MEMORANDUM OF COOPERATION
BETWEEN
THE MINISTRY OF ECONOMY, TRADE AND INDUSTRY OF JAPAN
AND
THE MINISTRY OF ENERGY AND MINERAL RESOURCES
OF THE REPUBLIC OF INDONESIA
ON THE REALIZATION OF ENERGY TRANSITIONS

The Ministry of Economy, Trade and Industry of Japan and The Ministry of Energy and Mineral Resources of the Republic of Indonesia (hereinafter referred to individually as a “Participant” and collectively as the “Participants”),

CONSIDERING the mutual interest of the Participants in developing cooperation in the field of energy based on the principles of equality and mutual benefits;

RECOGNIZING the importance of efforts to explore possible options to achieve realistic energy transitions to reduce carbon dioxide emissions while ensuring economic growth;

CONSIDERING the technologies that contribute to realistic energy transitions such as those involving Carbon Recycling and Carbon Capture and Storage (CCS) /Carbon Capture Utilization and Storage (CCUS) are considered to be among the future’s most promising options, and that ammonia as a source of fuel (fuel ammonia) plays an important role to realize the hydrogen society in the future, not only as hydrogen carrier but also as zero-emission fuel;
RECOGNIZING the importance of cooperation on blue, green and other types of hydrogen as well as fuel ammonia towards the utilization of hydrogen and fuel ammonia as well as the development of hydrogen and fuel ammonia market in the future;

NOTING the importance of these fuels in ensuring affordable and reliable energy resources and achieving realistic energy transitions, and of the promotion of further cooperation for the acceleration of technological innovations, which are necessary for the achievement of realistic energy transitions, in the fields of hydrogen, fuel ammonia, Carbon Recycling, CCS/CCUS and other relevant technologies;

REFERRING to the Memorandum of Cooperation between the Ministry of Energy and Mineral Resources of the Republic of Indonesia and the Ministry of Economy, Trade and Industry, Japan on the Energy Sector signed on June 16, 2019 in Karuizawa, Japan; and

PURSUANT to the prevailing laws and regulations of their respective countries,

HAVE REACHED the following recognition:

**Paragraph 1**

**Objective**

The objective of this Memorandum of Cooperation (hereinafter referred to as this “MoC”) is to establish a cooperative institutional framework to facilitate and enhance Japan and Indonesia’s energy cooperation for the realization of realistic energy transitions that utilize all available energy sources, technologies and options including but not limited to hydrogen, fuel ammonia, Carbon Recycling and CCS/CCUS on the principles of equality and mutual benefits.

**Paragraph 2**

**Areas of Cooperation**

The Participants will cooperate in the following areas:
1. The formulation of energy transition roadmap towards net-zero emission based on their respective national targets;

2. The development and deployment of technologies that contribute to realistic energy transitions such as but not limited to hydrogen, fuel ammonia, Carbon Recycling and CCS/CCUS;

3. Support efforts within multilateral fora to accelerate cooperation for technologies that contribute to realistic energy transitions such as but not limited to hydrogen, fuel ammonia, Carbon Recycling and CCS/CCUS; and

4. Support for policy development, human resource development and knowledge sharing on energy transitions and their contributing technologies.

**Paragraph 3**

**Forms of Cooperation**

Cooperation between the Participants under this MoC will take the following forms:

1. Exchanging information, knowledge and research results on energy transition efforts and their contributing technologies such as but not limited to hydrogen, fuel ammonia, Carbon Recycling, CCS/CCUS and Enhanced Oil Recovery/Enhanced Gas Recovery;

2. Establishing meetings of various forms (e.g., workshops, trade missions and working groups) to discuss and exchange information on energy transition efforts and their contributing technologies such as but not limited to hydrogen, fuel ammonia, Carbon Recycling, CCS/CCUS and Enhanced Oil Recovery/Enhanced Gas Recovery;

3. Cooperating in the relevant international fora;

4. Exchanging information on identifying possibilities for cooperation to accelerate energy transition efforts such as converting carbon dioxide (CO2) into carbonates and utilizing fuel ammonia;

5. Encouraging opportunities of investment, joint project (including feasibility study and demonstration project) and joint research (including exchanging experts, technology, samples, and equipment), which contribute to the acceleration of energy transition efforts, in hydrogen, fuel ammonia, Carbon Recycling, CCS/CCUS, Enhanced Oil Recovery/Enhanced Gas Recovery and related low emissions technologies, industries and value chains; and
6. Other forms of cooperation mutually decided by the Participants.

