

Project Idea Note for JCM Project (Provisional Draft)

環境省 JCM 設備補助事業の記入指針及び記入例

PIN reference
number

(For the secretariat use only)

All the information described in this document is at the pre-implementation stage and may change as the project develops. (入力フォントは Times New Roman でお願いします)

1. Basic project information	
1.1. Date of Submission	<u>16/05/20XX</u> (公募提案書の提出日 形式は dd/mm/yyyy)
1.2. Partner country (A host country where the planned project is located)	<u>Country A</u> (正式国名を確認の上記載する。パートナー国については別資料 (パートナー国名一覧表) 参照のこと。)
1.3. Title of the planned project (Should be self-explanatory and clearly indicate the activity leading to GHG emissions reductions / removals)	<u>30MW Binary Power Generation Project at XX Region, North XYZ Island</u> (公募提案書の英語事業名と一致すること、なお、事業名に国名は含めない。)

The Joint Committee makes the result publicly available, including the PIN reference number, the name of the planned project, the date of submission in the above, and the reason for objection when the Joint Committee objects to the planned project described in the PIN through the JCM website.

2. Project participants and contact information	
2.1. Representative Japanese participant for the project and its roles in the project (For identification of the person in charge for the project in terms of communication) (代表事業者の主な窓口担当に関する情報)	
Name of the entity (Company, etc.):	<u>ABC Corporation</u> (代表事業者名)
Roles of the entity in the project:	<u>1. Project Administration</u> <u>2. Submission of Monitoring Result to MOEJ</u> (事業者の役割、事業の実施責任、MRVの報告等)
Address of the contact entity:	<u>X-XX-X, YYY, ZZZ-ku, Tokyo</u> (代表事業者住所)
Website of the contact entity:	<u>http://www.abc.corp.jp/english/</u> (英語のウェブサイトのアドレス)
Name and position of the main contact person in the entity:	Last name: <u>Chikyu</u> (姓) First name: <u>Midori</u> (名) Position: <u>Manager</u> (役職) (窓口担当者名及び役職)
E-mail of the main contact person:	<u>Midori.chikyu@abccorp.jp</u> (窓口担当者のメールアドレス)
Phone number of the main contact person:	<u>+81-XXXX-ZZZZ</u> (窓口担当者の電話番号)
2.2. Japanese participant(s) for the project and their roles in the project except for the entity in 2.1. (If possible, please indicate the contact person of each entity involved in the project) (日本の事業者に関する情報) 日本の共同事業者がいる場合はここに記入する。日本の共同事業者が複数いる場合は欄を追加して全ての共同事業者を記入する。)	
Name of the entity (Company, etc.):	日本の共同事業者がいる場合に記入する。なければ N/A とする。
Roles of the entity in the project:	<u>N/A</u>
Address of the entity:	<u>N/A</u>
Website of the entity:	<u>N/A</u>

