

**THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA  
AND  
THE STATE SCIENCE AND TECHNOLOGY COMMISSION OF THE  
PEOPLE'S REPUBLIC OF CHINA  
FOR COOPERATION IN THE FIELD OF ENERGY EFFICIENCY AND RENEWABLE  
ENERGY TECHNOLOGY DEVELOPMENT AND UTILIZATION**

**ANNEX V**

**ELECTRIC VEHICLE AND HYBRID-ELECTRIC VEHICLE DEVELOPMENT**

**Cooperative Activities Between the  
Department of Energy of the United States of America and the  
State Science and Technology Commission of the People's Republic of China**

The Department of Energy of the United States of America (USDOE) and the State Science and Technology Commission (SSTC) of the People's Republic of China (PRC), hereinafter referred to as the Parties:

Noting the Agreement between the Government of the United States of America and the Government of the PRC on Cooperation in Science and Technology signed at Washington on January 31, 1979, as amended and extended, hereinafter referred to as the "Umbrella Agreement,"

Noting that under the Umbrella Agreement the Parties signed a Protocol for Cooperation in the Fields of Energy Efficiency and Renewable Energy Technology Development and Utilization on February 23, 1995, hereinafter referred to as the "Protocol,"

Noting that Article 2 of the Protocol identifies a number of areas for potential cooperation in the field of civil transportation technology and that Article 6 of the Protocol provides that the USDOE and the SSTC may invite other organizations to participate in Annexes under the Protocol; and

Desiring to establish cooperation between agencies in the United States and in the People's Republic of China for electric and hybrid-electric vehicle development, as well as other modes of electric transportation including electric bicycles, in order to enhance the commercialization potential of such technology for the benefit of the Parties;

Have agreed as follows:

## **ARTICLE I - OBJECTIVES**

- A. This Annex is subject to the terms and conditions of the Umbrella Agreement and the Protocol. In the event of any conflict between the terms and conditions of the Umbrella Agreement or the Protocol and this Annex, the Umbrella Agreement and the Protocol shall govern.
- B. The objectives of this Annex are to establish the framework for specific collaboration, including demonstrations as provided in Article IV, in order to promote large-scale deployment in the PRC of electric vehicles, including light duty passenger and business vehicles and electric buses, and other forms of electric transportation, into appropriate fleets and other applications, with support from USDOE, national laboratories and the automobile industry in the United States, and U.S. private industry organizations involved in electric transportation.

## **ARTICLE II - AREAS FOR COOPERATION**

Cooperation under this Annex may include, but is not limited to, the following areas:

### **A. Technical Cooperation**

1. Advanced Batteries;
2. AC Motor Control Systems;
3. Fast Charging;
4. Electric Vehicle (Body) Design; and
5. Residential and Fleet Charging.

### **B. Provision of Information**

Electric Vehicles Infrastructure Requirements: Building Codes and Safety Standards, Non-Financial and Regulatory Incentives, and Electricity Rates.

## **ARTICLE III - PARTICIPATING ORGANIZATIONS**

- A. The principal organization responsible for conducting the cooperative activities under this Annex in the United States shall be the USDOE. The principal organization responsible for conducting the cooperative activities under this Annex in the PRC shall be the SSTC.

- B. Each Party may invite other government agencies and organizations and private organizations in its country to participate in cooperative activities under this Annex at the participating organization's own expense and subject to such terms and conditions as the Parties may specify. For the USDOE, such participating organizations may include USDOE national laboratories.

#### **ARTICLE IV - FORMS OF COOPERATION**

Cooperative activities undertaken pursuant to this Annex may include, but are not limited to, the following:

A. **Exchange of Technical Information and Experiences and Collaborative Visits**

The Parties will exchange technical information and experiences and arrange collaborative visits. These exchanges and visits may address research and development programs, technical and economic evaluation, maintenance and operational procedure, and facilities relating to electric vehicle technology.

B. **Economic, Environment, and Policy Studies**

The Parties will conduct specific economic and policy studies in order to enhance joint understanding of appropriate mechanisms and policies to promote rapid implementation of electric vehicles in an environmentally and economically acceptable manner. The Parties will explore the need for a joint environmental evaluation of such implementation and will develop and implement such an evaluation, as appropriate.

C. **Demonstrations**

The Parties will conduct demonstrations in order to show the technical and economic feasibility of electric vehicle technologies in the areas of cooperation set out in Article II of this Annex. USDOE may send vehicles, instrumentation, equipment or spare parts for use in demonstrations carried out under this Annex, which shall remain U.S. Government property. Such property may be donated to the Government of China or exchanged for data or information owned by the Government of China consistent with the laws and regulations of the Parties. The USDOE, through participating organizations, will provide technical training to Chinese technical representatives. The SSTC shall pay the cost of demonstration activities, transportation, and installation related to this demonstration project.

Each Party shall exercise due care in carrying out demonstration projects under this Annex. Neither Party has accepted any liability, and neither Party will accept any liability, unless such acceptance is consistent with its applicable laws and regulations. Damages shall be compensated in accordance with applicable laws and regulations.

**D. Professional Training**

The Parties will explore the need to train PRC professionals in electric vehicle and supporting technologies in an organized fashion.

**ARTICLE V - MANAGEMENT**

Each Party shall designate one Project Coordinator who shall jointly plan the technical approach for accomplishing the objectives of this Annex, and who shall be responsible for the program, schedule, coordination and reports. A Project Coordination Meeting shall be held at a mutually agreed site, preferably annually.

**ARTICLE VI - COSTS AND LEGAL PROVISIONS**

Except when otherwise specifically agreed by the Parties in writing, all costs including travel and lodging expenses, resulting from cooperation under this Annex shall be borne by the Party that incurs them. The implementation of this Annex is subject to the availability of appropriated funds and personnel, and subject to applicable laws and regulation of the countries of the Parties.

**ARTICLE VII - INTELLECTUAL PROPERTY RIGHTS**

Article 8 of the Protocol and Annex I of the Umbrella Agreement govern the dissemination, use and protection of information used or generated in the course of activities conducted under this Annex, and the allocation of intellectual property rights arising from this activity.

**ARTICLE VIII - ENTRY INTO FORCE AND TERMINATION**

A. This Annex shall enter into force upon signature by the Parties and remain in force for five (5) years or until termination of the Protocol, whichever occurs first. This Annex may be amended or extended by mutual written agreement of the Parties.

B. At the discretion of either Party, this Annex may be terminated upon six (6) months advance notice in writing to the other Party.

SIGNED at Beijing, this 18<sup>th</sup> day of November, 1997, in duplicate, in the Chinese and English languages, each text being equally authentic.

FOR THE DEPARTMENT OF  
ENERGY OF THE UNITED STATES  
OF AMERICA

FOR THE STATE SCIENCE AND  
TECHNOLOGY COMMISSION OF  
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