

MEMORANDUM OF COOPERATION
BETWEEN
THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA
AND
THE MINISTRY OF ENERGY OF THE REPUBLIC OF CHILE
FOR COOPERATION ON ENERGY TRANSITION AND ENERGY SECTOR
DEVELOPMENT

The Department of Energy of the United States of America and the Ministry of Energy of the Republic of Chile, hereinafter referred to collectively as the “Participants” and individually as a “Participant”:

CONSIDERING the excellent and close relationship between the United States and Chile and the long-standing friendship between our two countries in a year when we celebrate 200 years of diplomatic relations;

RECOGNIZING the importance of the promotion and strengthening of international cooperation as an effective mechanism for mutual collaboration in the development of their respective energy sectors through information sharing and collaboration on best practices regarding the implementation of plans, policies, and standards for the development and functioning of the energy sector;

SEEKING to strengthen energy cooperation between both countries;

CONVINCED of the importance of the global energy transition to net zero emissions by or around mid-century in the face of climate change, and aspiring to realize opportunities of technology development in and between the two countries, as well as the immense job creation potential in clean energy;

TAKING INTO CONSIDERATION the two countries’ shared commitment to economic, industrial, and socially sustainable development; and

DESIRING to undertake such cooperative activities through the implementation of this Memorandum of Cooperation (hereinafter referred to as this “MOC”),

Have reached the following recognition:

I. OBJECTIVE

This MOC is intended to facilitate technical assistance and information exchanges between the Participants and their respective government agencies, enterprises and research institutions in support of developing of the energy sectors of both countries.

II. AREAS OF COOPERATION

Taking account of their respective national priorities and available resources, the Participants' cooperation under this MOC to contribute to the energy transition in both countries may include, but is not limited to, the following areas:

a) Research and Development – Early Technology Adoption

- i) Identifying strategies and good practices for national laboratories and the Piloting and Industrial Testing Center of Chile to test technology and early adoption;
- ii) Sharing the experience of the national laboratories' work and their governance, exploring how the labs interact with relevant energy companies, innovation centers, entrepreneurial companies, electrical system operators, and academic institutions, among other actors; and
- iii) Supporting the development of digitization and modernization of the operation of electrical networks.

b) Decarbonization

- i) Identifying costs, benefits and technical solutions for the closure and reconversion of coal-fired power plants and promotion of renewable technologies; and
- ii) Exploring methodologies and transition conversion technologies from coal to clean fuels such as green ammonia (co-firing and/or blending).

c) Grid Modernization

- i) Fostering the development of grid modernization and flexible electrical systems that can accommodate variable renewable energy;
- ii) Promoting technological innovation in the field of energy storage and optimized demand management;
- iii) Facilitating attraction of investments for the development of transmission and storage; and;

- iv) Sharing best practices regarding interconnection systems within the transmission network.
- d) Hydrogen
 - i) Sharing analysis on costs and benefits for developing infrastructure to produce net zero and zero emissions hydrogen and fuels from hydrogen;
 - ii) Exploring regulatory experiences in the development of hydrogen, including sharing of information on the development of regulations, certifications, and standards, particularly through fora such as the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE); and
 - iii) Sharing of safety information and lessons learned, particularly through the Center for Hydrogen Safety.
- e) Net Zero World Initiative (NZW)
 - i) Jointly carry out the NZW program of work in Chile to accelerate the transition to a net zero, resilient, and inclusive energy system through technical and analytical support and investment analysis.
- f) Critical Minerals
 - i) Sharing experiences on the role of critical minerals in the energy transition and their use for energy purposes.
- g) Energy Justice
 - i) Sharing just transition strategies and best practices in communities, job retraining, and intersectoral coordination for challenges over different time horizons.

