

地方推进“十一五”节能减排工作的做法及经验

The Methods and Experiences of Local Governments in Promoting the Energy Conservation and Emissions Reduction Targets during the “11th Five-year Plan” Period

国务院研究室工交贸易司司长 唐元
Mr. Tang Yuan, Director of the Research Department for Industry, Transportation and Trade, Research Office of the State Council

实现节能减排目标，地方是关键。过去以来，许多地方加大了节能减排工作力度，在贯彻落实中央决策部署上下功夫，节能工作取得了很大进展。各地在推进节能减排工作过程中，创造性地开展工作，积累了丰富经验，许多做法和经验值得全国推广。

- Local governments play a key role in realizing energy conservation and emissions reduction targets.
- Recently, local governments have strengthened efforts to implement targets and have improved energy efficiency.
- The experience of local governments should be promoted nationwide.

做法一：调整产业和产品结构

Approach 1: Adjust industrial and product structure

地方经验表明：抓结构调整就是抓住了节能减排的牛鼻子，调整产业和产品结构是节约资源、改善环境、促进经济持续健康发展的根本途径。

广东省：加大力度限制发展和逐步淘汰高污染、高耗能的落后生产能力。

山东省：组织实施了结构调整“3646”工程，即大力发展三大高新技术产业，用高新技术改造提升6大传统产业，重点发展46类消耗低、污染小、效益高的产品。

中央企业与各地联手推进结构调整和优化。

- Focusing on structural adjustment is key to realizing the targets.
- Adjustment of industrial and product structure is fundamental to conserving energy, improving the environment, and promoting economic development.

Guangdong Province: Strengthened efforts to curb and phase out out-of-date production modes.

Shandong Province: Implemented structural adjustment emphasizing the development of three high-tech industries and advancement of six traditional industries. Focused on the development of 46 kinds of low energy-consuming, low-polluting, and high-performing products.

- Central enterprises collaborated with local governments on promoting structural adjustment and optimization.

做法二：抓住节能减排的重点领域和重点工程。

Approach 2: Focus on key fields and major projects in energy conservation and emission reduction

- 地方经验表明：抓重点项目和重点工程是节能减排的有效措施，创造性地实施中央确定的重点领域十大节能减排工程，可以达到事半功倍的效果。

- 山东省：在开展省级“千家企业节能行动”基础上，还组织实施了三个“节能100项”。即在全省推广100项重大节能技术，安装100项重大节能装备，实施100项重大节能示范工程。

- Focusing on key programs can conserve energy and reduce emissions.

Shandong Province:

Organized three “Energy Conservation-100 Programs”:

1. Promoted 100 significant energy-saving technologies across the province.
2. Installed 100 major types of energy-saving equipment.
3. Implemented 100 key energy-saving demonstration projects.

河北省：在国家确定的112家重点节能企业之外，又选择109家年耗能10万吨标准煤以上的工业企业全力实施“双百企业节能工程”。

北京、上海等市：结合特大型城市特点，将节能减排重点放在建筑节能和交通节能上。北京对大型公共建筑的耗能量定额管理和能源差价措施，在全国率先实施欧三机动车尾气排放标准，并拟于2008年实施欧四机动车尾气排放标准。北京、杭州、昆明、济南等城市还积极推动快速公交系统建设，减少城市交通能耗和空气污染。

Hebei Province: In addition to the 112 key energy-saving enterprises designated by the state, Hebei named an additional 109 industrial enterprises (each consume over 100,000 tons of coal annually) as part of its “Energy Conservation Project for Double-Hundred Enterprises.”

Mega-Cities: These cities focused on buildings energy efficiency and transportation energy conservation.

Beijing:

1. Carried out energy consumption quotas and differential energy pricing.
2. Took the lead in implementing Euro III emissions standard and plans to implement the Euro IV emissions standard in 2008.

