISO 14065 or the TPE voluntarily withdraws the accreditation for some or all sectoral scopes under the CDM, without being suspended, the designation of the TPE under the JCM is maintained for the corresponding sectoral scopes for which the TPE continues its accreditation or designation under the other programme; and
  - (c) When either the TPE voluntarily withdraws the accreditation for some or all sectoral scopes under ISO 14065 or the TPE voluntarily withdraws the accreditation for some or all sectoral scopes under the CDM, which is currently under suspension, the designation of the TPE for the corresponding sectoral scopes under the JCM is suspended until the JC decides whether to withdraw or reinstate the designation.

The case the status of the TPE falls under the conditions described above, the TPE notifies the JC of such status without delay.

Procedures following suspension or withdrawal [GL TPE ver.1, para 30-34]

- When the designation of a TPE is suspended or withdrawn for some or all sectoral scopes, the JC makes the name of the TPE, its status regarding sectoral scopes suspended or withdrawn and the reasons for the suspension or withdrawal publicly available through the JCM website without delay.
- When the designation of a TPE is suspended or withdrawn for some or all sectoral scopes, the TPE notifies all affected organizations including PPs which the TPE is under contract to perform JCM validation and/or verification activities by the time of suspension or withdrawal.
- When the designation of a TPE is suspended, the TPE may continue its ongoing JCM validation and/or verification activities for which the contract was in force at the time of its suspension.
- When the designation of a TPE is withdrawn for some or all sectoral scopes, the TPE does not continue any JCM validation and/or verification
  activities for the sectoral scopes withdrawn.
- Projects which had been already validated or verified by the TPE are not affected by its suspension or withdrawal, however, the JC may conduct any actions to these projects.

## Procedures for reinstatement of designation [GL TPE ver.1, para 35-39]

- When a TPE whose designation is suspended or withdrawn for some or all sectoral scopes since it no longer complies with the applicable JCM guidance and guidelines following the review conducted by the JC, wishes its designation to be reinstated, the TPE submits the application form and documents which explain corrective actions for the causes of its suspension.
- When a TPE whose designation is suspended or withdrawn for some or all sectoral scopes since it ceased to meet the conditions described for accreditation under ISO 14065 and/or designation under the CDM, wishes its designation to be reinstated after the suspension is lifted or the accreditation is reinstated, the TPE submits the application form and relevant documents.
- When a TPE whose designation is voluntarily withdrawn wishes its designation to be reinstated, the entity submits the application form and relevant documents.
- The JC decides on whether to reinstate the designation of the suspended or withdrawn TPE based on the submitted documents.
- When the designation of a TPE is reinstated, the secretariat makes the name of the TPE and its reinstated sectoral scopes publicly available through the JCM website without delay.

# Procedures for voluntary withdrawal by a TPE [GL TPE ver.1, para 27-29]

- A TPE may withdraw its designation status for some or all sectoral scopes by submitting the letter through electronic means specified on the JCM website, to the JC indicating the following:
  - (a) Name of the TPE with the signature of its authorized representative;
  - (b) Sectoral scopes that the TPE wishes to withdraw; and
  - (c) Date when the TPE wishes to withdraw its designation.
- Voluntary withdrawal of the designation by a TPE for some or all sectoral scopes is effective on the same date indicated above.
- Voluntary withdrawal of the designation by a TPE does not free the TPE from its contractual arrangement.

### BOX: JCM Guidelines for Validation and Verification version 1.0 (VV Guidelines) [GL VV ver.1]

These Guidelines are applicable to TPEs that are under contractual arrangement with PPs to validate or verify any JCM projects based on JCM methodologies previously approved by JC.

### BOX: JCM Guidelines for Designation as a Third-Party Entity version 1.0 [GL TPE ver.1]

These Guidelines are applicable to candidate entities, TPEs, the JC and the secretariat with respect to designation, suspension and withdrawal of TPEs.

# 3-5. Project participants (PPs)

- Project participants: [Rol ver.2, para 18]
  - Prepare a draft methodology and submit the draft to the JCM secretariat for its review before the JC approval
  - Prepare a draft PDD and submit the draft to a TPE for validation and notify the JC
  - Submit the PDD that was validated by the TPE to the JC for its registration of the project
  - Implement the JCM project and conduct monitoring in line with the PDD
  - Prepare a monitoring report and send the report to a TPE for verification
  - After the submission of the monitoring report for the first issuance of credits, prepare and submit a progress report to update the current status of the project to the secretariat annually through the project lifetime. The PPs use the template of a monitoring report for preparing the progress report.
  - Submit a verification report prepared by TPE to the JC, and request notification to each side for issuance of credits under the JCM.

# **3-6. Procedures for Modalities of Communication (MoC)**

### Procedures for MoC [PCP ver.2, para 43-45, 49]

- The PPs of a JCM project designate one focal point entity (focal point) from the PPs to communicate on their behalf with the JC and the secretariat in line with the scopes of authority described below, and include this information in an MoC.
- After the submission of a MoC of a proposed JCM project, all official communication between the PPs and the JC, the secretariat, or each side for the specific project is conducted through the focal point.
- The PPs submit a MoC to the JC and the TPE, at the time of submitting the draft PDD to the TPE for validation and the JC for public comments, using the latest version of the "JCM Modalities of Communication Statement Form" (MoC form). The contact details of the focal point and other PPs are included in the MoC form.
- The secretariat publishes the MoC on the JCM website following the registration of the project. The MoC is shared only among the PPs, the JC, the secretariat and the TPE involved in the JCM project. The secretariat makes sections 1 to 4 of the MoC without specimen signatures publicly available.

### Focal point [PCP ver.2, para 46-49]

- ♦The PPs grant the focal point the authority to:
  - (a) Communicate in relation to requests for issuance of credits to respective accounts;
  - (b) Communicate in relation to requests for addition and/or voluntary withdrawal of PPs and changes to the focal point, as well as changes to company names, legal status, contact details and specimen signatures; and
  - (c) Communicate on all other project-related matters not covered by subparagraphs (a) and (b) above.
- The PPs and the focal point designate one primary authorized signatory and one alternate authorized signatory. The signature of either the primary or alternate authorized signatory suffices for authenticating the PPs' or the focal point's consent or instruction(s).
- ♦The PPs do not include or refer to private contractual arrangements in a MoC.

