MEMORANDUM OF UNDERSTANDING BETWEEN

THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA AND

THE MINISTRY OF PETROLEUM, MINES, AND ENERGY OF THE ISLAMIC REPUBLIC OF MAURITANIA

ON

CLEAN ENERGY COOPERATION

The Department of Energy of the United States of America (DOE) and the Ministry of Petroleum, Mines, and Energy (MPME) of the Islamic Republic of Mauritania, hereinafter referred to as the "Participants,"

Recognizing that the rapid deployment of clean energy technologies internationally is essential for tackling the climate crisis;

Seeking to strengthen energy cooperation between both countries;

Affirming that the Islamic Republic of Mauritania has enormous potential for low-cost electricity production with its world-class wind and solar resources;

Appreciating the economic development potential from deploying clean energy technologies for the production of low-cost, zero-emissions electricity for existing and new end-uses;

Acknowledging that expanding reliable energy access to its population is an economic imperative and high priority for the Islamic Republic of Mauritania;

Noting that the Islamic Republic of Mauritania has cross-border electricity transmission infrastructure and potential for increased electricity trade with neighboring countries;

Expressing support for the recently commenced cooperation between the Participants and partners to conduct a techno-economic analysis of the potential for decarbonized steel production in the Islamic Republic of Mauritania using the country's own iron ore and novel clean energy technologies; and

Seeking to identify and advance fruitful new areas for bilateral cooperation related to clean energy;

Have reached the following understandings:

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1. Guiding Principles

The Participants share a desire to cooperatively explore the technical and economic potential for deploying clean energy technologies that could simultaneously help reduce global greenhouse gas emissions and catalyse economic development in the Islamic Republic of Mauritania. The Participants seek to focus these cooperative efforts on exploring discrete project concepts that could lead to investment and market development. The Participants intend to focus such cooperative efforts on clean energy technologies from U.S. companies, noting in particular technologies that have been developed with the support of DOE.

2. Scope

Collaboration under this Memorandum of Understanding (Memorandum), which in all instances is intended to be conducted in line with the guiding principles described in Section 1 of this Memorandum, may include, but is not limited to, the following topics:

- a. Utility-scale renewable power generation;
- b. Distributed renewable power generation and mini-grids;
- c. Energy storage;
- d. Energy transmission and distribution;
- e. Grid stability;
- f. Energy efficiency;
- g. Hydrogen and hydrogen derivatives production;
- h. Decarbonized production of internationally traded commodities with large associated greenhouse gas emissions (for example, iron and steel, fertilizers, and aluminium); and
- i. Methane emissions abatement and decarbonized end-uses of natural gas (for example, methane pyrolysis and power generation with CCUS).



3. Forms of Cooperative activities

- 3.1. In carrying out cooperative activities under this Memorandum, the Participants may invite laboratories, research institutions, universities or contractors of the Participants to engage in cooperative activities as appropriate.
- 3.2 Cooperative activities may include:
 - a. Techno-economic analyses of project concepts for the deployment of clean energy technologies in the Islamic Republic of Mauritania;
 - c. Information exchanges at jointly organized workshops, symposia, or conferences; and
 - d. Visits and exchanges of scientists, technical personnel, and other experts.

4. Funding

- 4.1 Unless otherwise jointly approved in writing, any costs arising from collaboration between the Participants are expected to be borne by the Participant that incurs them.
- 4.2 Collaboration under this Memorandum is subject to the availability of appropriated funds, technical resources, and personnel.

5. General Provisions

- 5.1 Each Participant is to conduct the activities contemplated by this Memorandum in accordance with applicable laws, regulations, and policies to which it is subject, including with regard to data protection and export control, and applicable international agreements to which its government is party.
- 5.2 Any questions concerning the interpretation or application of this Memorandum may be addressed by consultations between the Participants.
- 5.3 The Participants do not anticipate the generation of intellectual property arising from activities under this Memorandum, or the exchange of business-confidential information. If the Participants decide that a particular activity may lead to the creation of intellectual property or the exchange of business-confidential information, they intend to consult with each other and make appropriate written arrangements for the protection and allocation of such intellectual property and the protection of such business-proprietary information.
- 5.4 This Memorandum does not create any legally binding obligations between the Participants.



6. Duration, Modification and Discontinuation

- 6.1 Activities under this Memorandum may commence upon signature by the Participants. The Participants intend to review their cooperation under this Memorandum every five years.
- 6.2 The Participants may discontinue collaboration under this Memorandum at any time by mutual written decision. Alternatively, a Participant that wishes to discontinue its participation in this Memorandum may do so at any time and should endeavour to provide at least ninety (90) days written notice to the other Participant. Unless otherwise specified in writing, the Participants understand that cooperative activities not completed upon the discontinuation of this Memorandum may be continued to their completion under the provisions of this Memorandum.
- 6.3 This Memorandum may be modified at any time by mutual written decision of the Participants.

Signed at Dubai, in duplicate, this 4 day of Person 2023, in the English and French languages.

UNITED STATES OF AMERICA:

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FOR THE DEPARTMENT OF ENERGY OF THE FOR THE MINISTRY OF PETROLEUM, MINES, AND ENERGY OF THE ISLAMIC REPUBLIC OF

MAURITANIA: