

美国加利福尼亚州 能源委员会
与
张家口市能源局

谅解备忘录

MEMORANDUM OF UNDERSTANDING
BETWEEN
ZHANGJIAKOU CITY ENERGY BUREAU OF
ZHANGJIAKOU MUNICIPAL PEOPLE'S GOVERNMENT
AND THE CALIFORNIA ENERGY COMMISSION OF THE
STATE OF CALIFORNIA OF THE UNITED STATES OF
AMERICA

二〇二一年八月

August 2021



美国加利福尼亚州 能源委员会
与
张家口市能源局
谅解备忘录

**MEMORANDUM OF UNDERSTANDING
BETWEEN
ZHANGJIAKOU CITY ENERGY BUREAU OF ZHANGJIAKOU MUNICIPAL
PEOPLE'S GOVERNMENT
AND THE CALIFORNIA ENERGY COMMISSION OF THE
STATE OF CALIFORNIA OF THE UNITED STATES OF AMERICA**

张家口市能源局和加利福尼亚州能源委员会（以下简称“双方”）同意以下内容：
The Zhangjiakou City Energy Bureau and the California Energy Commission (CEC), hereinafter
referenced as “participants,” agree as follows:

第一章
目标
**SECTION 1
Objective**

本谅解备忘录的目标是为双方建立一个灵活的合作框架，允许它们扩展在能源和去碳化政策与实践上的合作，尤其关注加速向零排放交通的转型。为了实现这一目标，双方同意以下目标：

1. 加速向由零碳电网驱动清洁交通系统的转型；
2. 快速有效地将各种零排放汽车应用于各个领域；
3. 研究将氢燃料应用于当前的市政系统和电网设施的最佳实践并分享相关经验。

The purpose of this Memorandum of Understanding (MOU) is to establish a flexible framework between the participants to permit them to expand cooperation on energy and decarbonization policies and practices, with specific focus on supporting the acceleration of zero-emission transportation. In doing so, the participants share the following objectives:

1. Accelerating the transition to a cleaner transportation system powered by a carbon-free grid
2. Effectively and quickly integrating a wide range of zero-emissions vehicles put to a wide range of uses
3. Examining best practices and share lessons learned regarding the integration of hydrogen fuel into existing municipal systems and existing grid infrastructure



第二章
合作领域
SECTION II
Areas of Cooperation

双方旨在扩大零排放交通上的合作。合作议题包括但不限于以下领域：
The participants intend to expand cooperation on zero-emission transportation, through initiatives focused on, but not limited to, the following areas of cooperation:

A. 扩大在双方均有兴趣的领域的合作，包括

1. 交通

- a) 在各类车辆中加速发展零排放交通；
- b) 推广零排放汽车和配套设施示范应用的创新科技；
- c) 研究零排放交通设施政策，规划，标准和其它相关科技，包括：
 - (1) 支持大规模推进零排放交通的技术与经济发展的可行性；
 - (2) 氢能的安全性，燃料质量，加氢站标准，协议，规范，和最佳实践。
- d) 支持零排放交通供应链的商品化

A. Expand cooperation in areas of mutual interest including:

1. Transportation

- a) Advancing zero-emission transportation across all vehicle sectors
- b) Promoting innovative technology for demonstrative application of zero-emission vehicles and their supporting fueling infrastructure
- c) Studying zero-emission transportation infrastructure policy, planning, standards and other related technologies, including:
 - (1) The feasibility of technological and economic development to support widespread adoption of zero-emission transport
 - (2) Hydrogen safety, hydrogen fuel quality, and hydrogen fueling standards, protocols, codes, and recommended practices
- d) Supporting the commercialization of the zero-emission transportation supply chain

2. 能源

- a) 发展可持续氢能的生产，分配和储存；
- b) 支持区域能效提升

2. Energy

- a) Developing sustainable production, distribution, and storage of renewable hydrogen energy
- b) Supporting regional energy efficiency