### 3-6. Procedure for Modality of Communication (MoC)

Changes to registered modalities of communication [PCP ver.2, para 115-117, 119, 121-123]

- PPs of the JCM project request changes to the contents of the registered MoC to the secretariat as soon as possible after the changes become effective.
- The secretariat requests a new submission of a MoC form whenever the secretariat identifies inconsistencies or inaccuracies in the registered MoC.
- In case of requesting for changes to the contents of the registered MoC, PPs submit a new MoC using the latest version of the "JCM Modalities of Communication Statement Form" to the secretariat by electronic means.
- PPs who submit a new MoC ensure that:
  - (a) Supporting documentation, including powers of attorney, or extracts from board meeting minutes or company association documentation, or extracts/certificates from national company registries that cannot be verified online, is dated or notarized within 2 years from the time of submission of a request for change to established modalities of communication. This time limitation does not apply to copies of national personal identity documents;
  - (b) To the extent possible, changes applicable to more than one JCM project or multiple changes affecting the same JCM project are consolidated in a single form.
- Legal representatives signing on behalf of the PPs provide written evidence that they are authorized to sign on behalf of the respective entities.
- The secretariat may request additional clarification and/or documentation if submissions do not clearly provide evidence.
- The secretariat displays the updated MoC including its annex 1 as necessary and their effective dates on the JCM website.

### Changes to focal point [PCP ver.2, para 124]

Any of the PPs for a registered JCM project may request for changes on the designation of the focal point for any reason and at any time by submitting a new MoC signed by all PPs using the latest version of the "JCM Modalities of Communication Statement Form", to the secretariat by electronic means.

### Changes to PPs [PCP ver.2, para 126-127]

- If the PPs of a registered JCM project have changed after the registration of the project, PPs submit a completed annex 1 of the MoC form for each of the following changes:
  - (a) Addition of a PP;
  - (b) Changes related to entity names/legal status;
  - (c) Withdrawal of a PP (if a PP has ceased operations due to bankruptcy or other reasons and is unable to sign the MoC form, the submission is accompanied by documented evidence of the cessation);
  - (d) Changes related only to contact details and specimen signatures.
- A PP added to a registered JCM project accepts the existing MoC unless a new MoC is submitted simultaneously.

# Chapter 4. JCM project methodology

**4-1. Methodology structure** 

[Glossary ver.1, No.18-20] [GL PM ver.1, para 10-16]

Project methodology is a methodology applied to JCM projects for calculating emission reductions achieved by each project and monitoring the JCM project which is submitted to and approved by the JC.

### **Proposed Methodology**

- Proval.
- Tonsists of Proposed Methodology Form and Proposed Methodology Spreadsheet.

### Proposed Methodology Spreadsheet

Defines a monitoring plan and enables calculation of GHG emission reductions automatically through inputting values.
 Consists of an input sheet and calculation process sheet.

### Input sheet

Contains all the parameters to be monitored *ex post*, projectspecific parameters to be fixed *ex ante* by the PPs (e.g. historical data) as well as the default factors which can be changed by the PPs. For each parameter, the methodology proponents fill in all the required fields, except for those of the inputted values.

### Calculation Process Sheet

Contains all the default values which cannot be changed by the PP, calculation process to derive reference emissions and project emissions, and the resulting emission reductions.

## Approved methodology

- A methodology that has been approved by the JC for application to JCM projects.
- Consists of an approved methodology document and a Monitoring Spreadsheet.

### Monitoring spreadsheet

Consists of a Monitoring Plan Sheet, Monitoring Structure Sheet, and Monitoring Report Sheet.

Monitoring Plan sheet	Monitoring Structure Sheet	Monitoring Report Sheet
Used for developing a monitoring plan	Used before validation for developing an	Used for preparing a monitoring report
and calculating emission reductions	operational and management structure	and calculating emission reductions ex
ex ante.	to be implemented for monitoring;	post.

The Monitoring Plan Sheet and Monitoring Report Sheet include input sheet and calculation process sheet which are prepared based on the Proposed Methodology Spreadsheet. The Monitoring Structure Sheet is added by the JCM secretariat after the approval of the proposed methodology by the JC.

## BOX: JCM Guidelines for Developing Proposed Methodology (Methodology Guidelines) [GL PM ver.1]

- These guidelines are intended to assist each side or methodology proponents in preparing proposed methodologies for the
  - JCM and referred to by the JC in developing and assessing proposed methodologies.

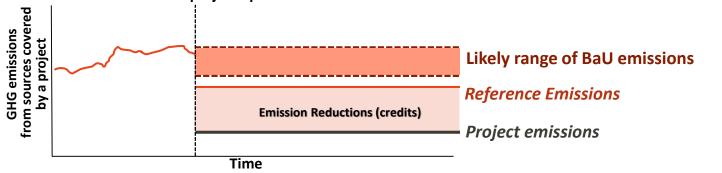
# **4-2. Reference emissions**

[GL PM ver.1, para 7] [Glossary ver.1, No.5-8]

♦ In the JCM, emission reductions to be credited are defined as the difference between *reference emissions* and *project emissions*.

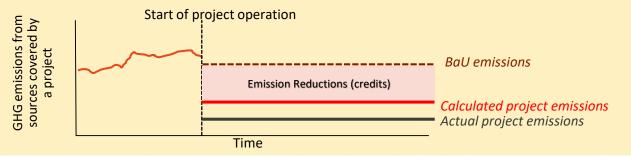
- ♦ The reference emissions are:
- Calculated to be below business-as-usual (BaU) emissions which represent plausible emissions in providing the same outputs or service level of the proposed JCM project in the Kingdom of Thailand.
- Calculated by multiplying a crediting threshold which is typically expressed as GHG emissions per unit of output by total outputs.
  - Crediting threshold is typically expressed as GHG emissions per unit of output and is 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.

Figure: Indicative diagram of the relationship between the BaU emissions, reference emissions and project emissions Start of project operation



### BOX: Alternative way to realize net reduction [GoJ Jul 2018]

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.



# 4-3. Eligibility criteria

[GL PM ver.1, para 9] [Glossary ver.1, No.3]

- Eligibility criteria are requirements for the JCM project defined in the JCM methodology and contain the followings:
  - (a) Requirements for the project in order to be registered as a JCM project.
  - (b) Requirements for the project to be able to apply the JCM methodology.

## **BOX: Eligibility criteria**

- Eligibility criteria is: [GoJ July 2018]
  - The clearly defined in the methodology, can reduce the risks of rejection of the projects proposed by PPs.
  - A "check list" will allow easy determination of eligibility of a proposed project under the JCM and applicability of JCM methodologies to the project.
  - Both Governments determine what technologies, products, etc. should be included in the eligibility criteria through the approval process of the JCM methodologies by the JC.
  - PPs can use the list of approved JCM methodologies when applying for the JCM project registration.

