

**MEMORANDUM OF UNDERSTANDING
BETWEEN
THE MINISTRY OF ENERGY, INDUSTRY, AND MINERAL RESOURCES
OF THE KINGDOM OF SAUDI ARABIA
AND
THE DEPARTMENT OF ENERGY
OF THE UNITED STATES OF AMERICA
IN THE AREA OF CLEAN FOSSIL FUELS AND CARBON MANAGEMENT**

The Ministry of Energy, Industry, and Mineral Resources (MEIMR) of the Kingdom of Saudi Arabia and the Department of Energy of the United States of America (DOE), hereinafter referred to as the "Participants,"

NOTING the Agreement between the Government of the Kingdom of Saudi Arabia and the Government of the United States of America on Science and Technology Cooperation, done at Riyadh, Saudi Arabia on December 2, 2008, corresponding to 4/12/1429 H.

In accordance with the laws, regulations and instructions in force in both countries, and in accordance with the available resources, and on the basis of equity, mutual benefit and mutual respect,

HAVE REACHED THE FOLLOWING UNDERSTANDING:

SECTION 1

The purpose of this Memorandum of Understanding (MOU) is to establish a framework for mutually beneficial cooperation in the energy field in accordance with forms of collaboration in the areas listed in Section 2.

SECTION 2

1. Collaboration under this MOU includes the following areas:
 - a. Supercritical carbon dioxide (sCO₂) power cycles;
 - b. Carbon capture, utilization, and storage (CCUS);
 - c. Chemical looping and oxy-combustion;
 - d. Energy-water nexus; and
 - e. Other areas of mutual interest for both Participants.
2. For each area of collaboration under this MOU, the Participants intend to develop a work plan to define the collaborations suitable for implementation, with a view to modify the work plans in accordance with available resources and evolving conditions.
3. The Participants intend to identify projects within the areas of collaboration that are suitable for joint research and development that the Participants would like to execute in the future, with an eye toward developing appropriate small pilot programs for them.

SECTION 3

Both Participants intend to work to perform the activities under this MOU, which may include the following:

1. Exchanges of experts, engineers, and scientists in the relevant field;
2. Exchanges of relevant scientific and technical information;
3. Encouraging mutual visits and meetings and organization of seminars and workshops, including visits by a Participant's specialist teams or experts to the facilities (e.g., research laboratories, research institutes, and industrial sites) of the other Participant to exchange technical information and experience;
4. Technology transfer, pursuant to an appropriate written agreement between the Participants; and
5. Other forms of cooperation as determined by the Participants at a later time.

SECTION 4

Each Participant should designate – in writing – a focal point with the responsibility to facilitate the cooperation and follow up with the activities under this MOU.

SECTION 5

The Participants may include representatives from government-affiliated or non-government bodies and organizations from their respective countries to participate in the activities under this MOU.

SECTION 6

Each Participant is responsible for the costs of its participation in all cooperative activities carried out in the framework of this MOU, unless specified otherwise by the Participants. The conduct of cooperative activities under this MOU is subject to the available resources of each Participant.

SECTION 7

1. This MOU does not affect the rights and obligations of a Participant in any of the international conventions, treaties, and agreements to which its government is party.
2. The activities contemplated in this MOU (listed in section 3) should be carried out in accordance with the laws, regulations and instructions in force in both countries.

SECTION 8

1. The Participants do not anticipate the generation of intellectual property arising from activities under this MOU, or the exchange of business-confidential information.
2. If the Participants decide that a particular activity may lead to the creation of intellectual property or the exchange of business-confidential information, they should consult with each other and make appropriate arrangements for the protection and allocation of such intellectual property and the protection of such business-confidential information.

SECTION 9

Subject to any pertinent legislation or law, each Participant intends to use the information exchanged between them only for the purposes specified between them, and understands that it should not disclose such shared information to any third party without first obtaining the prior written approval for the disclosure from the Participant providing the confidential information.

SECTION 10

The Participants may consult on any matter or misunderstanding arising out of this MOU. The Participants intend to amicably resolve among themselves any issues concerning the interpretation or implementation of the terms of this MOU.

SECTION 11

1. The activities under this MOU may commence on the date of the last notification between the Participants - through diplomatic channels - confirming each Participant's intent to begin cooperation under this MOU.
2. Cooperation under this MOU may continue for a period of five years, subject to automatic renewal for subsequent five-year period(s), unless one Participant provides the other Participant with three months' notice in writing – through diplomatic channels – of its desire to discontinue its participation under this MOU.
3. The Participants anticipate that activities under this MOU that are not completed at the time of discontinuation of this MOU may continue until their completion under the framework set out in the MOU.
4. This MOU may be modified in writing by mutual determination of the Participants.

This MOU has been signed in the city of Riyadh on December 4, 2017, corresponding to 16/3/1439H, in two originals in both Arabic and English.

FOR THE MINISTRY OF ENERGY, INDUSTRY,
AND MINERAL RESOURCES OF THE
KINGDOM OF SAUDI ARABIA:

FOR THE DEPARTMENT OF ENERGY OF
THE UNITED STATES OF AMERICA:

