## Memorandum of Understanding on Research, Innovation, and Investment to Advance Cooperation on Low-Carbon Development and Clean Energy Resources

# The Government of California of the United States of America And The Ministry of Science and Technology of the People's Republic of China

**ACKNOWLEDGING** that California has a long history of successful collaboration with China, including cooperation on climate change, air quality, energy efficiency, renewable energy, new-energy and zero emission vehicle development, emissions trading systems, and climate-positive trade and investment opportunities;

**RECOGNIZING** the negative effects of climate change on both developing and developed countries, as well as the importance of jointly promoting low-carbon development and clean technology to fight against climate change;

**ACKNOWLEDGING** that California has strong climate mitigation policies, including reducing greenhouse gas emissions 40% below 1990 levels by 2030, 50% renewable energy and doubling of energy efficiency by 2030, and extensive investment in clean technology development and deployment;

**ACKNOWLEDING** that China is committed to improving air quality and controlling greenhouse gas emissions, and will spare no efforts to reach its peak of  $CO_2$  emissions around 2030 as soon as possible and reduce its  $CO_2$  emissions per unit of GDP by 60-65% compared with the ratio in 2005;

**ACKNOWLEDGING** the tremendous opportunity to further California-China bilateral cooperation to promote clean technology innovation and investment;

**STRIVING** to develop a mutually beneficial relationship of partnership and cooperation between California and China and to advance economic, environmental, public health, and job creation benefits derived from implementing clean energy and low-carbon technologies, policies, and programs; and

**CONSISTENT** with the governing laws of their respective countries:

California and China (hereinafter referred to as the "Participants") have reached the following understanding:

## Paragraph 1 OBJECTIVE

The objective of this Memorandum of Understanding ("MOU") is to support the Participants in advancing innovation and development of, and investment in, low-carbon energy resources and clean technologies. Cooperation between the Participants will be based on a mutual understanding of shared issues and concerns of the governments and citizens of California and the People's Republic of China as they relate to research, innovation, and commercialization of clean technologies.

To achieve these objectives, the Participants agree to develop the California-China Clean Technology Partnership (CCCTP, hereinafter referred to as the "Partnership"), which will allow the Participants to communicate and cooperate on matters of research, innovation, and commercialization. The Partnership will also provide a mechanism through which the Participants' governments, researchers, key stakeholders, and industrial collaborators may exchange views, express concerns, and arrange to carry out joint actions. The Partnership will provide a mechanism to promote scientific, technological, and industrial research and commercialization cooperation between California and the People's Republic of China and will provide a platform for promoting mutually beneficial endeavors between the Participants, including developing markets for science and technology-based products.

#### Paragraph 2 AREAS OF COOPERATION

The Parties agree that the areas of cooperation of the Partnership will include but not be limited to:

- 1. Clean energy technologies that focus on reducing energy use, improving energy efficiency, advancing renewable energy technologies such as solar and wind power, energy storage and grid modernization technologies, new-energy and zero emission vehicles, and low-carbon cities;
- 2. Greenhouse gas emission and air pollution reduction programs, including emissions trading systems;
- 3. Environmental protection technologies, including pollution mitigation technologies, water and waste water technologies, and solid waste management technologies;
- 4. Information technologies and techniques including software, advanced communication products and services benefiting the mitigation of criteria air pollutants and greenhouse gas emissions, and advancing clean energy development;
- 5. Carbon capture, utilisation and storage technologies, including new-generation carbon capture technologies, and CO<sub>2</sub> recycling utilisation and storage technologies;
- 6. Other areas mutually agreed by the Participants.

## Paragraph 3 IMPLEMENTATION

The Participants of this MOU will establish a Joint Working Group on the California-China Clean Technology Partnership (hereinafter referred to as the "Joint Working Group") to implement this MOU. The Participants will each designate a co-chair and an equal number of representatives to develop collaborative activities under this MOU and advise the Participants on ways to conduct the activities included in this MOU. The Joint Working Group will meet annually on a mutually agreed date and venue to discuss progress on the implementation of the MOU. Each Participant will bear its own costs in meeting its commitments under this MOU, including but not limited to any costs associated with the Joint Working Group.