## Examples:

- (a) 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
  - Series Example
    - ✓ 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>

- (b) Requirements for the project to be able to apply the approved methodology
  - Series Example
    - ✓ 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
  - Same as "applicability condition of the methodology" under the CDM

# 4-4. Methodology development

[GL PM ver.1, para 12, 13, 15, 17-18] [PCP ver.2, para 6-7]

- Methodology proponents provide supporting documents to justify key logical and quantitative assumptions regarding the choice of eligibility criteria, default values and establishment of reference emissions.
- ◆ The Japanese side, the Thai side or PPs may prepare a proposed methodology and submit it.
- The proposed methodology:
- Describes the procedures in a manner that is sufficiently explicit to enable the methodology to be used, be applied to projects unambiguously, and be reproduced by a third party;
- Is possible for projects following the methodology to be subjected to JCM validation and/or verification;
- Includes all algorithms, formulae, and step-by-step procedures needed to apply the methodology and validate the project, i.e. calculating reference emissions and project emissions;
- Provides instructions for making any logical or quantitative assumptions that are not provided in the methodology and is made by the methodology user;
- Avoids the intentional increase of credits caused by perverse incentives (e.g. when an increase in output is triggered by incentive to increase credits).

The Proposed Methodology Form and the Proposed Methodology Spreadsheet are completed in English language.
 The Proposed Methodology Form is not altered, that is, is completed without modifying its format, font, headings. If sections of the Proposed Methodology Form are not applicable, it is explicitly stated that the section is left blank on purpose.
 The presentation of values in the Proposed Methodology Form and the Proposed Methodology Spreadsheet should be in international standard format (e.g. 1,000 representing one thousand and 1.0 representing one). The units used should be accompanied by their equivalent S.I. units/norms (thousand/million) as part of the requirement to ensure transparency and clarity.

### The JCM sectoral scope

[GL PM ver.1 Annex I]

defines the category of GHG source sectors or groups of activities that apply to JCM projects. A JCM project may fall within more than one sectoral scope:

- Energy industries (renewable / nonrenewable sources);
- 2. Energy distribution;

- 3. Energy demand;
- 4. Manufacturing industries;
- 5. Chemical industry;
- 6. Construction;
- 7. Transport;
- 8. Mining/Mineral production;
- 9. Metal production;
- 10. Fugitive emissions from fuels (solid, oil and gas);
- 11. Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride;
- 12. Solvents use;
- 13. Waste handling and disposal;
- 14. Afforestation and reforestation;
- 15. Agriculture

#### 4-5. Procedure for submission of a proposed methodology [PCP ver.2, para 6-25] Methodology proponents **Secretariat** JC Submission (1) Prepare a proposed methodology and (2) Notifies the receipt of the submission to the (1') Develop a proposed methodology under submits it to the JC (through the methodology proponents by electronic the initiative of the JC secretariat) for its approval by means. electronic means. The proposed methodology consists Completeness check (within 7 calendar days) of 1) the completed "JCM Proposed Methodology Form" and 2) "JCM (3) Checks whether the proposed Proposed Methodology Spreadsheet methodology is complete and Form", containing the Input Sheet communicates the result to the and Calculation Process Sheet, both methodology proponents within 7 calendar of which are developed in line with days after the receipt of the submission. the Methodology Guidelines. The submission may be Complete accompanied by additional documents which help explain the Incomplete methodology. (4') If the submission is deemed incomplete, the secretariat notifies the methodology proponents of the reason. (4'-1) May resubmit any proposed methodology that has been assessed as incomplete by the secretariat. Such Public comments (15 calendar days) submission addresses the reasons for incompleteness stated by the secretariat (4) After the submitted proposed methodology is deemed to satisfy the completeness check, promptly makes the methodology publicly available for public comments through the JCM website. The duration of call for public inputs is 15 calendar days. (5) The secretariat makes all received comments publicly available through the JCM website.

### 4-5. Procedure for submission of a proposed methodology

**Methodology proponents Secretariat** JC Assessment (within 60-90 calendar days) Review of a proposed methodology Receives the outcome of the secretariat's (8) (6) Reviews the proposed methodology view and considers the proposed based on, but not limited to, the materials methodology submitted by the methodology proponents and the received comments (8)' May interact with the methodology in line with Methodology Guidelines. proponents on specific issues regarding the proposed methodology. (6)' May interact with the methodology proponents on specific issues regarding The outcome of the consideration is as (9)the proposed methodology. follows: (a) Approval of the proposed methodology; (b) Approval of the (6)" May delegate part of the work of the proposed methodology with revisions; (c) work of review to external experts and/or Non-approval of the proposed a panel independent from methodology methodology. proponents, as appropriate. (7) Upon the completion of the review, the (10) Should conclude the consideration within secretariat notifies the methodology 60 calendar days from the closing of the proponents and submits the outcome to secretariat review. the JC. If this is deemed not possible due to matters such as ongoing clarifications, then Non-approval (10') May resubmit any proposed the secretariat notifies the methodology methodology that has been assessed as proponents of the status of discussion Making methodology publicly available incomplete by the secretariat or has not within 60 calendar days from the closing of (within 5 calendar days) been approved by the JC. Such secretariat review, and the JC should (10) Makes publicly available the outcome submission addresses the reasons for conclude the consideration no later than 90 of the consideration, as well as relevant incompleteness stated by the secretariat calendar days from the closing of the information on the approved and non-approval stated by the JC. secretariat review. methodology, which consists of approved methodology document and Monitoring

Spreadsheet, through the JCM website

within 5 calendar days from the date of

decision by the JC.

(9) Upon conclusion of consideration, the secretariat notifies the outcome of consideration to the methodology proponents, with its reasons.

# 4-6. Procedure for revision of an approved methodology

[PCP ver.2, para 77-89]

→

# **Methodology proponents**

Submission

 May request the JC to revise an approved methodology by submitting the completed "JCM Approved Methodology Revision Request Form" highlighting all proposed changes.

The submission may be accompanied by additional documents which help explain the proposed revision.

# BOX: Putting on hold of an approved methodology

[PCP ver.2, para 90]

In case new or better comprehension of scientific evidence indicates that emission reductions may be overestimated based on the approved methodology, or there are identified inconsistencies, errors and/or ambiguities in the approved methodology, the JC may put on hold an approved methodology at any time. In this case, the JC decides to either:

- (a) Put on hold the approved methodology with immediate effect. In this case, PPs do not submit any draft PDD for public comments or any request for registration of a project applying the methodology, from the day following the date of publication of the JC's decision through the JCM website; or
- (b) Put on hold the approved methodology with a grace period of 28 calendar days. In this case, PPs do not submit any request for registration of a project applying the methodology any more than 28 calendar days following the date of publication of the JC's decision through the JCM website.

