



ANALYTICAL NOTE ON JOINT CREDITING MECHANISM

Analysis on different funding
programs of JCM

2024

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Summary

The Government of Japan established various JCM funding programs to promote expansion of the low-carbon technologies to the developing economies to join forces to combat climate change and make contribution to the Japan's and partnering country NDCs. The organizers of JCM programs are government representatives from the relevant ministries and development agencies and the programs they offer are in line with their goals. The JCM funding initiatives vary in specific characteristics of programs such as funds recipient, amount of funding provided, the objective of the program and eligibility criteria. The table below¹ presents a list of JCM funding programs declared by the Japanese government.

In most cases, the programs require the participation of a Japanese legal entity or a governmental institution as an applicant and project implementer in cooperation with representatives of the partner country's government. State institutions are involved in the stage of signing a memorandum of understanding and in further participation in the development of the methodology, monitoring and credit issuance. In some cases, state institutions and enterprises may be recipients of funding, receiving funds or equipment in cooperation with Japanese implementor.

1. Source http://carbon-markets.env.go.jp/document/20240517_JCM_goj_eng.pdf



Holder	Program	Type
Ministry of Environment	Finance Programme for JCM Model Projects	Subsidy
	Finance Programme for F-gas Recovery and Destruction Model Projects	Subsidy
	Japan Fund for the JCM (JF JCM)	Grant
	Demonstration Programme for Application of New Decarbonizing Technology	Subsidy
	JCM support programme by UNIDO	Grant for projects, technical cooperation
	Project development/capacity building/ MRV support	Technical cooperation
Ministry of Economy, Trade and Industry	JCM Feasibility Study	Technical cooperation
	JCM Demonstration Programme	Government-commissioned project
Ministry of Agriculture, Forestry and Fisheries	Development of MRV for JCM projects in Agriculture	Technical cooperation
	Field studies for JCM REDD+	Government-commissioned project

The sections below contain information on funding programs for which information is publicly available. The information is presented in the form of a summary highlighting the main features of each program.

Key programs’ summary and recommendations

- 1 Most programs require a Japanese company as an implementer. The participation of the state’s institution mostly is applicable in an international consortium presented by a Japanese entity. To attract funding for decarbonisation projects exploiting the JCM mechanism, it seems to be essential to enlist the support of a Japanese entity that has a business track record in the proposed equipment and has the organization and personnel necessary to achieve the goals of the project. Thus, the research on companies that may be eligible for the project implementation, and in the best case, have already had experience in project development under the JCM mechanism, should be the first step for seeking funds under the JCM decarbonization program.
- 2 In fact, all programs are implemented according to the same rules, procedures and requirements. Consortium participants must prepare PINs and PDDs, develop and agree on a methodology for monitoring GHG emissions (or use an already approved methodology), and conduct verification of emissions reductions with the involvement of a third party. All JCM projects are ultimately aimed at issuing carbon credits and distributing them to participating countries to help them meet their NDCs.
- 3 Projects proposed for implementation should include advanced decarbonisation technologies and practices. In the case of the most common program – JCM Model Projects, project cost-effectiveness is crucial for determining the amounts of subsidies. Therefore, a detailed feasibility study of the proposed technologies should be carried out to determine the best option for maximization of the grant component. Ideally, the feasibility study could be financed through the JCM Feasibility Study program. However, projects included in the JCM Feasibility Study are expected to be further implemented through NEDO’s JCM Demonstration Project program and shall be Japanese advanced low-carbon technologies that have the potential for expansion. Such criteria provide additional limitations in project development.



4

The Japanese government is systematically working to expand JCM support programs. In recent years, several new mechanisms have emerged, that potentially may be used by different stakeholders on the Ukrainian side, namely

- Demonstration Programme for Application of New Decarbonizing Technology – financial support to technologies that have no track record of JCM in the target country and be expected to be widely used and deployed in the medium to long term
- JCM Eco Lease project - financial support for leasing businesses (covers up to 10% of the total lease payments)
- City-to-City Collaboration Programme for Zero-Carbon Society – transfer of the Japanese cities' knowledge and experiences and cutting-edge low-carbon technologies.

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Special attention may be paid to the JCM REDD+ program. Initially, REDD+ under UN-FCCC was conceived and used as a mechanism to support developing countries. Ukraine has historically not been able to participate in this mechanism. The implementation, financing and scoping of JCM REDD+ projects are highly customised on a bilateral basis directly with the relevant representatives of the Japanese government. So potentially any partner country of JCM may be eligible for JCM REDD+. In addition, the focus of this program on Forest protection and reforestation activities makes it the most relevant among all the others considering the capacities and responsibilities of the Ministry of Environmental Protection and Natural Resources of Ukraine.



Table 1. The key features of JCM funding programs

Name of program	Highlights	Eligible partners
JCM Model Projects	<ul style="list-style-type: none"> • The most common JCM financing program; • A wide range of decarbonisation technologies in scope; • Implemented exclusively in Partner Countries. 	Japanese entity or an international consortium presented by a Japanese entity
F-Gas Recovery and Destruction Model project	<ul style="list-style-type: none"> • Aimed at F-gases neutralization and restoration; • Implemented by The Global Environment Centre Foundation; 	Japanese entity or an international consortium presented by a Japanese entity
Japan Fund for the Joint Crediting Mechanism	<ul style="list-style-type: none"> • Provides grant components and stand-alone grant investment projects; • Financed and managed by ADB; • Technical support. 	Sovereign or non-sovereign entities located in Partner Countries,
JCM Unido	<ul style="list-style-type: none"> • The program fulfils JCM Model Projects requirements; • Implemented by UNIDO specifically in African countries. 	African Partner Countries
JCM Feasibility Study	<ul style="list-style-type: none"> • Finance initial feasibility study of the potential JCM projects; • Developed by Ministry of Economy, Trade and Industry of Japan and is implemented by Pacific Consultants Co., Ltd; • Is expected to promote NEDO's JCM Demonstration Project 	Japanese entity
NEDO's JCM Demonstration Project	<ul style="list-style-type: none"> • Promotes Japan's advanced low-carbon technologies and GHG reduction systems; • Has a three-stage approach; • Supports technology expansion after project finalization. 	Japanese entity or an international consortium presented by a Japanese entity
JCM REDD+	<ul style="list-style-type: none"> • Highly customizable on a bilateral basis; • Forest protection and reforestation activities. 	Not specified; Usually, Governmental institutions of Partner Country

2. From 2013 to 2023.

3. Depends on the level of technology adoption in the Partner country

Project eligibility criteria	Maximum financing per project, <i>thousand \$</i>	Total projects ²
<ul style="list-style-type: none"> GHG emission reduction and SDG contribution; Criteria for the number of similar projects implemented in partner country; Specific criteria for cost-effectiveness. 	12,800 or up to 50% of total costs whatever is lower ³	Subsidy
<ul style="list-style-type: none"> Contribution to Japan's NDC through F-gas neutralizing; GHG emission reduction and SDG contribution; 	Up to 360	Subsidy
<ul style="list-style-type: none"> Advanced low-carbon technologies with significant GHG reduction; Additional environmental and socioeconomic benefits; High potential for replication and scalability. 	Sovereign projects - 10,000 or up to 10% of total costs whatever is lower Non-sovereign projects - an interest subsidy of 10,000 or up to 10% of total costs whatever is lower	Subsidy
<ul style="list-style-type: none"> General requirements of JCM Model Projects 	600 or up to 75% of total costs whatever is lower	Subsidy
<ul style="list-style-type: none"> The project shall be applicable to NEDO's JCM Demonstration Project. 	Up to 100	Subsidy
<ul style="list-style-type: none"> Japanese low-carbon technology eligible; Reduction of energy-related carbon dioxide; Feasible and concrete expansion. 	Up to 20 million (100% entrusted by NEDO)	Subsidy
<ul style="list-style-type: none"> To be specified at the negotiation stage. 	Up to 20 million (100% entrusted by NEDO)	Subsidy

01 | JCM Model Projects

The Finance Program for JCM Model projects⁴ has been developed by the Ministry of the Environment of Japan to financially support the implementation of decarbonization projects in developing and other countries and in return to acquire JCM credits for the achievement of Japan's GHG emission reduction target. JCM model project contributes to global GHG emission reductions through the diffusion of leading decarbonising technologies while considering the needs of the partner countries.

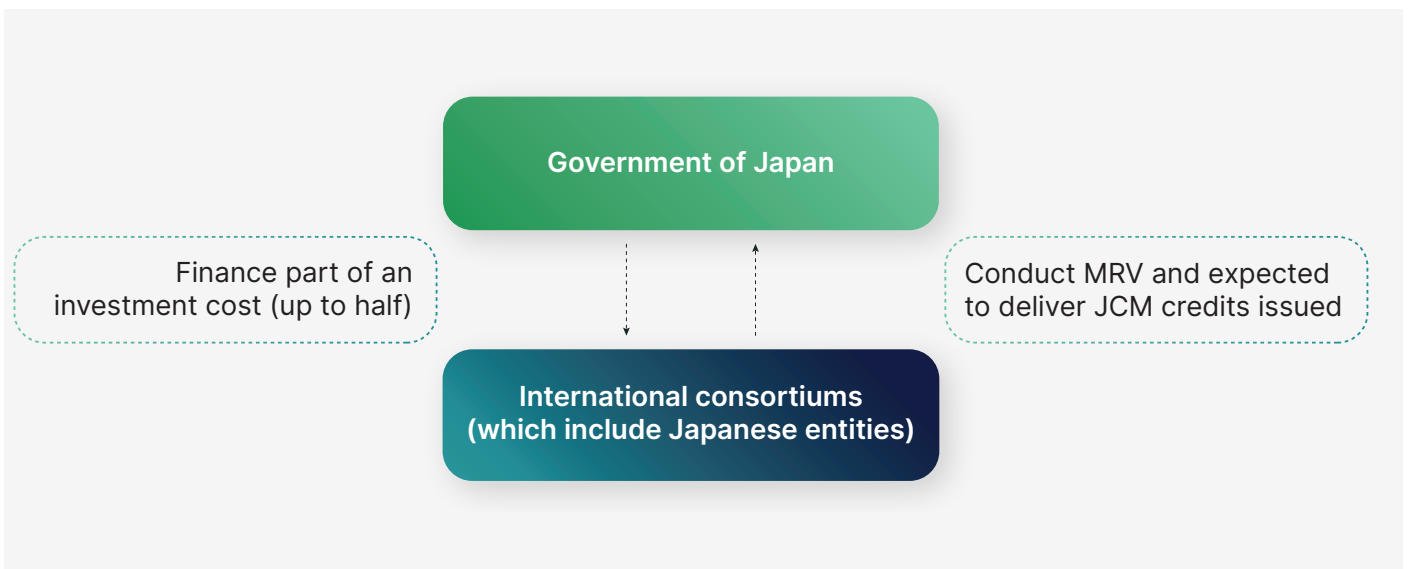


Figure 1. The Finance Program for JCM projects

General Provisions and procedures

The general approach to development of JCM Model Projects includes:

1. Application for registration as JCM Project:
 - 1.1. Matching with a Japanese Partner
 - 1.2. Development of proposal and submission to the Global Environment Centre (GEC)⁵

Proposals must be submitted electronically using the Electronic Application Account and the Account Application Form, registered in advance. Pre-registration must be completed at least two weeks before the proposal deadline⁶. Proposals must be written in Japanese.

4. [https://gec.jp/jcm/jp/kobo/r05/mp/\(tentative\)2023_Guidelines_for_Submitting_Proposals.pdf](https://gec.jp/jcm/jp/kobo/r05/mp/(tentative)2023_Guidelines_for_Submitting_Proposals.pdf).

5. GEC was founded with the aim of contributing to the conservation of the environment in developing nations and around the world by leveraging Japan's wealth of conservation knowledge and experience in support of UNEP's urban environment conservation activities in developing countries and undertaking activities to promote international cooperation to protect the global environment. In recent years, GEC is proactively engaged in projects, such as: introduction of low-carbon technology into developing countries using the Joint Crediting Mechanism (JCM); UN agency support on waste management; support for overseas business expansion by Japanese companies possessing excellent environmental and energy saving technologies; and international training.

6. <https://gec.jp/jcm/jp/preregistration/>

Following documents must be included in a proposal:

- a) Form No.1 Application Form
- b) Form No.2 Declaration by Representative Participant
- c) Form No.3-0a Project Implementation Plan
- d) Form No.3-16 PIN (Project Idea Note for the JCM Project)
- e) Form No. 4 Expenses breakdown (including supporting documents, such as quotations of the budget)
- f) Company information (such as company brochure and articles of incorporation of both representative participant and co participant(s))
- g) Financial statement of both representative participant and co participant(s) (audited one for the latest 3 consecutive years)
- h) International Consortium Agreement
- i) Form No. 5 Agreement on the Allocation of JCM Credits

Also, for JCM projects a Sustainable Development Implementation Plan (SDIP) must be prepared.

