

# Chinese Energy Conservation Policies

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Item 1-2

# Background

## **Basic state policy**

**Chinese government attaches great importance to energy conservation, taking resource saving as the basic state policy, developing and saving energy simultaneously, and giving priority to energy saving.**

# Background

## Aim

China takes building a resource-saving and environment-friendly society as a significant strategic task in the *Outline* of the Eleventh Five-year Plan, aims to reduce energy consumption for unit GDP by 20% in 2010 over that in 2005, and regards this as a binding target.

## Status quo

As a developing country, China still falls behind in economic development and people's living level. Due to the quick industrialization and urbanization, it now has a huge demand for energy. But the energy utilization efficiency should be lifted. Saving energy and lifting energy efficiency is a significant strategic task concerning the modernization and long-term development of China and also an urgent task that China is faced with currently.

# Background

## Progress

From 1981 to 2005, China had reported annual average growths of 9.8% and 5.4% in GDP and total energy consumption respectively. Energy consumption for unit GDP declined 64% accumulatively. From 2005 to 2008, China had reported a decline of 12.45% in energy consumption for unit GDP, and rate further dropped by 4.03% in the first half of 2009. It is expected that we can achieve the goal of reducing energy consumption for unit GDP by around 20% in the period of the “Eleventh Five-year Plan”.

# Background

## Measures

- **Chinese government established the National Leading Group to Address Climate Change and Energy Conservation & Pollutant Discharge Reduction under the lead of Wen Jiabao, premier of the State Council.**
- **Modified and issued the Law of the People's Republic of China on Conserving Energy, improved the basic management system of energy conservation, and clarified basic requirements and measures on energy saving in industry, architecture, traffic and transportation, and public institutions.**
- **Formulated the General Work Plan for Energy Conservation and Pollutant Discharge Reduction, and put forward 45 concrete measures.**

# Framework of Energy Conservation Policies



# I Adjust industrial structure

## **(I) Control the quick growth of industries with high energy consumption and pollutant emission**

Make comprehensive use of economic policies to lift the threshold for market access of energy conservation and environmental protection, including credit, land, price, taxation, and import & export, reinforce the management of investment projects, and control the blind investment and low-level expansion of industries with high energy consumption and pollutant emission.

## **(II) Phase out backward production capability according to laws**

During the period of the “Eleventh Five-year Plan”, shut down small thermal power generating units of 50 million kilowatts in the electric power industry; phase out backward iron-smelting and steel-smelting capabilities of 100 million tons and 55 million tons respectively in the iron & steel industry; and stage out backward cement production of 250 million tons in the construction material industry.



# I

## Adjust industrial structure

### **(III) Facilitate the accelerated development of the service industry**

By 2010, the proportion of the service industry to GDP will be lifted to 43.3% from 40.3% in 2005.

### **(IV) Develop hi-tech industries**

By 2010, the proportion of high-tech industries to the industrial added value will be lifted to 10% from 4.5% in 2005.

### **(V) Push forward the adjustment of energy structure**

Vigorously develop renewable energies and stably develop replacing energies. By 2010, the proportion of renewable energies to total energy consumption will be lifted to 10% from 7.5% in 2005.



## II

# Promote technological progress

### (I) Accelerate the research & promotion of energy conservation technologies

Organizing and implementing a number of significant technological R&D projects for energy conservation and consumption reduction, tackle a number of key and common technological difficulties of energy conservation and consumption reduction, and establish the energy conservation technology application promotion system with enterprise as the subject and combining industry and study.

Released *Policy Outline of China Energy Conservation Technology* (2006) and *Catalog of Key National Energy Conservation Technologies*; implement the ten key energy conservation projects with central financial support; provide high-efficiency lighting product financial subsidy; and implement the project of energy conservation product benefiting people.

## II

# Promote technological progress

### Ten key energy conservation projects

Coal-fired industrial boiler (kiln) rebuilding

Combined thermal power generation

Residual heat and pressure utilization

Petroleum-saving and replacing

Energy-saving of motor system

Optimization of energy system

Energy conservation of buildings

Green lighting

Energy conservation of governmental institutions

Construction of energy conservation monitoring and technological service system

## II

## Promote technological progress

Ten key energy conservation projects

**Expected  
benefits**



Save 240 million tons of equivalent coal.