# Secretariat

(2) Notifies the receipt of the submission to the methodology proponents by electronic means.

Completeness check (within 7 calendar days)

(3) Conducts a completeness check of the submission in the same procedure as described in 4-5

(4) In parallel with the completeness check, the secretariat also assesses the nature and complexity of the proposed revision and classify them as follows:

- (a) Substantive revision proposal: Substantive changes to the approved methodology including changes in eligibility criteria, calculation and monitoring methods and parameters; or
- (b) Editorial revision proposal:
   Correction of misstatements and editorial revisions to improve the clarity of the approved methodology

Public input (15 calendar days)

(5) Upon conclusion of the completeness check and the assessment of the proposed revision by the secretariat, all substantive revision proposals referred to in 4(a) above, including those under the initiative of JC, are subject to public inputs procedure as described in 4-5.

Makes methodology publicly available (within 5 calendar days)

(6) Makes publicly available all approved revised methodologies through the JCM website within 5 calendar days from the date of decision by the JC.

# JC

- (1)' May request the methodology
   proponents to submit additional
   documents including a draft PDD to
   which the proposed revised methodology
   is applied.
- (1)"Methodologies may also be revised under the initiative of the JC
- (5)' Upon conclusion of the completeness check and the assessment of the proposed revision by the secretariat, all editorial revision proposals referred to in paragraph 4(b) on the left, including those under the initiative of the JC, are reflected as appropriate by the secretariat after approval by the Joint Committee. The secretariat makes the revised methodology publicly available through the JCM website.

The revision of an approved methodology has no effect on projects which have started the public inputs for draft PDDs applying the previous version of the revised methodology.

Consideration of the substantive revision proposals is conducted in the same procedure as described in 4-5

PPs may apply the approved revised methodology in projects seeking validation after the date on which the revised version is approved.

# Chapter 5. Making project design document (PDD)

# 5-1. Making PDD [GL PDD ver.2, para 3, 9-22]

- Project design document (PDD) is prepared by the PP of a JCM project and sets out in detail, in line with the JCM guidance and guidelines, the JCM project which is to be realized.
- When designing a proposed JCM project and developing a PDD and a monitoring report, PPs apply PDD and Monitoring Guidelines and the selected methodology(ies), which contain(s) approved methodology document(s) and Monitoring Spreadsheet(s).
- PPs conduct the implementation and monitoring of registered JCM projects in accordance to the approved PDD.

### PDD

Consists of a completed PDD form and monitoring plan using Monitoring Plan Sheet and Monitoring Structure Sheet. A monitoring report is completed by using Monitoring Report Sheet.

PDD form		Mo	Monitoring plan		,	
JCM Project Design Doc	cument Form ver.2			Monitoring Plan Sheet	Monitoring Structure Sheet	

- The PPs provide a description of the project that provides a comprehension of the nature of the project and its implementation.
- The PPs monitor the registered JCM project and its emission reductions. The PPs establish and apply quality management procedures to manage data and information. The PPs should reduce, as far as is practical, uncertainties related to the quantification of emission reductions.
- The Monitoring Spreadsheet may be revised when the corresponding approved methodology is revised.
- The PDD form and the Monitoring Spreadsheet are completed in English language.
- The PDD form and the Monitoring Spreadsheet are not to be altered, that is, are to be completed without modifying its format, font, headings, except for rows added to the table in the Annex of the PDD form.
- Where a PDD contains information that the PPs wish to be treated as confidential or proprietary, the PPs are required to submit documentation in two versions: (1) One version where all parts containing confidential or proprietary information are made illegible, and (2) Another version containing all information that is to be treated as strictly confidential or proprietary by all parties handling this documentation.
- Description related to application of the eligibility criteria and the environmental impact assessment is not considered confidential or proprietary.
- The presentation of values in the PDD, including those used for the calculation of emission reductions, should be in international standard format, accompanied by their equivalent S.I. units/norms as part of the requirement to ensure transparency and clarity.
- The starting date of a JCM project is the date on which the operation of a project begins. Expected operational lifetime may be explained with publicly available statistical data, reference data from similar projects, legal durable years, expert judgement, etc.

BOX: JCM Guidelines for Developing PDD and Monitoring Report (PDD and Monitoring Guidelines) [GL PDD ver.2]

Section of the sectio

A monitoring plan sets out the methodology to be used by PPs for the monitoring of, and by TPEs for verification of the amount of GHGs emission reductions achieved by the JCM project. PPs develop before validation a monitoring plan using Monitoring Plan Sheet and Monitoring Structure Sheet in the corresponding Monitoring Spreadsheet of the methodology applied.

### **Requirements to PPs**

PPs:

- Input estimated values for each parameter in the Monitoring Plan Sheet including those fixed ex ante for parameters not to be monitored.
- Describe the items written on the right for each parameter specified in the Monitoring Plan Sheet in line with the applied methodology(ies) and may add detailed information specific to the proposed project to the contents given in the applied methodology.
- Ensure that data monitored and required for verification and issuance be kept and archived electronically for two years after the final issuance of credits.
- Describe the operational and management structure to be implemented in order to conduct monitoring. The PPs establish and clearly indicate the roles and responsibilities of personnel, institutional arrangements, and procedures for data collection, archiving and reporting.
- Appoint a person who is responsible for overall monitoring activity including preparation of the monitoring report, and managing and archiving of data. The responsible person for monitoring:
  - (a) Ensures the quality of the monitoring report and the structure and procedure for producing such a document;
  - (b) Appoints a person(s) responsible for managing monitoring points, when necessary, to collect data and maintain and control measuring instruments (including calibration/regular inspection) at monitoring points.
- After the first submission of the monitoring report for the first issuance of credits, prepare and submit a progress report to update the current status of the project to the secretariat annually through the project lifetime by using the template of a monitoring report for preparing the progress report

Items to be described by the PPs:

- (a) Estimated values: Provide the estimated values of the parameter for the purpose of calculating emission reductions *ex ante*;
- (b) Monitoring option: Select an option from below;
  - (i) Option A: Based on public data which is measured by entities other than the PPs (Data used: publicly recognized data such as statistical data and specifications);
  - (ii) Option B: Based on the amount of transaction which is measured directly using measuring equipment (Data used: commercial evidence such as invoices);
  - (iii) Option C: Based on the actual measurement using measuring equipment (Data used: measured values).
- (c) Source of data: Provide the source of data used or to be used. Clearly indicate the type of data source (e.g. logbooks, daily records, surveys, etc.) and spatial level of data (e.g. local, regional, national, international), if applicable;
- (d) Measurement methods and procedures: Describe how the parameters are to be measured/calculated including Quality Assurance/Quality Control procedures applied. If the parameter will be measured, describe the equipment to be used to measure it, including details on accuracy level, and calibration information (frequency, date of calibration and validity)
- (e) Monitoring frequency: Describe the monitoring frequency (e.g. continuously, annually).

