

**PROTOCOL**  
**between**  
**THE DEPARTMENT OF ENERGY OF**  
**THE UNITED STATES OF AMERICA**  
**and**  
**THE MINISTRY OF SCIENCE AND TECHNOLOGY AND**  
**THE NATIONAL ENERGY ADMINISTRATION OF**  
**THE PEOPLE’S REPUBLIC OF CHINA**  
**FOR COOPERATION ON A CLEAN ENERGY RESEARCH CENTER**

The Department of Energy of the United States (USDOE), as a Party, and the Ministry of Science and Technology (MOST) and the National Energy Administration (NEA) of the People’s Republic of China, as one Party, collectively herein the “Parties”;

NOTING the Agreement between the Government of the United States of America and the Government of the People’s Republic of China on Cooperation in Science and Technology signed January 31, 1979, as amended and extended (hereinafter “the S&T Agreement”); and the Joint Press Statement of the First Strategic and Economic Dialogue in July 2009;

NOTING the concurrence of the National Development and Reform Commission of the People’s Republic of China (hereinafter “China”) in the cooperative activities planned by the Parties;

NOTING the Protocol between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China for Cooperation in the Field of Energy Efficiency and Renewable Energy Technology Development and Utilization of December 15, 2006 (hereinafter "Protocol I"), and the Protocol for Cooperation in the Field of Fossil Energy Technology Development and Utilization between the Department of Energy of the United States of America and the Ministry of Science and Technology of the People's Republic of China of April 20, 2000, as extended (hereinafter "Protocol II");

RECOGNIZING that climate change, clean and efficient energy, and environmental protection are among the greatest challenges facing the United States and China and that cooperation between the two countries is critical in addressing these issues;

SEEKING to support the implementation of the Memorandum of Understanding to Enhance Cooperation on Climate Change, Energy and Environment between the Government of the United States of America and the Government of the People's Republic of China of July 28, 2009 (hereinafter the "MOU");

CONSIDERING that science and technology have long been a cornerstone of cooperation between the United States and China, given their importance for economic and social development;

ACKNOWLEDGING that the United States and China share a responsibility to contribute to the world's future sustainability and prosperity by taking advantage of the abundant opportunities for cooperation between their two countries on clean energy technologies;

SHARING an interest in collaborating to advance clean energy technologies by building upon their ongoing scientific and technological cooperation in this area among research institutes, universities and companies;

CONSIDERING that their support to research activities on the basis of equality and reciprocity will provide mutual benefits to both Parties' countries; and

DESIRING to establish the U.S.-China Joint Clean Energy Research Center, that will accelerate development and more rapid deployment of critical technologies for renewable energy, energy efficiency, cleaner uses of coal, including carbon capture and storage, and other areas of clean energy that are needed to avoid the worst consequences of climate change, diversify energy supply and accelerate the transition to a low-carbon economy;

HAVE AGREED AS FOLLOWS:

**I. Purpose**

1. The Parties shall establish a U.S.-China Joint Clean Energy Research Center (hereinafter, "the Center") to facilitate joint research and development on clean energy by teams of scientists and engineers from the United States and China as well as serve as a clearinghouse to help researchers in each Party's country cooperate in mutually beneficial areas.
2. This Protocol is subject to and governed by the S&T Agreement.
3. This Protocol is intended to complement, and not duplicate, cooperation under Protocol I or Protocol II.
4. This Protocol is intended to support the objectives of the MOU, consistent with Section II, Part C of the MOU.

**II. Areas of Cooperation**

1. The initial priority research topics include: building energy efficiency; cleaner uses of coal, including carbon capture and storage; and clean vehicle technologies.
2. Other areas of collaboration may be added by the Parties' mutual consent in writing.

### **III. Principles**

Cooperative activities shall be conducted on the basis of the following principles:

1. equality, mutual benefit, and reciprocity;
2. timely exchange of information relevant to cooperative activities;
3. effective protection of intellectual property rights;
4. peaceful, non-military uses of the results of collaborative activities; and
5. respect for the applicable legislation of each Party's country.

### **IV. Project Annexes**

1. **Cooperative activities** under this Protocol may be undertaken by the Parties or, as appropriate, laboratories or contractors of the Parties. Each such cooperative activity that may involve the sharing of costs or that may give rise to intellectual property shall be set forth in a Project Annex, which shall be subject to the terms of this Protocol.
2. Each Project Annex shall include detailed provisions for conducting and managing the cooperation, and shall cover such matters as technical scope, work plan, staffing requirements, funding sources and budget, protection and allocation of intellectual property, exchange of proprietary information, and any undertakings, obligations or conditions necessary to the proposed activity.

