

Key Points for Utilizing METI JCM FS Schemes

JCM FS応募におけるポイント

*Presentation is based on JCMFS application guideline in FY2023.

FY2023 JCM-FS Secretariat FY2023 JCM-FS事務局

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Pacific Consultants

This project is commissioned by the Ministry of Economy, Trade and Industry



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[Appendix]

GHG emission reduction project potential in Uzbekistan



目的 / PURPOSE of JCM FS

- 本実現可能性調査(Feasibility Study: FS)は、二国間クレジット制度(JCM)を活用し、 我が国企業等の脱炭素技術・製品の普及等の事業化を実現すると共に当該国での温室効果ガス排出削減及びJCMクレジット化を実現する案件の実現可能性を検討する。
 - Examining the feasibility of a project to commercialize the dissemination of decarbonization technologies and products by Japanese and other entities, and to realize GHG emission reductions and JCM credits issuance by utilizing the Joint Crediting Mechanism (JCM).
- 本FSの出口として、<u>『二国間クレジット制度(JCM)等を活用した低炭素技術普及促進事業</u> <u>業』(NEDOによるJCM実証事業)への応募、あるいは、民間JCMプロジェクトとしてのJCMプロジェクト化を</u>

As an exit strategy of JCM FS, it is expected to apply for either the NEDO JCM Demonstration Project or a Private JCM project.



対象技術・製品 / Target technologies/products

■ 優れた脱炭素技術等を活用したエネルギー起源CO2の排出削減を行うとともに、実現したGHG 排出削減量のJCMクレジット化に資するもの

Reduction of <u>energy-derived</u> CO2 emissions through the use of superior decarbonization technologies, etc., and contribution to issue JCM credits.

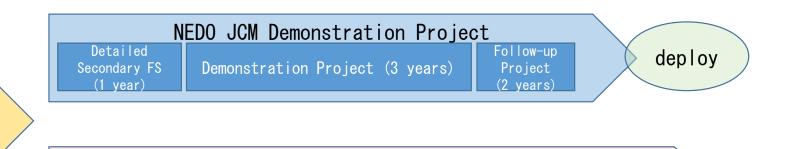
■ GHG排出削減量を定量的に評価でき、かつ、可能な限り大規模なGHG排出削減に貢献するもの (明確なGHG排出削減量の閾値は設定しませんが、一定以上の規模のGHG排出削減量が見込め る提案を優先します)

Projects that contribute to <u>quantifiable GHG emission reductions</u> and contribute to the largest possible GHG emission reductions. No clear threshold for GHG emission reductions will be set, but priority may be given to proposals that are expected to achieve larger GHG emission reductions.



FS終了後の展開(想定する出口戦略) / Expected exit strategy after JCM FS

- 『二国間クレジット制度 (JCM) 等を活用した低炭素技術普及促進事業』 NEDO JCM Demonstration Project
- 民間資金を中心とするJCMプロジェクト (民間JCM) Private JCM project



Private JCM

FY2023 JCM FS



FSにおける調査項目 / Research items on JCM FS

- 関連政策・制度の動向分析 Trend analysis of related policies and systems
- 事業化およびJCMプロジェクト化の検討
 Study of commercialization and JCM project implementation
- 課題と対応の検討
 Examination of issues and measures
- GHG排出削減見込量の算定および排出削減貢献の検討
 Calculation of expected GHG emission reductions and consideration of contribution to emission reductions
- 相手国関係者への提案技術・製品や事業化計画、課題や対応策等の共有を通じた事業化に向けた調整
 - Coordination toward commercialization through sharing of proposed technologies/products, project plans, issues and measures, etc. with counterpart parties



Project Idea Note

本様式はJCM バートナー国と調整中のものであり最新様式はJCM ホームページの各パートナ	一国ページを
Project Idea Note for JCM Project (Provisional	Draft)
PIN reference number	

All the infromation described in this document is at the pre-implementaion stage and m project developes.

