

## MEMORANDUM OF UNDERSTANDING

### For Provision of Technical Assistance to Promote the Establishment of a Public Energy Savings Company and DSM Program in Hebei Province

This Memorandum of Understanding (MOU) is entered into on this ---- day of -----Two Thousand and Nine (2009) among:

**Heibei Power Demand Side Management and Instruction Center**, having its corporate office at No.19, Huaxi Road, Shijiazhuang City, Hebei Province, and hereinafter referred to as "**HBDSM Center**",

AND

**The USAID ECO-Asia Clean Development and Climate Program**, a program of U.S. Agency for International Development, with its program office at Monririn Building, B 301, 60/1, Phaholyothin, Soi 8, Bangkok 10400, and hereafter referred to as "**ECO-Asia**",

AND

**Natural Resources Defense Council** having its principal place of business at 40 West 20th Street, 11th Floor, New York, NY USA, and with its Beijing representative office at A1606 Building No.1, G.T. International Center, Jia 3 Yongandongli, Jianguomenwai Avenue, Chaoyang District, Beijing, Peoples Republic of China, and hereafter referred to as "**NRDC**",

AND

**The China-US Energy Efficiency Alliance** having its principal place of business at One Embarcadero Center, Suite 1550, San Francisco, CA, USA, and hereafter referred to as the "**Alliance**."

#### **THIS MOU WITNESSETH THAT:**

The ECO-Asia Clean Development and Climate Program, funded by the US Agency for International Development (USAID), promotes policies, programs, and projects in China (and the region) that encourage investment in clean energy technologies while addressing China's economic productivity, energy security, and environmental challenges. International Resources Group is the USAID contractor that is implementing this program.

The Natural Resources Defense Council is one of the most highly respected and accomplished environmental organizations in the world, with a staff of 380 preeminent scientists, policy specialists, attorneys, and communications experts in New York, Washington, Beijing, Los Angeles, San Francisco, and Chicago. NRDC has an unmatched 30-year international record of promoting energy efficiency through a combination of voluntary private-sector initiatives, utility-funded incentives, and regulatory proceedings, and worked to create the first energy-efficiency standards and DSM programs in California, the United States, the People's Republic of China (PRC) and Russia.

The China-US Energy Efficiency Alliance is a nonprofit organization combating global climate change by promoting energy efficiency as the cleanest and least expensive energy resource in China. Through its powerful network, the Alliance pools financial and technical resources to help China design and implement large-scale energy efficiency incentive programs.

#### **Responsibilities of ECO-Asia, NRDC and the Alliance**

**ECO-Asia, NRDC** and the Alliance in this MOU express their intention to jointly conduct a series of technical assistance activities during August 2009-August 2011 to support DSM development in Hebei province. The Parties to this MOU concur that the scope of the services of the ECO-Asia, NRDC and Alliance Team will include but not necessarily be limited to the following:

- A. Support the establishment and scale-up of a public Energy Savings Company (“Super ESCO) in Hebei province. This work will be led by **ECO-Asia**.
- B. Support the scale-up of Hebei’s existing Demand Side Management (DSM) Fund through the review and design of incentive mechanisms, as well as assistance in seeking additional funding from commercial financial sources, as well as international financial institutions. This work will be led by **ECO-Asia**.
- C. Support the HBDSM Center in conducting targeted energy audits, performing potential studies, screening and identifying “Efficiency Power Plant” (EPP) projects, designing incentive programs, providing technical assistance in DSM program implementation, and developing an EM&V framework. This work will be led by **NRDC** in conjunction with the Alliance.
- D. Develop and implement a plan to provide ongoing training and capacity building to support the needs of the Hebei Provincial Power Office and the Hebei DSM Center related to A to C above. This work will be led by both **ECO-Asia and NRDC**, with the support of the **Alliance**.