Make a contribution of nearly 40% to realize the energy conservation target in the “Eleventh Five-year Plan”.



Play an important role in realizing major aims of pollutant emission reduction in the “Eleventh Five-year Plan”.

## Background

The project of energy saving products benefiting people means “Use of energy saving products by ordinary households with governmental subsidies”. This project refers to the promotion and application of ten kinds of energy products with energy efficiency grade above I or II, including air-conditioner, refrigerator, flat TV set, washing machine, motor, etc., including the implemented high-efficiency lighting products and energy conservation as well as new energy vehicles.

**实施“节能产品惠民工程”**


- 通过财政补贴方式，对能效等级在1级或2级以上的空调、冰箱、平板电视、电机等10类高效节能产品加大推广力度。
- 组织财政补贴推广高效照明产品工作，2009年推广使用节能灯1.2亿只。
- 支持在北京、上海、重庆等13个城市开展节能与新能源汽车示范试点。



**2009年推广使用  
120,000,000只**



**节能产品惠民工程**



高效节能空调 美的 KFR-23GW/DY-X(E2)

推广上限价格：3200元  
政府补助金额：300元  
补助后上限价格：2900元

**中国能效标识**  
CHINA ENERGY LABEL

生产者名称 广东美的制冷设备有限公司  
规格型号 KFR-23GW/DY-X(E2)

耗能低	1
	2
中 等	3
	4
耗能高	5

能效比 3.39

输入功率(瓦) 679  
制冷量(瓦) 2300

依据国家标准 GB 12021.3-2004

## II

# Promote technological progress

### **(II) Speed up the construction of the energy conservation technological service system**

Promote contracted energy management, render special support to professional energy conservation service firms, and provide services including diagnosis, design, financing, rebuilding, and operating management for enterprises and users to carry out energy conservation rebuilding.

Lend a impetus to the establishment of the energy conservation service industrial committee and work out the Circular on the Accelerated Promotion of Contracted Energy Management so as to Facilitate the Development of the Energy Conservation Service Industry

### III

## Reinforce energy conservation management

### (I) Focus on energy conservation management in key fields

#### Industry

Carried out the “Top 1000 enterprises energy conservation Action”; evaluate and examine the responsibility for achieving objectives of energy conservation; report and announce the results of energy auditing and utilization; and conduct the benchmarking action to compare energy consumption with international peers.

#### Architecture

Implement the standard of 50% energy saving in new buildings and 65% energy saving in some regions; charge users in terms of heat metering; rebuild the existing buildings for energy conservation.

#### Transportation

Limit the energy consumption of fuel of vehicles and establish the vehicle fuel consumption declaration, labeling, and notification system; give priority to the development of public traffic, and encourage developing energy-saving and environmental protection vehicles.

#### Commercial and civil use

Adopt energy conservation office equipment, electric appliance, and lighting products in public facilities, hotels and markets, office buildings, and residential apartments.



### III

## Reinforce energy conservation management

### **(II) Evaluate and examine the responsibility for achieving the objectives of energy conservation**

The State Council printed and issued the scheme for the implementation of unit GDP energy consumption examination system, requiring the evaluation and examination on the completion of energy conservation objectives in all regions and the 1,000 key energy consumption enterprises.

Since 2007, the central government has carried out the evaluation and examination on energy conservation of all provinces, covering the completion of energy conservation objectives and fulfillment of energy conservation measures. The results are announced to the public. China also implements the system of rewards and penalties.



### III

## Reinforce energy conservation management

### (III) Accelerate the implementation of energy conservation labeling and energy conservation product certification

#### Energy efficiency labeling system

Released the Measures for the Administration of Energy Efficiency Labels and set up the compulsory energy efficiency label system for energy-using products. So far, China has implemented the energy efficiency labeling system for 15 kinds of products including refrigerator, washing machine, air-conditioner, energy-saving light, motor, etc. The scope will be further expanded in the next step.



### III

## Reinforce energy conservation management

### (III) Accelerate the implementation of energy efficiency labeling and energy saving product certification

**Promote energy saving product certification**

Implement the voluntary certification of energy conservation, expand the certification scope, and establish the international coordination and mutual acceptance system.



