

中国可持续能源项目

China Sustainable Energy Program

2009年工作进展

2009 Program Updates

能源基金会高级副主席

中国可持续能源项目主任

林江

Jiang LIN

Energy Foundation Senior Vice President

China Sustainable Energy Program Director

北京嘉里中心大酒店

2009.11.13

Kerry Center Hotel

November 13th, 2009

中国可持续能源项目对话工作组新成员

New Members of CSEP Dialogue Partners

张志宏

国家科技部

高新技术发展及产业化司副司长

Mr. ZHANG Zhihong

Deputy Director General,

Department of High and New

Technology Development and

Industrialization,

Ministry of Science and

Technology

赵英民

国家环境保护部

科技标准司司长

Mr. ZHAO Yingnin

Director General,

Department of Science,

Technology and Standards,

Ministry of Environmental

Protection

王骏

国家能源局

新能源和可再生能源司司长

Mr. WANG Jun

Director General,

Department of New and

Renewable Energy, National

Energy Administration

能源基金会的17个合作伙伴

Our 17 Funding Partners

Cinco Hermanos

The ClimateWorks Foundation

The Doris Duke Charitable Foundation

The Grousbeck Family Foundation

The William and Flora Hewlett Foundation

The Kohlberg Family Foundation

The Kresge Foundation

The McKnight Foundation

The Mertz Gilmore Foundation

The George and Cynthia Mitchell Foundation

The David and Lucile Packard Foundation

The Pisces Foundation

The Sea Change Foundation

The Schmidt Family Foundation

The Simons Foundation

The TomKat Trust

The TOSA Foundation

气候工作基金会

ClimateWorks Foundation

- 气候工作基金会于2008年成立，总部设在美国加州旧金山。基金会的主旨是降低温室气体排放，推动全球低碳化的进程
- 气候工作基金会为非政府、非盈利性慈善机构，提供旨在降低全球温室气体排放研究的资金支持
- 为中国可持续能源项目提供主要资助来源

- ClimateWorks Foundation was established in 2008 with a goal of reducing greenhouse gas emissions and supporting a global low-carbon future.
- ClimateWorks is a non-governmental, non-profit philanthropic organization that supports research to address climate change worldwide.
- ClimateWorks is a major donor to the China Sustainable Energy Program.

中国可持续能源项目进展报告

Progress Report on China Sustainable Energy Program

- 工业
- 电力
- 可再生能源
- 建筑
- 交通项目
- 可持续城市
- 低碳发展之路
- 环境管理

- Industry
- Electric Utilities
- Renewable Energy
- Buildings
- Transportation
- Sustainable Cities
- Low-Carbon Development Paths
- Environmental Management

工业节能

Industrial Energy Efficiency

“千家企业”项目每年减少的CO₂排放 (百万吨)

Top 1000 Program Annual CO₂ reductions (million tons)

Year/Goal	Reductions (million tons)
2006	49
2007	142
2010 Goal	245
AB 32 2020 Goal	174

2009年主要工作

支持“十二五”工业节能规划和重点节能技术规划的制定

在山东支持开展“能源管理体系”和“能源管理师”工作并在苏州推动“能效之星”试点

建立10个节能中心、5个工业协会和10所大专院校和企业的合作机制，在地方开展针对水泥、化工和有色金属工业的能源审计和能效对标

2009 Achievements:

Supported development of the 12th FYP on industrial energy efficiency and promotion of key energy efficiency technologies

Initiated pilot programs in Shandong and Jiangsu

Built a network of 10 centers, 5 industry associations and 10 universities to facilitate local energy efficiency implementation

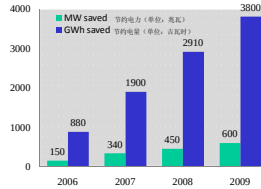
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能效电厂： 机遇与挑战

Efficiency Power Plants: challenge and opportunity

江苏能效电厂项目历年 节约的电力和电量

Energy Savings from Jiangsu Efficiency Power Plant Program



能效电厂试点省份：江苏、河北、北京、上海、重庆、四川

通过技术支持和开发最佳案例加强项目实施能力建设。

建立法规和激励机制以鼓励能效电厂投资。

• DSM/EPP pilots in: Jiangsu, Hebei, Beijing, Shanghai, Chongqing and Sichuan

• Technical assistance and developing best practice models to build implementation capacity

• Developing regulations and incentives to reward DSM/EPP investment

可再生能源

Renewable Energy

2009 年主要成果

- 协助人大环资委开展《可再生能源法》的修订工作
- 支持“2030年风电满足10%电力需求的可行性研究”。该研究为国家能源局制定新能源产业振兴计划和提出2020年风电发展目标提供了重要参考
- 协助江苏省研究制定光伏发展计划，提出三年内建设400兆瓦的光伏发电，并在省内加收3厘/度可再生能源附加以分摊光伏成本

2010 年挑战：

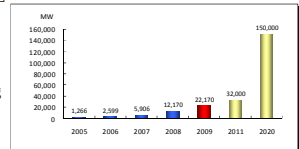
可再生能源发电并网

2009 Achievements

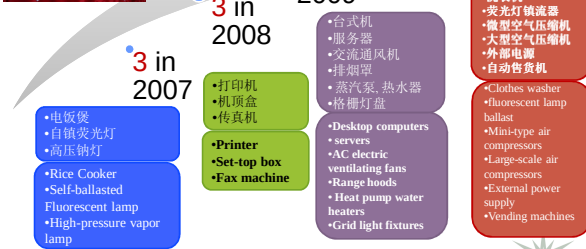
- Assisted NPC in RE Law Amendment
- Supported 2030 Wind Analysis, providing reference to NEA in developing 2020 wind target for the New Energy Industry Stimulus Plan
- Assisted Jiangsu Gov't in developing 400MW PV program and 0.3fen/kWh RE surcharge