Name and position of the contact person in the entity:	Last name: <u>N/A</u> First name: <u>N/A</u> Position: <u>N/A</u>
E-mail of the contact person:	<u>N/A</u>
Phone number of the contact person:	<u>N/A</u>
2.3.1 Participant(s) of partner country for the project and their roles in the project <i>(If possible, please indicate the contact person of each entity involved in the project)</i> (パートナー国の共同事業者に関する情報。パートナー国の共同事業者が複数の場合は、欄を追加してすべての事業者分を記入する。)	
Name of the entity (Company, etc.):	<u>XXX Power Supply</u> (共同事業者名)
Roles of the entity in the project:	<u>1. Project management as facility owner</u> (共同事業者の役割 (事業の実施責任、MRV の報告等) を記入)
Address of the entity:	<u>XXX YYY, ZZ City, XX Region, Country A</u> (共同事業者の所在地)
Website of the entity:	<u>http://www.xxx.power.supply.co.xx/english/</u> (英語ウェブサイトアドレス)
Name and position of the contact person in the entity:	Last name: <u>KKK</u> (姓) First name: <u>LLL</u> (名) Position: <u>Deputy Director</u> (役職) (共同事業者の担当者の名前と役職)
E-mail of the contact person:	<u>LLLKKK@xx.power.supply.co.xx</u> (担当者の E メールアドレス)
Phone number of the contact person:	<u>+XX XXX XXXXXXXX</u> (担当者の電話番号)
2.3.2 Participant(s) of partner country for the project and their roles in the project <i>(If possible, please indicate the contact person of each entity involved in the project)</i>	
Name of the entity (Company, etc.):	<u>DDD Energy Development</u> (共同事業者名)
Roles of the entity in the project:	<u>1. Facility operation and maintenance</u> <u>2. Monitoring of GHG emissions and data collection</u> (共同事業者の役割 (事業の実施責任、MRV の報告等) を記入)
Address of the entity:	<u>VVV SSS, YY City, XX Region, Country A</u> (共同事業者の所在地)
Website of the entity:	<u>http://www.ddd.energy.development.co.xx/english/</u> (英語ウェブサイトアドレス)
Name and position of the contact person in the entity:	Last name: <u>MMM</u> (姓) First name: <u>PPP</u> (名) Position: <u>Manager</u> (役職) (共同事業者の担当者の名前と役職)
E-mail of the contact person:	<u>KCruise@nice.energy.development.com</u> (担当者の E メールアドレス)
Phone number of the contact person:	<u>+XX XXXXXX XXXX</u> (担当者の電話番号)
2.4.1 Relevant ministry or governmental agency of partner country <i>(If possible, please indicate the contact person)</i> (本事業に関する情報を共有したパートナー国の政府との対応状況を記入する。複数の場合は欄を追加して全ての省庁をそれぞれ記載、特に情報共有をしていなければ空欄とする。)	
Name of the entity:	<u>Ministry of Environment</u> <u>Department of XXXX</u> (パートナー国側政府省庁担当部署)

Address of the entity:	<u>XXXX, YY ZZZ, XX Region, Country A</u> (所在地)
Website of the entity:	<u>http://www.environment.ministry.xx</u> (英語ウェブサイトアドレス)
Name and position of the main contact person in the entity:	Last name: <u>XXX</u> (姓) First name: <u>YYY</u> (名) Position: <u>Director</u> (役職) (主担当者の姓、名、役職)
E-mail of the main contact person:	<u>xxxxyy@envmin.gov.xx</u> (主担当者の E メールアドレス)
Phone number of the main contact person:	<u>+xx-xxx-xxxxx</u> (主担当者の電話番号)
Is the project information already shared with the entity?	☒ Yes (<i>Briefly explain the status below</i>) ☐ No <u>On January 15, 2023, project information was shared with Ministry of Environment.</u> (事業に関する情報は既に共有されているか。されている場合は「Yes」、されていない場合は「No」のいずれかにチェックがされていること) (原則として、事業に関する情報を既に共有した省庁のみを記載するため、Yes の場合は詳細を記載する。No の場合は空欄とする。)
2.4.2 Relevant ministry or governmental agency of partner country (If possible, please indicate the contact person)	
Name of the entity:	<u>Ministry for Energy</u> <u>Department of Energy Development</u> (パートナー国側政府省庁担当部署)
Address of the entity:	<u>XXXX ZZZZ, MM City, Country A</u> (所在地)
Website of the entity:	<u>http://www.energy.ministry.xx</u> (英語ウェブサイトアドレス)
Name and position of the main contact person in the entity:	Last name: <u>XXX</u> (姓) First name: <u>ZZZ</u> (名) Position: <u>Manager</u> (役職) (主担当者の姓、名、役職)
E-mail of the main contact person:	<u>xxxzzz@enr.min.gov.xx</u> (主担当者の E メールアドレス)
Phone number of the main contact person:	<u>+zz-xxxx-yyyy</u> (主担当者の電話番号)
Is the project information already shared with the entity?	☒ Yes (<i>Briefly explain the status below</i>) ☐ No <u>On January 15, 2023, project information was shared with the Ministry for Energy.</u> (事業に関する情報は既に共有されているか。されている場合は「Yes」、されていない場合は「No」のいずれかにチェックがされていること) (原則として、事業に関する情報を既に共有した省庁のみを記載するため、Yes の場合は詳細を記載する。No の場合は空欄とする。)