# 6. Registration

# 6-1. Validation requirements [GL VV ver.1, para 18-81] [Glossary ver.1, No.27]

- Validation is the process of independent evaluation of a proposed JCM project by a TPE against VV Guidelines as developed by the JC on the basis of the PDD.
- ♦ The TPE:
  - (a) Determines whether the proposed JCM project complies with the requirements of the applied methodology(ies), VV Guidelines and decisions by the JC;
  - (b) Assesses the claims and assumptions made in the PDD and MoC. The evidence used in this assessment is not limited to that provided by the PPs.
- The validation report gives an overview of the validation conclusions and the validation process used by the TPE.
- General requirements: The TPE assesses the information provided by the PPs and applies the means of validation specified throughout VV Guidelines, including but not limited to document review, follow-up actions (e.g. on-site visit and interviews) as deemed necessary, and reference to available information relating to projects or technologies similar to the proposed JCM project under validation. Where no specific means of validation is specified, the TPE applies appropriate auditing techniques.
- PDD form: The TPE determines whether the PDD was completed using the latest version of the PDD forms appropriate to the type of project and drafted in line with the PDD and Monitoring Guidelines.
- Project description: The TPE determines whether the description of the proposed JCM project in the PDD is accurate, complete, and provides an understanding of the proposed JCM project.
- Application of approved methodology(ies): The TPE validates that the project is eligible for applying selected methodology and that the applied version is valid at the time of submission of the proposed JCM project for validation.
- Emission sources and calculation of emission reductions: The TPE determines whether all relevant GHG emission sources covered in the methodology are addressed for the purpose of calculating project emissions and reference emissions for the proposed JCM project. The TPE determines whether the values for project specific parameters to be fixed *ex ante* listed in the Monitoring Plan Sheet are appropriate, if applicable.

- Environmental impact assessment: The TPE determines whether the PPs conducted an environmental impact assessment, if required by the Kingdom of Thailand, in line with the Thailand procedures.
- Local stakeholder consultation: The TPE determines whether the PPs have completed a local stakeholder consultation process and that due steps were taken to engage stakeholders and solicit comments for the proposed project.
- Monitoring: The TPE determines whether the description of the monitoring plan is based on the approved methodology and/or PDD and Monitoring Guidelines. The TPE determines whether the monitoring points for measurement are appropriate, as well as whether the types of equipment to be installed are appropriate if necessary.
- Public inputs: The TPE ensures that all inputs on the PDD of the proposed JCM project submitted in line with the PCP are taken into due account by the PPs..
- ♦ MoC: The TPE validates the corporate identity of all PPs and a focal point included in the MoC, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories. The TPE validates that the MoC has been correctly completed and duly authorized.
- Avoidance of double registration: The TPE determines whether the proposed JCM project is not registered under other international climate mitigation mechanisms.
- Start of operation: The TPE determines whether the start of the operating date of the proposed JCM project does not predate January 1, 2013.

Solution Normative references [GL VV ver.1, para 4]

The following referenced documents are indispensable for the application of VV Guidelines:

(a) "ISO 14064-3:2006 Greenhouse gases -- Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions"

(b) Joint Crediting Mechanism Project Cycle Procedure (PCP)

(c) PDD and Monitoring Report

### BOX: Items coverage on JCM VV Guidelines and ISO 14064-3

	Items	JCM VV Guidelines	ISO14064-3			JCM VV Guidelines	ISO14064-3
	Objectives	1	Introduction		Objectives	1	Introduction
	Scope and applicability	2, 3	1	General Items		2,3	1
General Items	Normative references	4	-	Validation	Normative references Identifying issues and raising requests	22-27	
General items	Terms and definitions	5-11	2			29-73, 77-80, 81	4.9
	Roles and responsibilities	Gfl 25-26, 32-33		requirements	Verification issues	2575,7700,01	4.5
	Principles		3		Compliance of the project		
	ТРЕ	13-15	4.1	i	implementation with the eligibility	102-104	4.7
General	General validation and verification	16			criteria of the applied methodology Assessment of the project		
validation and	requirements				implementation against the registered	105-107	_
verification	Validation approach	18	4.2, 4.4		PDD or any approved revised PDD	105-107	_
procedures	Means of validation	12, 19-21	4.2, 4.4		Compliance of calibration frequency		
procedures	Verification approach	82-86	4.2, 4.4	Verification requirements	and correction of measured values with	108-113	-
	Means of verification	12, 90-92	4.2, 4.4	requirements	related requirements		
	Level of assurance	99 (verification)	4.3.1		Assessment of data and calculation of	114-116	4.5-4.8
Development	Materiality	100-101(verification)	4.3.5		GHG emission reductions Assessment of avoidance of double		
Development of validation	Scope	-	4.3.4	re	registration	117-120	-
and	Understanding project activities and				Post registration changes	121-125	-
verification	project implementation environment	-	4.4.1		Identifying issues and raising requests	93-98	-
plans	Risk assessment	-	4.4.1		Verification report	126-128	4.9
	Sampling	17	4.4.3	1	Judgment of reliance on internal	-	4.5
	Items to be planned	-	4.4.2	Evaluation of	control	87-89 verification	
	Validation issues			validation or	Quality of evidence	only	4.6
	Project design document form	28, 29	-		Assessment against validation or		
	Project description	30-32	-	results	verification criteria	-	4.7
	Application of approved	33-37	A.2.4.6.2 A.2.6.1		Evaluation of the GHG assertions	-	4.8
	methodology(ies)	55-57	A.2.4.0.2 A.2.0.1		Validation or verification opinions	-	4.9
	Emission sources and calculation of	38-46	A.2.4.6.2 A.2.6.1		Quality control review regarding validation or verification engagement	-	A.2.2.5 ISO65 8.5
	emission reductions	30-40	A.2.4.0.2 A.2.0.1	QA/QC	Recording and retention	_	4.1
Validation	Environmental impact assessment	47-49	-		Facts discovered after the validation or	-	
requirements		50-52	-		verification	-	4.11
	Monitoring	53-56	A.2.4.6.2 A.2.6.1		·		
	Public inputs	57-60	-				
	Modalities of communications	61-69	-				
	Avoidance of double registration	70-73	-				
	Start of operation	74-76	-				
	Identifying issues and raising requests	22-27	-				
	Validation report	29-73, 77-80, 81	4.9				

## 6-2. Publication of PDD

### [PCP ver.2, para 34-42,50-52]

PPs

### Submission

(1) Prepare a draft PDD, which consists of a completed PDD Form, monitoring plan, in line with the PDD and Monitoring Guidelines, and submit them together with a MoC and supporting documentation, as appropriate, to the TPE contracted by the PPs to perform validation of the project and to the JC for public comments.