The following is a list of illustrative activities that would be pursued under each of the topics identified above:

- A. Support the establishment and scale-up of a public ESCO (“Super ESCO) in Hebei province.
  - Work closely with the DSM center to structure a Super ESCO, develop its objectives and key activities, hire staff, and develop a business plan.
  - Market the Super ESCO to multilateral banks, Chinese commercial banks and private sector financiers through programs such as Private Financing Advisory Network(PFAN) with the aim of attracting additional financial resources (e.g. equity, debt and credit guarantees)
  - Assist the Super ESCO to develop a pipeline of energy-efficiency projects, screen and identify candidate projects, and initiate implementation of the first set of projects.
- B. Support the scale-up of Hebei’s existing DSM fund through the review and design of incentive mechanisms, as well as assistance in seeking additional funding from commercial financial sources, as well as international financial institutions.
  - Review existing policies and mechanisms for raising revenue to fund DSM efforts in Hebei province
  - Recommend alternative financing mechanisms that could be applied by Hebei (e.g., rebates, incentives, tax incentives, loans)
  - Develop alternate approaches for scaling up revenue from both electricity tariffs imposed in Hebei and from external sources such as commercial finance and international financial institutions (e.g., ADB)
- C.** Support HBDSM Center in conducting targeted energy audits, performing potential studies, screening and identifying EPP projects, designing incentive programs, providing technical assistance in program implementation, and developing an EM&V framework.
  - ◆ Assist HBDSM Center in conducting targeted and comprehensive energy audits as well as economic/financial analyses to identify optimal mix of retrofit options for the highest energy consuming industrial enterprises which present the biggest opportunities for

- GHG emissions reductions.
- ◆ Help Hebei develop pilot Efficiency Power Plant programs including designing effective program portfolio, developing implementation procedures, and designing incentive structures.
- ◆ Assist Hebei in developing an effective, reliable and consistent program evaluation system, which will help program administrators and policy-makers to assess the economic, social, and climate impacts of the implemented DSM programs. Help HBDSM use appropriate measurement and verification protocol to measure and verify energy savings and GHG emissions reductions at the project level.
- ◆ Based on the results of Hebei DSM program, develop comprehensive case studies on experiences gained and lessons learned from DSM program design and implementation.

D. Provide ongoing training and capacity building to the HBDSM Center

- Between 1-2 training workshops a year on (1) financing EE measures with a focus support to private ESCOs in Hebei, performance guarantees and carbon finance, and (2) DSM program development and implementation,
- Support for HBDSM Center staff to participate in national and regional trainings/workshops/study tours to learn about experiences and best practices from other locations.

The support provided by ECO-Asia, NRDC and the Alliance to the Hebei DSM Center will be in the form of consulting services and expertise provided by their staff as well as national and international consultants.

**Responsibility of Hebei DSM Center**

To accomplish the joint goals of this MOU, the Hebei DSM Center will work closely with ECO-Asia, NRDC and Alliance staff and consultants by

- Assigning senior managers from the DSM Center as the primary contact for ECO-Asia CDCP, NRDC and Alliance staff and consultants.
- Providing ECO-Asia, NRDC and the Alliance, upon request, data on provincial energy use, DSM activities to date and existing legal and business framework for the Super ESCO.
- Working closely with ECO-Asia, NRDC and the Alliance, to respond to questions/queries from MDBs and commercial banks.
- Overseeing, managing and funding local logistics for meetings/trainings in Hebei province

**General Provisions**

1. This MOU does not create a binding obligation to commit any financial or other resources except as may be agreed to by the Parties in relation to specific projects undertaken pursuant to this Agreement. The Agreement will also not be exclusive in nature.
2. This MOU shall come into force as of the date of its signature by all Parties without any other formality and shall run for a term of two years.
3. Each Party will have the right to terminate this MOU with prior written notice of three months. Such termination will not affect the commitments already undertaken in connection with previous contracts.

**Leadership and Points of Contact**

1. The Core Management Group under this MOU for **ECO-Asia** will comprise:

Mr. Pradeep Tharakan, Deputy Chief of Party, USAID ECO-Asia Clean Development and Climate Program ECO-Asia, and

Points of Contact:

Steven Zeng, China Country Manager, USAID ECO-Asia Clean Development and Climate Program

2. The Core Management Group under this MOU for **NRDC** will comprise:

Barbara Finamore, Senior Attorney and Director of China Program, natural Resources Defense Council

Point of Contact:

Bo Shen, China DSM & Energy Efficiency Project Director, Natural Resources Defense Council

3. The Core Management Group under this MOU for the **Alliance** will comprise:

Terry Fry, Senior Vice-President, Nexant Co.