1. Basic project information	
1.1. Date of Submission	dd/mm/yyyy
1.2. Partner country (A host county where the planned project is located)	
1.3. Title of the planned project (Should be self-explanatory and clearly indicate the activity leading to GHG emissions reductions / removals)	

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

	ge for the project i	n terms of communication
Name of the entity (Company, etc.):		
Roles of the entity in the project:		
Address of the contact entity:		
Website of the contact entity:		
Name and position of the main contact person in the entity:	Last name: Position:	First name:
E-mail of the main contact person:		
Phone number of the main contact person:		
2.2. Japanese participant(s) for the p (If possible, please indicate the contact		
Name of the entity (Company, etc.):		
Roles of the entity in the project:		
Address of the entity:		
Roles of the entity in the project: Address of the entity: Website of the entity: Name and position of the contact person in the entity:	Last name: Position:	First name:

Phone number of the contact person:	
2.3. Participant(s) of partner country (If possible, please indicate the contact	
Name of the entity (Company, etc.):	
Roles of the entity in the project:	
Address of the entity:	
Website of the entity:	
Name and position of the contact	Last name: First nam
person in the entity:	Position:
E-mail of the contact person:	3334430033, 3344
Phone number of the contact person:	
2.4 Relevant ministry or government (If possible, please indicate the contact	
Name of the entity:	
Address of the entity:	
Website of the entity:	
Name and position of the main contact person in the entity:	Last name: First nam Position:
E-mail of the main contact person:	
Phone number of the main contact person:	
Is the project information already	☐ Yes (Briefly explain the status
shared with the entity?	A 4.53 5
	□ No
3. Project information	
3.1. Summary of the planned project	
3.1. Summary of the planned project Description of the project:	
3.1. Summary of the planned project Description of the project: (Project implementation scheme, role	
3.1. Summary of the planned project Description of the project: (Project implementation scheme, role of each participant, etc. Insert an	
3.1. Summary of the planned project Description of the project: (Project implementation scheme, role of each participant, etc. Insert an image of the implementation structure	
3.1. Summary of the planned project Description of the project: (Project implementation scheme, role of each participant, etc. Insert an image of the implementation structure in section 5)	
3.1. Summary of the planned project Description of the project: (Project implementation scheme, role of each participant, etc. Insert an image of the implementation structure	
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3.1. Summary of the planned project Description of the project (Project implementation scheme, role of each participant, etc. Insert an image of the implementation structure in section 5) Location of the project Technologies, products, systems, services, infrastructure, or	
3.1. Summary of the planned project Description of the project (Project implementation scheme, role of each participant, etc. Insert an image of the implementation structure in section 3) Location of the project Technologies, products, systems, services, infrastructure, or implementation of mitigation actions	
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3.1. Summary of the planned project Description of the project. (Project implementation scheme, role of each participant, etc. Insert an image of the implementation structure in section 3) Location of the project Technologies, products, systems, services, infrastructure, or implementation of mitigation actions to be adopted for the project, and a brief description of them:	
3.1. Summary of the planned project Description of the project: (Project implementation scheme, role of each participant, etc. Insert an image of the implementation structure in section 5) Location of the project Technologies, products, systems, services, infrastructure, or implementation of mitigation actions to be adopted for the project, and a	

3.2. Expected scale of investment	Total proje
	In project In Japan
	Breakdow
3.3. Applicable JCM methodology(jes)	☐ Existing
	□ New me
3.4. Expected GHG emission	tCC
reductions / removals (unit: tCO ₂ /year)	
3.5. Expected schedule up to the commercial operations date and the project registration under the JCM	
3.6. Contribution to Partner Country's NDC (Nationally Determined Contributions)	
3.7. Contribution other than GHG emissions reductions or removals (Financial contribution should be explained in section 4)	
3.8. Credit allocation	
Select one of the following:	
☐ Credit allocation is still under discu	ssion among
□ Project participants propose a preli	
condition that numbers will be decided *In case the project expects to receive	
Japan determines a preliminary percen	
Partner country (Government and projection	ect participa
Japan (Government and project partici	pants)
The reason for the above credit allocation:	

(Please indicate which government support is ex

- ☐ Financial support from the Government of following
- ☐ Financing Programme for JCM Model Project Environment, Japan (MOEJ) ☐ JCM Support Programme administered by the
- Development Organization (MOEJ) ☐ F-gas Recovery and Destruction Model Project
- ☐ Japan Fund for the JCM administered by the (MOEJ)
- ☐ JCM Demonstration Project by New Energy as Development Organization (Ministry of Econo Japan)
- ☐ Other (Please explain how the project will be fir

