

**MEMORANDUM OF UNDERSTANDING**  
**to**  
**ENHANCE THE COOPERATION ON GREEN BUILDING AND LOW-CARBON URBAN**  
**DEVELOPMENT**  
**between**  
**The Center of Science and Technology & Industrialization Development of**  
**Ministry of Housing and Urban-Rural Development of the P. R. China**  
**and**  
**The California Energy Resources Conservation and Development Commission of**  
**the State of California of the United States of America**

This Memorandum of Understanding (the MOU) to enhance the Cooperation on Green Building and Low-carbon Urban Development is entered into by the Center of Science and Technology & Industrialization Development of the Ministry of Housing and Urban-Rural Development of the P. R. China and the California Energy Resources Conservation and Development Commission of the State of California of the United States which are hereinafter jointly referred to as the "Parties." This MOU is signed to further strengthen and coordinate efforts to combat global climate change, reduce air pollution, and promote clean and efficient energy technology research and development while ensuring public health, environmental protection, and the sustainable use of natural resources.

Striving to develop a mutually beneficial relationship of partnership and cooperation consistent with the governing laws of their respective countries, the Parties agree to pursue the following:

## **1. Purpose**

This MOU establishes a fundamental framework for the Parties to exchange technical expertise, academic resources, policy design and planning, unique sustainable and green urban development opportunities based on principles of equality and mutual benefits, and to further explore collaboration opportunities and proactively combat climate change. This does not provide the Parties or third parties with any legal rights, nor does it incur legal obligations by the Parties or any third parties.

## **2. Areas of Cooperation**

The Parties will focus cooperation on urban and environmentally-friendly low-carbon development efforts, with specific areas of cooperation including, but not limited to the following:

a. Sustainable urban planning (e.g. energy planning, water system planning, etc.), building design (natural ventilation, natural lighting and shading, usage of renewable energy resources, application of existing efficiency codes and standards, and other sustainable design practices), and project management and implementation;

b. Research on the application, promulgation and the demonstration of ultra-low energy building and net zero energy building, incorporating existing and emerging technologies;

c. Research on the technology and integration of renewable energy resources in urban energy systems and the wide application of renewable energy in distributed energy system;

d. Conducting research about distributed-energy based smart micro grid technology and its applications, with an aim to promote the integration of micro-

grid, micro heating network and information network, for efficient use of energy resources;

e. Launch of green building and low-carbon urban development related dissemination events (such as improving efficiency of natural resource usage through voluntary actions, etc.) to promote green lifestyle and development;

f. Research and analysis on building energy consumption to improve data analysis capacity; establishment of the building energy consumption data sharing mechanism between the two parties to conduct comparative analysis on building energy consumption between the two sides; and disclosure of the energy consumption data and carbon emission data of buildings of different types and functions on a regular basis;

g. Joint research by enterprises from both countries on green building and low-carbon urban development, technological innovation, technological commercialization and information exchange is encouraged, in order to explore innovative collaboration models to turn research achievements into productive forces, and to work for the demonstration projects;

h. Other areas of mutual interest to the Parties.

### **3. Forms of Cooperation**

The Parties can use the following forms of cooperation:

a. Information sharing on laws and regulations that is beneficial to low-carbon urban and rural development;

b. Planning, design, and construction of green, low-carbon buildings and urban development demonstration sites;

c. Information sharing activities regarding examples of the existing low-carbon urban and rural development projects and those being planned (such as co-organizing seminars, workshops, exhibitions, and training);

d. Exchange of relevant information, experience, and lessons learned from previous low-carbon urban and rural development project through sharing of relevant documents and other resources;

e. Co-compilation of the coordinated report identifying the major areas in need of development for promoting green and low-carbon urban development in an effective way;

f. Exchange visits between the Parties' relevant personnel, including exchanges through conference call and webinar technology;

g. Exchange visits and interaction or relevant joint research and technology development;

h. Co-organization of seminars, workshops, exhibitions, and training;

i. Research environmentally-friendly financing policy and mechanisms;

j. Promotion of research, technology innovation, technology

commercialization and collaboration on green building and low-carbon urban development; and encouragement of information exchange and visits between private sectors on both sides;

k. Facilitation of cooperation and exchanges between major Chinese and Californian cities to share local government tools and resources and lessons learned;

l. Other forms of collaboration as agreed upon by the Parties.

