#### ANNEX II - A

### TO THE PROTOCOL ON COOPERATION IN THE FIELD OF FOSSIL ENERGY TECHNOLOGY DEVELOPMENT AND UTILIZATION BETWEEN

THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA THE MINISTRY OF SCIENCE AND TECHNOLOGY OF THE PEOPLE'S REPUBLIC OF CHINA AND

# FOR COOPERATION IN THE AREA OF CLEAN FUELS

The Department of Energy (DOE) of the United States of America, and the National Energy Administration (NEA) of the People's Republic of China, hereinafter referred to as the

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 referred to as the "Agreement";

Noting that under the Agreement the DOE and the Ministry of Science and Technology (MOST) of the People's Republic of China signed the Protocol for Cooperation in the Field of Fossil Technology Development and Utilization on April 20, 2000, hereinafter referred to as the "Protocol"

participate in cooperative activities under the Protocol; Noting that Article 2 of the Protocol identifies a number of areas for potential cooperation in the field of fossil energy technical development and utilization, and that Article 7 provides that the DOE and the MOST may invite other organizations to

Noting that under the Protocol the DOE and the State Development Planning Commission of the People's Republic of China signed Annex II thereto for Cooperation in the Area of Clean Fuels on November 19, 2002, hereinafter referred to as "Annex II", which has expired;

Desiring to continue the cooperation in the area of clean fuels conducted under Annex II;

Have agreed as follows:

#### ARTICLE 1

- Annex, the provisions of the Agreement and the Protocol shall govern. between the provisions of the Agreement or the Protocol and the provisions of this This Annex is subject to the Agreement and the Protocol. In the event of any conflict
- energy for the industrial sector. and chemicals; (b) a preferred feedstock for the production of power; and (c) a source of economic resource for the production of alternative transportation fuels, additives, coal and mixed feedstocks that include coal as (a) an environmentally acceptable and analyses, data, processes, and technologies leading to the preparation and utilization of The objectives of this Annex are to jointly investigate and discuss key factors,

### ARTICLE 2 AREAS OF COOPERATION

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

- Coal Conversion (including use of feedstock mixtures such as coal/biomass);
- 2 Advanced Separation Processes (i.e., innovative coal preparation technologies);
- 3. Co-Production of Alternative Fuels, Chemicals and/or Power;
- 4 Integrated Fuels and Chemicals Production; Ultra-Clean Transportation Fuels, to Include Hydrogen, and Carbon Recycle for
- 5. Solid Fuels and Feedstock including coal;
- 6. Carbon Sequestration Technology Related to Coal Use;
- 7. Technical Training, Workshops, and Meetings;
- 8. Other areas may be added by written agreement of the Parties.

## ARTICLE 3 PARTICIPATING ORGANIZATIONS

The principal organizations in the United States responsible for conducting the cooperative activities under this Annex shall be the DOE and its National Energy Technology Laboratory.

- 2 The principal organization in the People's Republic of China responsible for conducting the Administration (NEA). cooperative activities under this Annex shall be the China National Energy
- Ċ. By-written agreement of DOE and NEA, other government agencies and organizations conditions as the Parties jointly decide. in their respective countries may be invited to participate in this Annex, on such terms and

### ARTICLE 4 FORMS OF COOPERATION

3 of the Protocol. Cooperation undertaken pursuant to this Annex may take any of the forms listed in Article

#### ARTICLE 5 MANAGEMENT

and maintain working contacts at the staff level participating in the Task, to manage specific cooperative activities, and to establish conducted under the Annex shall have a Task Coordinator from each organization maximizing the mutual benefits of cooperation. An Annex Coordination Meeting under this Annex, including harmonizing future program opportunities with a view to Each Party shall designate an Annex Coordinator to oversee all activities conducted held at a mutually agreed site, preferably annually. Individual

## ARTICLE 6 COSTS AND TECHNICAL SCOPE

regulations to which it is subject. Each joint Task shall be the subject of a written agreement which shall include provisions governing, as appropriate, such subjects as exchange of proprietary information, management, total costs, cost sharing, and schedule, and any undertakings, obligations or conditions necessary to the proposed each Party shall conduct its activities in accordance with applicable Task under this Annex shall be borne by the Party that incurs them. The implementation all costs, including travel and lodging expenses, resulting from cooperation in each Except when otherwise specifically agreed by the Parties in writing in each joint Task, Annex is subject to the availability of appropriated funds and personnel, and Each joint Task shall be the subject of a written laws

# ARTICLE 7 ENTRY INTO FORCE, AMENDMENT, AND TERMINATION

- Protocol remains in force. This Annex shall enter into force upon signature by DOE and NEA, and (subject to paragraph 2 of this Article) shall remain in force for the duration of the Protocol. This Annex may be amended by written agreement of the Parties, so long as the
- 5 At its discretion, a Party may terminate its participation in this Annex upon six (6) months advance notice in writing to the other Party. The Parties may terminate this Annex at any time in writing.