### **V. Management**

1. USDOE and MOST, NEA jointly establish the U.S.–China Steering Committee on Clean Energy Science and Technology Cooperation, chaired for the United States by the Secretary of USDOE, and for China by the Minister of MOST and the Administrator of NEA. The Joint Steering Committee consists of representatives of the Parties, and of other interested ministries, departments and agencies of each Party's country as jointly determined by the Parties. The Joint Steering Committee shall meet annually, or at such times as the co-chairs jointly agree, to provide high level review and guidance for the activities and the direction of the research

conducted under this Protocol.

2. A Joint High Level Advisory Panel (hereinafter the Joint Advisory Panel) of six eminent business and academic experts selected by the Joint Steering Committee from each Party's country shall be formed and supply the Center with suggestions and insights to ensure that issues of importance to the business and academic sectors on the state of, and needs for, clean energy research and development activities are brought to the attention of the Joint Steering Committee. The Joint Advisory Panel should meet annually and update its experts along with the changes in the priority areas described in paragraph 1 of Article II above, and shall be responsible for reaching out to the United States and Chinese clean energy science and technology communities for their suggestions and to encourage their participation in Center activities through an annual workshop or other appropriate means as the Joint Steering Committee shall decide.
3. The Parties shall monitor the activities conducted under this Protocol, and assess the progress of the Center.
4. The Parties shall each establish a secretariat that shall work closely together and act as the principal coordinators of communications and activities. The functions of the secretariats are to: (1) organize the meetings of the Joint Steering Committee and the Joint Advisory Panel; (2) help arrange special activities such as teleconferences and workshops; (3) act as clearinghouses for new activities; (4) maintain archival records for the Joint Steering Committee and the Joint Advisory Panel. The Parties may identify other functions to be performed by the secretariats, as appropriate.
5. Except as otherwise provided in Annex I (Intellectual Property Rights), any question concerning the interpretation or application of this Protocol shall be resolved by consultations between the Parties.

## **VI. Funding Mechanism**

1. Subject to the availability of funds authorized and made available by each Party's government and subject to paragraph 2 of this Article, funding for the activities under

this Protocol shall be borne by the Parties, to help ensure the long-term and stable financial support to move the objectives of the Center forward. Private industry and academia also may provide funding for joint projects and activities in which they are participating.

2. USDOE shall fund only research performed by United States participants, and MOST and NEA shall fund only research performed by Chinese participants, in collaborative activities, unless agreed otherwise by the Parties for specific projects.
3. Each Party shall conduct the activities under this Protocol in accordance with applicable law to which it is subject.

## **VII. Information Sharing and Intellectual Property**

1. The protection and allocation of intellectual property created or furnished under this Protocol is provided for in Annex I (Intellectual Property Rights), which is attached to and forms an integral part of this Protocol. The allocation of intellectual property rights shall be determined on a case-by-case basis, as appropriate, pursuant to Annex I.
2. Subject to the provisions of Annex I, each Party shall make available to the other, technical information first produced under projects under this Protocol that is (1) relevant to or necessary for projects under this Protocol; and (2) either in the Party's possession or available to it, and which it has the right to disclose.

## **VIII. Entry into Force, Extension, Amendment, and Termination**

1. This Protocol shall enter into force upon signature by both Parties.
2. Subject to paragraph 4 of this Article, this Protocol shall remain in force for an initial period of ten years, and shall be automatically renewed for additional periods of five years, so long as the S&T Agreement remains in force.
3. This Protocol may be amended by mutual written agreement of the Parties.
4. This Protocol may be terminated by both Parties in writing at any time, or by either Party upon ninety days' written notice to the other Party. Notwithstanding the

previous sentence, activities approved by the Parties prior to termination shall remain in effect, and this Protocol shall continue to apply to them, until their originally intended date of completion and shall be funded accordingly.

DONE at Beijing, in triplicate, on the 17<sup>th</sup> day of November 2009, in the English and Chinese languages, both texts being equally authentic.

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



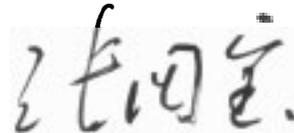
DR. STEVEN CHU

FOR THE MINISTRY OF SCIENCE AND  
TECHNOLOGY OF THE PEOPLE'S  
REPUBLIC OF CHINA:



DR. WAN GANG

FOR THE NATIONAL ENERGY  
ADMINISTRATION OF THE PEOPLE'S  
REPUBLIC OF CHINA:



MR. ZHANG GUOBAO

## ANNEX I – INTELLECTUAL PROPERTY

The Parties shall ensure adequate and effective protection of intellectual property created or furnished under this Protocol and relevant implementing Project Annexes. Rights to such intellectual property shall be allocated as provided in this Annex. Subject to this Annex, the Parties shall support the widest dissemination of scientific information they generate in the execution of this Protocol.

