

**MEMORANDUM OF UNDERSTANDING
AMONG
THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA
AND
THE DEPARTMENT OF NATURAL RESOURCES OF CANADA
AND
THE MINISTRY OF ENERGY OF THE UNITED MEXICAN STATES
CONCERNING CLIMATE CHANGE AND ENERGY COLLABORATION**

The Department of Energy of the United States of America, the Department of Natural Resources of Canada and the Ministry of Energy of the United Mexican States, hereinafter referred to as the "Participants",

HAVING signed a Memorandum of Understanding among the Department of Energy of the United States of America and the Department of Natural Resources of Canada and the Ministry of Energy of the United Mexican States Concerning Cooperation on Energy Information, signed at Washington, D.C. on 15 December, 2014 (the "2014 MOU");

SEEKING to expand cooperation to include climate change and energy collaboration activities;

NOTING the longstanding and productive integration of energy markets across North America;

RECALLING previous initiatives to promote energy regional cooperation and integration, such as the North American Energy Working Group, the Security and Prosperity Partnership of North America in 2005, and the Agreement among the Government of the United States of America, the Government of Canada and the Government of the United Mexican States for Cooperation in Energy Science and Technology, done at Victoria, British Columbia on 23 July, 2007, among other joint efforts;

TAKING INTO ACCOUNT the results of the last North American Leaders' Summit, held in Toluca, Mexico in February 2014, where energy was emphasized as a trilateral priority, as well as the results of trilateral meetings held in Mérida, Mexico in May 2015, where emphasis was placed on the Participants' respective internal institutional arrangements and the ongoing bilateral and multilateral efforts of their three countries to combat climate change;

CONSIDERING that close economic integration, geographic proximity, energy potential, infrastructure, and common perspectives support their strong collaboration on matters of energy information transparency and the shift toward a low-carbon energy future;

NOTING that fundamental shifts in North American and global energy production and consumption are occurring;

RECOGNIZING the importance of coordinating existing trilateral energy collaboration;

RECOGNIZING that by acting together, they may improve the information on North American energy flows, as well as support the implementation of clean energy and climate change goals of each of the Participants;

GUIDED by a mutual commitment to collect, analyze, and disseminate accurate and timely energy information and to promote common strategies on energy efficiency, innovation, clean technologies –including renewable energy–, climate change adaptation and resilience, and responsible resource development; and

SHARING an interest in expanding their climate change and energy collaboration;

Have reached the following understanding:

1. PURPOSE

This Memorandum of Understanding (MOU) creates a framework for consultation and cooperation on:

- (a) sharing publicly available energy information among the Participants, with the purpose of setting the stage for dialogue, comparisons, and deliverables on each of the Participants' energy outlooks and information; and
- (b) addressing climate change associated with energy production, transmission, and use, in furtherance of the commitments made under the U.N. Framework Convention on Climate Change, while also collaborating in bilateral activities and through complementary mechanisms like the Major Economies Forum, the Climate and Clean Air Coalition, the Clean Energy Ministerial, and the Energy and Climate Partnership of the Americas.
- (c) accelerating widespread clean energy innovation as an indispensable part of an effective, long-term global response to our shared climate challenge, and as a critical component for energy security.

2. SCOPE OF PLANNED ACTIVITIES

This MOU covers information, data, maps, and statistics that are publicly available, as detailed in subparagraph 3.1, and excludes any information considered confidential, strategic, or sensitive for national security and sovereignty reasons. This MOU also covers areas of cooperation on climate change and energy as detailed in subparagraph 3.2.

3. PLANNED AREAS OF COOPERATION

The Participants understand that cooperative activities under this MOU, in subject areas within each Participant's respective purview, are intended to include:

3.1 Energy Information

- (a) systematically comparing respective import and export information on energy flows to validate publicly available data and improve data quality;
- (b) sharing publicly accessible geospatial information relating to utility infrastructure, such as pipelines, transmission lines, power plants (fossil, nuclear, and renewable), refineries, and oil and natural gas wells;
- (c) exchanging views and projections for cross-border flows of natural gas, electricity, crude oil, and refined products; and
- (d) developing a cross reference for terminology commonly used in the energy sector with a view toward harmonization of terms, concepts, and definitions for energy products and flows, or understanding their differences.