Point of Contact:

Francine Schulberg, Director of Operations, China-US Energy Efficiency Alliance

4. The Core Management Group under this MOU for **Hebei DSM Center** will comprise:

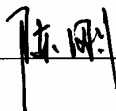
Mr. Chen Gang, Director, Hebei Demand Side Management and Instruction Center

Point of Contact:

- i) Ms. Zhao Cuicui, Project Manager, Hebei Power Demand Side Management and Instruction Center
- ii) Mr. Zhou Zhantong, Deputy Manager, Hebei Power Demand Side Management and Instruction Center

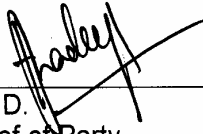
IN WITNESS THEREOF, the Parties have caused this MOU to be signed in their respective names as of the signing date

For and on behalf of Hebei Power DSM Center:

  
Chen Gang, Mr.  
Director  
Hebei Power DSM Center

2009年 9月 8日  
Date

For and on behalf of ECO-Asia :

  
Pradeep Tharakan, Ph.D.  
Contractor, Deputy Chief of Party  
USAID ECO-Asia Clean Development and  
Climate Program

September 8, 2009  
Date

For and on behalf of NRDC:



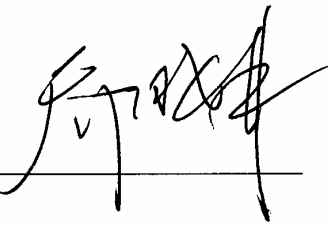
9/8/09  
Date

For and on behalf of the Alliance:



9 Sept 2009  
Date

Witness 1:

  
Mr. Qiao Xiao Lin  
Director  
Hebei Provincial Electric Power Office

2009. 9. 8.  
Date

Witness 2:

  
Name:

9-8-09  
Date

Designation:

# 关于提供技术支持 促进河北省建立公共能源服务公司 推动电力需求侧管理项目的合作谅解备忘录

本谅解备忘录签订于 2009 年 9 月 8 日，签订方为：

河北省电力需求侧管理指导中心，（以下简称“河北DSM中心”，地址：河北省石家庄市华西路19号）

美国国际开发署/生态亚洲清洁发展与气候项目，（以下简称“生态亚洲”，地址：泰国曼谷Monririn Building, B 301, 60/1, Phaholyothin, Soi 8）

美国自然资源保护委员会，（以下简称“NRDC”，地址：美国纽约40 West 20th Street, 11th Floor；北京代表处地址：北京市朝阳区建国门外大街永安东里甲3号院通用国际中心1号楼A1606）

中美能效联盟，（以下简称“能效联盟”，地址：美国加利福尼亚州旧金山One Embarcadero Center, Suite 1550）

## 本备忘录声明：

生态亚洲清洁发展与气候项目是由美国国际发展署(USAID)资助的项目，致力于促进中国（以及亚洲地区）在清洁能源技术投资领域的政策研究、规划和项目实施，同时也帮助中国应对经济发展过程中能源安全和环境保护等方面的挑战。美国国际资源集团(IRG)受美国国际开发署的委托，负责生态亚洲项目的实施。

美国自然资源保护委员会(NRDC)是世界上最具影响力的环保组织之一，拥有380多位资深的科学家、政策研究专家、律师和环保专家，分别在纽约、华盛顿、北京、洛杉矶、旧金山和芝加哥设有办事处。NRDC在能效领域具有30多年的工作经验，通过对私营部门项目、电力基金激励项目以及监管项目的整合推动能源效率的提高，同时NRDC也是第一个在加利福尼亚州、美国、中国和俄罗斯建立能效标准和开展DSM项目的机构。