To apply for JCM project registration, an approved by the Joint Committee JCM methodology is required. Participants must either develop this methodology themselves or in cooperation with representatives of JCM methodology developers, providing the necessary information for the methodology's development to ensure it applies to the relevant project. In addition to describing the technical and economic components, the Project Design Document of the project shall include a section on the results of consultations with local stakeholders and a section on the involvement of the Third-Party Entity responsible for the project validation process.

1.3 Announcement of preliminary selection result for financing programme for JCM Model Projects

1.4 Development of application documents for contract of finance and submission to GEC

1.5 Conclusion of the contract of finance

2. Measurement, Reporting and Verification (MRV) of GHG emission reductions

Participants must ensure a monitoring process in place that quantifies the effects of facilities or equipment on GHG emission reductions using an MRV methodology that has been approved or is expected to be approved by the Joint Committee. They must report the results and operation of the facilities or equipment to the Ministry of Environment of Japan annually until the end of the legal depreciation period as stipulated by Japanese law, provided that the bilateral JCM documents with the partner countries remain effective. If there is a period during which the reduction amount cannot be measured due to the participants' responsibility, that period will be added to the legal depreciation period. The Ministry of Environment of Japan may share the monitoring results with the partner country Government.

3. Issuance of JCM credits

Based on the approved JCM methodology, participants shall request the issuance of JCM credits using the monitoring results. This process includes developing a monitoring report, obtaining verification by a Third-Party Entity, and submitting a "JCM Credits Issuance Request" to the JCM Joint Committee. Participants

shall deliver the issued JCM credits to the Japanese government's account. Any contractual stipulations regarding credit allocation must not conflict with the JCM rules between Japan and the partner country.

Participants shall request the issuance of JCM credits for emission reductions achieved from the start of commercial operation until the end of the legal depreciation period. The first request for credit issuance shall be made within one year from the registration of

the JCM project, except when issuance cannot be realized due to negotiations with partner countries. After the first request, participants may request the issuance of JCM credits for emission reductions achieved over several years. When the legal depreciation period of the facilities or equipment ends, the request for credit issuance shall be made within one year, summarizing the engagement.

Eligibility criteria

The Finance Program for JCM Model projects sets the eligibility principle and technical requirements for both, the participant and project. Also, JCM Model Projects Guidelines for Submitting Proposals describes partner countries eligible for project implementation and requirements for International Consortium Participants which includes the representatives of the partner country.

International consortium is an association that consists of a Japanese entity and a foreign entity(ies), with the objective of effectively implementing the project. A Japanese entity is the representative participant of International Consortium. Member(s) of the international consortium other than the representative participant is called as a co-participant(s).

An entity eligible for receiving support under The Finance Program for JCM Model projects shall be only a Japanese entity which is one of the following:

- a private company,
- an independent administrative institution,
- an incorporated association/foundation,

- any organization admitted as appropriate by the Global Environment Centre with approval from the Ministry of Environment of Japan.

Other practical requirements for the representative participant (a Japanese entity) include.

- A participant shall have developed structure for the implementation of the eligible project and have technical capacity to appropriately implement the eligible project;
- A participant shall have a financial basis to bear the costs required to appropriately implement the eligible project;
- A participant shall have adequate management structures and handling capacity for accounting and other administrative work related to the eligible project;
- A participant shall explain the contents, effect on GHG emission reductions, details of the cost, investment plan, etc. of the eligible project;
- A participant shall take a pledge regarding the exclusion of any organized crime groups (boryokudan in Japanese).

Also, all participants shall provide detailed disclosure of contents, effect on GHG emission reductions, costs, and investment plan, of the implementation project.

The projects eligible for The Finance Program for JCM Model projects shall fulfil the following requirements:

- Projects shall reduce energy-related CO₂ emissions with leading decarbonizing technologies in the partner countries or developing countries (eligible countries) and that are expected to contribute to achieving Japan's National Determined Contributions under the Paris Agreement through the JCM;
- Projects shall contribute to realization of the Sustainable Development Goals. The installation and operation of the facilities or equipment shall comply with the relevant laws and regulations of the partner country and international practices and guidelines regarding environmental and human rights protection.
- Reduction of GHG emissions achieved by the projects can be quantitatively calculated and verified.
- Facilities or equipment installed by the projects do not receive any other financial support from the Government of Japan.
- If the technology to be adopted is a technology mentioned in Attachment of Annex 1 "Conditions for Adoption by Technology" of JCM Model Projects Guidelines for Submitting Proposals, the technology shall meet the conditions listed in that Annex.

In addition, projects that are to be implemented under The Finance Program for JCM Model projects are subject to specific cost-effectiveness requirements. Cost-effectiveness is being calculated by the following formula:

$$\text{Cost effectiveness} = \frac{\text{Amount of provided financial support}}{\text{Yearly GHG emission reduction} \times \text{legal durable years}}$$

The results of the calculation above shall meet the threshold based on a number of implemented projects using a specific methodology according to the following table⁸.

Table 2. The cost-effectiveness requirements for JCM Model projects

Number of already selected project(s) using a similar technology in each partner country and requirements for specific technologies	Financial support
Up to 5	<JPY4000/tCO ₂ e
5 to 9	<JPY3000/tCO ₂ e
10 to 19	<JPY2,500/tCO ₂ e
20 or more	<JPY2,000/tCO ₂ e
Solar power plant	<JPY2,500/tCO ₂ e
Hydropower plant	<JPY500/tCO ₂ e

8. https://gec.jp/jcm/jp/event/2022Indonesia/S2-3_GEC1.pdf

Finance volumes and regulations

Suggested amounts of finance for an individual project are up to 2 billion Japanese Yen (12,8 million USD). Total amount of the budget for the model project is expected to be 15 billion Japanese Yen (approx. 96 million USD) for 2023-2025. The maximum amount of financial support shall be calculated by the total amount of eligible costs multiplied by the percentage determined by representatives of the Global Environment Centre. The maximum amount of financing is determined based on the uniqueness of the technology in the country. In particular, the number of projects using similar technology in each country defines the maximum financing percentage as presented in the table below.

Table 3. Maximum percentage of financial support for JCM Model Projects

Number of already selected project(s) using a similar technology in each partner country	Percentage of financial support
None (0)	Up to 50%
Up to 3 (1 - 3)	Up to 40%
More than 3 (4 and more)	Up to 30%

The Finance Program for JCM Model projects has a limited scope of costs that may be covered and applies only to those costs that can be verified as having been spent for implementation of eligible projects. The list of eligible expenses includes the following:

- Cost of main construction work,
- Cost of ancillary work,
- Cost of machinery and instruments,
- Cost of survey and testing,
- Cost of facilities/equipment (including monitoring equipment),
- Cost of administrative work, and
- Other necessary costs approved by GEC,

The following activities are restricted for financing:

- Cost to remove existing facilities/equipment (including miscellaneous expenses related to removal costs).

- Equipment and consumable supplies/materials for maintenance of the facilities/equipment installed by the model project, emergency facilities/equipment, safety equipment (such as fire extinguisher, sprinkler, PPE etc.) and security equipment.
- Civil engineering work and construction of buildings (excluding structures that directly contribute to energy-related CO2 emission reductions).
- Cost related to a simple restoration of function, such as restoring the function to the state at the time of installation by updating existing facilities/equipment.
- Spare parts (excluding those used for testing and commissioning).
- Cost related to on-site inspections and writing reports submitted to GEC as part of the model project.
- Cost of forward exchange contract and remittance charge.
- Cost related to land acquisition.

Within the JCM Model Projects, the JCM Eco Lease

project is available starting from this fiscal year 2020. The total scheme financing for three years is ¥9 billion (90 million USD). The eligible technologies are those that GEC approve with consideration of the results of approved JCM projects.

The JCM Eco Lease scheme is a new program which supports more effective diffusion and expansion of the de-carbonizing technologies through financial support for leasing businesses instead of support for facilities.

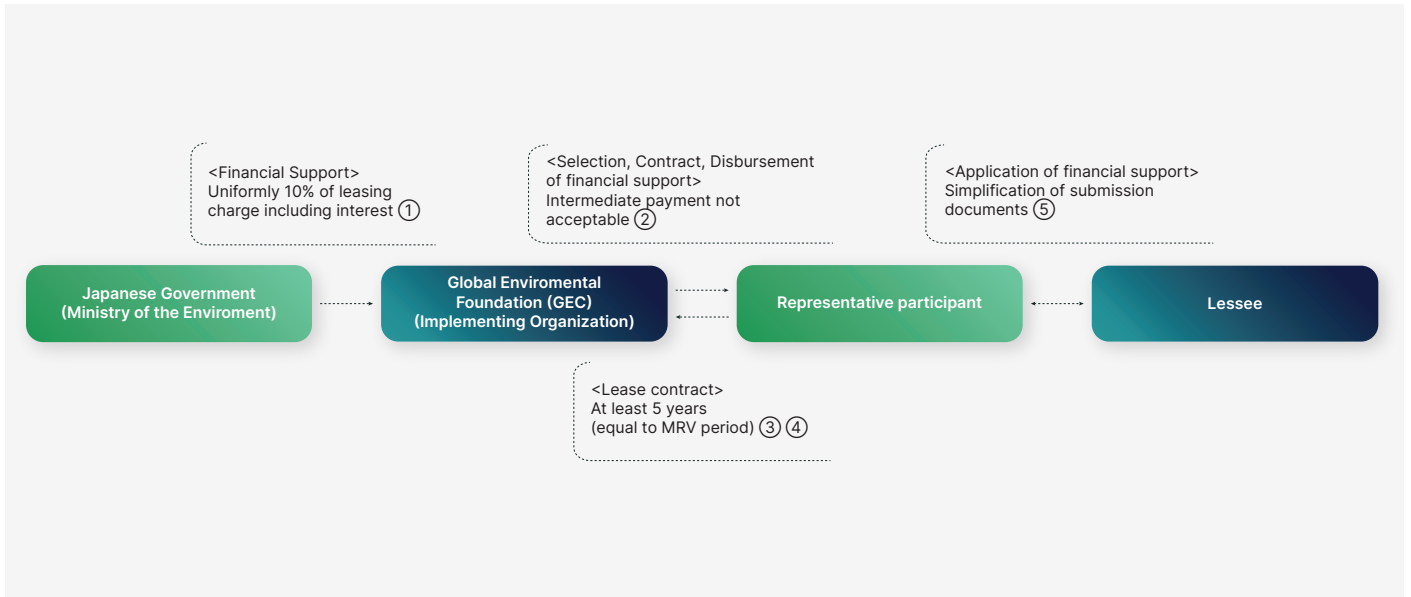


Figure 2. The JCM Eco Lease scheme



The program highlights are the :

- The form of the activity is the equipment lease to the project implementor.
- The total subsidy amounts to 10% of the total lease payments but not exceeding ¥500 million over three years.
- Covering the cost of facilities or equipment and the relevant leasing interest based on the leasing charge.
- The lease period shall be equal to the legal life of the JCM equipment subsidy project.
- Re-lease and residual value are not eligible for subsidy.
- Includes only equipment costs that directly contribute to the GHG reduction.

In 2013, Japan's Ministry of the Environment launched the "City-to-City Collaboration Programme for Zero-Carbon Society"¹⁰ which is being conducted within

framework of JCM Model Project. This initiative supports sustainable urban development in developing countries by leveraging Japanese cities' knowledge and experiences. The program facilitates the transfer of expertise through city-to-city partnerships and identifies cutting-edge low-carbon technologies suitable for implementation in partner cities. Furthermore, the program offers valuable opportunities for capacity building among city government officials through partnership development, project planning, and educational workshops and seminars.

Since, there are also non-JCM projects realized through City-to-City Collaboration Programme, Ukrainian companies and local communities should be eligible to participate in this programme.

The City-to-City Collaboration Programme, overseen by Japan's Ministry of the Environment, offers learning opportunities through workshops and seminars in Japan. Events in Kitakyushu (October 2016) and Tokyo (January 2017) brought together participants from 18 cities across 8 countries. These gatherings provided comprehensive insights into the JCM, showcased progress made by other participating cities, and included site visits to demonstrate Japanese low-carbon technologies. To strengthen partnerships, representatives from Asian cities visited their Japanese counterparts, engaging with local stakeholders. The programme's progress and achievements are disseminated to a broader audience through side-events at UNFCCC-COP meetings and various seminars held in Japan.