### III

## Reinforce energy conservation management

### (IV) Strengthen Power DSM and energy-saving power generation dispatching management

Strengthen DSM



Optimize urban and corporate electricity use, promote the construction of energy efficiency power plants, and enhance the using efficiency of electric energy.

Improve power generation dispatching rules



Implement energy-saving dispatching measures, and give priority to the power generation of clean and efficient sets and comprehensive utilization of resources, and restrict power generation of sets with high energy consumption and pollutant emission.

## **IV**

# **Reinforce law system construction**

### **(I) Improve energy conservation laws**

**Modified the energy conservation law implemented in 1998. The modified law was promulgated in October 2007 and came into effect on April 1, 2008 formally. The new energy law regulated the management system, stepped up policy encouragement, clarified the subject of law execution, and increased the punishment on high energy consumption.**

## IV

# Reinforce law system construction

### *New Energy Conservation Law of the People's Republic of China*

The newly modified *Energy Conservation Law* was reviewed and passed by the 30th Session of the 10th NPC Standing Committee on October 28.

• Pay attention to improving the basic system of energy conservation

• Pay attention to the combination of market-orientation measures and governmental management

• Pay attention to reinforcing the practice and feasibility.

**Modification principles**

## IV

# Reinforce law system construction

### *New Energy Conservation Law of the People's Republic of China*

**Establish and improve the energy conservation law system with energy conservation law as the core and also coordinated rules and standards as the supplement and reinforce the supervision and management according to laws.**

#### Key contents

Energy conservation management system

Major energy conservation systems

Architecture, traffic, commercial and civil energy conservation

Energy encouragement policies

Law responsibility

## IV

# Reinforce law system construction

### **(II) Improve standards system**

Formulated 22 national compulsory limitation standards for high energy consumption products, including thermal power, crude steel, iron alloy, calcium carbide, caustic soda, synthetic ammonia, etc.; worked out the 19 compulsory energy efficiency standards for energy-using products, including industrial equipment, home appliance, lighting instrument, office device, etc.; and improved architecture energy conservation design criteria.

### **(III) Reinforce the law execution**

Organize special check and inspection on energy conservation, and seriously punish various illegal behaviors.



# V

## Improve policy mechanism

### **(I) Push ahead price reform**

Actively and stably push ahead the reform of resource product prices, so as to fully play the role of price leverage in restraining unreasonable energy consumption.

### **(II) Improve financial policies**

Improve financial policies favorable for energy conservation, set up the energy conservation fund so as to support the construction of key energy conservation projects, promotion of efficient energy conservation products and new mechanisms, and energy conservation management capability.

### **(III) Improve the purchase system**

Implement the governmental purchase system of efficient energy conservation products, and also governmental compulsory purchase of some energy conservation products.

## **(IV) Implement taxation policies favorable for energy conservation**

Formulate the energy conservation product catalog, and offer preferential policies for products listed in the catalog, such as tax reduction and exemption.

Reduce and exempt income taxes for energy conservation technological rebuilding projects, offer income tax credit to energy conservation equipment investment, and formulate the policies of crediting input tax from value-added tax.

Implement preferential policies for encouraging energy conservation and environmental protection vehicles and land-saving buildings.

## VI

# Mobilize all citizens to save energy

### **(I) Carry out propaganda and education**

Extensively and consistently carry out energy conservation propaganda and education, popularize energy conservation knowledge and method, and enhance all citizens' awareness of resource urgency and energy conservation.

### **(II) Carry out promotion campaigns among all citizens**

Carry out the “campaigns of energy saving and emission reduction among all citizens”, including nine special actions of enterprise, governmental institution, school, barrack, family and community, youth, science and technology, popular science, and media.

## VII Reinforce international cooperation

Like other countries, China is faced with a great deal of problems and challenges in the field of energy, so reinforcing the cooperation with foreign governments and international organizations is of great significance for guaranteeing energy security, improving the environment, and actively dealing with global climate changes.

In the energy conservation field, the Chinese government carries out intensive cooperation with countries like the United States, Japan, South Korea, and also international organizations such as UNDP, World Bank, GEF, EU, etc.

IPEEC is an important international cooperation mechanism concerning energy conservation, and China is active in participating in the program. China is willing to step up the cooperation with all countries to enhance the energy efficiency of the world.



Thanks !