Beijing, Hangzhou, Kunming, and Jinan:

1. Actively promoting BRT.

做法三：积极创新节能减排新机制。 Approach 3: Actively create new energy conservation and emission reduction mechanisms

地方经验表明：节能减排不能单靠政府行政行为，必须充分发挥市场机制的作用。

一、电力需求侧管理。江苏、上海、广东、辽宁等地区成功实施了“能效电厂”项目，即通过捆绑实施一系列需求侧管理节电措施，获得金融机构贷款支持。研究表明，通过实施能效电厂项目，江苏能够在四年内减少未来装机和电量需求15%，同时只需投入相当于建新电厂四分之一的成本。

- The realization of targets cannot rely only on administrative measures; market mechanisms must also be leveraged.

1. Introduce DSM in electric power.

Shanghai, Jiangsu and Liaoning Provinces successfully implemented EPP programs.

Studies suggest that in Jiangsu, implementation of the EPP program can reduce newly installed power generation capacity and electricity demand by 15% in the next four years with investment equivalent to one fourth of the cost of building new power plants.

二、企业节能自愿协议。山东省在济钢和莱钢进行了企业节能自愿协议试点，成效显著。通过自愿协议，企业可根据自身的节能潜力，制定出比政府规定的节能指标更高的目标，推动企业社会责任和自身发展的统一。

三、发电权交易机制。就是利用市场机制，在尊重发电企业经营自主权和不推动电价上涨的前提下，收到降低能耗和减少污染的双重功效。

2. Use voluntary Energy Efficiency Agreements (EEAs).

Shandong Province successfully piloted voluntary EEAs with two enterprises.

According to the EEAs, enterprises can formulate more ambitious energy-saving targets than government ones, promoting the integration of social responsibility and self-development.

3. Establish a trading mechanism for power-generation rights.

By leveraging market mechanisms, allowing self-management by power generating companies, and without driving up electricity prices, energy consumption and air pollution can be reduced.

四、节能调度机制。就是通过改变调度方式，优先安排可再生、高效、污染排放低的机组发电，限制能耗高、污染大、违反国家政策及有关规定的机组发电。2006年12月，华东电力市场进行了为期7天的电力市场化调度模拟试验，取得了良好效果。相比计划调度方式，60万千瓦及以上机组增发电量1.05亿千瓦时，30万千瓦以下的机组减发电量1.12亿千瓦时，节约标准煤5000吨，减排二氧化硫100吨，减排二氧化碳1.3万吨。

4. Establish energy conservation deployment mechanisms.

Prioritize generation by renewable, highly efficient and low-emission sources.

Restrict energy-intensive and heavily-polluting power generation.

December 2006: A power marketing dispatch simulation was implemented in Eastern China's power market.

Generating units of at least 600,000 kW increased electricity generation by 0.105 billion kWh.

Units below 300,000 kW decreased electricity generation by 0.112 billion kWh.

Standard coal consumption was reduced by 5,000 tons.

Sulfur dioxide emissions were reduced by 100 tons.

CO2 emissions were reduced by 0.013 Mt.

做法四：开发应用节能环保技术和发展循环经济。
Approach 4: Develop and apply energy conservation and environmental protection technologies, and develop a circular economy

各地经验表明：节能技术是节能减排的基础，发展节能技术对实现节能目标、减少污染排放、降低生产成本具有重大的战略意义，必须结合各地经济结构特点，优先发展有竞争性的节能环保技术。

- Energy conservation technologies are the foundation for energy conservation and emissions reduction.
- Development of energy conservation techniques is of great significance for reaching the targets.
- Based on the economic structure of different regions, priority must be given to developing competitive technologies that save energy and protect the environment.

广东省：组织实施了以解决产业重大关键及共性技术为主要内容的十二大重点技术创新专题，

Guangdong Province:

Undertook technological innovations in 12 key industrial areas.

浙江省：在2006年7月公布了第二批节能技术和产品推广导向目录，包括4个类别、22个种类；还利用政府节能专项资金，集中扶持100余项共性、关键性节能技术和高效节能项目，推进节能科技成果产业化。

Zhejiang Province: (July 2006)

Published the second round of promotion catalogs for energy-saving products.

Utilized the government's special fund for energy conservation to support over 100 energy conservation technologies and high-efficiency energy conservation projects.