10. <https://www.env.go.jp/earth/coop/lowcarbon-asia/english/project/>

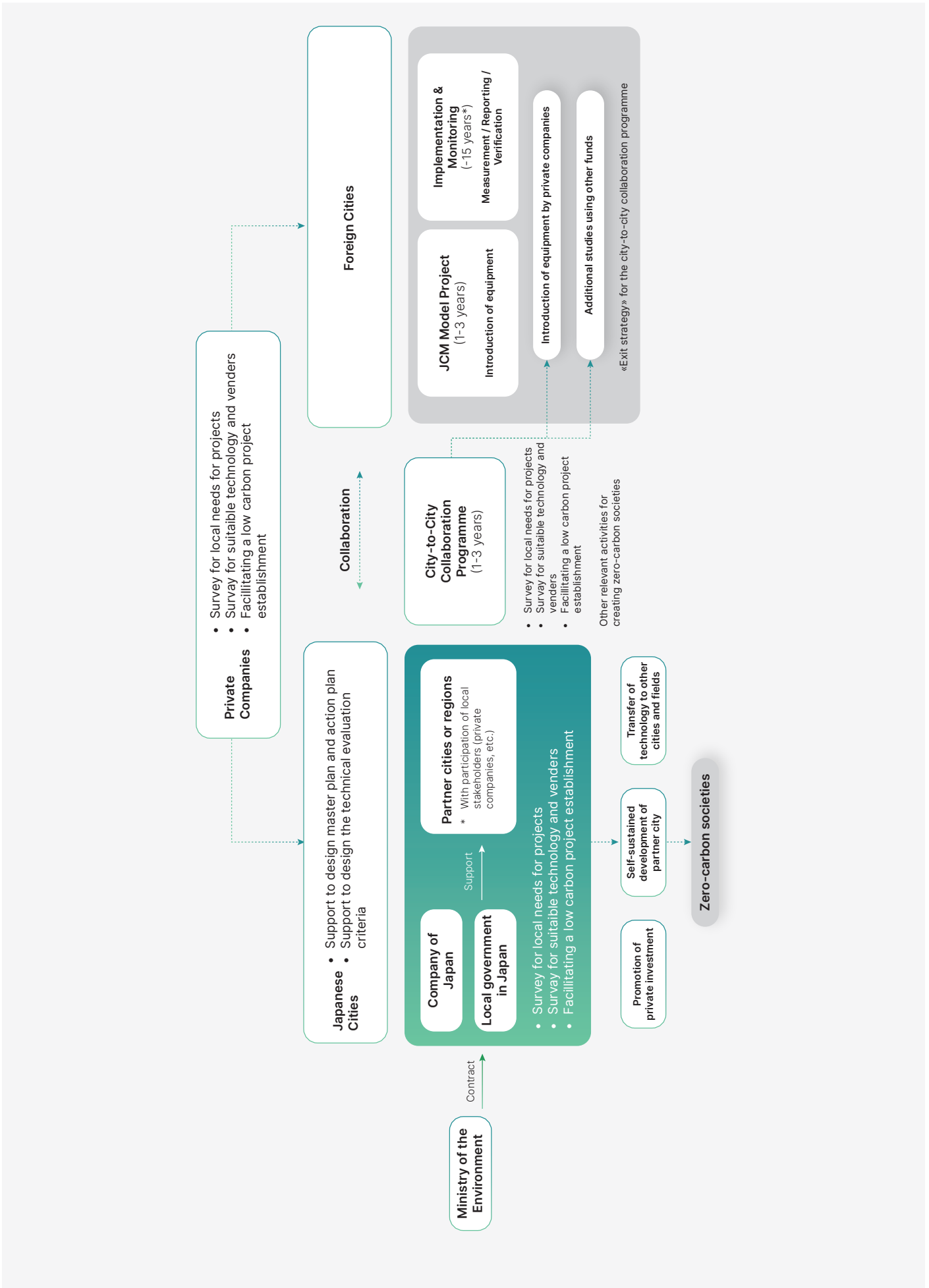


Figure 3. The City-to-City Collaboration Programme

02 | F-Gas Recovery and Destruction Model project

The Project for the Recovery and Destruction of Freon Substitutes Using the JCM (F-Gas Recovery and Destruction Model project¹¹) has been developed by the Ministry of the Environment of Japan and is being implemented by GEC. The specific goal of the program is to promote investment in projects to recover and destroy F-gases that are being substitutes of ozone-depleting chlorofluorocarbons (CFCs) in used equipment without releasing them into the atmosphere. This grant finance is targeted to GHG emission reduction issuing JCM credits that will contribute to the achievement of Japan's NDC.

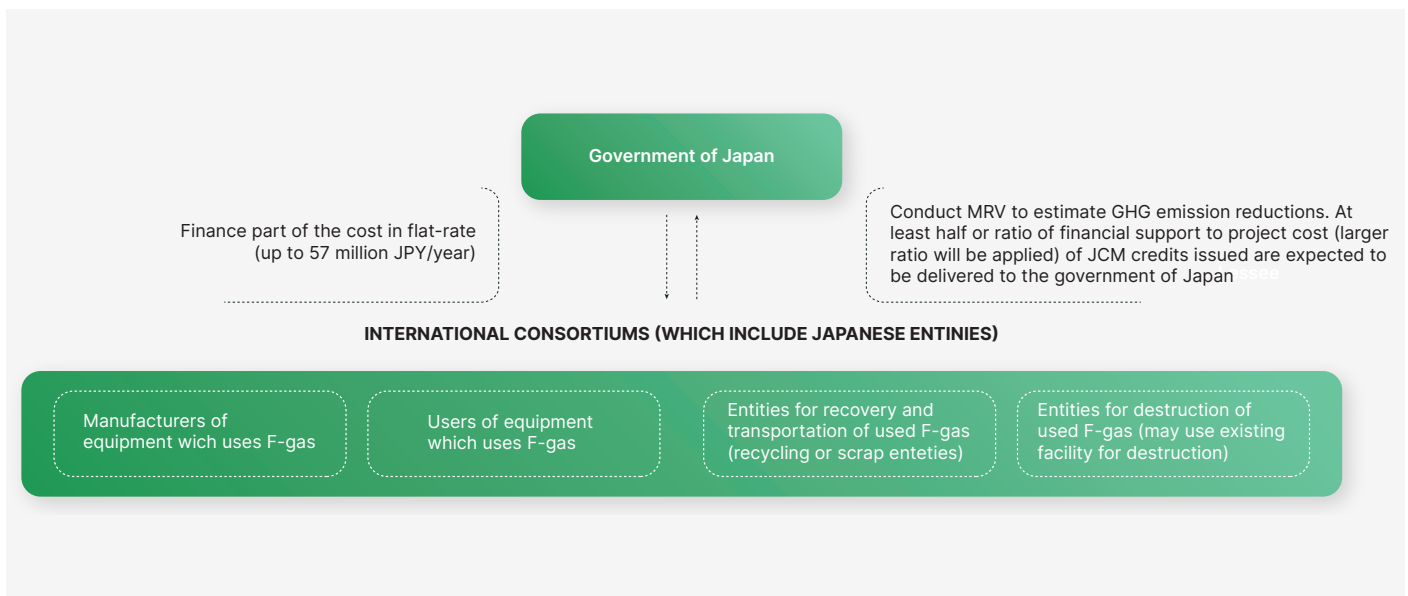


Figure 4. F-Gas Recovery and Destruction Model project

General Provisions and Procedures

The sequence of steps, the format of the application, as well as the list of required documents are generally similar to those for the JCM Model projects¹².

1. Application for registration as JCM Project

To apply for the F-Gas Recovery and Destruction Model project, the project shall be registered as a JCM project. This includes preparing the Project Design

11. <https://gec.jp/jcm/jp/kobo/freon230602/> (Japanese only)

12. https://gec.jp/jcm/jp/kobo/r05/freon/freonR5_koboyoryo.pdf (Japanese only)

Document (PDD), which involves the engagement of the local stakeholders and gathering their comments through a Local Stakeholder Consultation, as well as obtaining validation by a Third-Party Entity (TPE). Registration applications should ideally be submitted within one year of the subsidized project's completion. For the registration of a JCM project, the MRV methodology approved by the Joint Committee under the program must be applied. Therefore, the subrecipient is required to either develop an applicable MRV methodology for the project or provide necessary information to those developing the methodology separately.

2. Measurement, Reporting and Verification (MRV) of GHG emission reductions

When equipment is installed as part of a subsidy of the F-Gas Recovery and Destruction Model project, the operator of the installation is responsible for the equipment until the end of the statutory useful life beginning from the period the equipment is put into operation. If there is a period during which the reduction amount cannot be measured due to issues on the side of the subsidy operator, this period will be added to the measurement period, limited to the validity period of the bilateral JCM documents, including any extensions.

During the MRV period, the company must measure and report GHG emission reductions according to the MRV methodology approved or assumed to be approved by the Joint Committee for JCM. Additionally, project reports on GHG emission reductions and facility operation status must be submitted to the Ministry of the Environment annually, from the date the facilities begin operation or the subsidized project is implemented, until the end of the year and throughout the MRV period. These reports may be shared with gov-

ernment officials in the Partner Country to inform them of the project's effects.

3. Issuance of JCM credits

Considering the approved MRV methodology, an application for the issuance of JCM credits using the results of monitoring implementation is required. This process includes preparation of monitoring reports, verification by a Third-Party Entity, and submission of an application for JCM credits to the JCM Joint Committee. Generally, JCM credits are issued to the Japanese side as a result of the project implementation and must be delivered to the account of the Japanese government. Additionally, if credit allocation is mentioned in the contract or other project-related documents, it should not conflict with the JCM bilateral agreements with the Partner Country.

Participants shall request the issuance of JCM credits for emission reductions achieved from the start of commercial operation until the end of the legal depreciation period. This period is limited to the validity of the JCM bilateral document, including any extensions. The first request for credit issuance shall be made within one year from the registration of the JCM project, except when issuance cannot be realized due to negotiations with partner countries. After the first request, participants may request the issuance of JCM credits for emission reductions achieved over several years. When the legal depreciation period of the facilities or equipment ends, the request for credit issuance shall be made within one year, summarizing the engagement.

Eligibility criteria

The applicant for the Program shall fulfill the same requirements as for the JCM Model projects.

To be eligible for subsidized financing under the F-Gas Recovery and Destruction Model the project shall meet the following requirements:

- The project shall contribute to the achievement of Japan's NDC by conducting activities to recover and destroy CFC substitutes from the used equipment, taking measures to prevent leakage of CFC substitutes, and obtaining the realized GHG emission reductions as credits under the JCM in Partner countries or developing countries that are expected to sign the agreement.
- The project should contribute to the realization

of Sustainable Development Goals (SDGs). The installation and operation must comply with the environmental and other legal systems of the Partner country and follow international practices and guidelines regarding environmental conservation and human rights.

- The GHG emission reductions as a result of the project must be quantitatively calculated and verified.
- The equipment to be installed with the assistance of this project do not receive other subsidies from the Japanese government (as defined in the Law Concerning Appropriation of the Budget concerning Subsidies).
- It is reasonably expected that the project will be registered as a JCM project and that credits may be issued.

Finance volumes and regulations

The maximum amount of finance eligible under the F-Gas Recovery and Destruction Model project is ¥57 million (equivalent to approx. \$360 thousand) per single application. The total program budget for 2024-2026 amounts to ¥180 million (approx. \$1.2million).

The costs covered by the F-Gas Recovery and Destruction Model project include the following eligible activities:

- Personnel expenses - Labor cost for the work time of those directly engaged in the operation.
- Cost of equipment - Expenses required for the purchase or lease of facilities and equipment (including monitoring equipment) directly necessary to carry out the project, as well as transportation, adjustment, and installation of the purchased items.
- Wages - Salaries for labourers necessary to conduct the business.
- Social insurance premium - Employer-paid premiums for social insurance premiums for labour costs necessary to operate the business.
- Main construction cost - Material cost, labour

cost, direct cost, common temporary construction cost, site management cost and general management cost.

- Incidental expenses - The minimum amount required for construction work directly incidental to the construction cost of the Project, and the method of calculating expenses shall be in accordance with the construction cost of the Project.
- Machinery and equipment costs - Expenses for construction, minor transportation, and other construction machinery and equipment directly necessary to carry out the project, as well as expenses for rent, transportation, installation, removal, repair, and fabrication.
- Surveying and testing expenses - Expenses for research, surveying, basic design, execution design, construction supervision, and testing directly necessary to carry out the project.
- Commission - Expenses required for subcontracting work that requires special skills or qualifications necessary to carry out the project, or research, basic design, implementation design, construction supervision, and execution of tests directly necessary to carry out the project.
- Travel expenses - Expenses related to domestic and international transportation necessary to conduct business

The following activities are not eligible for financing:

- Removal costs of existing facilities.
- Equipment and supplies required for maintenance of installed facilities, emergency equipment, safety and sanitation, and fire safety.
- Civil engineering costs, and construction costs of buildings, excluding structures that directly contribute to GHG emission reductions.
- Costs related to “mere restoration of functions” such as restoring functions to the state at the time of new installation by updating existing facilities.
- Spare parts (excluding those used for testing and commissioning).
- Expenses required for the preparation of reports and on-site inspections related to this grant project.
- Forward exchange contract fee, bank transfer fee.
- Land acquisition cost.