中美能效联盟是一个非赢利性的机构，旨在提高中国的能源效率，缓解全球气候变化问题。通过其强大的网络，中美能效联盟通过整合资金和技术资源，帮助中国设计和实施大型的能效项目。

## 生态亚洲、美国自然资源保护委员会以及中美能效联盟的职责

在本谅解备忘录中，生态亚洲，NRDC以及能效联盟将在2009年8月至2011年8月期间在河北省开展一系列的技术支持活动，推动河北省电力需求侧管理的发展。生态亚洲，NRDC以及能效联盟的支持活动将包括但不限于：

- A. 支持在河北省建立一个公共能源服务公司（简称超级ESCO公司）并支持其规模化发展。该项工作由生态亚洲主导；
- B. 通过帮助评审和设计激励机制，以及寻求来自商业金融机构和国际金融机构的资金来源，来扩展河北投入的需求侧管理资金规模。该项工作由生态亚洲主导；

- C. 支持河北 DSM 中心开展能源审计、能源潜力研究、能效电厂项目评审以及激励计划的设计，并且为 DSM 项目的实施，以及能效评估、计量与核证模型的建立提供技术支持。该项工作由 NRDC 主导，联合能效联盟共同实施；
- D. 开发并实施持续的培训和能力建设的计划，以满足河北省电力办和河北省 DSM 中心在上述几个方面的需要。该项工作由生态亚洲及 NRDC 主导，能效联盟提供支持。

根据确定的上述四个合作领域, 拟开展以下具体的活动:

- A. 支持在河北省建立一个公共能源服务公司（简称超级 ESCO 公司）并支持其规模化发展
- 与 DSM 指导中心紧密合作来构建一个超级合同能源服务公司，确定公司目标和关键职能、开展团队建设、并开发出公司发展的商务计划；
  - 向国际多边银行, 中国商业银行, 以及私营部门融资网络（如 PFAN）等营销该超级合同能源服务公司, 以吸引额外的融资资源（例如: 股权、债务和信贷担保等）；
  - 帮助超级 ESCO 开发多种能效项目以形成产品线, 评选和识别候选项目、并启动首批项目的实施。
- B. 通过帮助评审和设计激励机制，以及寻求来自商业金融机构和国际金融机构的资金来源，来扩展河北投入的需求侧管理资金规模
- 评估现有的河北省的 DSM 项目资金筹集的政策和机制；
  - 推荐其他可在河北实施的融资机制（比如: 价格折让、奖励、税收优惠、贷款）；
  - 开发其他渠道和方法, 来扩大基金收入的来源, 寻求电价附加费之外的资金来源渠道, 诸如商业金融与国际金融机构（如亚洲开发银行等）。
- C. 支持河北 DSM 中心开展能源审计、能源潜力研究、能效电厂项目评审以及激励计划的设计，并且为 DSM 项目的实施，以及能效评估、计量与核证模型的建立提供技术支持
- 支持河北 DSM 中心实施有针对性的综合性的能源审计工作, 以及对项目成本效益的分析工作, 从而通过审计和分析, 帮助高能耗工业企业找到解决能效问题的最佳方案, 最大程度的促进温室气体减排；
  - 帮助河北省开发能效电厂试点项目, 包括设计项目文件, 开发实施流程, 以及设计相应的激励措施等；
  - 协助河北省开发有效的、可靠的以及可持续的项目评估系统, 从而帮助项目管理者 and 政策制订者评估 DSM 项目实施所带来的经济、社会和环境效益。帮助河北 DSM 中心采用适当的计量和核证方案, 核实并验证项目所产生的节能量和温室气体减排量；
  - 基于河北 DSM 项目的实施成果, 开展案例研究工作, 全面分析和研究 DSM 项目设计和实施过程中所取得的经验和教训。

#### D. 向 DSM 指导中心提供持续的培训和能力建设

- 每年提供 1-2 次的培训研讨会, 主题有: (1) 能效项目融资, 重点在于支持河北合同能源服务公司的发展、节能绩效保障, 以及碳融资; (2) DSM 项目的开发及实施。
- 支持河北省电力需求侧管理指导中心的员工参加全国和国际区域性的培训、研讨会和学习考察, 以掌握其它地区的经验和最佳实践。