2010 Challenges:
RE Power Grid Integration

中国风电装机增长情况 China Wind Power Growth



标准： Standards: Saving 656 million tons CO2 annually by 2030



来源：劳伦斯伯克利国家实验室研究报告

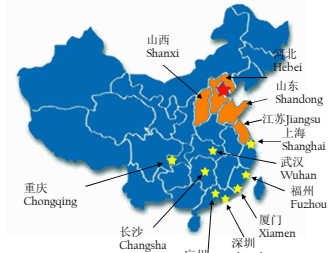
Source: LBNL research report

建筑节能： 地方实施的挑战

Buildings: Local Implementation challenges

建筑规范的遵守在大城市有所改善，但在中小城市仍存在一定的困难

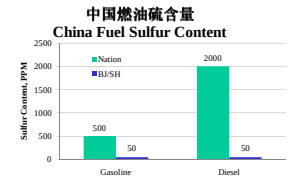
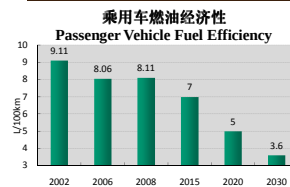
Building code compliance is improving in major cities but ensuring compliance in small and mid-sized cities is a challenge.



四个省级示范城市，八个市级示范城市
Four province-level pilots, eight city-level pilots

机动车燃油效率与排放

Vehicle Fuel Efficiency and Emissions



燃油经济性标准：

乘用车（第三阶段）

• 轻型商用车

• 重型商用车

• 农用车

排放标准

全国实施欧III标准；

北京、上海实施欧IV标准

未来的挑战：油品质量

Fuel efficiency standards:

• Passenger vehicles (now working on Phase III)

• LD commercial vehicles

• HD commercial vehicles

• Rural vehicles

Emissions Standards:

Euro III nationwide, Euro IV in Beijing & Shanghai

Ongoing challenge:

Fuel Quality

可持续城市与交通系统

Sustainable Cities and Transit Systems



成绩

快速公交

• 14座城市

• 31条走廊

• 425公里

• 100人次出行

公交引导城市发展

• 推动可持续城市设计，实现高效

公交体系支持的集约化城市发展

Achievements

7 years of BRT Development

• Built in 14 Cities

• 31 Corridors

• 425 Kilometers

• 1 Million Trips per day

Transit-Oriented Development

Building on our BRT work in 7 cities to promote compact urban development supported with high-efficiency public transit

提升环境监管能力

Building Capacity for Environmental Management



推广并实施北京奥运会清洁空气保障措施
Supporting promotion of Beijing Olympics clean air practices for replication



在上海（2010年世博会）和重庆建立试点起早清洁空气行动方案
Ongoing air quality management pilots in Shanghai (2010 Expo) and Chongqing



为《大气污染防治法》修订提供国际经验咨询及召开国际研讨会

Continue Support for amendment of National Air Quality Law: international best practices and workshops

主要政策建议及正在进行的后续研究：
Policy Recommendations for ongoing Air Quality Law amendment process:

- 以空气质量改善为核心的污染防治规划、考核体系
- 推动出台跨地区、跨行政部门的大气污染区域联防联控条例
- 注重能源、环境政策的充分结合
- 加严空气质量标准并支持修订API体系
- Require provinces and major cities to develop Clean Air Implementation Plans
- Assist on developing regulation on regional air quality management
- Integrate Energy and Environment Policies
- Regulate $PM_{2.5}$ & Support modifying API system

低碳发展之路

China's Low Carbon Development

2009 年主要工作成果:

• 支持国内外专家组开展2050年能源与气候情景分析研究;

• 支持碳税研究, 并将其纳入环境税改革中;

• 支持气候谈判中有关技术转移和碳金融的相关研究。

2009 Achievements

• Supported 2050 energy and climate scenario research by top Chinese and international teams

• Supported development of a Carbon Tax as part of China's environmental tax reform

• Provided support to China's international climate negotiation team

- technology transfer
- carbon finance



建议2010年重点开展的工作

Proposed 2010 Priorities

- 支持开展低碳发展之路工作
- 分部门支持“十二五”规划制定的相关工作
- 推动“千家企业”扩展为“五千家企业”
- 支持示范省/地区开展项目实施工作
- 为修订后的可再生能源法提供配套实施细则制定的工作支持
- Support the development of Low-Carbon Growth Path
- Support the development of Sectoral 12th FYP
- Expand Top-1000 to Top-5000
- Support local implementation pilots
- Support the formulation of implementation regulations for the revised RE Law



迎接挑战

Challenges

- 适应快速发展形势的要求, 做出迅速的政策响应;
- 加强实施地方试点项目;
- 政府官员的能力建设: 中央和地方政府官员培训中心;
- 成立项目开展、鉴定的专家顾问组;
- Addressing the blinding pace of development with timely policy recommendations
- Strengthening local pilot implementation
- Building capacity in government through training at all levels
- Building an expert consultant group to help launch and



谢谢!
Thank You!

中国可持续能源项目
The China Sustainable Energy Program

中国可持续能源项目第十二
次高级政策顾问委员会会议

Targets for Energy Savings and
Emissions Reduction in China's 12th
Five Year Plan

2010年中国可持续能源项目重点领域

讨论

Discussion
China Sustainable Energy Program
2010 Priorities

中国•北京
嘉里中心大酒店
2009年11月13日

Kerry Center Hotel
Beijing, P.R. China
November 13, 2009