3. Project information

3.1. Summary of the planned project (3.1 欄には地図や写真は貼らないこと。)

Description of the project: (Project implementation scheme, role of each participant, etc. Insert an image of the implementation structure in section 5)	This is a project to construct a 30MW Binary Geothermal Power Plant in YY City, XX Region. ABC Corporation serves as the representative participant of this project and administers the entire project including MRV reporting. XXX Power Supply, a partner participant, the largest geothermal company in Country A, will own the new geothermal power plant. They will receive the monitoring data from DDD Energy Development and provide to ABC Corporation. DDD Energy Development will operate the facility and maintain the appropriate operation of the facility. They also conduct daily monitoring and collect data of the GHG emission reduction through the operation of the facility. The generated power will be sold to national grid, which will replace the fossil-fuel based power and significantly reduce greenhouse gas (GHG) emissions. (プロジェクトのスキームを具体的に説明、各参加者の役割等を記入する。 ※電子申請システム「事業概要」タブ 「事業概要、補助事業の実施体制と役割分担」参照)
Location of the project	NN City, XX Region, Country A (事業の実施場所)
Technologies, products, systems, services, infrastructure, or implementation of mitigation actions to be adopted for the project, and a brief description of them:	Compact and excellent durability geothermal turbine generator system (30,350kW) will be adopted. (1) XXX's super-rotor technology is applied in order to achieve longer continuous reliable operation of the plant. Super-rotor technology solves various problems to the equipment caused by severe geothermal corrosive steam and protect from the damage and degradation due to aging. (2) The auxiliary equipment such as condensers, heater/evaporator, gas extraction system, and pumps are optimized to minimize the power consumption and achieve maximum output. Outline of the Binary Geothermal Power Plant is illustrated on Page 8. (導入技術及び設備の概要を記入する。太陽光発電事業の場合は、パネルの変換効率が22.5%以上であることを明示する。また導入技術がわかりやすく説明された図解などを添付する。添付箇所はPINの最終頁でもよく、その場合はどこに掲載しているかをこの欄に示す。 ※電子申請システム「導入技術」タブ 「導入技術及び設備の概要」参照)
Status and progress of the project (Feasibility study, license application status, etc.):	A Special Land Use Permit has been granted by the Country A government in 2020 to occupy and manage leasehold and public forest lands for this purpose, and a 25-year use permit has been secured starting in 2021 (power plant, transmission lines, wells, access roads). Grid connection permit approved, local government approval obtained, non-duplication certification verified, environmental compliance certificate approved. (事業の進捗状況（許認可の取得状況等）を記入する。 ※「事業概要」タブ 「事業実施に係る調整状況」参照)
3.2. Expected scale of investment	Total project costs*: USD75,000,000.00 In project currency: ZYX1,004,906,250,000.00(本事業使用通貨額) In Japanese Yen: 10,125,000,000(日本円額) @1.007/100ZYX

