

**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**

ANNEX V

**DEVELOPMENT OF ELECTRIC-DRIVE AND FUEL CELL VEHICLE
TECHNOLOGIES**

Cooperative Activities 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

The Department of Energy of the United States of America (USDOE) and the Ministry of Science and Technology (MOST) 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" and the Protocol was extended for another five years effective February 23, 2000;

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 MOST 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 development of electric-drive and fuel cell vehicle technologies including battery-powered electric vehicles, hybrid electric vehicles, fuel cell vehicles, electric scooters, electric bicycles, and vehicles using alternative transportation fuels, in order to enhance the commercialization potential of such technologies 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 collaboration, including research, development, information exchange and demonstrations as provided in Article IV, in order to promote large-scale deployment in the PRC and in the United States of electric-drive and fuel cell vehicle technologies for applications in light duty passenger and business vehicles, electric buses, and other forms of transportation, into appropriate fleets and other applications. These objectives will be accomplished with support from DOE and MOST, national laboratories, other research institutions in the United States and the PRC, the automobile industry in the United States and the PRC, and U.S. and Chinese private industry organizations.

ARTICLE II – AREAS FOR COOPERATION

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

- A. Technical Cooperation
 - 1. Battery-Powered Electric Vehicle Technologies;
 - 2. Hybrid Electric Vehicle Technologies;
 - 3. Fuel Cell Vehicle Technologies; and
 - 4. Advanced Vehicle Materials.
- B. Provision of Information
 - 1. Technology Development, Deployment, Demonstrations, and Infrastructure Requirements;
 - 2. Codes and Standards;
 - 3. Financial and Regulatory Incentives; and
 - 4. Technology and Policy Assessments.

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 MOST.
- 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, technology deployment and demonstration, technical and economic evaluations, maintenance and operational procedures, and facilities relating to electric-drive and fuel cell vehicle technologies.

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-drive and fuel cell vehicle technologies 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 explore the need for demonstrations in order to show the technical and economic feasibility of electric-drive vehicle and fuel cell technologies in 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 MOST shall pay the cost of demonstration activities, transportation, and installation related to any demonstration projects.

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.

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 regulations of the countries of the Parties.

ARTICLE VII – INTELLECTUAL PROPERTY RIGHTS

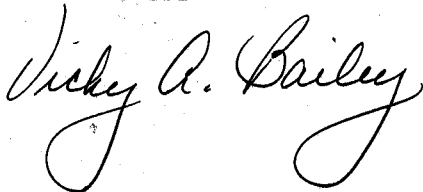
Article 8 of the Protocol and Annex I of the Umbrella Agreement govern the dissemination, use and protection of information used or generated in the course of activities conducted under this Annex, and the allocation of intellectual property rights arising from this activity.

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 29th day of October, 2003 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 MINISTRY OF SCIENCE
AND TECHNOLOGY OF
THE PEOPLE'S REPUBLIC OF CHINA

