Хөшгийн хөндий 15 МВт НЦС

118-р дунд сургууль, халаалтын зуух

Оюу толгой –Цагаан суварга дамжуулах шугам

JOINT CREDITING MECHANISM IN MONGOLIA

Otgontsetseg L,
Secretary of the JCM between Mongolia and Japan

@Japan Pavilion, COP27

8 November 2022

Дархан хот 10 МВт НЦС

Эвэридэй Фарм 12.7 МВт НЦС

POLICY ENVIRONMENT

Vision-2050

2050

Targeted development program

2030

The main directions for the development of Mongolia within 2021-2025
Mongolia's 2021-2025 investment program

2025

Action program 2020-2024 - Action plan

2024

Yearly development plan for 2022

2022

SUSTAINABLE DEVELOPMENT GOALS

NATIONALLY DETERMINED CONTRIBUTION TO IMPLEMENTING PARIS AGREEMENT

The JCM GHG emission reductions include in the Energy sector target

1 *Mongolia's GHG emission reduction target*

22.7%
16.89 m.t CO_2

Energy	Agriculture	Industry	Transport	Construction	Waste
8.34 m.t	5.28 m.t	1.28 m.t	1.05 m.t	830 thous.t	106.1 thous.t

2 *Climate Change adaption target*

Water
Animal husbandry and grazing
Disaster protection
Livelihood, social security
Forest
Farming
Public health
Biodiversity

(Source: Ministry of Economic and Development Mongolia)

Arrangements necessary for the further implementation of the JCM within the framework of Article 6.2 of the Paris Agreement in Mongolia

For the preparation:

- Domestic arrangements to authorize the use of JCM credits for ITMO's and NDC targets
- Domestic arrangements for corresponding adjustment (CA)
- To develop domestic registry system for measures taken on emission reduction (JCM has its own online web-based registry system)
- To prepare the reports (IR, AR, RI)

Actions that may need to be considered further in the implementation of the existing JCM:

- Ensure environmental integrity with conservative reference emissions.
- Support for sustainable development *(JCM Mongolia has SDCP/SDCR documents that regulates the JCM projects environmental integrity and contribution for SDG's, and the Gender equality guideline were adopted in 2020)*
- JCM partner countries will have to fulfill their obligations to participate in the cooperative approach for example, the most recent greenhouse gas inventory report required by decision.

18/CMA.1, MPGs https://unfccc.int/sites/default/files/resource/cma2018_3_add2_new_advance.pdf

(Source: IGES, Mutual learning program)

Preparation status for the further implementation of the JCM within the framework of Article 6.2 of the Paris Agreement in Mongolia

For the preparation of further implementation of the JCM within the framework of Article 6.2 of the Paris Agreement:

- The JCM has periodically made the arrangements since the adoption of the PA in 2015.

  For example: The Gender equality guideline developed within the framework of the JCM in 2020, and JCM Mongolia-Japan developed and implemented the SDCP/SDCR documents in 2018.

- According to the requirements of 6.2, the necessary arrangements for all regulations and guidelines were updated and approved by the 8th Joint Committee meeting of the JCM between Mongolia and Japan, which was held on February, 2022.

CORSIA:

- JCM Mongolia-Japan submitted its second application to CORSIA in February 2022. First application was submitted in 2020.

(Source: www.jcm.go.jp)

Updates of regulations and guidelines of JCM in Mongolia under the requirement of CORSIA, and following Paris Agreement decision

	SUBJECT	ISSUES ADDRESSED FOR CORSIA
JCM Rules and Guidelines	Rules of Implementation (RoI)	• **Avoidance of double claiming** • **Corresponding adjustments** • **Written attestation**
	Common Specifications of the JCM Registry	• **Information on credit vintage (year of emission reductions)**
	Project Cycle Procedure (PCP)	• **Reference, crediting period**
	Guidelines for Developing Proposed Methodology	• **Reference, additionality, leakage and its procedure**
	Guidelines for Developing Project Design Document and Monitoring Report	• **Review on the crediting period and its procedure**
	Rules of Procedure for JC	• **Conflict of Interest and its procedure**
	Glossary of Terms	• **Definition on the new terms**
MN side	Registry (including website)	• **Tracking CORSIA-eligible units** ✓ JCM Mongolia-Japan plans to track units in the Mongolian registry in the same way as the Japanese registry. The status of those units authorized/canceled will be disclosed on the JCM website.
	Guidelines for the Implementation of the JCM in Mongolia	• **Development of the guidelines** ✓ The Guidelines aim at: - Facilitating the efficient implementation - Issuance of the JCM credits in the JCM registry of Mongolia - Management of the issued JCM credits - Procedures and forms related PA and its relevant decisions - Rules and guidelines established on the basis of the bilateral document.