	(適用為替レート) Breakdown (in project currency):(費用内訳) 1. <u>Turbine Generator:USD30,000,000.00</u> 2. <u>Switchyard and connection asset: ZYX267,975,000,000.00</u> 3. <u>Transformers, Switchboards, VFDs, Electric modules, DC, UPS : ZYX133,987,500,000.00</u> 4. <u>Installation: ZYX200,981,250,000.00</u> (見積書のうち、Total Project Cost の対象となる項目を記入する。) *Total Project Cost とは、補助対象としうる経費であり、GHG 排出削減に直接寄与する主要設備と主要設備の運用上欠くことのできない付帯設備及びこれらの設備の整備に係る工事費や事務費等とする。
3.3. Applicable JCM methodology(ies)	☐ Existing methodology(ies) (Please specify below) (適用できる方法論が既に存在する場合、方法論番号を記入する。 例 AA AM023) ☒ New methodology(ies) needed (Briefly explain the status below) <u>The development of a new methodology will start in parallel with the facility installation.</u> <u>Emission reductions are calculated by multiplying electricity generated by the geothermal power plant and emission factor in XX Region.</u> (方法論の開発が新たに必要の場合にチェック。開発予定や見込みがあれば記入する。提案済み方法論 (Proposed Methodology) がある場合でもこちらをチェックして、現在の状況を記入する。例えば「PM030 は現在パートナー国の承認待ち」等。 また、GHG 排出削減量はどのように算出されるのかを簡単に説明する。)
3.4. Expected GHG emission reductions / removals (unit: tCO ₂ /year)	<u>72,000 tCO₂/year</u> (年間の想定 GHG 排出削減/吸収量 (CO₂ 以外の各 GHG の量は CO₂ 換算とする。))
3.5. Expected schedule up to the commercial operations date and the project registration under the JCM	<u>09/ 20XX: Completion of Contract of Financing</u> <u>10/ 20XX: EPC contract signed</u> <u>11/ 20XX: Start of Design and Manufacturing of the major equipment.</u> <u>04/ 20XY: Start of installation.</u> <u>10/ 20XY: Completion of installation of the system</u> <u>11/ 20XY: Commissioning</u> <u>12/ 20XY: Start of commercial operation</u> <u>12/ 20XZ: Approval of the methodology</u> <u>09/ 20XZ: Registration of the project</u> (交付決定後の事業開始から稼働開始予定年月までの予定及び JCM プロジェクト登録予定年月を記入する。 形式は (mm/yyyy) とする。)
3.6. Contribution to Partner Country's NDC (Nationally Determined Contributions)	<u>The Enhanced NDC increases unconditional emission reduction target to 31.89%, compared to 29% in the 1st NDC. The commitment will be implemented through effective land use and spatial planning, sustainable forest management which include social forestry program, restoring functions of degraded ecosystems including wetland ecosystems, improved agriculture productivity, energy conservation and the promotion of clean and renewable energy sources, and improved waste management.</u> <u>Country A can increase its contribution up to 43.20% reduction of</u>

	<u>emissions in 2030 conditionally, compared to 41% in the 1st NDC, subject to availability of international support for finance, technology transfer and development and capacity building. This project will contribute to the promotion of clean and renewable energy sources by replacing the fossil-fuel based power with the renewable energy. The GHG emission reduction through this project will be monitored for 15 years. The accumulated reduction amount will be issued as the JCM credit and shared between Country A and Japan, which will significantly contribute to the emission reduction target of the partner country.</u> (パートナー国 NDC への貢献について記載する。 パートナー国の NDC 記載事項を最初に記載する。本案件が NDC 対象分野のスコープに含まれていること、海外からの支援によりより高い目標を目指している場合にはそれに貢献するものであること等について記入する。加えて、他の国家計画などがあれば、それに対する貢献を記入する。) IGES が公表している NDC データベースを参照 https://www.iges.or.jp/jp/pub/iges-indc-ndc-database/en)
3.7. Contribution other than GHG emissions reductions or removals (Financial contribution should be explained in section 4)	<u>Personnel of the partner country will be able to acquire sufficient theoretical knowledge and practical capability for the reliable operation and proper maintenance of the Systems, Classroom training and On-the-Job training will be implemented at the Site during the field test and commissioning.</u> <u>This project contributes to the following SDGs ;</u> <u>Goal 5: This project will create jobs in the community and women workers will have equal job opportunities. The employees will have opportunities to receive technical and management training regardless of the gender.</u> <u>Goal 7: Generated power will replace the fossil fuel-based energy, which promotes energy transformation in Country A.</u> <u>Goal 12: This project will contribute to the sustainable development of the society in Country A.</u> <u>Goal 13: This project will reduce the GHG emissions in Country A, which will contribute to the mitigation of the global environmental change.</u> <u>Goal 17: This project will promote partnership between Japan and Country A.</u> (GHG排出削減/吸収以外の貢献について記載する)
3.8. Credit allocation (この欄は空欄とする。)	
Select one of the following: ☐ Credit allocation is still under discussion among project participants. ☐ Project participants propose a preliminary percentage of credit allocation as below, <i>understanding the condition that numbers will be decided by the Joint Committee at the time of project registration:</i> *In case the project expects to receive financial support from the Government of Japan, the Government of Japan determines a preliminary percentage of credit allocation.	
Partner country (Government and project participants)	
Japan (Government and project participants)	
The reason for the above credit allocation:	