The period for project implementation shall be the

maximum period starting from the fiscal year following the fiscal year in which the equipment goes into operation. The grant period is a single fiscal year, so grant applications, etc. must be submitted for each fiscal year. Therefore, when implementing a project that spans multiple fiscal years, it is necessary to submit an implementation plan at the time of application that clearly separates the project expenses for each fiscal year. In case of significant changes in the budget, the applicant may be required to revise the project accordingly.

Upon completion of the subsidized project, the GEC shall conduct a final inspection and, determine the amount of subsidy to be granted to the subsidized entity and, based on a request from the entity, make payment by March 31 of the fiscal year in which the request is received (settlement payment).



03 | Japan Fund for the Joint Crediting Mechanism

The Japan Fund for the Joint Crediting Mechanism (JFJCM) is a single-donor trust fund established in 2014 and managed by the Asian Development Bank (ADB)^{13,14,15}. JFJCM goal is to offer financial incentives for the adoption of advanced low-carbon technologies in ADB-financed and administered sovereign (projects where the government or State-owned enterprise (SOE) of an ADB DMC (Development member country) is the grantee) and non-sovereign (projects with a private company from any other country from ADB DMC list or Japan) projects. The fund provides grants and technical assistance (TA) to ADB projects utilizing the JCM. Implementing these advanced low-carbon technologies enhance the sustainability of ADB-financed and administered projects. Furthermore, the JFJCM offers recipients opportunities to participate in projects with strong development characteristics and long-term climate-change mitigation benefits.

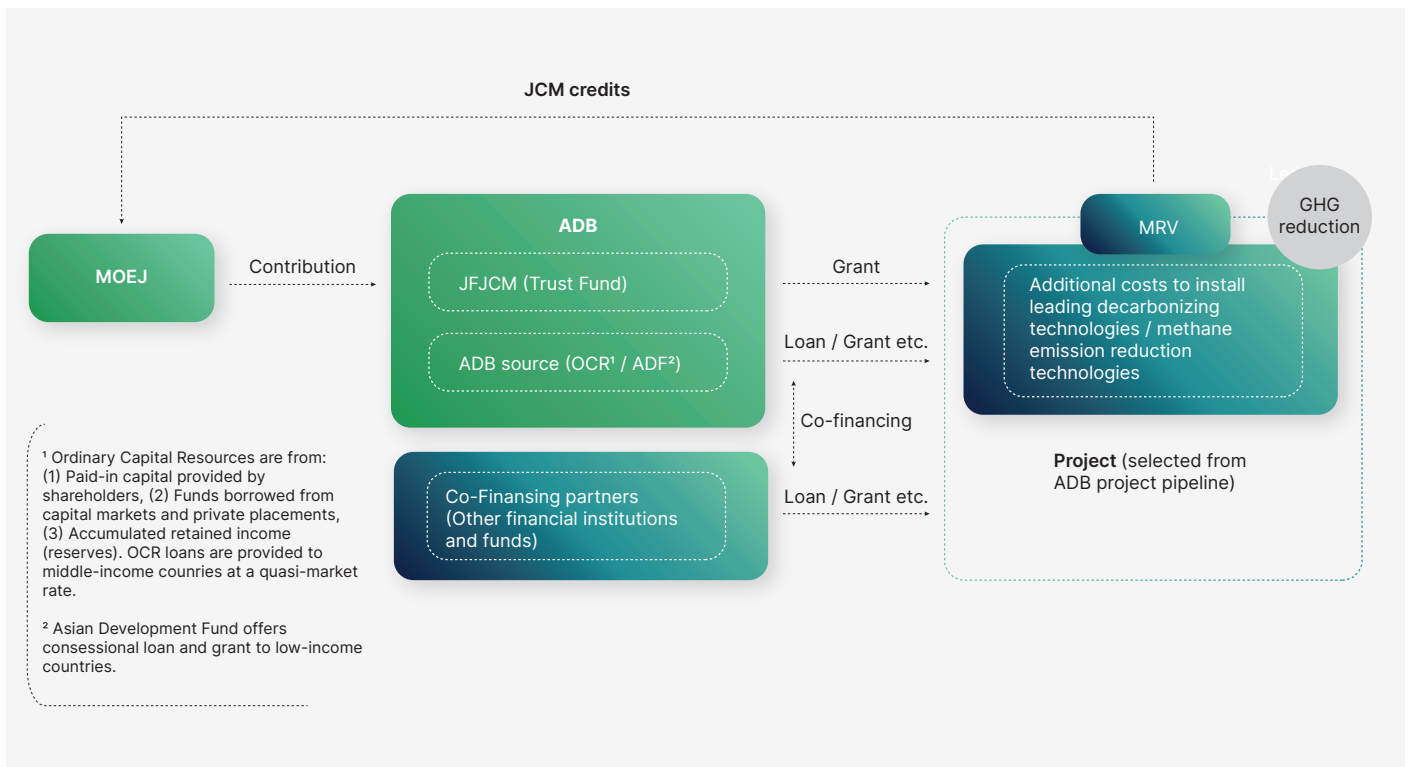


Figure 5. Japan Fund for the Joint Crediting Mechanism

13. <https://www.adb.org/what-we-do/funds/japan-fund-for-joint-crediting-mechanism>

14. <https://www.adb.org/sites/default/files/institutional-document/174311/r52-14.pdf>

15. <https://www.adb.org/sites/default/files/publication/177324/japan-fund-joint-crediting-mechanism-brochure.pdf>

General Provisions and procedures

The JFJCM provides financing for grant components of investment projects and stand-alone grant investment projects, grants for reducing interest or other expenditures of investment projects, technical assistance projects, direct charges, and any other activities the Government of Japan and ADB agree upon to reduce the cost of the advanced low-carbon technologies. Additionally, JFJCM provides technical support to the recipients in meeting the requirements of the JCM.

The grant components of sovereign investment projects and stand-alone sovereign grant investment projects finance goods, works, equipment, plants, consulting services, and other expenses. For non-sovereign operations, grants may be used to subsidize a portion of the interest margin on a loan, making the loan more concessional to support the deployment of advanced low-carbon technologies in accordance with ADB's non-sovereign lending policies and procedures.

The JFJCM also supports technical assistance projects for project preparation, capacity development, and research and policy advice for eligible DMCs for JFJCM investment projects. Technical Assistance projects may be designed to facilitate the replication of best practices. Additionally, the JFJCM support capacity development Technical Assistance projects in ADB Development Member Countries that have initiated discussions with the Government of Japan to enter into a memorandum of understanding or agreement for the development of the JCM.

In addition, JFJCM grants and Technical Assistance projects may be applicable to prepare and validate the project design document, register the JFJCM projects

with the relevant JCM joint committee, and monitor and verify GHG emission reductions of the JFJCM projects under the JCM scheme.

JFJCM project implementation requires general regulations on JCM implementation including development of the methodology, preparation of the project design document, validation of the JCM project, registration of the JCM project with the joint committee of two countries, monitoring of data, and verification of reduction in GHG emissions.

A JFJCM grant for an investment project is being proposed by the relevant ADB operations departments that coordinate with the Development Member Country government and other stakeholders such as public institutions, private sector entities and other organizations. Responsibilities of the relevant ADB operations departments includes project identification, due diligence, grant administration, and project evaluation with its further application to the JFJCM secretariat. JFJCM secretariat screens the grant proposal for its alignment with eligibility criteria and initiates a process for approval, the final stage of which is the funding approval by the Government of Japan.

The application process differs in detail for the sovereign and non-sovereign projects applying for JFJCM financing. The main participants in the process are the borrower/grantee, the Project Officer from ADB, the Climate Change and Sustainable Development (CCSD) Department at ADB and the Government of Japan.

The application process for sovereign projects consists of the following steps¹⁶:

1. The Borrower/Grantee provides consultation and initial concurrence of applying for JFJCM support. The Project Officer provides a concept paper clearance, prepares the project's Initial Title and Description (ITD), and submits it to the CCSD. The CSDD review possibility of new technologies and in case of positive decision submits the results to the Government of Japan.
 - a) CSDD for initial screening;
 - b) Technical Advisory Group of CSDD review and draft recommendation;
 - c) Climate Change Steering Committee of CSDD endorse recommendation.
2. The Government of Japan requests the project proposal from the Project Officer. The project proposal contains technical specifications, evaluation and qualification criteria, GHG reduction estimation and a JCM application plan and its development is supported by inputs provided by the borrower and CSDD.
3. The Borrower/Grantee provides concurrence of submitting the JFJCM application in parallel with the Project Officer submitting the proposal to the CCSD where the proposal is examined by:
 4. The Project Officer prepares the draft of the report and recommendation and conducts management review meeting. The Grant negotiation includes approval of the report and recommendation by the Management of the Borrower/Grantee.

When the examination is completed the Partner Funds Division of CSDD submits the proposal to the Government of Japan which delivers a final review and grant amount approval.

When all the above steps are concluded the grant agreement is reached.



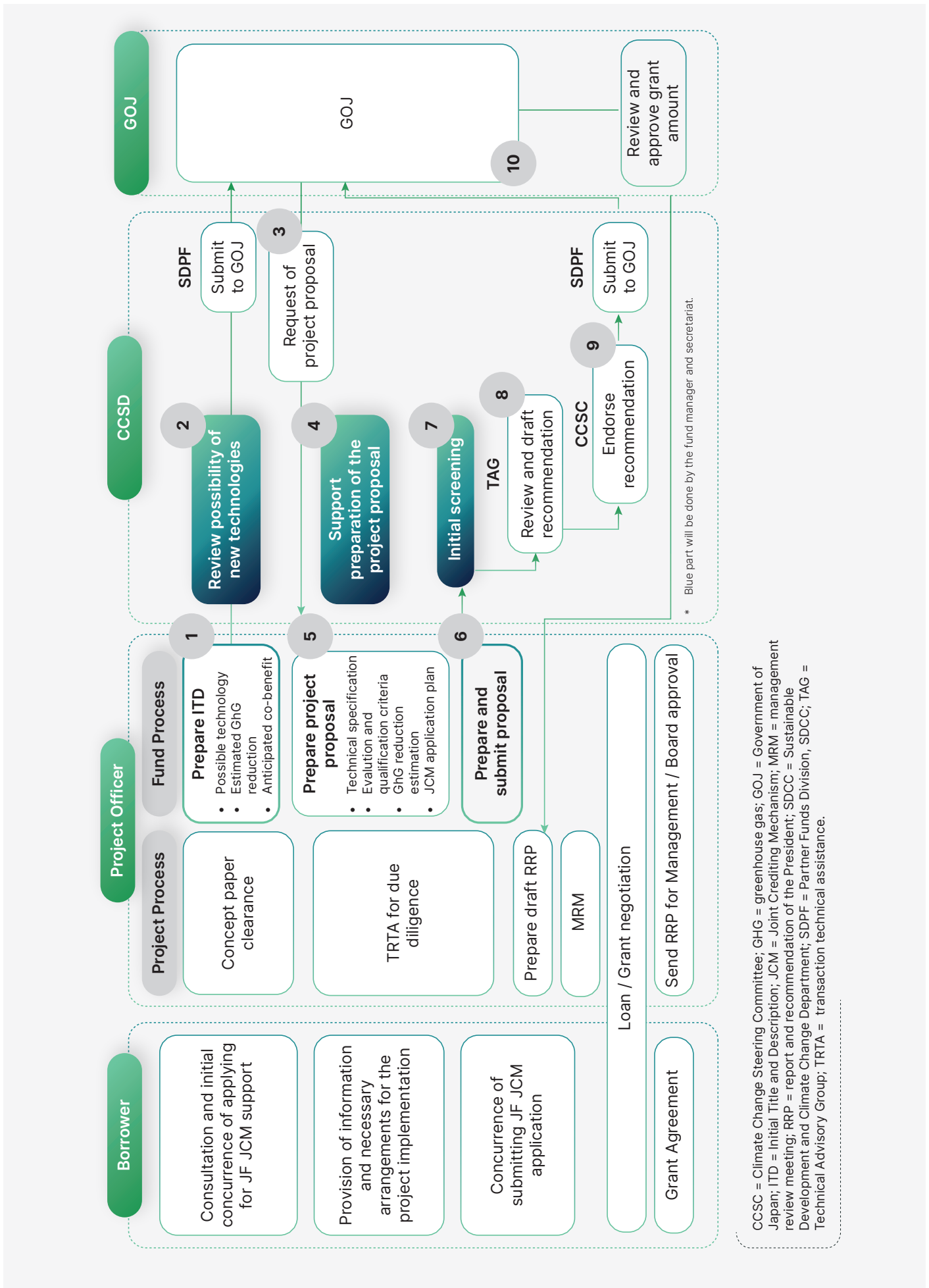


Figure 6. The application process for sovereign projects

The application process for non-sovereign projects consists of the following steps¹⁷:

1. The Borrower/Grantee provides consultation and initial concurrence of applying for JFJCM support. The Project Officer provides a concept paper clearance, prepares the project's Initial Title and Description (ITD), and submits it to the CCSD. The CSDD review possibility of new technologies and in case of positive decision submits the results to the Government of Japan.
2. The Government of Japan requests the project proposal from the Project Officer. The project proposal contains technical specifications, evaluation and qualification criteria, GHG reduction estimation and a JCM application plan and its development is supported by inputs provided by the borrower and CSDD.
3. The Borrower/Grantee provides concurrence of submitting the JFJCM application in parallel with

the Project Officer submitting the proposal to the CCSD where the proposal is examined by:

- a) CSDD for initial screening;
- b) Blended Finance Committee of CSDD reviews and endorse proposal;

When the examination is completed the Partner Funds Division of CSDD submits the proposal to the Government of Japan which delivers final review and grant amount approval.

