

**MEMORANDUM OF UNDERSTANDING ON  
ENHANCING COOPERATION ON CLIMATE AND ENVIRONMENT BETWEEN  
SHANGHAI MUNICIPAL BUREAU OF ECOLOGY AND ENVIRONMENT  
AND  
CALIFORNIA AIR RESOURCES BOARD**

Shanghai Municipal Bureau of Ecology and Environment ("Shanghai") and California Air Resources Board ("California"), hereinafter referred to as "the Participants," declare as follows;

**ACKNOWLEDGING** that Shanghai and California have expressed intentions to cooperate on climate change and environmental protection;

**WHEREAS** Shanghai is committed to improving air quality and aims to achieve these targets by 2025: the annual average concentration of PM 2.5 in Shanghai will not exceed 30 micrograms per cubic meter, and the AQI excellent and good rate will be greater than or equal to 89%. Shanghai is committed to reduce greenhouse gas emissions and achieve the following targets by 2030: the proportion of non-fossil fuel energy consumption will reach 25%, and carbon dioxide emissions per unit of GDP will decrease by 70% than 2005, and peak carbon emissions; by 2060, non-fossil fuel energy will account for 80% the energy consumption and carbon neutrality will be successfully achieved;

**WHEREAS** California has committed to targets to reduce greenhouse gas emissions 40% below 1990 levels by 2030 and 85% by 2045, achieve 60% renewable electricity and double energy efficiency savings in electricity and natural gas end-uses by 2030, 100% renewable and zero-carbon electricity by 2045, 100% zero-emission new light duty vehicle sales by 2035, and carbon neutrality by 2045;

**WHEREAS** the Participants desire to enhance actions and policies to further strengthen and coordinate efforts to combat climate change and protect the environment;

**CONSIDERING** the opportunities for economic growth and the human health co-benefits that accompany the mitigation of greenhouse gas emissions and air pollution;

Therefore, the Participants have reached the following understanding:

**SECTION I Objectives**

The purpose of this Memorandum of Understanding is to establish a flexible framework between the Participants in order to collaborate on protecting the environment, combating climate change and advancing clean energy development. In doing so, the Participants share the following common objectives:

- a) To promote the protection of the natural and urban environment and reduce air pollution and carbon emissions;
- b) To combat climate change, advance medium- and long-term low- carbon development and achieve the vision of carbon neutrality; ;
- c) To advance clean, low-carbon transportation including the development of clean ports and green shipping, accelerate deployment of zero emissions vehicles (ZEVs) and new energy vehicles (NEVs) in both economies and the phase-out of fossil fuel vehicles;

- d) To facilitate cooperation in climate adaptation and resilience measures; and
- e) To facilitate cooperation in nature-based solutions and strengthen awareness of nature-based cooperation.

## **SECTION II Areas of Cooperation**

On the basis of the principles of equality and mutual benefit, the Participants intend to cooperate on protecting the environment, combating climate change and advancing clean energy development through initiatives (focused particularly on, but not limited to) the following areas of cooperation:

- 1. Air Quality**
- 2. Greenhouse Gas Emissions**
- 3. Clean Transportation, including Clean Ports and Green Shipping**
- 4. Clean Energy**
- 5. Climate Adaptation and Resilience**
- 6. Nature-Based Climate Solutions**

## **SECTION III Coordination**

The Participants respectively designate the Shanghai Municipal Bureau of Ecology and Environment, Shanghai Municipal Development and Reform Commission, Shanghai Municipal Transportation Commission, Shanghai Municipal Foreign Affairs Office, as well as the California Environmental Protection Agency and the California Natural Resources Agency, in coordination with sister agencies, to establish the creation of an action plan to implement the objectives of this Memorandum of Understanding.

The Participants intend to designate a point of contact (or Secretariat) that will serve as the primary liaison for communication and information exchange, as well as for any notice to be submitted under this Memorandum of Understanding. The joint office of the California-China Climate Institute at the University of California, Berkeley and the Shanghai Municipal Department of Ecology and Environment, Shanghai Municipal Development and Reform Commission, Shanghai Transportation Council, and Shanghai Municipal Foreign Affairs Office are designated as points of contact for California and Shanghai respectively under this Memorandum of Understanding.