(本様式はJCM パートナー国と調整中のものであり最新様式はJCM ホームページの各パートナー国ページを参照する必要がある。) contribution or economic incentive will make the project viable.):

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

Version	Date	Contents revised
	dd/mm/yyyy	
	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

Source: https://www.meti.go.jp/press/2022/03/20230328004/20230328004-2.pdf



実施規模等 / JCM FS budget (In case of FY2023)

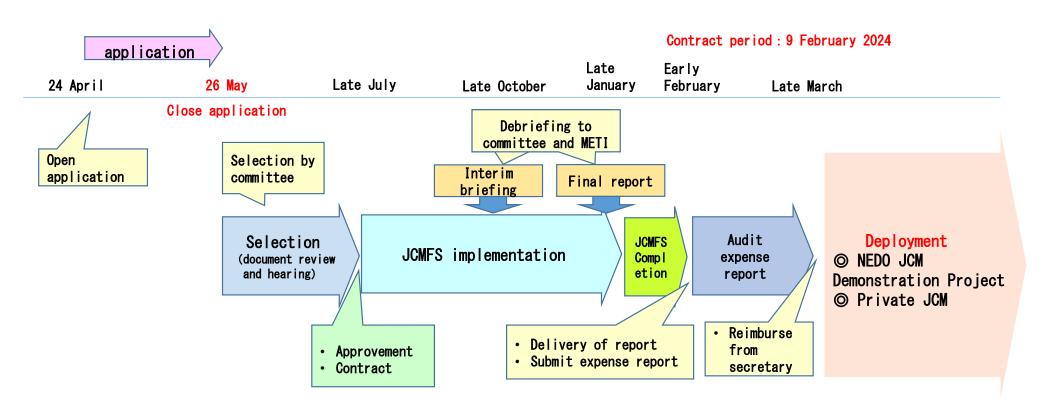
- ☐ Type: Entrustment from JCMFS secretariat
- ☐ FS schedule: Contract date ~ 9 February 2024
- Budget: 15 million JPY (tax excluded)/JCMFS = 100,000 USD/JCMFS (1USD=150JPY) FY2023 result: 14 JCMFS project approved

NOTE) Any proposal over maximum budged could not be approved.

□ One of requirements for applicants:
日本に拠点を有していること。親会社である本社が、日本に拠点を有している日本企業の海外現地法人は、「日本に拠点を有していること」に含む。
Having a base in Japan. An overseas subsidiary of a Japanese company whose parent company's head office is based in Japan is included in "having a base in Japan."



全体スケジュール / Overall schedule in case of FY2023



Appendix

GHG emission reduction project potential in Uzbekistan

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1. Status of GHG emission in Uzbekistan (2020)

GHG emissions (World Bank)

igoplus GHG emissions (2020) : 187.5 million tC02e¹

■ CO2 (2020) : 115.6 million tCO2 (61.7%)²

■ CH4 (2020) : 53.6 million tC02e (28.6%)³

Energy-derived CO2 emissions (2020, IEA) 4

- > Fuel combustion: 109.6 million tC02
- > Fuel-wise: Natural gas 78.7%, oil 11.0%, coal 10.3%
- > Sector-wise: Electricity and heat generation 40.6%, household 22.9%, transportation 14.4%, industry 10.6%, service 11.6%, other 5.2%
- * World Bank, 2023, Total greenhouse gas emissions (kt of CO2 equivalent) Uzbekistan, https://data.worldbank.org/indicator/EN.ATM.GHGT.KT.CE?locations=UZ
- World Bank, 2023, CO2 emissions (kt) Uzbekistan, CO2 emissions (kt) Uzbekistan | Data (worldbank.org)

 Output

 Description

 Output

 Data (worldbank.org)

 Output

 Data (worldbank.org)

 Data (worldbank.org)

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 Data (worldbank.org)

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- X3 World Bank, 2023, Methane emissions (kt of CO2 equivalent) Uzbekistan | Data (worldbank.org)
- X4 IEA, 2022, Uzbekistan 2022 Energy Policy Review, https://iea.blob.core.windows.net/assets/0d00581c-dc3c-466f-b0c8-97d25112a6e0/Uzbekistan2022.pdf