To implement this MOU, the Joint Working Group will create a coordinated Joint Investment Plan that identifies projects and technologies consistent with the objectives of this MOU that may be considered

as part of the California-China Clean Technology Partnership. Each Participant will identify and fund eligible projects consistent with the Joint Investment Plan according to its own processes. Each Participant agrees to independently fund the activities contemplated by and being conducted pursuant to the MOU, on a contribution schedule that permits the participants to achieve the objectives set forth under the MOU. The Participants agree to collaborate on these projects where possible and to share information resulting from the projects funded pursuant to the Joint Investment Plan.

## Paragraph 4 PARTICIPATION OF OTHER INSTITUTIONS

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 any other organizations whose activities may contribute to achieving the goals of this MOU.

## Paragraph 5 OTHER RIGHTS AND INTERESTS

The Participants intend to adopt all appropriate measures, in accordance with their respective laws and regulations, to protect intellectual property rights and interests.

Nothing in this MOU limits the right of each of the Participants to establish similar agreements with other institutions. Cooperation under this MOU does not affect the rights and obligations acquired by the Participants in other international agreements.

#### Paragraph 6 EFFECT OF MOU

This MOU serves only as a record of the Participants' intentions and does not constitute or create any legally binding or enforceable rights or obligations, expressed or implied.

## Paragraph 7 SUPPLEMENTARY PROVISIONS

The Participants also agree to the following provisions:

- 1. The Participants have decided that any disagreement arising from the implementation of this MOU shall be settled through amicable discussion;
- 2. Nothing in this MOU precludes the Government of California or the California Energy Resources Conservation and Development Commission or the Government of China or China's Ministry of Science and Technology from entering into any other agreement with an entity inside or outside of the United States of America or the People's Republic of China; and
- 3. Consultation and exchange of information and documents shall preserve the security and integrity of the systems, processes, and information (including trade secrets) of each Participant and all third parties acting on behalf of any of the Participants and be without prejudice to Participants' legal

requirements or obligations, which may prevent the exchange of certain confidential information and documents under this MOU.

## Paragraph 8 FINAL PROVISIONS

This MOU is neither a contract nor a treaty.

This MOU will be effective upon the date of signature by both participants and will remain in force for five (5) years thereafter.

This MOU may be renewed for equal periods by mutual consent of the Participants until terminated through written notice.

This MOU may be amended or modified by mutual written consent of the Participants.

Either Participant may terminate this MOU by providing the other with 30 days written notice.

Signed in Beijing, China on June 6<sup>th</sup>, 2017, in two originals in Chinese and English languages, both texts being equally authentic.

Governor Edmund G. Brown Jr.
State of California
United States of America

Minister Wan Cana

Minister Wan Gang Ministry of Science and Technology People's Republic of China

## 美利坚合众国加利福尼亚州政府 与

## 中华人民共和国科学技术部 关于

## 推动低碳发展与清洁能源合作的研究、创新和投资 谅解备忘录

肯定加利福尼亚州与中国长期以来一直保持着的成功 合作,合作领域包括气候变化、空气质量、能效、可再生 能源、新能源和零排放车辆研发、碳排放交易体系、正气 候贸易和投资机会;

认识到气候变化对发展中国家和发达国家的负面影响,以及共同推动低碳发展和清洁技术以应对气候变化的 重要性:

赞赏加利福尼亚州为减缓气候变化制定的有力政策措施,包括 2030 年温室气体排放量比 1990 年下降 40%, 2030年可再生能源占比达到 50%、能效翻番,以及大幅增加清洁技术开发与部署的投资;

**赞赏**中国致力于改善空气质量和控制温室气体排放, 尽最大努力实现二氧化碳排放 2030 年左右达到峰值并争取 尽早达峰,单位国内生产总值二氧化碳排放比 2005 年下降 60%-65%的目标;

**赞同**在促进清洁能源技术创新与投资方面,加利福尼亚州和中国有着巨大的双边合作机遇;

致力于在加利福尼亚州和中国之间建立互利伙伴与合作关系,实施清洁能源与低碳技术、政策和计划,以促进 经济发展、环境保护、公共卫生和就业;并

遵照两国各自的相关法律:

加利福尼亚州与中国科学技术部(以下简称"双方")兹达成谅解如下:

#### 第一条 目标

本谅解备忘录旨在帮助双方推动低碳能源和清洁技术方面的创新、开发与投资。双方之间的合作基于加利福尼亚州和中华人民共和国的政府和公民之间就清洁技术研究、创新和商业化这一共同关切达成的共识。