第三章 合作方式

SECTION III Coordination

双方将出台行动方案，以实施该谅解备忘录的目标。双方将作为沟通和信息交换的相应联系人。

为了支持该谅解备忘录的实施，以下两个机构将作为秘书处：加州-中国气候研究院和张家口市氢能与可再生能源研究院。两个机构的员工将成立联合工作组。工作组将组建指导委员会，负责制定工作计划，推进项目，联络机构合作伙伴，包括当地政府，企业，院校，研究机构和投资机构。

经双方共同同意后，第三方也可参与合作，包括高等院校，其它公共或私人的学术、研究与发展机构，或其它能帮助实现谅解备忘录目标的组织。

The participants shall create an action plan to implement the objectives of this MOU and shall serve as the respective contact points for communication and information exchange.

To support the implementation of this MOU, two organizations will serve as secretariats: the California-China Climate Institute (CCCI) and the Zhangjiakou Institute of Hydrogen and Renewable Energy. Staff from these organizations will form a joint working group. This working group will assemble a steering committee that will be responsible for developing work plans, promoting projects, and engaging institutional partners that might include local governments, businesses, universities, research institutes, and investment institutes.

The participants, by common consent, may seek the collaboration of third parties, including universities and other public and private academic and research and development institutions, or organizations whose activities may contribute to achieving the goals of this MOU.

第四章 具体行动

SECTION IV Specific Activities

实现第二章中谅解备忘录关键领域和议题目标的具体行动可能包括：

- A. 促进科学和技术合作，包括但不限于，支持零排放交通的科学和技术；
- B. 共同组织培训和能力建设活动，以促进技术人员、中高层管理人员的技术进步和合作关系拓展；
 1. 支持双方的交叉培训，尤其是张家口市在推广氢能和零排放交通上的经验；
 2. 分享包括但不限于以下方面的专业知识：
 - a. 零排放交通配套设施，包括和零排放货运、机场与海港地面设施和其它大型零排放车队相关的加氢设施；



- b. 充能需求的规划，包括时间和空间分析；
- c. 公共和私人投资者在公共加气设施发展和推广中的不同作用；
- d. 零排放汽车充能的安全标准和协议，包括电动汽车和电网协同的技术；
- e. 在公寓楼中服务零排放汽车驾驶员的方法；
- f. 氢燃料电池车技术，包括标准、生产、以及推广进度预测；
- g. 远洋船舶使用的岸电系统；
- h. 中型与重型零排放汽车的技术和标准。

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

- A. Promoting scientific and technological collaboration including, but not limited to, science and technology that supports zero-emission transportation
- B. Organizing joint trainings and capacity-building efforts to promote technological progress and networking for technical personnel and middle and senior management
 - 1. Supporting cross training between the participants, in particular Zhangjiakou City's experience in developing hydrogen energy and zero-emission transportation
 - 2. Sharing expertise concerning, but not limited to:
 - a) Zero-emission transportation fueling infrastructure, including hydrogen fueling, for zero-emission cargo transport and transit, ground equipment at airports and seaports, and other large zero-emission fleets
 - b) Planning for charging needs, including spatial and temporal analysis
 - c) The various roles of public and private investors in public hydrogen fueling station development and deployment
 - d) Safety standards and protocols for zero-emission vehicle fueling, including vehicle-grid-integration technology
 - e) Methods for serving zero-emission vehicle drivers at multi-family dwellings.
 - f) Hydrogen fuel cell vehicle technology, including standards and production and deployment projections
 - g) Shore power systems for ocean-going vessels
 - h) Technologies and standards for zero-emission medium- and heavy-duty vehicles