循环经济是一种“变废为宝”的经济发展模式，也是实现节能减排的重要途径。去年以来，国家批准了13个循环经济试点园区，各个试点省份也都在积极制定实施方案。广东省编制了《广东省循环经济发展总体规划》，确定了第一批省级循环经济试点单位84家，包括试点企业69家、试点园区8家、试点县1个、试点城市6个。

Circular economy: An economic development model that “Transforms Trash into Treasure,” and an important approach to realizing energy conservation and emissions reductions.

Since 2006, the central government has approved 13 circular economy pilot zones, and provinces with pilot programs are formulating implementation plans.

Guangdong Province:

Launched the compilation of “Guangdong Province’s Overall Planning on Circular Economy Development,” aimed at guiding national circular economy pilots to formulate work plans.

Initiated a provincial-level circular economy pilot program.

做法五：加强节能减排管理制度和能力建设。

Approach 5: Strengthen the management system and capacity

building of energy conservation and emission reduction

地方经验表明：管理和监管能力不足、执行力不强是制约节能减排的最重要因素，完善节能管理制度和体制，是当前节能减排工作的头等大事。

- **Lack of management and supervision capacity is the key factor that restricts energy conservation and emissions reduction.**
- **Optimization of the management system and mechanisms is the top priority.**

一、完善节能管理机构建设。山东省成立了副厅长级省政府节约能源办公室，下设综合协调、资源节约、循环经济与清洁生产三个处，加大了节能工作的协调力度，提高了贯彻实施的权威性和效率。上海、山西、江苏省设立了节能监察中心，赋予节能执法地位。加强对重点用能单位的能源监测和审计，定期组织对重点用能企业节能目标落实情况的检查，加强节能执法工作。浙江省建立节能工作省长办公会议制度，成立了节能工作领导小组，负责节能降耗的组织领导和工作协调。

1. The structure of energy conservation management must be improved.

Shandong Province: Established the provincial government's Energy Conservation Office, improving energy conservation coordination and implementation.

Shanghai, Shanxi Province and Jiangsu Province: Established energy conservation supervision and inspection centers.

Zhejiang Province: Established the provincial governor's Energy Conservation Office Meeting System, along with a team to lead the organization, guidance and coordination of energy conservation.

二、分解GDP能耗、污染排放指标和建立公报制度。2006年，全国各省市积极贯彻中央部署，对GDP能耗、污染排放指标进行了逐级分解，很多地区还将节能减排指标纳入政府官员的绩效考核体系和国有企业负责人经营业绩的重要考核内容，实行节能减排工作问责制。

2. Disaggregation of indices for GDP energy intensity and pollutant emissions, and the establishment of a reporting system is needed.

In 2006,

Provinces and cities around China disaggregated GDP energy consumption and emissions indices.

Many regions also took the indices into account regarding performance evaluations of government officials and large state-owned enterprises, and implemented the system of holding entities responsible for energy conservation and emissions reductions.

三、制定和完善节能减排法规和标准：

上海市开展对《上海市节能条例》修订的调研工作，以及《上海市节约能源监察办法》、《上海市重点用能单位管理办法》等配套法规、规章的制定工作，对汽车、空调、冰箱等节能潜力大、使用面广的用能产品，严格实施能效标识制度。

3. We must improve laws, regulations, and standards for energy conservation and emissions reduction.

Shanghai:

Carried out research and investigation on the revision of the Shanghai Energy Conservation Law.

Formulated laws, such as the Shanghai Energy Conservation Supervision and Inspection Methods and Management Measures of Key Energy Consumers in Shanghai.

Implemented an energy efficiency labeling system for widely-used energy-consuming products that have large energy saving potential (cars, air conditioners, and refrigerators).

做法六：利用多渠道筹集节能减排资金。

Approach 6: Raise funds for energy conservation and emission reduction through multiple channels

地方经验表明：

资金不足是节能减排的最大障碍，必须利用政府调控有形之手和市场机制无形之手，双管齐下，两手互动，建立多元化投资渠道，保证节能减排投资需求。

- **Insufficient funding is the biggest barrier to energy conservation and emissions reduction.**
- **Government regulatory mechanisms should join marketing mechanisms in establishing diversified investment channels to promote investment in energy conservation and emissions reduction.**

一、财政和税收政策

1. Tax and fiscal policies

浙江省：建立财政节能专项，2005年拿出2500万元集中扶持了100余项节能项目，2006年增加到4000万元。地方财政也列出专项支持，仅杭州萧山区财政2006年就安排了2500万元扶持以节能为重点的工业循环经济项目。

Zhejiang Province: Established special fund for energy conservation programs.