3. The Project Officer prepares the draft of the report and recommendation and engages the Investment Committee. The Grant negotiation includes approval of the report and recommendation by the Management of the Borrower/Grantee.

When all the above steps are concluded the grant agreement is reached.



17. https://cleanairasia.org/sites/default/files/BAQ%20Presentations/Day%202/1400_Breakout%20Sessions/Track%204/Japan%20Fund%20For%20The%20Joint%20Crediting%20Mechanism_Tatsuya%20Yanase.pdf

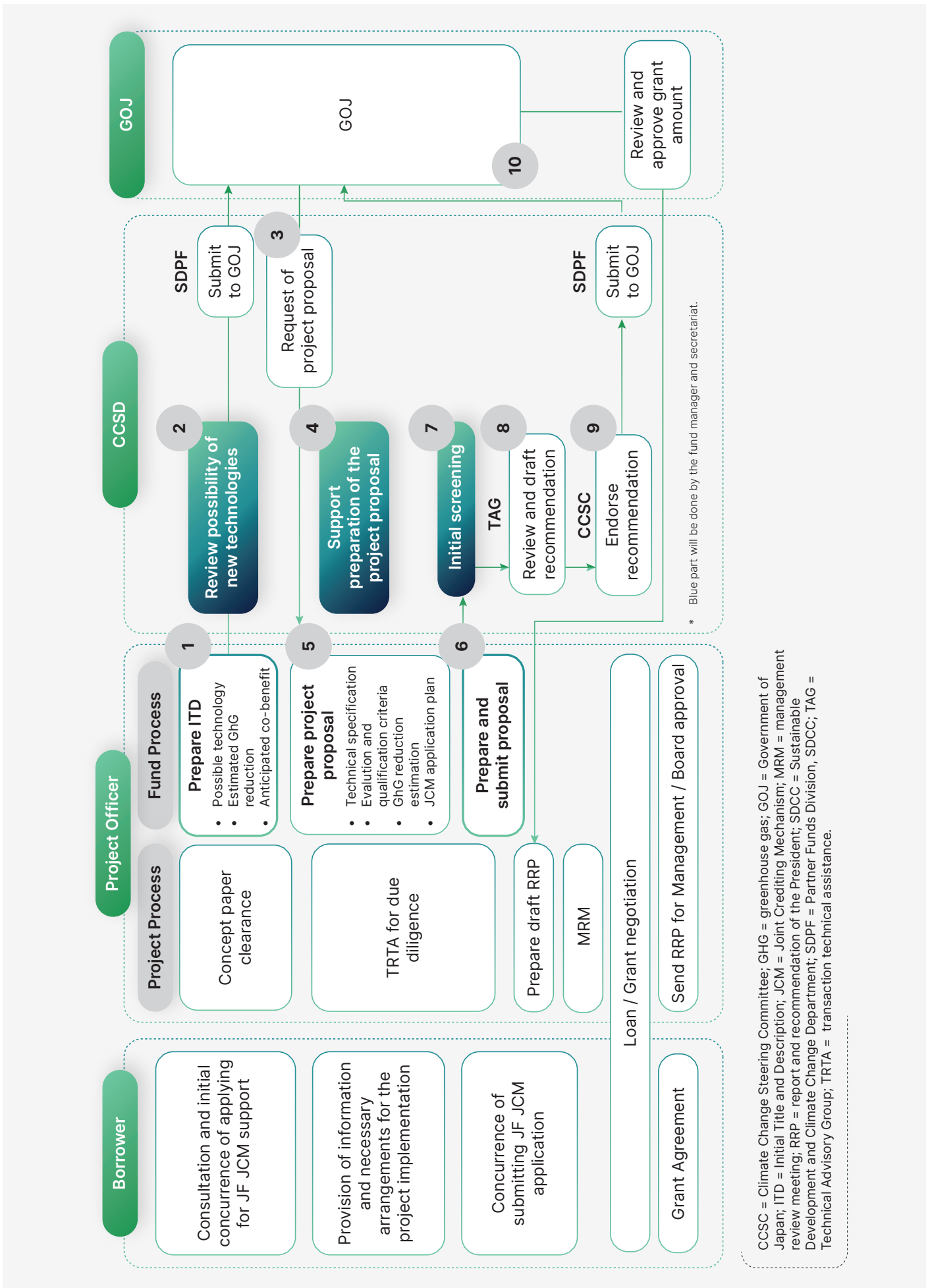


Figure 7. The application process for non-sovereign projects

Eligibility criteria

The eligible countries for receiving JFJCM grants for the investment projects are those that have negotiated at the time of financing a memorandum of understanding or agreement with the Government of Japan for the development of JCM and Development Member countries from ADB's DMC list¹⁸. Ukraine fulfils only one of these two requirements having the signed memorandum of understanding with the Government of Japan. This means that this program is unavailable for projects located in Ukraine for now.

Grants, grant components and Technical Assistance are available for sovereign and non-sovereign projects that meet the following eligibility criteria:

- The project is financed exclusively with a JFJCM grant or with a JFJCM grant together with ADB or ADB-administered funds.
- The project includes a component adopting advanced low-carbon technologies that in the long term reduce GHG emissions significantly. The advanced low-carbon technologies for the project must have a proven implementation and operation record, and their technical effectiveness and GHG emission reduction capacity must be established.
- Recipients of JFJCM grants agree to meet the requirements of the JCM and apply to the joint committee of the JCM for JCM credits.
- In addition to GHG emission reduction, the project also benefits the recipient country through:
 - reduction of environmental pollution, including air or water pollution, solid waste treatment, or conservation of natural resources;
 - other social economic benefits, including increased job creation opportunities and better access to basic infrastructure.
- The project has high demonstration potential for replication and scalability in the country and/or

elsewhere in the regions.

- Such other criteria as detailed in the JFJCM guidelines.

Advanced low-carbon technologies:

- reduce energy-related greenhouse gas (GHG) emissions over the long term;
- have proven track records of their technical effectiveness;
- include but are not limited to renewable energy, energy efficiency solutions, smart grids, and waste-to-energy systems.

The process for selection of the Technical Assistance project is based on the criteria of direct contributions to:

- Project preparation, capacity development, and research and policy advice to eligible ADB Development Member Countries for JFJCM investment projects.
- Capacity development on JCM of those ADB Development Member Countries that have initiated discussions with the Government of Japan for entering into an MOU or agreement for the development of JCM.
- Facilitating the replication of best practices.
- Meeting JCM general requirements.

The JFJCM financing is eligible for foreign sovereign and non-sovereign borrowers. For projects where the government of an ADB Development Member Country is the borrower on an ADB loan, the JFJCM can provide a grant to:

- Finance the incremental cost of deploying advanced low-carbon technologies compared with the cost of a business-as-usual technology.
- Cover costs associated with meeting JCM requirements.

18. <https://www.adb.org/sites/default/files/page/615371/adb-classification-dmcs-2023.pdf>

Finance volumes and regulations

The JFJCM is supported by the Government of Japan. As of July 2024, Japan's cumulative contribution to the fund since its inception in June 2014 amounted to ¥16.60 billion (\$137.30 million equivalent) including the contribution for methane emission reductions, which amounted to ¥400 million (\$2.96 million equivalent). Budget for 2024 amounts to ¥0.2 billion (approx. \$110 million).

The amount and rules for receiving JFJCM funding differ for private and public participants¹⁹:

- For sovereign projects, the JFJCM provides support in the form of a grant. The grant can reach up to 10% of the project cost or \$10 million, whichever is smaller. For projects that cost less than \$50 million, the maximum grant amount is \$5 million.
- For projects in which the borrower is in the private sector or the project is not guaranteed by the Development Member Country government, the JFJCM grant is provided as an interest subsidy to reduce the interest payment of the ADB loan. The grant can reach up to 10% of the project cost or \$10 million, whichever is smaller.

Procurement of goods, works, and consulting services are eligible under JFJCM funding. Goods, works, and other services related to advanced low-carbon technologies under the JFJCM follow ADB member country procurement eligibility restrictions and ADB's Procurement Guidelines.

Finance disbursement is carried out in line with ADB's Loan Disbursement Handbook²⁰, Technical Assistance Disbursement Handbook²¹ and Handbook for Developing Joint Crediting Mechanism Projects²².



19. <https://www.adb.org/sites/default/files/institutional-document/219486/handbook-developing-joint-crediting-mechanism-projects.pdf>

20. <https://www.adb.org/documents/loan-disbursement-handbook>

21. <https://www.adb.org/documents/technical-assistance-disbursement-handbook>

22. <https://www.adb.org/sites/default/files/institutional-document/219486/handbook-developing-joint-crediting-mechanism-projects.pdf>

04 | Demonstration Programme for Application of New Decarbonizing Technology

The Demonstration Programme for Application of New Decarbonising Technology^{23, 24} is a programme subsidised by the Japanese Ministry of the Environment and aims to implement GHG emission reduction projects in Partner countries by utilizing excellent decarbonisation technologies and to obtain credits under the JCM and use them to achieve Japan's emission reduction targets.

The main feature of this programme is that the applied technology must have no track record of JCM in the target country and be expected to be widely used and deployed in the medium to long term. On the other hand, the applied technology should have a proven track record of demonstration in Japan or internationally and necessitate the validation of its business model in markets beyond Japan's borders.

General Provisions and procedures

The entity selected and awarded a subsidy under this programme is required to provide a promotion activity for the introduced technology and equipment.

The selection of subsidized projects is made after a public call for applications and a screening process based on the documents submitted by the applicants. The screening process is being conducted by the Screening Committee and consists of two phases:

1. Basic screening phase, the questions to be addressed²⁵:
 - Is it a decarbonization technology that has no JCM track record in the target country and is expected to be widely deployed in the target country?
 - Reduce energy-derived CO₂ emissions or are key technologies proven?

- Is the project capable of being completed within three fiscal years?
- Is the project about to be implemented in the Partner Country?
- The project improves the capacity of human resources in the Partner Country and creates a sustainable market for the product or technology in the Partner Country. Will it be recognized as connected to the project implementation?
- Is the project compliant with the MOEJ Decarbonization Infrastructure Initiative²⁶, MOEJ Global Warming Action Plan²⁷, and the MOEJ Post-COP26 Implementation of Article 6²⁸?
- Does it contribute to the realization of the Sustainable Development Goals (SDGs)? Is it in line with the Global Environment Center Foundation's publicly disclosed "Gender Guidelines"²⁹?
- Does the subsidized business enterprise address human rights in the best possible way

23. https://gec.jp/newtech/R6/newtech24_yoryo.pdf

24. https://gec.jp/newtech/R6/newtech24_outline.pdf

25. https://gec.jp/newtech/R6/newtech24_outline.pdf

26. <https://www.env.go.jp/content/900505904.pdf>

27. <https://www.env.go.jp/press/110060.html>

28. https://www.env.go.jp/earth/MOEJ_A6.pdf

28. https://www.env.go.jp/earth/MOEJ_A6.pdf

29. https://gec.jp/jcm/jp/kobo/r02/mp/jcmsbsdR2_gender_en.pdf

under its responsibility in accordance with the Action Plan on Business and Human Rights (2020-2025)³⁰? Is the grantee addressing the best human rights practices in its supply chain, etc., in line with the Guidelines for Respect for Human Rights in Responsible Supply Chains³¹, etc.?