# TPE

- (2)' In line with the VV Guidelines, validates the MoC and the proposed JCM project as described in the draft PDD, prepares a validation report using the "JCM Validation Report Form" and sends the report to the PPs.
- (6) Checks the authenticity and relevance of this information on the name and contact
   details of the submitters in case of doubt.

### **BOX: Validation and verification**

Validation and verification can be conducted either simultaneously or. Separately. When the PPs apply for validation and verification simultaneously, all sections of the draft PDD and the draft monitoring report are completed prior to submission. (2) Issues a unique reference number to the JCM project submitted to the JC for public comments.

(3) Notifies the receipt of the submission and the unique reference number to the project participant who has submitted the draft PDD and MoC.

# Public comments (30 calendar days)

(4) Upon notifying the receipt of the submission, the secretariat makes the draft PDD publicly available through the JCM website for public comments. The duration of call for public comments on the draft PDD is 30 calendar days subsequent to the publication of the draft PDD. The secretariat informs the PPs and the TPE of the location of the draft PDD on the JCM website and the opening and closing dates of the duration of call for public comments.

### **BOX: Public comments**

Public comments are submitted through electronic means specified on the JCM website. The submitters of the comments provide the name and contact details of the individual or organization on whose behalf the comments are submitted.

# Secretariat

- (5) Makes the following information publicly available through the JCM website;
  - (a) The name of the proposed JCM project;
  - (b) The location of the proposed JCM project including coordinates;
  - (c) The names of the all project participants listed in the draft PDD of the proposed JCM project;
  - (d) The name of the TPE which conducts validation (and verification) for the proposed JCM project;
  - (e) The estimated annual GHG emission reductions or removals indicated in the draft PDD;
  - (f) The approved methodology(ies) being applied to the proposed JCM project;
  - (g) The proposed start date and length of the expected operation period.

(7) Makes the inputs publicly available through the JCM website where the draft PDD is displayed, and removes those that the TPE has determined to be unauthentic.

<sup>6-3.</sup> Procedures for requests for registration

# **6-3. Procedures for requests for registration**

[PCP ver.2, para 53-60, 93-97]

## PPs

### Submission

- After receiving a positive validation opinion by the TPE, may request for registration of the proposed JCM project. When requesting for registration, the PPs submit the completed "JCM Project Registration Request Form", the validated PDD, MoC, and validation report with other supporting documents, as appropriate, by electronic means.
- (3)" Submit the requested documents and/or information within 7 calendar days of receipt of the request.

- (4)" In this case, the PPs may re-submit the request for registration with revised documentation as described in (1).
- (6)" May re-submit the request for registration with revised documentation in line with (1), if the reasons for the rejection can be addressed by means of a validation report revised by the TPE, based on a revised PDD as appropriate. In this case, the PPs justify that the re-submission falls under such case.

# Secretariat

(2) Notifies receipt of the request and maintains a publicly available list of all submitted requests for registration through the JCM website.

# Completeness check (within 7 calendar days)

- (3) Upon receiving the request for registration, conducts within 7 calendar days a completeness check to determine whether the request for registration submission is complete. During the completeness check, if the secretariat identifies issues of an editorial nature, it requests PPs by electronic means, copying the TPE, to submit the missing or revised documents and/or information.
- (3)" If PPs do not submit the requested documents and/or information by this deadline, concludes that the request for registration is incomplete. The secretariat conducts completeness check within 7 calendar days from the date of the receipt of the requested documents and/or information.
- (4) Upon conclusion of the completeness check, notifies the PPs and the TPE of the conclusion of the completeness check.
- (4)' If the request for registration does not meet the requirements of the completeness check, communicates the underlying reasons to the PPs and the TPE, and makes them publicly available through the JCM website.

# JC

Registration decision by JC

- (5) Upon positive conclusion of the
- completeness check, decides to register the proposed JCM project.

Makes the project information publicly available

- (6) When the JC decides to register the proposed JCM project, the secretariat notifies each side, the PPs and the TPE of the registration and makes publicly available the relevant information on the JCM project through the JCM website.
- (6)' If the JC decides to reject the request for registration, the secretariat notifies each side, the PPs and the TPE of the rejection and its reasons and makes publicly available the decision with its reasons through the JCM website.

# **Chapter 7. Post-registration activities**

# 7-1. Changes to registered JCM project

[PCP ver.2, para 98-114]

When the project has been changed from the registered PDD and/or methodology, those changes are classified into the followings: (a) Changes determined by the TPE that do not prevent the use of the applied methodology;

- - The PPs revise the PDD and submit it for the first issuance request subsequent to the revision.
- (b) Changes identified by the PPs prior to verification or by the TPE during verification that would prevent the use of the applied methodology; The PPs proceed to obtain approval of changes by the Joint Committee with the process described below.
- (c) Changes identified by the PPs or determined by the TPE that prevent the use of the applied methodology.
  - The PPs withdraw the project in line with section 9. The PPs may re-submit a request for registration for the withdrawn project in line with 6-2.

**PPs** 

### Submission

(1) Submit a completed "JCM Post-Registration Changes Request Form" and a revised PDD to the secretariat by electronic means.

- (7") If the request for approval of changes is not approved, the PPs withdraw the project in line with section 9 or revise the PDD and submit a revised draft PDD to the TPE for validation and to the JC for public inputs, notifying the reference number which has already been issued to the registered JCM project.
- (7) If the request for approval of changes is approved with guidance which requests further revision of the revised PDD by the JC, the PPs revise the PDD in line with the guidance and submit to the JC the revised PDD reflecting the guidance.

### (2) Prepares and maintains a publicly available list of all submitted requests for approval of changes through the JCM website.