(Source: www.jcm.go.jp)

RENEWABLE ENERGY DEVELOPMENT IN MONGOLIA

Wind PP

Solar PP

Hydro PP

ZAVKHAN 5 MW+3.6MW battery storage (JFJCM)

Bogd river 2 MW

Myangad, Khovd 10 MW (WB)

Yesenbulag, Govi-Altai 10 MW (ADB)

Durgun 12 MW (CDM)

Taishir-Guulin 11 MW (CDM)

SALKHIT 50 MW (CDM)

DARKHAN 10 MW (JCM)

MON NARAN 12.7 MW (JCM)

KHUSHIG VALLEY 15 MW (JCM)

Ulaanbaatar

GOBI-SUMBER 10 MW (GCF)

✓ Private sector+ GCF

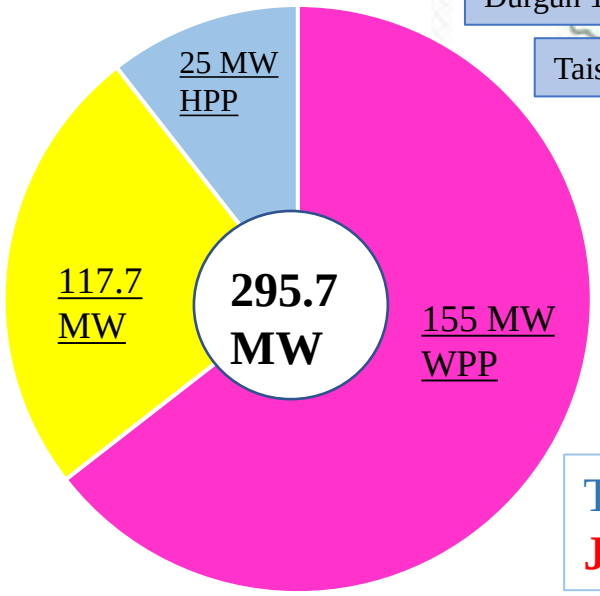
SAINSHAND 55 MW (EBRD & EIB)

SAINSHAND 30 MW

ZAMIIN UUD 15 MW

✓ 100% Private sector

TSETSII 50 MW (CDM)



Total RE installed capacity - 295.7 MW

JCM contribution 16% or 42.7 MW

(Source: Ministry of Energy, Mongolia)

MN001, MN002

"Installation of high efficiency boiler in 118th school of UB and Upgrading and Installation of Centralized Control System of High-efficiency HOB in Bornuur soum"

Project particpants:

ANU Service LLC

Suuri Keikaku LLC

Implementing period:

2013-2030

Total amount of credits issued in 2016 and 2018

483 T-CO2

MN003

Installation of
12.7 MW Solar Farm project in
Ulaanbaatar suburb

Project particpants:

Everyday Farm LLC
Farmdo LLC

Implementing period:

2016 - 2030

Total amount of credits issued as of 2022

44,299 T-CO2e

(Photo: Everyday Farm LLC)

MN004

10MW Solar Power Plant project in Darkhan City

Project particpants:

Solar Farm International LLC
Sharp Corporation

Implementing period:

2016-2030

Total amount of credits issued in 2017

8947 T-CO2

(Photo: Solar Power International LLC)

MN005

A HIGH EFFICIENCY AND LOW LOSS POWER TRANSMISSION AND DISTRIBUTION SYSTEM IN MONGOLIA

Project particpants:

NTPS SOE
Hitachi Ltd.