- If the project is to be conducted in cooperation with a project that receives investment or financing from JICA, a government financial institution, etc., is it possible to distinguish the scope of the grant project from that of the project that receives investment or financing that falls under ODA?
 - Is the subsidized business receiving any other subsidies from the Japanese government?
 - Does the applicant (including representative business operator and joint business operator) meet all the requirements?
2. Evaluation screening, points to be allocated for:
- 10 points - Novelty of the introduced new technology in the target country;
 - 15 points - Relevance of the content of the demonstration: purpose, issues, items, methods, etc. of the demonstration;
 - 25 points - Probability of JCM commercialization of the introduced technology in a few years: partner selection, business structure, financial plan, etc.
 - 25 points - GHG emission reductions at the time of commercialization: calculation approach, GHG emission reductions, cost-effectiveness;
 - 5 points - Policy evaluation: project contribution to Partner Country NDCs/SDGs;
 - 10 points - Consideration of the applicant's efforts to achieve carbon neutrality:
 - 6 points - Set greenhouse gas emission reduction targets toward carbon neutrality in 2050;
 - 4 points - Implementation of decarbonization activities: Participation in the Deco Life Support Group, Registration for Deco Declaration³².

The selected as the result of the screening project, is sent to the Partner country government. After confirming that the Partner country's government has no objection to the adoption of the project, the project will be decided within the budget. When the project is adopted, an informal notification will be sent to the applicant, the representative of the Partner country, the representatives of the project sponsor, and the details of the project will be announced on the websites of the Ministry of the Environment and the Global Environment Center.

The subsidized business selected through public solicitation is required to submit a grant application to the Global Environment Center. The Center will review the submitted grant applications and decide on those deemed appropriate for subsidies. It takes about 30 days from the date of receipt of a complete application form to the date of decision.

The project applicant is required to apply for registration as a JCM project which is similar to other JCM project applications and consists of the preparation of a Project Design Document (PDD) and, as part of the PDD, implementation of a Local Stakeholder Consultation (LSC) to explain the project to residents and other stakeholders, and a validation by a Third Party Entity (TPE). The subsidizing entity is requested to develop its own MRV methodology applicable to the project or to cooperate in providing the necessary information for the development of the methodology to those who develop the methodology separately.

30. <https://www.ohchr.org/sites/default/files/Documents/Issues/Business/NationalPlans/Japan-NAP.pdf>

31. https://www.meti.go.jp/english/policy/economy/biz_human_rights/1004_001.pdf

32. <https://ondankataisaku.env.go.jp/decokatsu/>

The project applicant is required to measure and report the actual GHG emission reductions for the period from the start of operation of the facility until the end of the demonstration period (but only during the period when the bilateral documents between the Partner country and the JCM are valid). The project team will be required to measure and report the actual GHG emission reductions according to the MRV methodology that has been approved or is assumed to be approved by the JCM Joint Committee. In addition, the project reports on the GHG emission reduction and the operation status of the facilities must be submitted to the Ministry of the Environment every year from the date of completion of the subsidized project to the end

of March of that year and for two years. The project report may be shared with government officials of the Partner country in order to share information on GHG emission reduction.

Based on the approved MRV methodology, the subsidized entity is required to apply for issuance of JCM credits using the results of monitoring (including preparation of monitoring reports, verification by TPE, and submission of an application for notification of credit issuance to the JCM Joint Committee). In principle, JCM credits issued to the Japanese side as a result of the project must be delivered to the account of the Japanese government.

Eligibility criteria

The eligible countries for project implementation are the 29 Partner countries, especially new Partner countries that have established JCM with Japan which includes Ukraine. The entities applying for subsidy shall fulfil all the following requirements:

- A Japanese company that falls under any of the following conditions:
 - Private companies (including Japanese corporations established by foreign companies under the Companies Act (Act No. 86 of 2005);
 - Incorporated administrative agencies stipulated in Article 2, Paragraph 1 of the Act on General Rules for Incorporated Administrative Agencies (Act No. 103 of 1999);
 - General incorporated associations, general incorporated foundations, and public interest incorporated associations and public interest incorporated foundations;
 - Other entities deemed appropriate by the Global Environment Center with the approval of the Minister of the Environment.
- An entity shall be a representative of an international consortium which is an organization consisting of a Japanese corporation and a foreign corporation to efficiently implement the project.
- The entity shall have capacity and implementation systems to ensure the proper execution of the subsidy project:
 - The applicant must have the financial basis and business soundness necessary to accurately carry out the subsidized project.
 - The applicant shall have an appropriate management system and processing capability for accounting and other administrative work related to the project.
 - The applicant must be able to present project details, project effects, cost breakdown, financial plan, etc., based on clear evidence.
 - The applicant must have a good understanding of the decarbonization technologies covered by the project and the ability to manage the implementation of the project.
 - A sufficient framework for project implementation has been established in agreement with the joint venture partners.

- The applicant must be able to pledge to the “Pledge Concerning Exclusion of Boryokudan” shown in Attachment 1 of the Application Guidelines³³ of The Demonstration Programme for Application of New Decarbonising Technology

To be eligible for subsidized financing under the Demonstration Programme for Application of New Decarbonising Technology the project shall meet the following requirements:

- The technology must have no track record of JCM in the target country and potential for wide use in the target country (e.g., be positioned in the national strategy of the target country).
- The targeted decarbonization technologies must meet all of the following requirements:
 - The technology must reduce energy-derived CO₂ emissions, including technologies that reduce only GHG other than CO₂, and technologies that absorb or fix CO₂ that is not clearly energy-derived.
 - The technology that is the main element

of the project must not be in the research stage and must have been demonstrated in Japan or abroad.

- The project must be able to be completed within three years.
- The project must be recognized as contributing to the capacity building of local human resources in the target country, which is the basis for technology introduction, and as leading to the creation of a sustainable market for the product/technology in the target country.
- The project must contribute to the realization of the Sustainable Development Goals (SDGs). The introduction and operation of the equipment must comply with the environmental and other legal systems of the Partner country, as well as with international practices and guidelines regarding environmental conservation and human rights.
- The equipment to be introduced under this project shall be subsidized by other subsidies from the Japanese government. The applicant has not received any other subsidies from the Japanese government for the equipment to be introduced under the Project assistance.

Finance volumes and regulations

The total budget for the Demonstration Programme for Application of New Decarbonising Technology is expected to be approximately 850 million yen over three years which is equivalent to \$5,8 million. The maximum amount of subsidy to be granted is the total amount of expenses eligible for the subsidy multiplied by the subsidy rate.

The following expenses are eligible for subsidy:

- Main construction cost;
- Incidental construction costs;
- Machinery and equipment;
- Surveying and testing expenses;
- Equipment costs (including monitoring equipment);

- Business expenses (including expenses for the MRV methodology if the Subsidiary develops the MRV methodology on its own);
- Administrative expenses;
- Other necessary expenses approved by the Global Environment Center.

The list of excluded from subsidy activities includes the following:

- Removal cost of existing facilities (including various expenses related to removal);
- Equipment and supplies required for maintenance of installed facilities, emergency equipment, safety and sanitation, and fire and crime prevention;
- Civil engineering costs, construction costs of buildings, etc. (excluding structures that directly contribute to the reduction of energy-derived CO₂ emissions);

33. https://gec.jp/newtech/R6/newtech24_yoryo.pdf

- Costs related to “mere restoration of functions” such as restoring functions to the state at the time of new installation by updating existing facilities;
 - Spare parts;
 - Expenses required for the preparation of reports and on-site inspections related to this grant project;
 - Forward exchange contract fee, bank transfer fee;
 - Land acquisition cost;
 - Expenses required for JCM project registration, implementation of monitoring, and application for issuance of credits.
- Only a certain percentage of the expenses eligible for subsidies will be subsidized according to the category of the subsidized business, as presented in the table below.

Table 4. The subsidy rates for different categories of businesses

Category of Subsidized Business	Subsidy rate
(A) When the Subsidizing Entity is an SME as defined in Article 2, Paragraph 1 of the SME Basic Act (Act No. 154 of 1963) ³⁴ . In the case of an international consortium, all participating Japanese corporations shall be defined as SMEs.	2/3
(B) For applicants other than (A) whose project cost per single fiscal year at the time of adoption exceeds 100 million yen (equivalent to approx. \$700 thousand)	1/2
(C) For applicants other than (A) whose project cost per single fiscal year at the time of adoption is 100 million yen or less (equivalent to approx. \$700 thousand).	1/3

In the case of a multi-year plan, the project cost for a single year is calculated as the total cost for a multi-year plan divided by total project years.

Regarding the expenses of the subsidy, an income/expenditure book must be kept, the amount of income and expenditure of the subsidy project must be separated from other expenses, the use of the subsidy must be clarified, and documentation must be maintained to prove the details of the expenditure. These books of account and other documentary evidence must be kept for five years after the completion of the subsidized project.

34. https://www.chusho.meti.go.jp/sme_english/outline/08/01.html

05 | JCM UNIDO

JCM program by UNIDO^{35, 36, 37} is supported by the Ministry of Environment of Japan and provides grant financing for the implementation of decarbonization technologies. The geographical scope of the JCM-UNIDO program covers Partner Countries in Africa that have negotiated with the Government of Japan, consisting of Ethiopia, Kenya, Senegal, and Tunisia. Additionally, proposals for project implementation located in a potential Partner Country in Africa are considered for analysis and examination on the condition that a memorandum of understanding has been signed.

Considering the above requirements, this program does not seem to be relevant for implementation in Ukraine. It is necessary to recheck with the Ministry of Environment of Japan in case if such program can be also targeted on Ukraine.

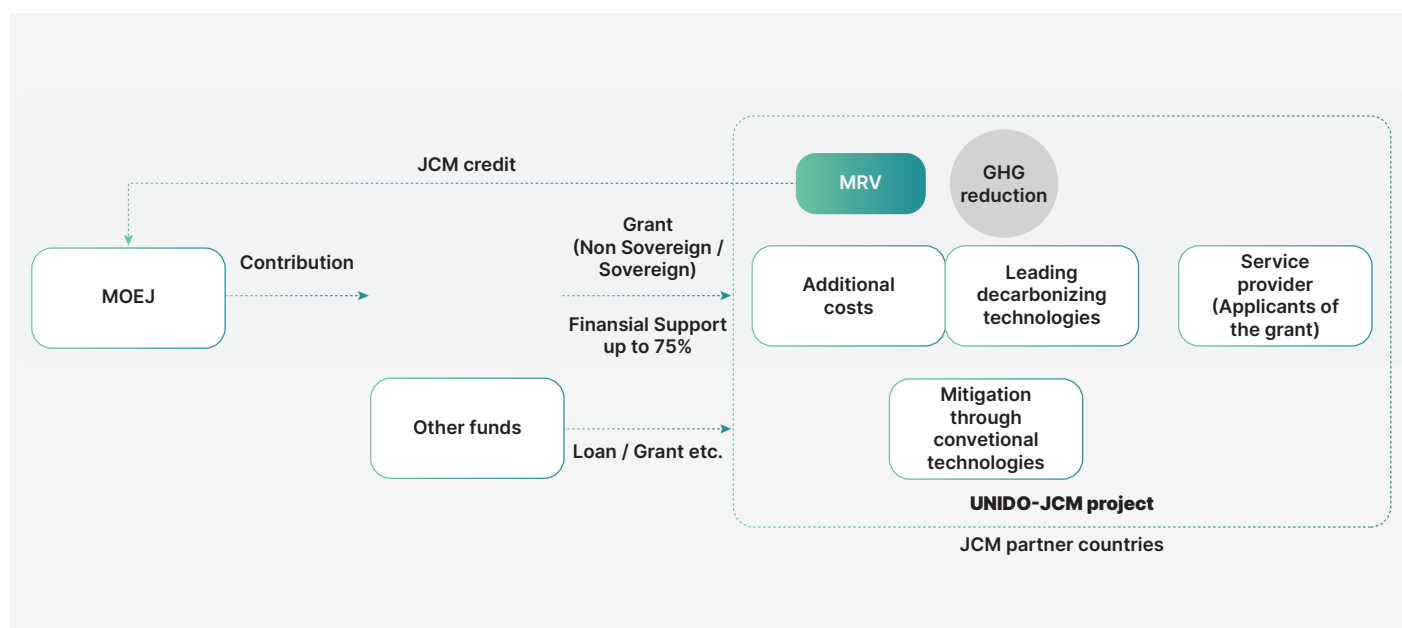


Figure 8. JCM program by UNIDO

35. <https://gec.jp/jcm/jp/wp-content/uploads/2024/03/840fb9ef0e1c1440ef55c5e9b2f80a85.pdf>

36. https://jcm-gm.my.site.com/JCMGlobalMatch/s/what-is-jcm/unido-jcm?language=en_US

37. https://jcm-gm.my.site.com/JCMGlobalMatch/s/information/a0C2s00000HvT3jEAF/united-nations-industrial-development-organization-call-for-proposals?language=en_US

General Provisions and procedures

UNIDO is the specialized development agency of the United Nations that promotes industrial progress for poverty reduction, inclusive globalization and environmental sustainability in developing and emerging countries and economies in transition. The program applicants are eligible only for Japanese entities implementing the JCM project in any of the African Partner

countries and the funding mechanism is similar to JCM Model Projects and differs in a UNIDO participation as program manager. Any applicant is allowed to apply for the both UNIDO-JCM and JCM Financing Programme for the same project at the same time, the applicant is able to be selected for only one of the programs.