#### **4. Cooperation Mechanism**

The Parties will carry out the following activities to achieve the objectives of this MOU,

a. Each Party will appoint the appropriate institutions to establish a Working Group, which will coordinate the implementation of the cooperation activities pursuant to this MOU, to explore collaboration opportunities on green building and green urban development, to carry out pilots and demonstration projects, and to assist with the administrative necessities of the MOU;

b. During the period of validity of this MOU, the Working Group plans to develop annual work plans before January 1, and report on the progress of cooperation to the Director of Center of Science and Technology & Industrialization Development of Ministry of Housing and Urban-Rural Development of the P. R. China and the Chair of the California Energy Resources Conservation and Development Commission once a year before August 31, and improve the cooperation plans based on their suggestions.

c. The Parties may cooperate in multilateral exchanges with other partners engaged in activities advancing the goals of this MOU, including universities; nongovernmental, civil society, and non-profit organizations; foundations; and other public and private academic and research and development institutions;

d. All activities carried out based on the MOU must be in accordance with the Parties' respective laws, rules, and regulations and shall be subject to the availability of funds, personnel, and other resources available to each Party.

## **5. Supplementary Provisions**

The Parties also agree to the following provisions:


- a. The Parties have decided that any disagreement arising from the implementation of this MOU shall be settled in writing over amicable discussion;
- b. This MOU is valid for three (3) years upon the date of signature. The MOU may be extended and modified with the mutual written consent of the Parties;
- c. This MOU may be terminated by either party with a written notice. After the termination of the MOU, the Parties must take necessary measures to conclude the ongoing activities in a swift and appropriate manner;
- d. Nothing in this MOU precludes the Parties from entering into any other agreement with an entity inside or outside of the People's Republic of China or the United States of America;
- e. Consultation and exchange of information and documents shall preserve the security and integrity of the systems, processes, and information (including trade secrets) of each Party and all third parties acting on behalf of any of the Parties and be without prejudice to Parties' legal requirements or obligations, which may prevent the exchange of certain confidential information and documents under this MOU;
- f. Some documents and communications related to this MOU and its implementation may be subject to disclosure under public records laws.

This MOU is signed in Beijing, China on Oct. 31, 2017. This MOU shall be provided in two copies in both Chinese and English. Each Party holds one copy and the two copies are equally authentic.

California Energy Resources  
Conservation and Development  
Commission of the State of California of  
the United States of America

Signature: 

Center of Science and Technology &  
Industrialization Development of the  
Ministry of Housing and Urban-Rural  
Development of the P. R. China

Signature: 

中华人民共和国住房和城乡建设部科技与产业化发展中心  
与美利坚合众国加利福尼亚州能源保护和发展委员会  
加强城市与建筑绿色低碳发展合作谅解备忘录

本《谅解备忘录》旨在进一步加强中华人民共和国住房和城乡建设部科技与产业化发展中心与美利坚合众国加利福尼亚州能源保护和发展委员会（以下统称“双方”）共同开展加强绿色建筑和城市低碳发展方面的合作。本《谅解备忘录》的签署，可进一步加强和协调双方在保证公众健康、环境保护和自然资源的可持续利用的同时，加强应对全球气候变化、减少空气污染、促进清洁高效能源技术研发和应用推广等领域的合作。

双方努力发展互利关系和友好合作，在遵守两国各自相关法律的前提下，就以下内容达成一致：

## 一、目的

本《谅解备忘录》旨在确立基本框架，供双方在平等互利原则的基础上就专业技术、学术资源、政策设计与规划以及各具特色的绿色可持续城市发展的机遇等领域进行充分交流，进一步发掘合作机会，积极开展应对气候变化行动。但这并不等于向对方或第三方赋予任何权利，也无需双方或任何第三方承担法律责任。

## 二、合作领域

双方将主要在城市与环境友好低碳发展方面开展合作，包括但不限于以下领域：



1、城市区域可持续规划（如能源规划、水系统规划等）和建筑设计（如自然通风、采光、遮阳、可再生能源的应用，现有能效标准和规范的应用，和其他可持续设计等）、项目管理和项目实施。