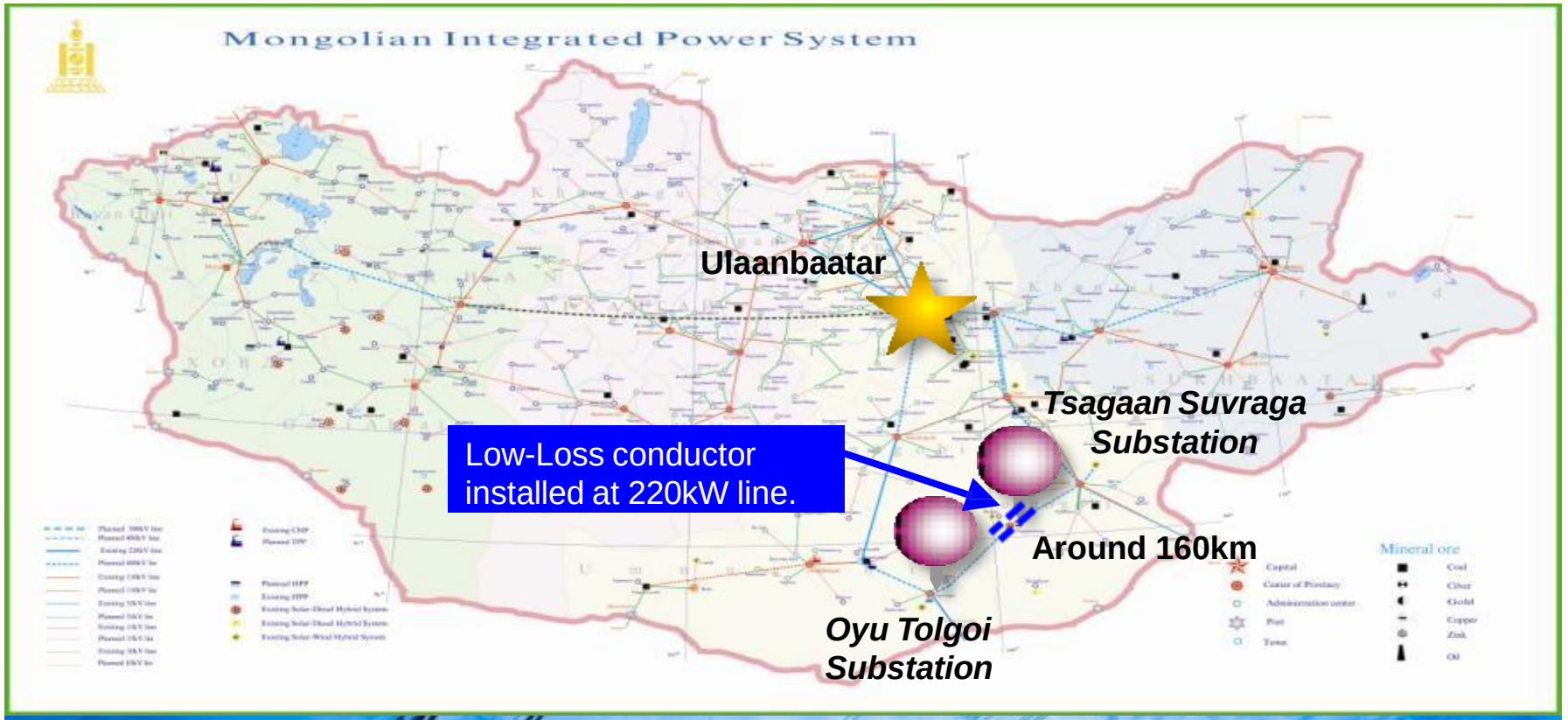
Implementing period:

2018-2019

Total amount of credits issued in 2019

1 T-CO2

PROJECT COMPLETED



MN006

15 MW Solar Power Plant project located in Khushig Valley, Tuv province

Project particpants:
Solar Farm International LLC
Sharp Corporation

Implementing period:
2017-2030

Expected GHG emission reduction /per year/
18438 T-CO2

Power generation /per year/
24 million KWh

(Photo: Tenuun Gerel Construction LLC)

Figure 3.
BEFORE: DZL (16 ton/hour steam boiler)

Figure 4.
AFTER: DAEYEOL (4 boiler with a steam capacity of 3.4 tons), NTEC (8 boiler with a heating capacity of 0.63 GCal/h)

MN007 –Fuel conversion project at te MCS Coca Cola factory.
Production in 2021: Heat produced by steam 3589 GJ, Heat produced by hot water 409 GJ, CO2 emission reduction - 5781 tCO2e

Project particpants:
MCS International LLC
Saisan Co.,Ltd.