4. Financial contribution (Please indicate which government support is expected; otherwise, explain in the "Other" section.)	
☒ Financial support from the Government of Japan: Select one of the following	Fiscal Year of Japan
☒ Subsidy Programme for JCM Facility Introduction by Ministry of the Environment, Japan (MOEJ) (JCM 設備補助事業)	20XX (設備補助事業採択年度)
☐ JCM Support Programme administered by the United Nations Industrial Development Organization (MOEJ)	
☐ F-gas Recovery and Destruction Model Project by MOEJ	
☐ Japan Fund for the JCM administered by the Asian Development Bank (MOEJ)	
☐ JCM Demonstration Project by New Energy and Industrial Technology Development Organization (Ministry of Economy Trade and Industry, Japan)	
☐ Other (Please explain how the project will be financed and what financial contribution or economic incentive will make the project viable.): kin	

5. Implementation structure

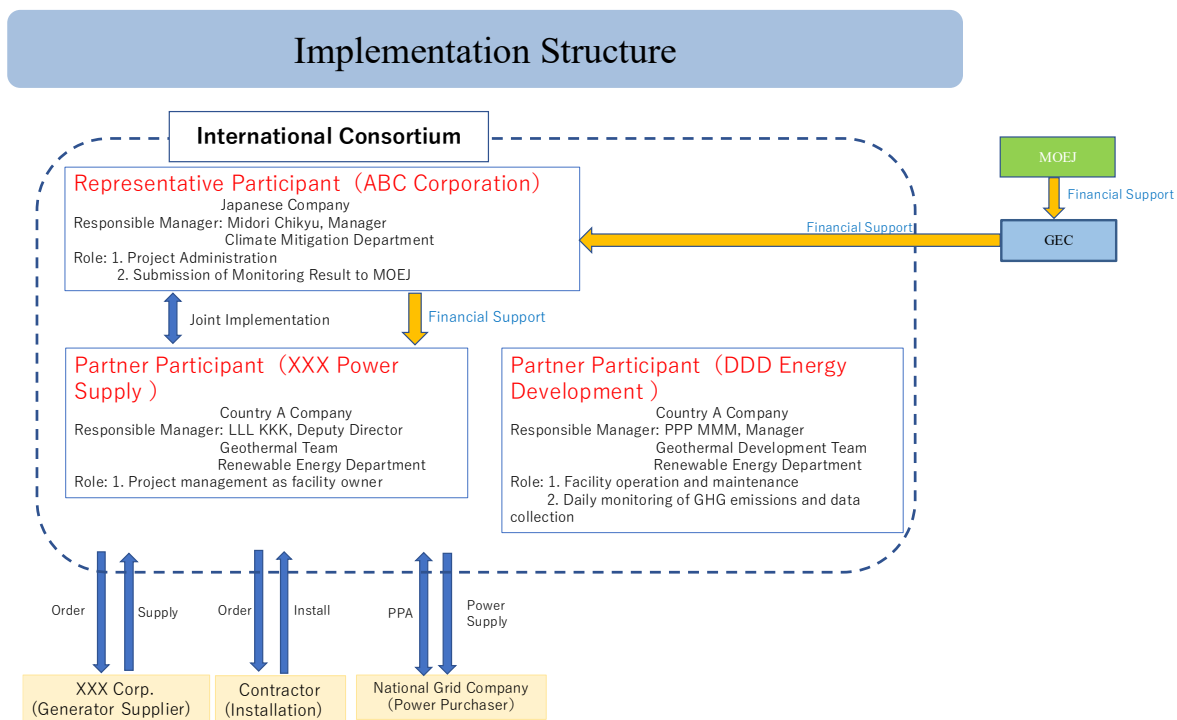
Please insert an image of the implementation structure including financial flows below:

(英語の事業実施体制図を貼付する。)

環境省から GEC を経由して補助金が渡ることを記載する。

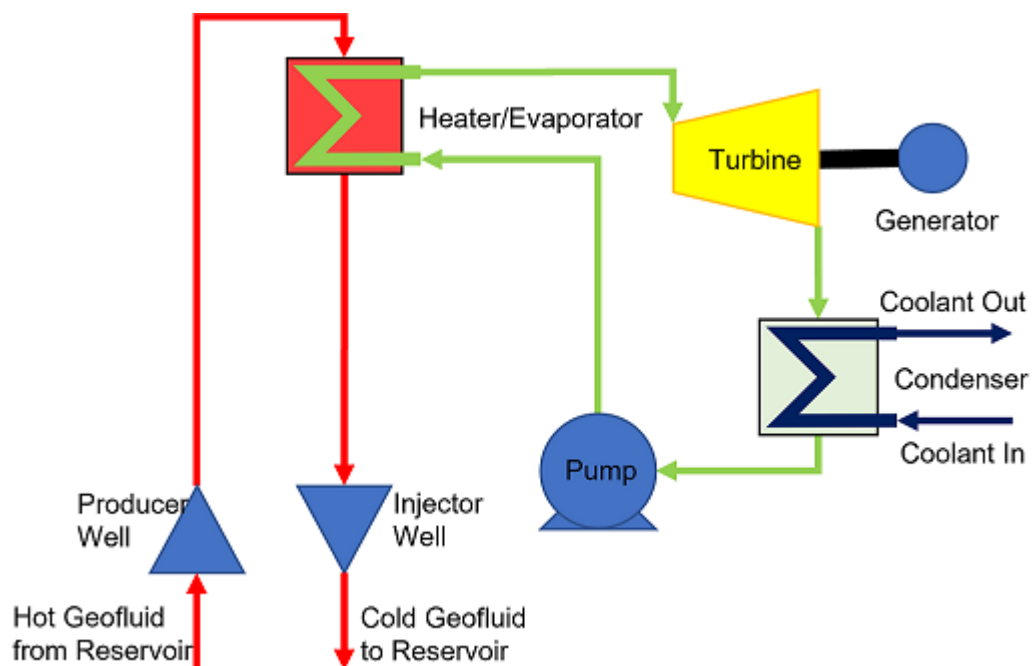
表中に代表事業者、共同事業者の役割を明示する。

共同事業者に未設立の SPC が含まれる場合は、設立予定であることを明記した上で実施体制図に含める。)



Outline of the Binary Geothermal Power Plant

(技術の概要図を貼付する。)



Revision history of PIN		
Version	Date	Contents revised
1.0	15/05/20XX (公募提案書 提出日形式) dd/mm/yyyy と する)	First version
	dd/mm/yyyy	
	dd/mm/yyyy	

*Project participants fill in this section when they submit a revised PIN to the Joint Committee.

*Rows may be added, as needed