Secretariat (JC)

(4') If the secretariat, during the preparation of the summary note, identifies issues that require inputs from a relevant expert, it seeks guidance from the expert. In this case, the secretariat, notwithstanding the provisions in (3) and (4) above, finalizes the summary note and sends it to the Co-Chairs within 14 calendar days of receipt of the inputs from the expert.

Approval decision by JC

(5)Upon confirmation of the summary note by the Co-Chairs, the summary note is distributed to the JC, and the JC decides whether to approve the request.

Makes the revised PDD publicly available

(8) Makes the revised PDD publicly available through the JCM website as the registered PDD.

This version of the registered PDD is applied for future requests for issuance of credits.

Completeness check (within 7 calendar days)

(3) Upon receipt of the request for approval of changes, the secretariat conducts within 7 calendar days the completeness check to determine whether the request for approval of changes is complete.

Summary to Co-Chair (within 14 calendar days)

- (4) Upon positive conclusion of the completeness check of the request for approval of changes, the secretariat, within 14 calendar days, prepares and sends to the Co-Chairs a summary note on the request with a recommendation on the course of action, or with a notification that the case will be considered by the JC.
- (6) Informs the PPs of the decision and any guidance provided by the JC as applicable, and makes the decision and guidance publicly available through the JCM website.
- (7') If the request for approval of changes is approved without guidance, the secretariat makes the revised PDD publicly available through the JCM website as the registered PDD.

# 7-2. Changes to registered MoC

PPs of the JCM project requests changes to the contents of the registered MoC to the secretariat as soon as possible after the changes become effective.

### Requirements

- In case of requesting for changes to the contents of the registered MoC, PPs submit a new MoC using the latest version of the MoC Form to the secretariat by electronic means.
- PPs may request for changes to the contents of the registered MoC by using the previous version of the MoC Form within the grace period of 6 months from the date of publication of a new version. The secretariat does not accept the previous version after the grace period of 6 months.
- PPs who submit a new MoC ensure that:

(a) Supporting documentation, including powers of attorney, or extracts from board meeting minutes or company association documentation, or extracts/certificates from national company registries that cannot be verified online, is dated or notarized within 2 years from the time of submission of a request for change to established modalities of communication. This time limitation does not apply to copies of national personal identity documents;
(b) To the extent possible, changes applicable to more than one JCM project or multiple changes affecting the same JCM project are consolidated in a single form.

Legal representatives signing on behalf of PPs provide written evidence that they are authorized to sign on behalf of the respective entities.

The secretariat

- Requests a new submission of a MoC whenever the secretariat identifies inconsistencies or inaccuracies in a registered MoC.
- May request additional clarification and/or documentation if submissions do not clearly provide evidence.
- Displays the updated MoC including its annex 1 as necessary and their effective dates on the JCM website.

# Changes to focal point

- Any of the PPs for a registered JCM project may change the designation of the focal point for any reason and at any time by submitting a new MoC signed by all PPs using the latest version of the MoC Form to the secretariat by electronic means.
- The legal representative of a PP may sign on behalf of the authorized signatories if the primary and alternate authorized signatories of the PP concerned are no longer available.

## Changes to PPs

- If the PPs of a registered JCM project have changed after the registration of the project, the PPs submit a completed annex 1 of the MoC Form for each of the following changes:
  - (a) Addition of a PP;
  - (b) Changes related to entity names/legal status;
  - (c) Withdrawal of a PP. If a PP has ceased operations due to bankruptcy or other reasons and is unable to sign the MoC Form, the submission is accompanied by documented evidence of the cessation;
  - (d) Changes related only to contact details and specimen signatures.
- A PP added to a registered JCM project accepts the existing MoC unless a new MoC is submitted simultaneously.

# **Chapter 8. Issuance of credits**

# **8-1. Verification requirements**

[GL VV ver.1, para 6, 82-128]

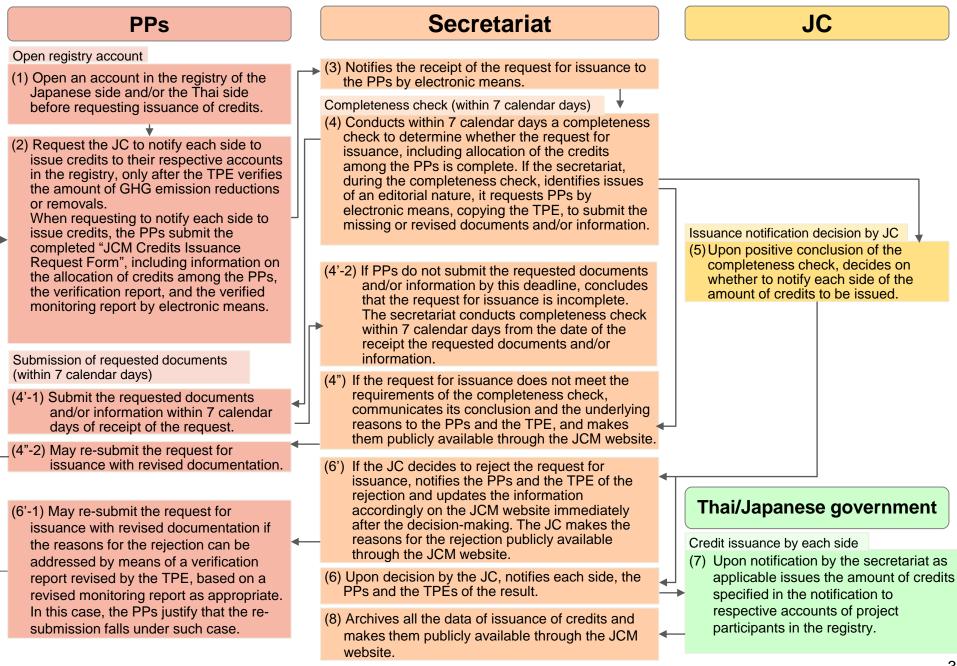
- Verification is the periodic independent review and *ex post* determination by a TPE of the monitored GHG emissions reductions as a result of a registered JCM project during the verification period.
- A TPE determines whether the project complies with the requirements of the applied methodology(ies), these Guidelines (GL VV ver.1), and decisions by the JC.
- The verification report gives an overview of the verification conclusions and the verification process used by the TPE. All verification findings are identified and justified.