C. 互相支持完成相应的温室气体减排目标，增加零排放汽车充电网络和公共设施，达成其余目标，可能包括：

- 1. 与合作机构分享数据；
- 2. 比较区域供电局的服务模型；
- 3. 加快对可持续氢能和其它可再生能源的使用；
- 4. 增加海港中岸电的使用；
- 5. 增加对零排放货运与公共交通的投资；
- 6. 设立对零排放中型与重型车的强制要求；
- 7. 提升和零排放汽车以及配套设施相关的人员培训。

C. Supporting one another in fulfilling respective goals for reducing greenhouse gas emissions, increasing zero-emission vehicle charging networks and public infrastructure, and meeting other goals that might include:

1. Sharing data with partner institutions
2. Comparing municipal utility district service models
3. Accelerating the use of renewable hydrogen and other renewable energy sources
4. Increasing the use of shore power in seaports
5. Increasing investments in zero-emission cargo and public transportation
6. Instituting mandatory requirements for zero-emission medium- and heavy-duty vehicles
7. Improving workforce training related to these vehicles and associated fueling infrastructure

D. 共同参与和组织国际与国内会议，通过白皮书，会议纪要等适当形式发布会议成果；

E. 支持零排放交通和设施在全球的推广；

1. 通过技术交流增加国际合作；

F. 支持在加州和中国向发展氢能和零排放汽车的企业开放市场机会；

G. 以和该谅解备忘录内容相关的其它方式协作。双方可能会决定协作方式并用文本记录；

H. 为了实施该谅解备忘录，双方可能选择定期线下或线上会面，以制定围绕第二章中合作内容的年度工作计划。

D. Participating in and organizing international and domestic meetings together, and disseminating the results through white papers, meeting minutes, and other media as appropriate

E. Supporting global advancement of zero-emission transportation and infrastructure

1. Increasing global cooperation through technical exchanges

F. Supporting the opening of market opportunities for businesses engaged in developing hydrogen energy and zero-emission transportation in California and the People's Republic of China

G. Cooperating by other means related to the scope of this MOU, as may be decided upon by the participants in writing

H. To implement this MOU, the participants may choose to meet regularly, in-person or virtually, to develop annual work plans focused on the areas of cooperation identified in Paragraph 2

第五章
联系人

SECTION V

Points of Contact

张家口市能源局和加州能源委员会同时也作为相应联系人，负责沟通，信息交换，以及该谅解备忘录要求提交的其它通知。

中国张家口市能源局：

王亚军

张家口市能源局新能源科科长

张家口市经开区长城西大街 10 号

zjksnyjxnyk@163.com

加州能源委员会：

阿兰娜·桑切斯 Alana Sanchez

加州能源委员会高级国际关系顾问

加利福尼亚州，萨克拉门托，9 街 1516 号

Alana.Sanchez@energy.ca.gov

The Zhangjiakou Energy Bureau and the CEC will also serve as the respective contact points for communication and information exchange, as well as any notice required to be submitted under this MOU.

Zhangjiakou Energy Bureau:

Yajun Wang

Staffer, New Energy Division, Zhangjiakou Energy Bureau

10 Great Wall Avenue West, Economic Development District, Zhangjiakou, People's Republic of China

zjksnyjxnyk@163.com

California Energy Commission:

Alana Sanchez

International Relations Senior Advisor, California Energy Commission

1516 9th Street, Sacramento, California, USA 95814

Alana.Sanchez@energy.ca.gov

第六章

无法律责任，权利，或补救措施

该谅解备忘录为自愿性质。它不带来任何有法律约束力的权利或责任，不产生任何形式的法律承认或可强制执行的权力或补救措施，不论是普通法还是衡平法上的。另外，该谅解备忘录中的承诺不取决于另一方的对等行动。每一方均有自主权根据自身的情况，法律，政策实施承诺。双方均可自由退出该备忘录。

SECTION VI
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, legal or equitable, 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.