III. FORMS OF COOPERATION

Cooperation activities between the Participants under this MOC in the areas listed in Section II may include, but are not limited to, the following forms:

- a) Exchanging and providing publicly available scientific and technical information and experiences on policies and regulations;
- b) Training, skill development, webinars, visits, technical exchanges, strengthening relations with sub-national governments and nongovernmental organizations, as appropriate; and capacity-building in energy planning and development;
- c) Facilitating, as appropriate, contacts among relevant public and private sector entities, academia, and research centers in both countries;

- d) Engaging in specific cooperative projects of technology development related to the entire value chain, including decarbonization of thermal power generation, in the framework of a program as the Participants may jointly decide in writing; and
- e) Any other form of cooperation as the Participants may jointly decide in writing.

IV. IMPLEMENTATION

- a) To coordinate the cooperation under this MOC, the Participants intend to establish a Working Group comprised of senior-level officials representing the Participants and related governmental bodies. Representatives are expected to meet on an annual basis to monitor the progress of projects and activities, resolve difficulties, or identify new opportunities under this MOC.
- b) The Working Group is expected to collaboratively develop an Action Plan, to contain prioritized work in each area of identified collaboration under this MOC and define specific planned actions for implementation. This Action is expected to be updated on a periodic basis by mutual decision of the Working Group.
- c) The Participants intend to mutually determine the agenda, time, and place of the Working Group meetings.
- d) The Participants do not expect activities under this MOC to result in the creation or transfer of intellectual property or Business-Confidential Information. However, if the Participants determine that a particular cooperative activity may lead, or has led, to the creation or transfer of information of commercial value and/or intellectual property or requires the sharing of Business-Confidential Information, the Participants intend to consult with each other and make appropriate written arrangements for the protection and allocation of such intellectual property or the sharing and protection of Business-Confidential Information.
- e) As used in this MOC, the term "Business-Confidential Information" means information that: 1) is not generally known or publicly available from other sources; 2) has not previously lawfully been made available to others without obligation to maintain its confidentiality; and 3) is not already in the possession of the recipient without obligation to maintain its confidentiality.

V. FUNDING

- a) Each Participant intends to carry out the cooperative activities contemplated by this MOC subject to the availability of appropriated funds and resources.
- b) Each Participant is responsible for its own expenses in connection with cooperative activities under this MOC.

VI. GENERAL CONSIDERATIONS

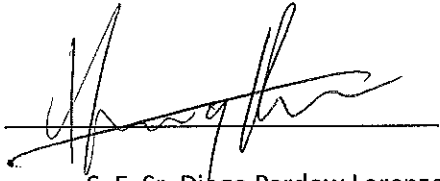
- a) This MOC does not create any legally binding rights or obligations between the Participants.
- b) Any questions concerning the interpretation or application of this MOC may be addressed by consultations between the Participants.
- c) Each Participant intends to conduct activities under this MOC in accordance with the applicable laws, regulations, and policies to which it is subject.

VII. COMMENCEMENT, DURATION, MODIFICATION AND DISCONTINUATION

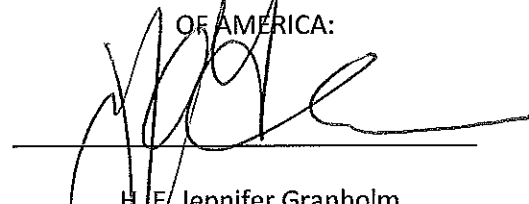
- a) Cooperative activities under this MOC are intended to commence upon signature by both Participants, and, subject to paragraph c) of this Section, may continue for a period of five (5) years.
- b) This MOC may be modified or extended by mutual written decision of the Participants.
- c) The Participants may discontinue cooperative activities under this MOC at any time by mutual written decision. Alternatively, a Participant that wishes to discontinue its participation in this MOC may do so at any time and should endeavor to give at least six months prior written notice to the other Participant.
- d) Unless otherwise specified in writing, the Participants intend to permit ongoing activities not completed upon expiration or discontinuation of this MOC to continue to their completion under the provisions of this MOC.

Signed at Seattle, in duplicate, this 16th day of August 2023, in the English and Spanish languages.

FOR THE MINISTRY OF ENERGY OF THE
REPUBLIC OF CHILE:


S. E. Sr. Diego Pardow Lorenzo
Minister of Energy

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


H. E. Jennifer Granholm
Secretary of Energy