The Participants, by mutual consent, may seek the collaboration of third parties, including universities, businesses, and other public and private academic institutions whose activities may contribute to achieving the goals of this Memorandum of Understanding.

#### **SECTION IV Specific Activities**

Specific activities to achieve the objectives of this Memorandum of Understanding for the key sectors and initiatives identified in Section II may include:

- a) Providing mutual advice;
- b) Sharing information and experiences regarding policies, programs, and incentives to strengthen their application in relevant industries and regions;
- c) Co-organizing policy seminars and informational exchanges;
- d) Organizing annual meetings focused on carbon neutrality planning, climate change mitigation and adaptation;
- e) Activities that advance exchange and mutual visits among personnel, businesses, universities and academic institutions of the Participants, including but not limited to field visits, meetings and webinars;
- f) Organizing symposia, seminars, workshops, informational exchanges, exhibitions, training, and other mutually agreed engagements.
- g) Implementation of a pilot project of mutual interest and benefit to the Parties.
- h) Other forms of collaboration as agreed upon by the Participants.

#### **SECTION V**

##### **No Legal Obligations, Rights, or Remedies**

This Memorandum of Understanding is a voluntary initiative. It does not create any legally binding rights or obligations and creates no legally cognizable or enforceable rights or remedies in any forum whatsoever. In addition, the pledges in this Memorandum of Understanding are not conditioned upon reciprocal actions by other Participants; each Participant retains full discretion over implementation of its pledges in light of the Participant's individual circumstances, laws, and policies; and each Participant is free to withdraw from the Memorandum.

#### **SECTION VI**

##### **Availability of Personnel and Resources**

This Memorandum of Understanding does not involve the exchange of funds, nor does it represent any obligation of funds by either Participant. All costs that may arise from activities covered by, mentioned in, or pursuant to this Memorandum of Understanding will be assumed by the Participant that incurs them, unless otherwise expressly agreed in a future written arrangement in accordance with applicable laws. All activities undertaken pursuant to this Memorandum of Understanding are subject to the availability of funds, personnel and other resources of each Participant.

The personnel designated by a Participant for the execution of this Memorandum of Understanding will work under the orders and responsibility of that Participant and any other organization or institution to which the personnel already belongs, at all times maintaining any preexisting employment relationship only with that Participant and organization or institution, and not with any other Participant.

#### **SECTION VII Compliance with Applicable Laws**

This Memorandum of Understanding shall be construed in consistency with all applicable laws, and activities undertaken in connection with this Memorandum of

Understanding shall be subject to, and shall be undertaken in a manner consistent with, all otherwise-applicable laws.

#### **SECTION VIII Interpretation and Application**

Any difference that may arise in relation to the interpretation or application of this Memorandum of Understanding will be resolved through consultations between the Participants, who will endeavor in good faith to resolve such differences.

#### **SECTION IX Final Provisions**

This Memorandum of Understanding is effective from the date of its signature for a four-year period, unless renewed or extended by the Participants in the same manner that the Participants may otherwise modify this Memorandum of Understanding. This Memorandum of Understanding may be modified at any time by mutual consent of the Participants. Any modification shall be made in writing and specify the date on which such modification is to become effective.

Any of the Participants may, at any time, withdraw from this Memorandum of Understanding by providing a written notice to the other Participant(s). A Participant that intends to withdraw from this Memorandum of Understanding shall endeavor to provide notice of such withdrawal to other Participants 30 days in advance.

The termination of this Memorandum of Understanding shall not affect the completion of activities initiated when this Memorandum of Understanding is in effect, unless a Participant expressly states otherwise. A Participant that intends to terminate a previously initiated activity shall endeavor to reach an understanding with the other Participant concerning such termination.

Nothing contained in this Memorandum of Understanding shall limit each Participant's right to enter into similar agreements with other institutions. Any cooperation hereunder shall not affect each Participant's rights and obligations under other international arrangements.

This Memorandum of Understanding is signed in Shanghai on October 29, 2023, in two original copies in Chinese and English, both of which are equally valid.



**FOR SHANGHAI MUNICIPAL BUREAU  
OF ECOLOGY AND ENVIRONMENT OF  
THE PEOPLE'S REPUBLIC OF CHINA**



**FOR AIR RESOURCES BOARD OF  
THE STATE OF CALIFORNIA OF  
THE UNITED STATES OF AMERICA**