Photo: MCS International LLC; Otgontsetseg L

JFJCM

(MN008) 5 MW solar PV with 3.6MWh battery storage and energy management system in Uliastai(solar), Aldarkhan(storage) soum in Zavkhan province

Project participants:

MCS International LLC, Ministry of Energy
NGK Insulators Ltd., ADB

Implementing period:
2018-2030

Expected GHG emission reduction 6439 t-CO2 per year, 160,975 t-CO2 for 25 years.

Official opening ceremony will be in mid of November, 2022

(Photo: MCS International LLC)

JCM PROJECTS CREDIT ISSUANCE / CO2 REDUCTIONS

- JCM partnership document is signed by 24 countries. Currently, a total of 53,730 t-CO2e credits issued for Mongolia whereas so far 10 countries have been issued 126,628 t-CO2e credits for the **40** projects. *(as of Nov, 2022)*

Country	Year	Credit issuance (1 credit =t-CO2e)		
		Total	Japan	Project implementer (by country)
Indonesia	2016-2020	56,254	36,614	19,650
Mongolia	2016-2022	**53,730**	42,982	**10,748**
Vietnam	2017-2019	4,415	2,691	1,724
Palau	2016-2018	881	659	222
Thailand	2018-2020	4,032	2,017	2,015
Laos	2019	207	174	33
Maldives	2019	152	78	77
Kenya	2021	486	-	486
Cambodia	2020	92	92	-
Saudi Arabia	2020	3074	3074	-

(Source: www.jcm.go.jp)

COMPARISON OF THE JCM PROJECTS EMISSION REDUCTION (*as of Dec, 2021*)

№	PROJECT NAME	STARTED DATE (year/month)	COMPLETED DATE (year/month)	TOTAL ENERGY PRODUCTION (Kw/h)	TOTAL POWER SUPPLY (Kw/h)	INTERNAL USE (Kw/h)	CO2 REDUCTION (T/CO2)
MN004	Darkhan 10 MW SPP	2016/2	2017/1	15,868,617.7*	15,739,112.9*	129,504.8*	12,567.94*
MN003	Mon Naran 12.7 MW SPP	2016/9	2017/8	18,964,000.00	18,201,702.50	763,233.14	14,981.560
MN006	Khushig Valley 15 MW SPP	2017/6	2019/6	26,366,866.5	26,048,052	318,814.5	20,760.297
MN001	HOB - 118th School of Ulaanbaatar	2013/7	2014	19,581 GJ	19,581 GJ	None	62
MN002	Upgrading and Installation of Centralized Control System of High-efficiency HOB in Bornuur soum	2013/7	2014	39,211 GJ	39,211 GJ	None	102
MN007	Fuel Conversion by Introduction of LPG Boilers to Beverage Factory, Ulaanbaatar	2019/10 started construction	2020/8	By steam: 3589,7 GJ By water: 404.8 GJ	2195,3 GJ 404.8 GJ	1394,3 GJ	5781

ACHIEVEMENTS IN PAST 10 YEARS

1. Introduce low carbon technology

- The key to reducing GHG emissions is to move from old technologies that are no longer economically viable, emit more carbon, less energy efficient, and cause more air pollution.

2. Increase competitiveness and economic efficiency

- The JCM projects in Mongolia are a combination of good practices which introduced new advanced technologies, investments, financing, and international standards.

3. Private sector participation and contribution to climate change mitigation

- JCM contributes to the expansion of public-private sectors cooperation in Mongolia.

4. Sustainable development goals

- JCM contributes to sustainable development of Mongolia through its projects as well as improving human health and working environment and gender equality is emphasized at all levels of JCM implementation.

5. Alternatives, cost-effectiveness, and benefits are all associated with the JCM.

- JCM helps in pre-finance the projects, thereby reducing the risk of complications during project development.

CONCLUSION

- The country lacks national policy for integrating GHG emissions reductions into the carbon market system, which is necessary to develop regulations to authorize the use of JCM credits for ITMOs and NDC targets.

- Needs to establish a unified registry system, in order to track GHG emissions reductions at the national level.

- Needs to be careful and avoid the risks that the results of emission reductions transferred(ITMO) internationally in accordance with articles 6.2 and 6.4 of the Paris Agreement. Avoid double counting.

- Taking advantage of the use and adopting good practices, such as examples, regulations, registry systems, technology, know-how, and financing of the JCM, for other climate change-related projects.

Happy 10th Anniversary

to all JCM members!

THANK YOU!

www.jcm-mongolia.com
www.jcm.go.jp