第七章
人员与资源

该谅解备忘录不涉及资金交换，不代表任一方有出资义务。任何该谅解备忘录包括或提及的活动，或践行该谅解备忘录产生的活动产生的花费应有活动实行方承担，除非根据未来单独的书面文件另有安排或决定。一切遵循该谅解备忘录的活动都取决于各方的资金、人力和其它资源是否充分。

由任一方指派的执行该谅解备忘录的人员都应在该方或相关机构任职期间，将遵循该方和其所属机构的规定和责任。这些人员的工作不会使其和另一方，或其它组织和机构，产生雇佣关系。所以另一方或其它组织或机构在任何情况下都不会被认为是该人员的新雇主或联合雇主。

SECTION VII
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 who incurs them, unless otherwise stipulated and decided pursuant to a future written arrangement. 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 the Participant and any other organization or institution to which they belong, at all times maintaining any preexisting employment relationship with the Participant and such organization or institution. Their work will not create an employer-employee relationship with another Participant or any other organization or institution, so in no case will that other Participant, or other organization or institution, be considered as a substitute or joint employer of the designated personnel.



第八章 遵守法律

一切实施该谅解备忘录产生的活动，以及所有双方为执行该谅解备忘录组织的活动而指派的人员，都应遵守一切相关法律，包括所有该活动发生地区的法律。该人员如果访问另一方以参与和该谅解备忘录相关的活动，不会做出对该备忘录不利的行为。

SECTION VIII Compliance with Applicable Laws

All activities undertaken pursuant to this Memorandum of Understanding, and all personnel designated by the Participants for the execution of those activities undertaken pursuant to this Memorandum of Understanding are subject to all applicable laws, including all laws applicable in the jurisdiction where the activities are performed. Such personnel, if visiting the other Participant to participate in an activity pursuant to this Memorandum of Understanding, will not engage in any activity detrimental to this Memorandum of Understanding.

第九章 理解和应用

任何由于解读或应用该谅解备忘录产生的差异将由双方协商解决。双方将以积极的态度尽力解决差异。

SECTION IX 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.

第十章 最后条款

本谅解备忘录自双方签字盖章之日起生效，有效期三年，除非由双方以可能的修改该谅解备忘录的方式续签。

双方均同意后可对该谅解备忘录在任何时间作出修改。任何修改均应以书面形式呈现，并标注修改生效的日期。

提交向另一方的书面声明后，任一方在任何时间均可退出该谅解备忘录。有意退出谅解备忘录的一方应尽量提前 30 天向另一方提交退出声明。

该谅解备忘录的结束不应停止在备忘录生效期间开始的活动，除非双方共同决定停止。如果一方希望停止之前开始的活动，应尽力征求另一方的理解。

SECTION X

Final Provisions

This MOU is effective from the date of its signature, for a three year period, unless renewed or extended by the participants in the same manner that the participants may otherwise modify this MOU.

This MOU 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 MOU by providing a written notice to the other participant. A participant that intends to withdraw from this MOU shall endeavor to provide notice of such withdrawal to the other participant 30 days in advance.

The termination of this MOU shall not affect when activities initiated while this MOU is in effect shall conclude, unless the participants mutually decide otherwise. A Participant that intends to terminate a previously initiated activity shall endeavor to reach an understanding with the other Participant concerning such termination.

(日期) 在张家口市和伯克利签字。两份原始文件均用中英文写成。
Signed in the Cities of Zhangjiakou and Berkeley on [Date], in two original copies in Chinese and English.

(以下为签字页)

(The following is the signature page)

美国加利福尼亚州能源委员会
CALIFORNIA ENERGY
COMMISSION

代表人：
Representative:

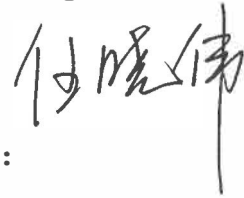


(签章)
(Seal)

日期：
Date: 2021.08.12

中国张家口市能源局
ZHANGJIAKOU CITY
ENERGY BUREAU

代表人：
Representative:



(签章)
(Seal)

日期：
Date: 2021.8.4