In 2005,

Put aside RMB 25 million to support over 100 energy conservation programs; the size of the fund has increased to RMB 40 million.

Local fiscal systems provided financial support:

Xiaoshan District in Hangzhou, allocated RMB 25 million in 2006 to support an industrial circular economy project that prioritized energy conservation.

广东省：2006年共安排省财政资金3.3亿元，带动企业和社会投入超过30亿元，用于实施以解决产业重大关键及共性技术为主要内容的十二大重点技术创新专题；同时还安排了25项以技术为中心的产业结构调整专项，带动企业和社会投入3.63亿元。

Guangdong Province:

In 2006,

Allocated RMB 330 million of provincial funds, in addition to over RMB 3 billion from enterprises and other social sectors to implement 12 key technological innovations in industry.

Arranged for 25 technology-based industry structural adjustment projects, which brought in RMB 363 million from enterprises and other social sectors.

二、合同能源管理

2. Energy Management Contract

这是吸引社会资金投向节能减排领域的重要途径。上世纪90年代后期，我国政府与有关国际机构合作，引入、示范“合同能源管理”这一节能融资新机制，在辽宁、北京和山东组建了三个按新机制运行的示范性节能服务公司。在示范取得基本成功的基础上，“十五”期间我国在全国推广合同能源管理机制，支持建立了节能项目贷款担保基金，帮助新组建的节能服务公司从商业银行获得实施节能项目的贷款，推动节能产业化发展。

Energy Management Contract (EMCs): An important way to attract social funds for energy conservation and emissions reduction.

Late 1990s,

The Chinese government cooperated with international agencies to introduce EMCs.

The government organized three pilot energy conservation service companies to operate under the new mechanism.

Based on the initial success of the pilot programs, China promoted EMCs nationwide, supported the establishment of guaranteed funds for loans for energy conservation projects, and helped newly-established energy service companies acquire loans from commercial banks to implement energy conservation programs.

到2005年底，节能服务公司发展到106家，分布在全国23个省市，产业规模已达到20亿元，以节能服务公司为主体的节能服务产业得到了快速发展，节能服务公司队伍已成为我国推进节能的一支重要新兴力量。

By the end of 2005,

106 energy conservation service companies were distributed in around 23 provinces and cities.

The value of the industry reached RMB 2 billion.

The energy conservation industry, composed mainly of energy conservation service companies, developed rapidly.

Energy conservation service companies have become an important emerging force to promote energy conservation.

政策建议 Policy Recommendation

1. 中央要摸清地方的实际情况，采取强有力的措施协助地方政府更有效地落实20%节能目标。

- 要特别重视目标在市、县级的实施；
- 要获得准确可靠的能源数据和信息，加强地方政府的能力建设和培训；
- 授权一个部门全面负责20%节能目标的落实和协调工作；
- 进一步细化官员绩效评价指标体系。

1. The central government should understand local conditions and take powerful measures to assist local governments with reaching the 2010 targets.

- 1.1 Attach special importance to implementation at the city and county level;
- 1.2 Acquire accurate energy data and strengthen capacity and training of local governments;
- 1.3 Authorize a department to be fully responsible for the fulfillment and coordination of the 20% energy conservation target;
- 1.4 Further break down government officials' performance evaluation indicators system.

政策建议 Policy Recommendation

2. 及时研究和调整20%节能指标的地方分配问题。现有的分配方案对地方具体情况考虑不足。

3. 组织人员到地方调研，尤其是到县里和企业里调研。了解地方实践的具体情况非常重要，有助于我们总结经验、发现问题、寻找解决方案。

2. The central government should adjust regional allocations of the 20% energy conservation reduction target. The current allocation plan does not fully take local conditions into account.

3. Organize relevant staff to research local regions, especially counties and enterprises.

谢谢大家!

Thank you!