2. Large GHG emission sources by sub-category in Uzbekistan from the Biennial Report⁵

Sector	Category	ktCO2e	Major GHG
Energy	Natural gas	47,185.2	CH4
Energy	Power generation, gaseous fuels	27,557.8	CO2
Energy	Process industry and construction, gaseous fuels	20,838.2	CO2
AFOLU	Internal fermentation	19,446.3	CH4
Energy	Residential sector, gaseous fuels	17,521.8	CO2

As of 2017, the <u>top five categories</u> with the highest GHG emissions amounted to approximately 132.55 million tons of CO2e, accounting for approximately 70% of Uzbekistan's GHG emissions.



3. Major GHG mitigation measures in Uzbekistan from the NDC⁶

- Double the energy-efficiency indicator relative to the level of 2018 and halve the energy intensity of GDP.
- Increase the share of renewable energy sources to 25% of total power generation by 2030.
 - > New 5GW of solar, 3 GW of wind and 1.9 GW of hydroelectric power plants.
- Further introducing energy-saving technologies in industry, construction, agriculture and other sectors of the economy.
 - Upgrade the infrastructure of industrial enterprises, ensure their sustainability by increasing energy efficiency by at least 20% and by wider use of clean and environmentally friendly technologies and industrial processes.
- Introducing alternative fuels in transportation.
 - Expand the production and use of motor fuels and vehicles with improved energy efficiency and environmental performance, as well as develop electric transport.
- Improving the water management system.
 - ➤ <u>Significantly increase the water use efficiency in all sectors of the economy, introduce drip irrigation technologies on up to 1 million hectares of lands and increase yield of crops cultivated on this land by up to 20-40%.</u>

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4. Potential areas for JCM project in Uzbekistan

Requirements for JCM scheme:

- METI/MOE JCM support scheme: Project that can reduce energy-derived CO2 emission.
- Private JCM: Project that can reduce GHG emissions (including non-energy-derived CO2).
- In both cases, it is necessary for project to be able to calculate GHG emission reduction quantitatively.

Energy Efficiency

- ✓ Electrified tech (heat pump etc) in household / industry sector
- ✓ Energy efficiency in power/heat sector (reduction of losses in power/heat generation/distribution etc)



- ✓ Fuel change from fossil to renewables
- ✓ Large renewable power with power storage system (battery, green-H2 etc).
- ✓ PV, wind, small hydro etc.



- ✓ Prevention of CH4 leakage from natural gas grid.
- Alternative motor fuel production or renewable power for EV.
- √ H2, CCUS etc



Ask for JCMFS project ideas

- ■JCMFSに繋がるプロジェクトの案がございましたら、是非、下記のプロジェクト情報シートをダウンロードしてご記入いただき、事務局までご連絡頂けますようお願いいたします。
 [JCM_pckk@tk.pacific.co.jp]。
- ■If you have a project idea that may be applicable to JCMFS program, Please download the information sheet and send it to us [JCM pckk@tk.pacific.co.jp].

➤ Information sheet

▶https://pckk.box.com/s/wkxyvx8vfzpys74jw9jwln20sju5y7rf

ファイル名: 【記入用】将来的なJCMFSに繋がる可能性のある案件候補情報

File : [Please fill in] Project information sheet for JCMFS



Useful Links

- ■JCM Official Website (incl. Rules and Guidelines, Methodologies for each partner country)
 - https://www.jcm.go.jp/
- ■About JCM
 - http://carbon-markets.env.go.jp/index.html
 - http://carbon-markets.env.go.jp/eng/
- ■民間資金を中心とするJCMプロジェクトの組成ガイダンス Guidance for the Development of Private-Sector JCM Projects
 - https://www.meti.go.jp/press/2022/03/20230328004/20230328004.html
 - https://www.meti.go.jp/english/press/2023/0328 002.html
- ■2023 JCMFS公募サイト(公募は既に終了しています) (No English website)
 - https://www.pacific.co.jp/news/2023/20230724-001119.html

Any inquiry, please contact to: JCM_pckk@tk.pacific.co.jp

Thank you so much for allowing us to make a presentation.

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