为实现上述目标,双方同意建立加利福尼亚州-中国清洁技术伙伴关系(以下简称"伙伴关系"),以便就研究、创新和商业化事宜开展交流与合作。伙伴关系将设立双方政府、研究人员、重要利益相关方和合作企业之间交流观点、表达关切和协调采取联合行动的机制。伙伴关系还将设立促进加利福尼亚州与中国之间科技、产业研究和商业化合作的机制,并为促进双方开展包括为科技型产品

开拓市场在内的互利活动提供平台。

#### 第二条 合作领域

双方同意伙伴关系的合作领域包括但不限于:

- 1. 清洁能源技术,重点是减少能源使用量,提升能效, 推动太阳能和风能、储能与电网现代化、新能源与零 排放车辆及低碳城市等可再生能源技术研发;
- 2. 温室气体与大气污染物减排项目,包括排放交易体系;
- 3. 环境保护技术,包括污染治理技术、水与废水处理技术及固体废物处理技术;
- 信息技术与方法,包括有助于降低常规大气污染物和 温室气体排放以及推动清洁能源发展的软件、先进通 信产品和服务;
- 5. 二氧化碳捕集利用与封存技术,包括新一代二氧化碳 捕集技术、二氧化碳资源化利用技术以及封存技术;
- 6. 双方一致同意的其他领域。

#### 第三条 实施

为实施本谅解备忘录,双方将成立加利福尼亚州-中国清洁能源技术伙伴关系联合工作组(以下简称"联合工作组")。双方各指定一名联合主席及同等数量的代表,负责制定本谅解备忘录下的合作活动,并就纳入本谅解备忘录的活动的开展方式向双方提供建议。联合工作组每年在

共同商定的日期和地点举行一次会议,讨论本谅解备忘录的实施进展。双方各自承担其履行本谅解备忘录下义务所产生的费用,包括但不限于联合工作组的相关费用。

本谅解备忘录可视为加利福尼亚州-中国清洁技术伙伴 关系的组成部分。为实施本谅解备忘录,联合工作组将制 定联合投资计划,确定与本谅解备忘录目标一致的项目和 技术。双方将分别按照各自程序遴选并资助符合联合投资 计划的项目。双方同意按照资助方案,分别独立资助本谅 解备忘录约定的或根据本谅解备忘录开展的活动,支撑活 动参与方达成本谅解备忘录所规定的目标。双方同意尽可 能合作实施这些项目,并共享根据联合投资计划予以资助 的项目所产生的信息。

#### 第四条 其他机构的参与

双方经一致同意可寻求第三方参与合作,所述第三方包括大学及其他公私学术、研究和开发机构,或其活动可能有助于实现本谅解备忘录目标的任何其他组织。

#### 第五条 其他权利和利益

双方将遵照各自法律法规采取所有妥当措施保护知识产权权利和利益。

本谅解备忘录的任何规定均不限制双方与其他机构订立类似协议的权利。本谅解备忘录下的合作不影响双方在其他国际协议下的权利和义务。

#### 第六条 谅解备忘录的效力

本谅解备忘录仅为双方合作意向的记录,不构成或产生任何明示或默示的具有法律效力或可执行的权利或义务。

#### 第七条 补充条款

双方还同意下列条款:

- 1. 双方决定,本谅解备忘录在实施过程中如遇分歧,应通过友好协商解决;
- 2. 本谅解备忘录的任何规定均不限制加利福尼亚州政府 或加利福尼亚州能源保护与开发委员会、中国政府或 中国科学技术部与美利坚合众国或中华人民共和国国 内或国外的任何实体订立任何其他协议;以及
- 3. 在进行信息和文件的咨询与交换时,应确保每方及代表任一方的第三方的系统、程序和信息(包括商业秘密)的安全性与完整性,且不得有悖于双方关于不允许在本谅解备忘录下交换某些机密信息和文件的法律规定或义务。

#### 第八条 最终条款

本谅解备忘录既不是合同, 也不是条约。

本谅解备忘录自双方签字之日起生效, 有效期五年。

经双方一致同意,本谅解备忘录可续签五年,直至书面通知终止。

经双方书面一致同意,可修订或修改本谅解备忘录。 任一方可提前30日书面通知另一方后终止本备忘录。 本谅解备忘录于2017年6月6日在中国北京签署,以 中文和英文写成,一式两份,两种文本具有同等效力。

Edy & Bring

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