Paragraph 4
Implementing Agencies

The implementing agencies of cooperation under this MoC are:

For the Ministry of Economy, Trade and Industry of Japan: Agency for Natural Resources and Energy (ANRE); and


Paragraph 5
Implementation

1. The Participants will determine specific areas of cooperation and related activities by mutual consent. The detailed scope of each joint activity and plan for its delivery, including activity schedule, project plan, timelines, and contributions may be set forth in a separate arrangement to be formulated between the Participants.

2. If one of the Participants wishes to engage a third-party entity in the implementation of this MoC, consent of the other Participant will be confirmed in written form.

Paragraph 6
Working Group

1. For the purpose of discussing, monitoring and reviewing the implementation of various issues pertaining to this MoC, the Participants may set up a Working Group and invite the related governmental entities.

2. The Working Group, consisting of representatives of the Participants, may hold a meeting periodically on mutually determined dates, alternately in Indonesia and Japan, or virtually. Each Participant will cover its own expenses relating to its participation in the meetings of the Working Group.
Paragraph 7
Confidentiality

1. The Participants will ensure that the data and information provided to each other, including the result of activities implemented under this MoC, are not transferred or supplied to a third party without the prior written consent of the Participants.
2. The Participants will not use information or documents exchanged under this MoC for any purposes other than the intended purposes of this MoC and in line with what has been mutually decided upon the signing of this MoC, and will not transfer such information or documents to a third party without the prior written consent of the other Participant.

Paragraph 8
Intellectual Property Rights

1. Any intellectual property brought by one Participant for the implementation of this MoC will remain the property of that Participant.
2. Any intellectual property rights resulting from activities for the implementation of this MoC will be handled in line with a separate arrangement to be formulated between the Participants and/or their involved entities.

Paragraph 9
Genetic Resources, Traditional Knowledge and Folklore

1. The Participants recognize the existence and the effective promotion of the protection of genetic resources, traditional knowledge and folklore.
2. The Participants confirm that any intellectual property rights arising from the use of genetic resources, traditional knowledge and folklore in the implementation of this MoC will be subject to laws and regulation in the respective territories of the Participants.
3. Use of genetic resources, traditional knowledge and folklore of the Participants in the implementation of this MoC will be effected through a specific arrangement to be formulated between the Participants.
Paragraph 10
Material Transfer Agreement

The Participants and/or their involved entities will arrange a separate Material Transfer Agreement in the event that research materials will be transferred outside of the territory of the originating countries of the Participants.

Paragraph 11
Modification

This MoC may be modified by mutual written consent of the Participants.

Paragraph 12
Settlement of Differences

This MoC is not intended to create any legally binding rights or obligations in respect of either Participant. Any differences arising in relation to the interpretation or implementation of this MoC will be settled amicably by consultation or negotiation on the basis of mutual understanding and goodwill between the Participants.

Paragraph 13
Commencement, Duration, and Discontinuation

1. The cooperation under this MoC will commence from the date of its signature.
2. The cooperation under this MoC will continue for a period of three (3) years, and may be extended for another period of 3 (three) years by mutual written consent through diplomatic channel.
3. Either Participant may discontinue this MoC at any time by giving written notification to the other Participant at least 6 (six) months in advance of the intended date of discontinuation.
4. The discontinuation of this MoC will not affect the ongoing programs or activities until their completion, unless the Participants consent otherwise.
SIGNED in duplicate at Jakarta on January 10th, 2022, in Japanese, the Indonesian, and English languages, all texts having equal value. In case of any divergence of interpretation, the English text will prevail.

For the Ministry of Economy, Trade and Industry of Japan

HAGIUDA KOICHI
Minister of Economy, Trade and Industry

For the Ministry of Energy and Mineral Resources of the Republic of Indonesia

ARIFIN TASRIF
Minister of Energy and Mineral Resources