2、研究综合了现有及新兴技术的超低能耗建筑/零能耗建筑技术的应用推广和示范。

3、研究可再生能源在城市能源系统的应用技术与整合，及在分布式能源中的应用推广。

4、开展基于分布式能源的智慧能源微网工程研究与实践，推进微电网、微热网及信息网的融合，促进能源高效利用。

5、开展城市与建筑绿色低碳发展宣传活动（如提高能源资源利用效率志愿者行动等），引导绿色发展方式和绿色生活方式。

6、开展建筑能耗数据分析挖掘技术研究，提高数据分析处理能力；建立中美双方建筑能耗数据分享机制，开展中美建筑能耗和能效比对活动，定期发布不同类型和功能的建筑的能源消耗和碳排放数据。

7、鼓励两国企业共同开展城市与建筑绿色低碳发展的基础研究、技术创新、成果转化以及交流合作，探索实践产学研结合创新合作模式，推动示范工程建设。

8、双方感兴趣的其他领域。

### **三、合作方式**

双方可采用以下合作方式：

1、分享有助于促进低碳城乡发展的相关法律和规范等方面的信息。

2、规划、设计和建设城市与建筑绿色发展示范点；

3、在现有和规划中的低碳城乡发展项目的设计和实践中，共享信息（包括共同组织专家讨论、研讨会、展览和培训等）；

4、交流以往有关低碳城乡发展项目的开发与实施的相关信息、经验和教训（包括共享相关文件和其他资源）；

5、共同撰写报告，确认能够有效且高效发展绿色低碳城市的主要改进领域；

6、组织双方相关人员开展交流参观活动（包括以电话会议和网络研讨会等形式）；

7、互访交流或相关技术联合研发；

8、共同组织专家讨论、研讨会、展览和培训；

9、研究绿色金融政策与机制；

10、推动城市与建筑绿色低碳发展的基础研究、技术创新、成果转化以及交流合作，鼓励双方企业交流合作。

11、促进中国与加州主要城市的合作与交流，分享当地政府的工具和资源，交流经验教训；

12、双方同意的其他合作方式。

#### **四、合作机制**

双方将开展以下工作来实现本《谅解备忘录》的目标：

1、双方各自指定相关部门或执行机构组成一个工作组来负责协调实施本《谅解备忘录》下各项合作活动的开展，探索城市与建筑绿色发展合作机遇，开展试点示范；

2、在本《谅解备忘录》有效期内，工作组计划于每年1月1日前制定出下一年度工作计划，并于每年8月31日前向中国住房城乡建设部科技产业化发

展中心主任及美国加州能源保护和发展委员会主席汇报合作进展情况，然后根据其意见改进合作计划；

3、双方还可与其他参与方（包括大学、民间社团、非营利组织、基金会以及其它公立和私立学术研究开发机构）建立多边交流合作，推动本《谅解备忘录》目标的实现；

4、在本《谅解备忘录》下进行的所有活动必须遵守双方各自的法律法规和规定，开展活动所需的资金、人员和其他资源由双方自筹。

## **五、补充条款**

双方还就以下条款达成一致：

1、双方决定：因执行本《谅解备忘录》产生的任何分歧应通过友好协商以书面形式解决；

2、本《谅解备忘录》自签字之日起生效，有效期（3）年，经双方书面同意后可以续签和修改；

3、本《谅解备忘录》可由双方任何一方发出书面通知后终止。终止后，双方必须采取必要措施，迅速、适当地结束正在进行的工作；

4、本《谅解备忘录》不妨碍各方与中华人民共和国或美利坚合众国境内外的任何其他实体签订其他协议；

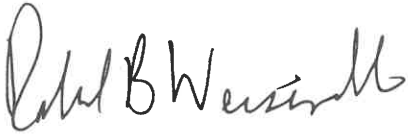
5、双方的谈判和文件资料交换应确保各方以及代表任何一方的所有第三方的系统、流程和信息（包括商业秘密）的安全性和完整性，且不损害双方的合法要求或义务（此款有可能会影响本《谅解备忘录》下某些机密信息和文件的交换）；

6、与本《谅解备忘录》以及执行本备忘录相关的某些文件和信函，依据各自国家的法律法规予以保护和披露。

本《谅解备忘录》于2017年10月31日于北京签署，一式两份，中英文双语，具有同等效力，双方各执一份。

美利坚合众国加利福尼亚州  
能源保护和发展委员会

中华人民共和国住房和城乡建设部  
科技与产业化发展中心

签字: 

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