### I. SCOPE

- A. This Annex is applicable to all cooperative activities undertaken pursuant to this Protocol, except as otherwise specifically agreed to by the Parties or their designees.
- B. For purposes of this Protocol, “intellectual property” shall have the meaning found in Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm, July 14, 1967, and may include other subject matter as agreed to by the Parties.
- C. Each Party shall ensure, through contracts or other legal means with its own participants, if necessary, that the other Party can obtain the rights to intellectual property allocated in accordance with the Annex. This Annex does not otherwise alter or prejudice the allocation between a Party and the nationals of its country, which shall be determined by that Party’s laws and practices.
- D. Disputes concerning intellectual property arising under this Protocol shall be resolved through discussions between the concerned participating institutions or, if necessary, the Parties or their designees. Upon mutual agreement of the Parties, a dispute shall be submitted to an arbitral tribunal for binding arbitration in accordance with the applicable rules of international law. Unless the Parties or their designees agree otherwise in writing, the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL) shall govern.
- E. Termination or expiration of this Protocol shall not affect rights or obligations under

this Annex.

- F. The provision of any computer program, whether an application program or operating systems format and whether in source or object code, by one Party (the Providing Party) to the other Party (the Receiving Party) under this Protocol is contingent on the availability of copyright protection, and the execution of an appropriate license agreement, for that program in the territory of the Receiving Party that is generally equivalent to the protection to which it is entitled in the territory of the Providing Party.

## II. ALLOCATION OF RIGHTS

- A. **Each Party shall be entitled** to a non-exclusive, irrevocable, royalty-free license in all countries to translate, reproduce, and publicly distribute scientific and technical journal articles, reports, and books directly arising from cooperation under this Protocol. All publicly distributed copies of a copyrighted work prepared under this provision shall indicate the names of the authors of the work unless an author explicitly declines to be named.
- B. Rights to all forms of intellectual property, other than those rights described in Section II.A. above, shall be allocated as follows:
1. **Visiting researchers, for example, those not participating in a research project** with a specific scope of work jointly funded by the Parties, shall receive intellectual property rights, awards, bonuses and royalties in accordance with the policies of the host institution.
  - 2.(a) Any intellectual property created by persons employed or sponsored by one Party under cooperative activities other than those covered by paragraph II.B.1. shall be owned by that Party. Intellectual property created by persons employed or sponsored by both Parties under cooperative activities (involving a research project with a specific scope of work jointly funded by the Parties) shall be jointly owned by the Parties. In addition, each creator shall be entitled to awards, bonuses and royalties in accordance with the policies of the

institution employing or sponsoring that person.

- (b) Unless otherwise agreed in a Project Annex, each Party shall have within its territory a right to exploit or allow others to exploit intellectual property created in the course of the cooperative activities.
- (c) The rights of a Party outside its territory shall be determined by mutual agreement as described in paragraph II.B.2(d).
- (d) The Parties or their participants shall jointly develop provisions of a Technology Management Plan regarding the exploitation of intellectual property rights as described in paragraph II.B.2.(b) and (c) and other than those covered by paragraph II.B.(1) of this Annex. The Technology Management Plan shall consider the relative contributions of the Parties to the particular jointly-funded research project, the benefits of licensing by territory, or for fields of use, and other factors deemed appropriate for the particular technology which is the subject matter of the jointly-funded research project.
- (e) If the Parties cannot reach an agreement on a joint Technology Management Plan in the particular research project agreement, work on the particular research project shall not commence.
- (f) Notwithstanding paragraphs II.B.2. (a-e) above, if a particular project has led to the creation of intellectual property protected by the laws of one Party but not the other, unless other allocation agreements are agreed upon by both Parties, the Party whose laws provide for this type of protection shall be entitled to all rights to exploit or license such intellectual property worldwide, although creators of intellectual property shall nonetheless be entitled to awards, bonuses and royalties as provided in paragraph II.B.2.(a).
- (g) For each invention made under any cooperative activity, the Party employing or sponsoring the inventor(s) shall disclose the inventions promptly to the other Party, together with any documentation and information necessary to enable the other Party to establish any rights to which it may be entitled. Either Party may ask the other Party in writing to delay publication or public

disclosure of such documentation or information for the purpose of protecting its rights in the invention. Unless otherwise agreed in writing, the delay shall not exceed a period of six months from the date of disclosure by the inventing Party to the other Party.

### **III. BUSINESS-CONFIDENTIAL INFORMATION**

In the event that information identified in a timely fashion as business-confidential is furnished or created under this Protocol, each Party and its participants shall protect such information in accordance with applicable laws, regulations, and administrative practice, which may include execution of an appropriate agreement of confidentiality. Information may be identified as “business-confidential” if a person having the information may derive an economic benefit from it or may obtain a competitive advantage over those who do not have it, the information is not generally known or publicly available from other sources, and the owner has not previously made the information available without imposing in a timely manner an obligation to keep it confidential.