生态亚洲、NRDC 以及能效联盟将通过其各自的职员及其国际和国内专家, 向河北省 DSM 中心提供咨询服务和专业培训。

#### 河北省电力需求侧管理指导中心的职责:

为完成本谅解备忘录的目标, 河北省 DSM 中心将与生态亚洲、NRDC 以及能效联盟的专家和职员密切合作:

- 从河北省电力需求侧管理指导中心指派一位高级经理作为生态亚洲、NRDC 以及能效联盟专家和职员的对口联络人;
- 根据需要, 向生态亚洲、NRDC 以及能效联盟的专家提供有关设计超级能源服务公司方面的河北省能源使用数据、以及现有法律和商业框架信息;
- 与生态亚洲、NRDC 以及能效联盟专家紧密合作, 以回应多边发展银行和商业银行提出的问题 and 询问;
- 为在河北举办的会议和培训提供后勤方面的管理和支持。

#### 通用条款

1. 本谅解备忘录在资金承诺和其他资源承诺方面不具有约束力。除非缔约方根据本协议在特定项目实施方面已经达成一致。本谅解备忘录为非排他性协议。
2. 本谅解备忘录自所有缔约方签字之日起生效, 有效期为2年。
3. 本谅解备忘录中任何一方都有权要求终止合作, 但必须提前3个月书面通知其他方。该终止行为将不影响以前合同中已经发生过的承诺。

#### 领导人及指定的联络人

1. 本谅解备忘录中生态亚洲的核心团队构成:

Pradeep Tharakan 先生, 项目副主任, 美国国际开发署/生态亚洲清洁发展与气候项目

联络人 :

曾磊先生, 中方经理, 美国国际开发署/生态亚洲清洁发展与气候项目

2. 本谅解备忘录中NRDC的核心团队构成:

Barbara Finamore 女士, 中国项目主任及高级律师, 美国自然资源保护委员会

联络人:

沈波先生, 中国 DSM 及能效项目主任, 美国自然资源保护委员会

3. 本谅解备忘录中能效联盟的核心团队构成:



Terry Fry, 高级副总裁, Nexant Co.

联络人

Francine Schulberg, 实施主任, 中美能效联盟

4. 本谅解备忘录中河北省DSM中心的核心团队构成:

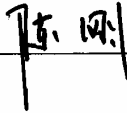
陈刚先生, 主任, 河北省电力需求侧管理指导中心

联络人:

- i) 赵翠翠女士, 项目经理, 河北省电力需求侧管理指导中心
- ii) 周湛通先生, 副经理, 河北省电力需求侧管理指导中心

以昭信守, 本谅解备忘录将由缔约方的代表签署:

河北省电力需求侧管理指导中心代表

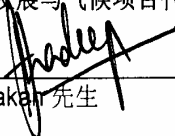


陈刚 先生  
主任  
河北省电力需求侧管理指导中心

2009年 9月 8日

日期

生态亚洲清洁发展与气候项目代表

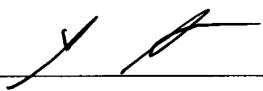


Pradeep Tharakan 先生  
项目副主任  
美国国际开发署/生态亚洲清洁发展与气候项目

September 10, 2009 .

日期

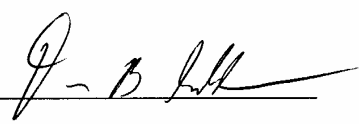
美国自然资源保护委员会代表



9/8/09

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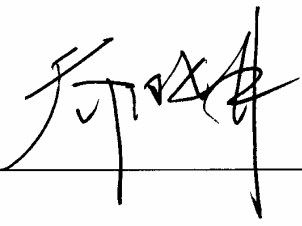
中美能效联盟代表



8 Sept 2009

日期

见证人1:

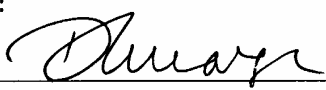


乔晓林  
主任  
河北省电力办公室

2009 9.8

日期

见证人2:



(姓名)

9-8-09

日期

职称