Eligibility criteria

Entities eligible for participation in UNIDO-JCM shall be Japanese Service Providers or an International Consortium formed by a Japanese entity. The main high-level criterion for projects is the introduction of GHG emissions reduction projects using decarbonization technologies with further support to conduct MRV of GHG emissions reductions. This program does not have specific criteria for determining project eligibility and refers to the general rules provided in the JCM Model Projects Guidelines for Submitting Proposals (please refer to the JCM Model Projects section).

Since the program is being handled by UNIDO, the application for potential projects is governed by UNIDO rules and regulations, as well as the procedures reflected in the Grants Manual (also known as UNIDO Procurement Manual). UNIDO Procurement Manual

contains general requirements for accountability, transparency and procedures of grant support without any consideration of specific criteria for decarbonization. The cost-effectiveness of the projects is reviewed under the proposal evaluation process but has no threshold to be met.

Additionally, the proposals evaluators draw attention to the extent of the project's contribution to the Partner Country's policies against climate change, including NDC and or Energy Plan. A proposal's contribution to SDGs, gender equality, and human rights protection is being considered. Compliance with Partner countries and international laws and regulations for human rights protection must be observed. The program also aims at the empowerment of women in the industries.

Finance volumes and regulations

The finance under UNIDO-JCM may amount to up to 75% of the total cost of the implementation project but is limited to ¥100 million (equivalent to more than \$600 thousand) and the total project budget for 2024 amounts to \$ 670 thousand. The amount of funding for a specific case is indicated in UNIDO's Call for Expression of Interest. UNIDO in cooperation with the Ministry of Environment of Japan examine the proposals and decide on the support of project implementation.

Proposals shall be submitted to UNIDO Headquarters as per the Call for Expression of Interest issued by UNIDO and the Ministry of Environment of Japan. In the case of a positive decision to allocate funding, the implementer has about two years (may be longer with prior negotiation) to install the equipment or facility. Development of JCM Methodology and Project Design Document are supported by the cost of the Ministry of Environment of Japan. The total period for MRV is negotiable but cannot be less than 5 years.

06

Development of MRV for JCM projects

The Ministry of Agriculture, Forestry and Fisheries supports the Development of MRV for JCM projects in Agriculture. The program's objective is to provide the development of MRV methodology with Partner Countries to successfully implement JCM projects in agriculture. The programme has a narrow focus and contributes to the achievement of GHG emission reduction, gain in farmers' income, and dissemination of Japanese climate-smart technology. The project considers financing amounting to \$200 thousand in 2024³⁸.



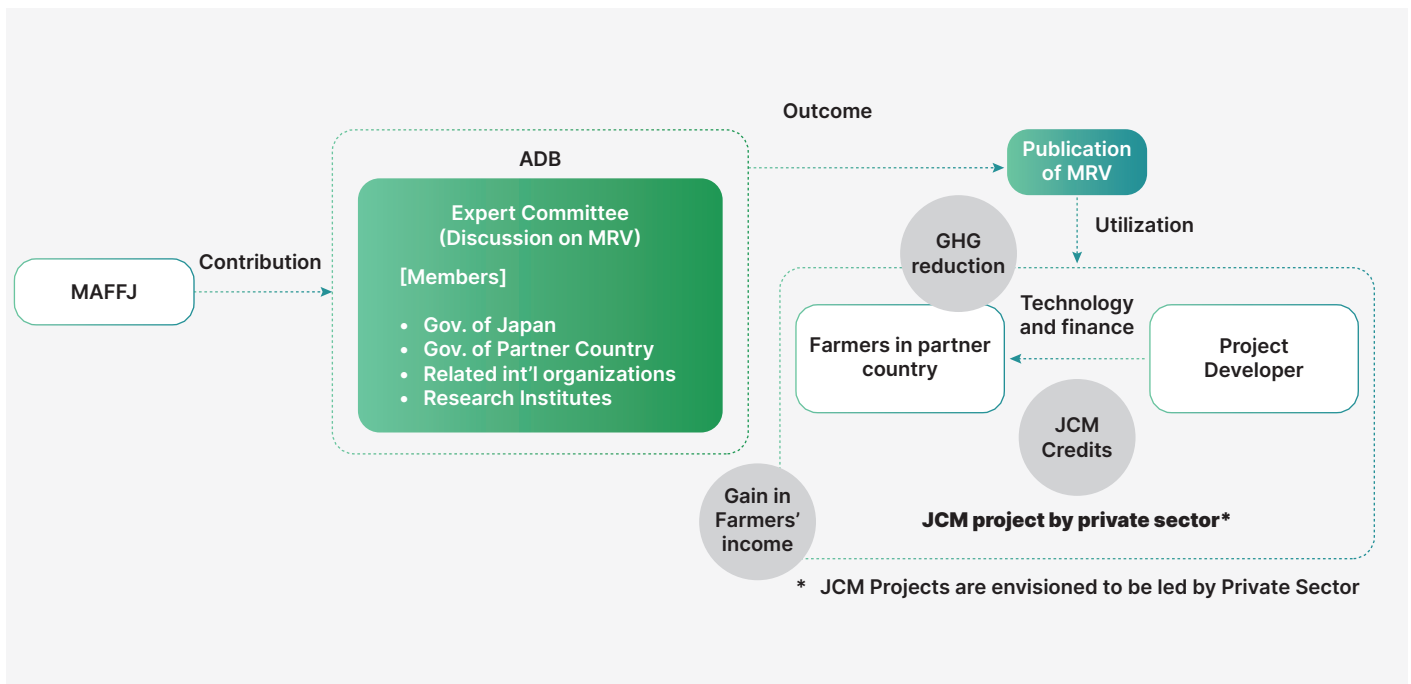


Figure 9. Development of MRV for JCM projects

The only case study available in open sources on this programme is the establishment of the Expert Committee consisting of experts from governments of ASEAN partner countries and Japan and well-established research institutes with ADB serving as the secretariat. The aim of the establishment of the Expert Committee is to share Japan's knowledge and experiences in paddy field management to increase food production while reducing greenhouse gas emissions in the agriculture sector of the ASEAN region and contribute to sustainable agricultural practices and climate change mitigation. The latest 5th Expert Committee Meeting on Climate-Resilient Agriculture and Low-Carbon Food Systems in the ASEAN Region³⁹ was held on 25 June 2024. During the meeting, the EC members agreed on the draft Joint Crediting Mechanism (JCM) methodology for Alternative Wetting and Drying (AWD)⁴⁰.

Ministry of Environment of Japan actively supports the JCM through financial and technical assistance, capacity building, and the development of effective MRV systems, ensuring that projects contribute to both emission reductions and sustainable development. A special place is occupied by capacity building activities to raise awareness of key stakeholders in Partner countries on the practical issues of implementing JCM projects

In 2021 Ministry of Environment of Japan in partnership with The Institute for Global Environmental Strategies provided the capacity building to Support JCM Partner countries for expanding Third-Party Entity. The activity included workshops on MRV procedures that were given to government officials and TPEs considering MRV reviews of JCM.

38. https://www.meti.go.jp/policy/energy_environment/global_warming/jcm/pdf/en_Recent_Development_of_JCM_202405.pdf

39. <https://events.development.asia/learning-events/5th-expert-committee-meeting-climate-resilient-agriculture-and-low-carbon-food>

40. <https://events.development.asia/system/files/materials/2024/06/202406-joint-crediting-mechanism-proposed-methodology.pdf>

07

JCM Feasibility Study

JCM Feasibility study^{41, 42} is a program developed by the Ministry of Economy, Trade and Industry of Japan and is implemented by Pacific Consultants Co., Ltd. The goal of the JCM Feasibility Study program is the enhancement of the spread of decarbonization technologies and products by Japanese companies and other entities, which lead to reduction of greenhouse gas emissions in form of JCM credits that can be used for achieving NDC's of Japan and its Partner Countries. In particular, this program provides funding for feasibility studies of decarbonization projects that may further apply for financing support under the NEDO's Project for Promotion of Low Carbon Technology Through the JCM or other non-sovereign JCM projects financing initiative.

General Provisions and Procedures

The JCM Feasibility Study program by the Ministry of Economy, Trade and Industry of Japan provides financial support for project development for potential JCM participants. The scope of the program considers basic elements of project development including technology, project site, stakeholders, market analysis, etc. The JCM Feasibility Study also provides a foundation for JCM methodology for GHG emission reduction assessment and MRV.

The content covered by the Feasibility Study is expected to be converted into JCM projects afterwards. High priority is given to implementation under the NEDO's Project for Promotion of Low Carbon Technology Through the JCM, with lower priority for other private-based JCM initiatives. After completing the Feasibility Study, the project implementor must report annually to the Ministry of Economy, Trade and Industry of Japan on the project's implementation progress.

Proposals should be based on a preliminary analysis of the challenges, business feasibility, and GHG emission reduction benefits associated with advanced decarbonization technologies and products. These proposals should focus on technologies and products that have the potential for promotion in Partner countries through the Feasibility Study to JCM.

The process for proposal evaluation is conducted by Pacific Consultants Co., Ltd in cooperation with the Ministry of Economy, Trade and Industry of Japan and is based on the following considerations:

- Analysis of relevant trends in related policies and regulations.
- Research on the socioeconomic environment and market trends in Partner countries relevant to the proposed technology.
- Evaluation of GHG reduction through the project operation period and discovering the potential contribution under JCM.

41. https://jcmfs.meti.go.jp/assets/file/R6%20JCMFS_kouboyoryo_20240422.pdf

42. <https://jcmfs.meti.go.jp/20240422.html>

- Coordination for commercialization, including sharing proposed commercialization plans, issues, and countermeasures with Partner countries officials.
- Consideration of future issues and potential challenges.

While implementing the Feasibility Study an applicant is required to effectively and regularly exchange information regarding the progress and specific details of implementation with the secretariate of the Ministry of Economy, Trade and Industry of Japan.

Eligibility criteria

The applicants of the JCM Feasibility Study program shall be a Japanese entity or an overseas subsidiary of the company the head office of which is located in Japan. If there are two or more parties in the form of a consortium applying the joint proposal the organizing corporation shall be selected and submit a proposal. The specific requirements for applicants are the following:

- The applicant has a base of operations in Japan.
- The applicant entity has adequate capacities including personnel, administration, etc. to accurately carry out the Feasibility Study.
- The applicant shall have the necessary management foundation to execute the Feasibility Study
- The applicant shall have an organizational structure that does not inappropriately disclose any information obtained through the Feasibility Study.

- The applicant shall not be subject to suspension of subsidies nominated by the Ministry of Economy, Trade and Industry of Japan.
- The applicant shall not have had a terminated contract with the Ministry of Economy, Trade and Industry of Japan within the past three years due to inadequate information management.

As for the technical criteria for projects, since the project implementation after the JCM Feasibility Study conducted by NEDO's Project for Promotion of Low Carbon Technology Through the JCM has the highest priority, the criteria specified in this program shall be met (please refer to the NEDO Low Carbon JCM Demonstration project).

Finance volumes and regulations

Total finance to be provided under the JCM Feasibility Study program in 2024 amounts to ¥270 million (equivalent to more than \$1,7 million) with the expected number of adopted projects approximately 15. The maximum foreseen budget for a single Feasibility study amounts to ¥15 million (equivalent to approximately \$100 thousand) excluding tax.

report submitted by the trustee. The amount to be paid consists of the total amount of expenses incurred within the scope of the contract. All expenditures must be accompanied by books of account and receipts that clarify expenditures. After the adoption of the project, a briefing session on the reimbursement process is held.