DONE in Qingdao, in duplicate, on the 27 day cand Chinese languages, each text being equally authentic. 27 day of September , 2009, in the English

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

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

/w/hummed

and for

### 美利坚合众国能源部

11

# 中华人民共和国科学技术部

# 关于化石能源技术领域开发和利用合作议定书

# 附件二 清洁燃料领域的合作

方 美利坚合众国能源部与中国国家能源局(以下简称"双

年1月 下简称"协议"); 注意到美利坚合众国政府与中华人民共和国政府 1979 31 日签订,并已修改和延长的《科技合作协议》(以

术领域开发和利用合作议定书》(以下简称"议定书"); 和国科学技术部 2000 年 4 月 20 日签订的《关于化石能源技 注意到根据该协议,美利坚合众国能源部与中华人民共

其它组织参与合作活动; 部和中华人民共和国科学技术部可在议定书框架下,邀请 用方面若干潜在合作领域, 议定书第七条规定: 美国能源 注意到议定书第二条列举了在化石能源技术开发和利

订了清洁燃料领域合作的附件二 人民共和国国家发展计划委员会于 2002 年 11 月 19 日签 注意到根据该议定书,美利坚合众国能源部与原中华 (以下简称"附件二")

料领域的合作; 已经到期, 且双方希望在附件二框架下继续开展在清洁燃

双方达成如下协议:

#### 第一条

#### 回答

- 定书的条款有任何冲突, 以协议和议定书的条款为准。 1. 本附件须遵守协议和议定书的条款, 如本附件与协议或议
- 术, 使其成为(a)一个环保上可接受的经济资源, 用来 的加工和利用中的关键因素、分析方法、数据、工艺和技 2. 本附件的目标是联合调查和讨论煤炭及含煤混合原料 生产替代运输燃料、添加物和化学品;(b)一个用于电力 生产的首选原料; (c)工业部门的能源来源。

#### 第二条

#### 合作领域

本附件下的合作包括但不限于以下领域:

- 1. 煤转化(包括利用煤/生物质等混合原料);
- 2. 先进的分离工艺(例如:创新的煤炭制备技

朱);

3. 可替代燃料、化学品及/或电力的多联产;

- 中的碳循环; 超洁净运输燃料,包括氢,燃料和化学品联产
- 5. 含煤固体燃料和原料;
- 6. 和煤利用相关的碳捕获和封存技术;
- 7. 技术培训、工作组和会议;
- 8. 经各方书面同意的可以增加的其它领域。

#### 第二線

#### 参加单位

- 单位是美利坚合众国能源部和国家能源技术实验室。 美利坚合众国方面负责本附件下合作活动的主要
- 要单位是中国国家能源局。 中华人民共和国方面负责本附件下合作活动的主
- 和条件由双方共同决定, 国的其它政府机构和单位均可受邀参加本附件,合作条款 3. 经过美国能源部和中国国家能源局的书面同意,两

#### 第四条

#### 合作形式

列述的任何形式。 合作按照本附件执行,可以采用在议定书第三条中所

#### 第五条

#### 會理

开,最好每年一次。对于附件指导下的每一项任务,各参 并在工作层建立和维持工作关系。 加机构应该安排一名任务协调员, 作项目的时机。附件协调人会议应当在双方同意的地点召 所有活动,包括为了使合作共同利益最大化,协调未来合 双方应各指派一名附件协调员监督本附件指导 管理具体的合作活动, 下密

#### 第六条

### 费用和技术范围

党 宿 拟议中的任务必需的义务、责任或条件等管理规定 ][#] 之匹配的经费和人员, 双方在开展活动过程中须遵守各自 据本附件进行的合作中产生的所有费用,包括差旅费和住 资料的交流、管理、总费用、费用分担、 家适用的法律和法规。每个合作任务都需要签署书面协 费, 由费用发生方承担。本附件的执行取决于是否有与 协议内容应根据具体情况包括有关管理规定, 比如专 在每个联合任务中,除非双方作出具体书面同意,根 时间表和任何

#### 第七条

生效、修改和终止

- 定。 件进行修改。 并在议定书有效期限内有效(根据本条第二款的规 1. 本附件经美国能源部和中国国家能源局签署后生 在议定书有效期限内, 经双方书面同意, 可对本附
- 终止本附件。 通知,终止参与本附件。双方可以在任何时间以书面形式 2. 根据意愿, 一方可以提前 6个月向另一方提交书面

双语,两种文本具有同等效力。 本附件于2009年9月27日在青岛签署,文本为中英

美利坚合众国能源部

Motoumed.

中国国家能源局