3.2 Collaboration on Climate Change, Energy, and Innovation

- (a) sharing experiences and knowledge in the development of reliable, resilient, and low-carbon electricity grids;
- (b) modeling, deploying and accelerating innovation in clean energy technologies, including renewables;
- (c) exchanging information in order to improve energy efficiency for equipment, appliances, industries, and buildings, including energy management systems;
- (d) exchanging information and promoting joint action to advance the deployment of carbon capture, use, and storage;
- (e) identifying potential trilateral activities to further climate change adaptation and resilience;
- (f) sharing best practices and seeking methods to reduce emissions from the oil and gas sector, including methane and black carbon; and
- (g) other areas that the Participants may jointly decide upon in writing.

4. FORMS OF COOPERATION

- (a) The Participants understand that cooperative activities may include consultations in person and electronically, technical events, meetings, workshops, conferences, and exchanges of personnel, survey results, and reports.
- (b) Cooperative activities under this MOU are intended to complement the Participants' respective programs in order to make effective use of resources and capabilities across governments, and should be informed by activities and actions of the bilateral and multilateral efforts on broader climate change issues of the Participants' respective countries.

(c) Wherever possible, activities under this MOU may seek to encourage engagement with academia and the private sector, and to promote business-to-business and regulator-to-regulator cooperation.

(d) Through Mission Innovation, the Participants have agreed to provide, on an annual basis, transparent, easily-accessible information on their respective clean energy research and development.

5. FINANCING

Unless the Participants decide otherwise in writing in a separate document, each Participant intends to pay the costs it incurs in conducting activities under the MOU.

6. VISITS AND COOPERATIVE ACTIVITIES

(a) Each Participant intends to assist the other Participants' personnel with the host country's applicable entry and exit procedures, in coordination with responsible national authorities, where necessary.

(b) The Participants understand that the personnel they each assign to participate in the cooperation activities are to remain employees of, and under the direction and control of, the sending Participant.

7. GENERAL CONSIDERATIONS

(a) This MOU does not impose any legally binding obligations upon the Participants.

(b) Each Participant intends to identify primary points of contact for the application of the two pillars of activities described in paragraph 3 of this MOU, within 45 days of its signature, and inform the other Participants in writing of this designation.

(c) The Participants intend to take appropriate action to have their respective primary points of contact provide a joint report, not later than 180 days after the cooperative activities under subparagraph 3.1 of this MOU have commenced, and not later than 90 days after the cooperative activities under subparagraph 3.2 of this MOU have commenced, documenting progress that has been made in each of the areas for cooperation described in paragraph 3. Each progress report may include recommendations for additional collaboration and further plans for periodic reporting.

(d) Each Participant may invite additional agencies or organizations to participate in the cooperative activities conducted under this MOU, at its own expense and on such terms as the inviting Participant and invitee may determine.

(e) The Participants endeavor to hold a meeting of their respective ministers on an annual basis at a time and venue of their mutual convenience for the purpose of reviewing progress on the activities that have commenced under this MOU, and to decide upon future joint work streams.

- (f) Cooperation under this MOU is expected to commence upon signature by the Participants.
- (g) The Participants intend to replace the 2014 MOU with this MOU. Cooperative activities initiated under the 2014 MOU may continue in accordance with the terms of this MOU.
- (h) The Participants may modify this MOU in writing upon their mutual consent.
- (i) The Participants may discontinue this MOU at any time by mutual consent in writing. Alternatively, a Participant that wishes to discontinue its participation in the activities under this MOU may do so by endeavoring to provide at least 60 days advance notice in writing to the other Participants. The withdrawal of any two Participants operates to discontinue this MOU.

Signed in triplicate at Winnipeg on this 12th day of February, 2016, in the English, French, and Spanish languages.

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



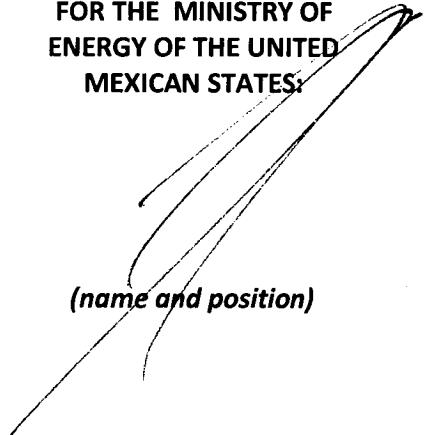
(name and position)

**FOR THE DEPARTMENT OF
NATURAL RESOURCES OF
CANADA:**



(name and position)

**FOR THE MINISTRY OF
ENERGY OF THE UNITED
MEXICAN STATES:**



(name and position)