General requirements:     Main focus of verification are given to the assessment of:	Compliance of the project implementation with the eligibility criteria of the applied methodology
(a) The eligibility criteria which are stipulated in the applied	The TPE determines the conformity of the actual project and its
methodology of implemented projects are satisfied;	operation with the eligibility criteria of the applied methodology.
<ul> <li>(b) The data used in monitoring reports is credible and reliable;</li> <li>(c) Double registration is available;</li> </ul>	<ul> <li>Assessment of the project implementation against the registered</li> <li>RDD or any approved revised RDD</li> </ul>
<ul><li>(c) Double registration is avoided;</li><li>(d) There are no post registration changes which prevent the use of</li></ul>	<ul> <li>PDD or any approved revised PDD</li> <li>Compliance of calibration frequency and correction of measured</li> </ul>
the applied methodology.	values with related requirements
The TPE reviews:	If monitoring of parameters related to the GHG emissions reductions
(a) The registered PDD, including any approved changes from the	of a project has been conducted by measuring equipment
registered PDD and the corresponding validation opinion;	(monitoring Option C defined in the PDD and Monitoring Guidelines),
(b) The validated PDD in case validation and verification are	the TPE determines whether the measuring equipment has been
conducted simultaneously and the corresponding validation	properly calibrated in line with the monitoring plan and whether
opinion; (c) The validation report;	measured values are properly corrected, where necessary, to calculate emission reductions in line with the PDD and Monitoring
(d) Previous verification reports, if any;	Guidelines.
(e) The applied methodology;	◆ Assessment of data and calculation of GHG emission reductions
(f) Monitoring report to verify that it is as per the corresponding	The TPE assesses the data and calculations of GHG emission
Monitoring Report Sheet to the applied methodology;	reductions achieved by/resulting from the project by the application
(g) Any other information and references relevant to the project's	of the selected approved methodology.
emission reductions;	◆ Assessment of avoidance of double registration
<ul> <li>(h) Written confirmation of the avoidance of double registration.</li> <li>The TPE assesses the information provided by the PPs and applies</li> </ul>	The TPE determines whether the project is not registered under other international climate mitigation mechanisms.
the means of verification specified throughout VV Guidelines,	◆ Post registration changes
including but not limited to document review and on-site assessment.	The TPE determines whether there are post registration changes
Where no specific means of verification is specified, the TPE applies	from the registered PDD and/or methodology which prevent the use
appropriate auditing techniques.	of the applied methodology.
	I for varification in line with ISO 14064 2:2006
Level of assurance: The TPE applies the reasonable assurance leve Materiality: The TPE uses the concept of materiality for verification in	line with ISO 14064-3:2006. The threshold of materiality for verification is

set at five (5) percent of emission reductions.

# 8-2. Procedures for requests for issuance of credits

[PCP ver.2, para 66-76, 128-132]



# JCM in Charts for Thailand ver.1.0

# **Chapter 9. Withdrawal**

# 9-1. Procedures for requests for withdrawal

# PPs

- (1) The PPs may voluntarily withdraw a proposed or registered JCM project at any time. In such case, the PPs submit a completed "JCM Project Withdrawal Request Form" using the latest version of that form to the JC by electronic means.
  - (a) For each following cases, the PPs submit a completed "JCM Registration Request Withdrawal Form" to the JC by electronic means:
    - (i) The PPs voluntarily wish to withdraw a request for registration;
    - (ii) The TPE has revised its validation opinion based on new insights or information and has notified it to the PPs.
  - (b) For each following cases, the PPs submit a completed "JCM Issuance Request Withdrawal Form" to the JC by electronic means:
    - (i) The PPs voluntarily wish to withdraw a request for issuance for the specified monitoring period;
    - (ii) The TPE has revised its verification report based on new insights and has notified it to the PPs.

# Secretariat

- (2) Upon receipt of the request for withdrawal, the secretariat confirms the documents submitted.
- (3) Upon confirmation by the secretariat:

[PCP ver.2, para133-138]

- (a) For a withdrawal of a project, the project is marked as "withdrawn" on the JCM website;
- (b) For a withdrawal of a request for registration, the request for registration is marked as "withdrawn" on the JCM website;
- (c) For a withdrawal of a request for issuance, the request for issuance for the specified monitoring period is marked as "withdrawn" on the JCM website.

# Glossary

## Examples of abbreviated titles used in this document and corresponding formal document symbols and titles

Examples of abbreviated titles used in this charts, shown in []	Corresponding formal document symbols and titles
BC., para 1	Bilateral Cooperation on the Joint Crediting Mechanism for the Low Carbon Growth Partnership between Japan and the Kingdom of Thailand, <b>para</b> graph 1
JC1, p1	Joint Committee of the Joint Crediting Mechanism between Thailand and Japan First Meeting, Meeting report, <b>p</b> age 1
GoJ Jul 2018	Government of Japan "Recent Development of the Joint Crediting Mechanism", July 2018
Rol ver.2, para1	Rules of Implementation for the Joint Crediting Mechanism (JCM) Version 2.0, paragraph 1 (ver.2 was adopted on 21 August 2017)
Glossary ver.1, No. 1	Joint Crediting Mechanism <b>Glossary</b> of Terms <b>Ver</b> sion <b>1</b> , <b>No. 1</b> (ver.1 was adopted on 23 August 2016)
PCP ver.2, para1	Joint Crediting Mechanism Project Cycle Procedure Version 2.0, paragraph 1 (ver.2 was adopted on 21 August 2017)
GL PM ver.1, para1	Joint Crediting Mechanism Guidelines for Developing Proposed Methodology Version 1.0, paragraph 1 (ver.1 was adopted on 29 January 2016)
GL PDD ver.2, para1	Joint Crediting Mechanism Guidelines for Developing Project Design Document and Monitoring Report Version 2.0, paragraph 1 (ver.2 was adopted on 21 August 2017)
GL TPE ver.1, para1	Joint Crediting Mechanism Guidelines for Designation as a Third-Party Entity Version 1.0, paragraph 1 (ver.1 was adopted on 29 January 2016)
GL VV ver.1, para1	Joint Crediting Mechanism Guidelines for Validation and Verification Version 1.0, paragraph 1 (ver.1 was adopted on 29 January 2016)
RoP ver.1, para1	Joint Crediting Mechanism Rules of Procedures for the Joint Committee Version 1.0, paragraph 1 (ver.1 was adopted on 29 January 2016)
Anx stands for Annex, Apx for Ap	pendix, Att for Attachment, and Ann for Annotation.

All reference documents are available on the JCM official website: https://www.jcm.go.jp/th-jp/rules\_and\_guidelines



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This copy is made as a part of Joint Crediting Mechanism MRV Development Programme supported by the Ministry of the Environment, Japan and published by the Institute for Global Environmental Strategies (IGES). Whilst information in this report is believed to be true and accurate at the date of going to press, neither the author nor publisher can accept any legal responsibility or liability for any errors or omissions that may be made.