The payment amount is finalized after the final inspection that is conducted based on the performance

08

NEDO's JCM
Demonstration Project

New Energy and Industrial Technology Development Organization (NEDO)⁴³ is a national research and development agency that creates innovation by promoting the technological development necessary for the realization of a sustainable society. NEDO acts as an innovation accelerator to contribute to the resolution of social issues by developing and demonstrating high-risk innovative technologies having practical applications.

NEDO's Project for Promotion of Low Carbon Technology Through the JCM (JCM Demonstration Project)^{44, 45} objective is to expand the use of Japan's advanced low-carbon technologies and systems reducing GHG emissions globally and quantify the amount of GHG emission reductions to convert them into the JCM credits. The main difference between this program and other JCM funding mechanisms is the focus on the decarbonisation of the energy sector and related activities.

General Provisions and Procedures

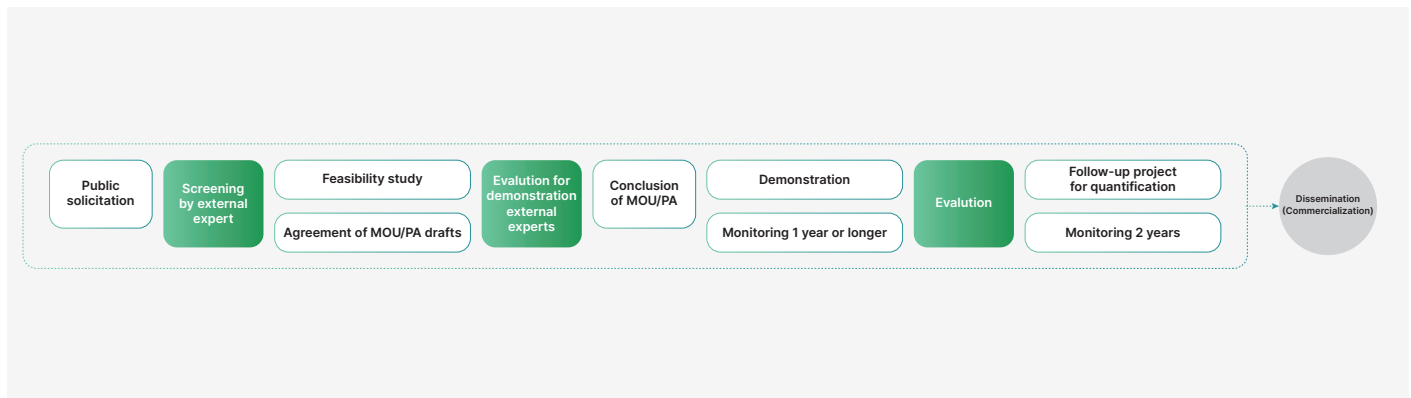


Figure 10. NEDO's JCM Demonstration Project

43. https://www.nedo.go.jp/english/introducing/introducing_index.html

44. https://www.nedo.go.jp/english/activities/activities_ZZJP_100022.html

45. https://www.nedo.go.jp/koubo/AT092_100232.html

Before the Pre-implementation stage, the applicant shall conclude a basic agreement that encompasses all of the three stages.

The Pre-implementation stage includes a detailed feasibility study that may be held after JCM Feasibility study program⁴⁶. The feasibility study during the Pre-implementation stage includes formulation of a demonstration plan, analysis of the probability of dissemination, the effects of greenhouse gas emission reductions, and the methods for quantifying these effects (JCM methodology, etc.), which are necessary for the implementation of the demonstration project. The feasibility of the project is a subject for review by the Commercialization Evaluation Committee consisting of external experts and the Subsidy Review Committee within NEDO.

Upon the implementation of the project, NEDO shall conclude a Memorandum of Understanding with the government agency of the counterpart country that has jurisdiction over the project. The NEDO

subcontractor will conclude a contractual document with the counterpart company for the implementation of the demonstration project, including items necessary for the execution of the project, as separately instructed by NEDO. After concluding the Memorandum of Understanding and the Project Agreement, NEDO and the NEDO-contracted firm conclude a Demonstration Project Consignment Agreement to implement the project. NEDO's contractor is also in charge of the implementation of GHG emission reduction quantification and monitoring for further issuance of JCM credits.

At the quantification follow-up stage, after the completion of the demonstration project, for projects that are expected to achieve steady GHG emission reductions, NEDO continues to support activities related to the projects for which quantification of GHG emission reduction effects and expansion of JCM credit acquisition through implementation of JCM procedures are expected, and for which dissemination of demonstration technologies is expected.

Eligibility criteria

The geographical scope of the potential project's implementation under NEDO's JCM Demonstration Project covers JCM Partner countries . Eligible applicants are companies, etc., that meet all of the following conditions:

- The applicant must be a Japanese entity. However, joint proposals between a Japanese entity and a foreign entity may be accepted under specific conditions.
- The applicant shall have a business track record in the proposed technology and shall have the

organization and personnel necessary to achieve the goals of the project.

- The entity shall have sufficient management capability in terms of management infrastructure, funds and facilities necessary for the smooth execution of the outsourced services, and shall have an information management system in place.
- If a company is applying independently, it must have sufficient ability to overcome the technical issues of the demonstration project and to formulate and implement a plan for the practical application and commercialization of the results of said demonstration project.

46. http://carbon-markets.env.go.jp/wp-content/uploads/2024/03/seminar_UAE_04_NEDO.pdf (page 6)

47. https://www.meti.go.jp/policy/energy_environment/global_warming/jcm/index.html

The project shall consider the following requirements for the technology used in the project:

- The technology to be implemented must be a Japanese low-carbon technology owned by the applicant, and there must be technological issues to be solved in the partner country for further technology expansion.
- The project must be related to the reduction of energy-related carbon dioxide.
- The project shall have a quantifiable greenhouse

gas emission reduction effect. In addition, JCM credits of 1,000 t CO₂ or more can be issued during the monitoring period of the project, and emission reductions of 10,000 t CO₂ or more per year can be expected during the expansion period.

- The expansion strategy for the considered technology is concrete and feasible.
- Appropriate risk management is conducted by the risk management sheet in the «Risk Management Guidelines for International Demonstrations».

Finance volumes and regulations

The finance under the NEDO's JCM Demonstration Project is divided into three separate stages according to project implementation stages:

- Pre-implementation stage - up to ¥50 million per project (equivalent to approx. \$320 thousand) for 1 year.
- Project demonstration stage – up to ¥1 billion per project (equivalent to approx. \$6,4 million) for 3 years.

- Quantitative follow-up – up to ¥20 million per project (equivalent to approx. \$128 thousand) for 2 years.

The total amount of provided support may amount to almost \$20 million 100% (entrusted by NEDO). The total budget under the program is 700 mln yen (equivalent to approx. \$4.9 million) for 2024.



09 | JCM REDD+

JCM REDD+⁴⁸ is a unique and highly customizable on a bilateral basis mechanism that provides funding to project-based REDD+ activities and issues credits for emission reductions achieved which can be used for both countries' NDCs. JCM REDD+ supports activities on the ground which directly affect drivers of deforestation. It also mobilizes financial sources from the private sector, in which involvement in REDD+ remains low.

In total, only two projects were supported under the JCM in Cambodia and Laos. There have been no new projects since 2017. But on other hand, in December 2023 the first JCM credits were issued from REDD+ project in Cambodia (0.6 Mt CO₂e credits, the largest single JCM issuance to date). However, there is no publicly available information on whether this project received support under the JCM REDD+ funding program.

In 2024 Japan identified the development of forestry and agriculture projects under the JCM⁴⁹ as a strategic priority, therefore, we can count on significant interest from Japan in the JCM REDD+ projects.

General Provisions and Procedures

The projects under the JCM REDD+ are implemented on a bilateral basis between Japan's Government and the Partnering Country Government which is usually represented by specific Ministries. Below is a description of the Project Cycle Procedure to the Joint Crediting Mechanism Project Cycle Procedure for Reducing Emission from Deforestation and Forest Degradation, and the Role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks in Developing Countries⁵⁰.

1. Application for registration as JCM Project:

The process of the JCM REDD+ application starts with the development of the Project Idea Note (PIN) and submitting it to the Joint Committee through the

Secretariat. Whereas the project applicant seeks to receive financial support for the project from the Government of Japan, the PIN should be submitted from a relevant ministry in the Government of Japan to the Joint Committee. The Secretariat conducts a completeness check to determine whether the submission is complete and notifies the project participants of the result of the completeness check. In the case of a positive result, the Joint Committee decides whether it has an objection or no objection to the planned project described in the PIN. The Joint Committee makes the result publicly available and notifies the project participants or the relevant ministry in the Government of Japan. The Government of Japan and the Government of the partner country represented by the JCM

48. <https://www.rinya.maff.go.jp/j/kaigai/attach/pdf/index-38.pdf>

49. <https://www.env.go.jp/content/000213036.pdf>

50. <https://www.rinya.maff.go.jp/j/kaigai/attach/pdf/index-38.pdf>

Secretariat may prepare a proposed methodology and submit it, to the Joint Committee through the Secretariat for its approval. In some cases, methodologies may also be developed under the initiative of the Joint Committee. The methodology applicants cooperate with government organizations of the forest sector on both sides to explain the proposed approach and procedures to develop the project baseline and estimate project emission reductions, consider any comments and other feedback they receive, and keep records of the communications. The Secretariat provides a completeness check and makes the methodology publicly available for public input through the JCM website.

The project participants of a proposed JCM project prepare a draft Project Design Document (PDD), including conducting a local stakeholder consultation which consists of a completed in line with the “Joint Crediting Mechanism Guidelines for Developing Project Design Document and Monitoring Report for Reducing Emission from Deforestation and Forest Degradation, and the Role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks in Developing Countries (REDD-plus) and afforestation/reforestation” and submit it to the Secretariat. The Secretariat makes the draft PDD publicly available through the JCM website for public input. The PDD is subject to validation by the Third-party Entity.

Differently from other JCM financing schemes, participants of JCM REDD+ shall prepare additional documents, namely:

- Safeguard Activity Implementation Plan (SGIP)⁵¹.
- Safeguard activity progress report (SGPR).

The project participants submit the SDIP and SGIP/

SGPR together with supporting documentation, as appropriate, to the Joint Committee through the Secretariat at the time of the submission of the draft PDD.

2. Measurement, Reporting and Verification (MRV) of GHG emission reductions

Project participants of a JCM project consult among themselves and both governments the percentage of credit allocation among the project participants, taking into consideration their respective contribution to GHG emission reductions or removals and request the Secretariat regarding project registration.

The project participants prepare a draft monitoring report in line with the applied methodology and the PDD and Monitoring Guidelines and submit it with supporting documentation to the Third-Party Entity contracted by the project participants to perform verification of GHG emission reductions or removals. The Third-Party Entity, in line with the Validation and Verification Guidelines, verifies the amounts of GHG emission reductions or removals, prepares a verification report using the latest version of the “JCM Verification Report Form” and sends the report to the project participants which requested verification.

3. Issuance of JCM credits

After all of the mentioned steps, project participants request the Joint Committee to notify each government to issue credits to their respective accounts in the registry, following the verification of the amount of GHG emission reductions or removals conducted by Third-Party Entities. Following the approval of the Secretariate and the Joint Committee, the project participants obtain credits to their registries.

51. https://www.jcm.go.jp/jc_decisions/1349/JCM_KH_GL_SG_REDD_ver01.0.pdf

Eligibility criteria

The JCM REDD+ provided by the Government of Japan has strict eligibility criteria regarding program content. All of the Rules, guidelines and methodologies are developed jointly on a bilateral basis with a signed partner countries. REDD+ guidelines are developed and approved by the government of Japan and each host country's government since the JCM is a bilateral mechanism.

Since no new REDD+ projects have been registered since 2017, there are no detailed publicly available information on eligibility criteria or any restrictions on the participants of the program.

Finance volumes and regulations

The finance provided under the JCM REDD+ is negotiable on a bilateral basis and depends on the final allocation of credit issuance between the Japanese government and the Government of the Partner Country. However, it should be noted that all JCM credit issuance from the REDD+ project in Cambodia were allocated to Japan.

Ukrainian project developers potentially may have a unique opportunity to benefit from Japan's REDD+ programs under the Joint Crediting Mechanism (JCM). Traditionally focused on developing countries, REDD+ offers a framework for forest protection and reforestation activities, aligning with Ukraine's environmental

priorities and the capacities of the Ministry of Environmental Protection and Natural Resources of Ukraine. In order to start substantive activities in this area, there is a strong need for matchmaking between Ukrainian and Japanese businesses. Establishing these partnerships can facilitate access to financing, allowing Ukraine to leverage its natural resources for sustainable development while contributing to global emission reduction goals. The strategic focus of Japan on forestry and agricultural sectors within the JCM framework makes this an especially relevant mechanism for collaboration, offering both environmental and economic benefits.