

China Sustainable Energy Program
The Energy Foundation



Top-1000 Enterprises Energy Conservation Action in China: An Introduction

Xuejun Wang
College of Environmental Sciences, Peking University
xjwang@urban.pku.edu.cn

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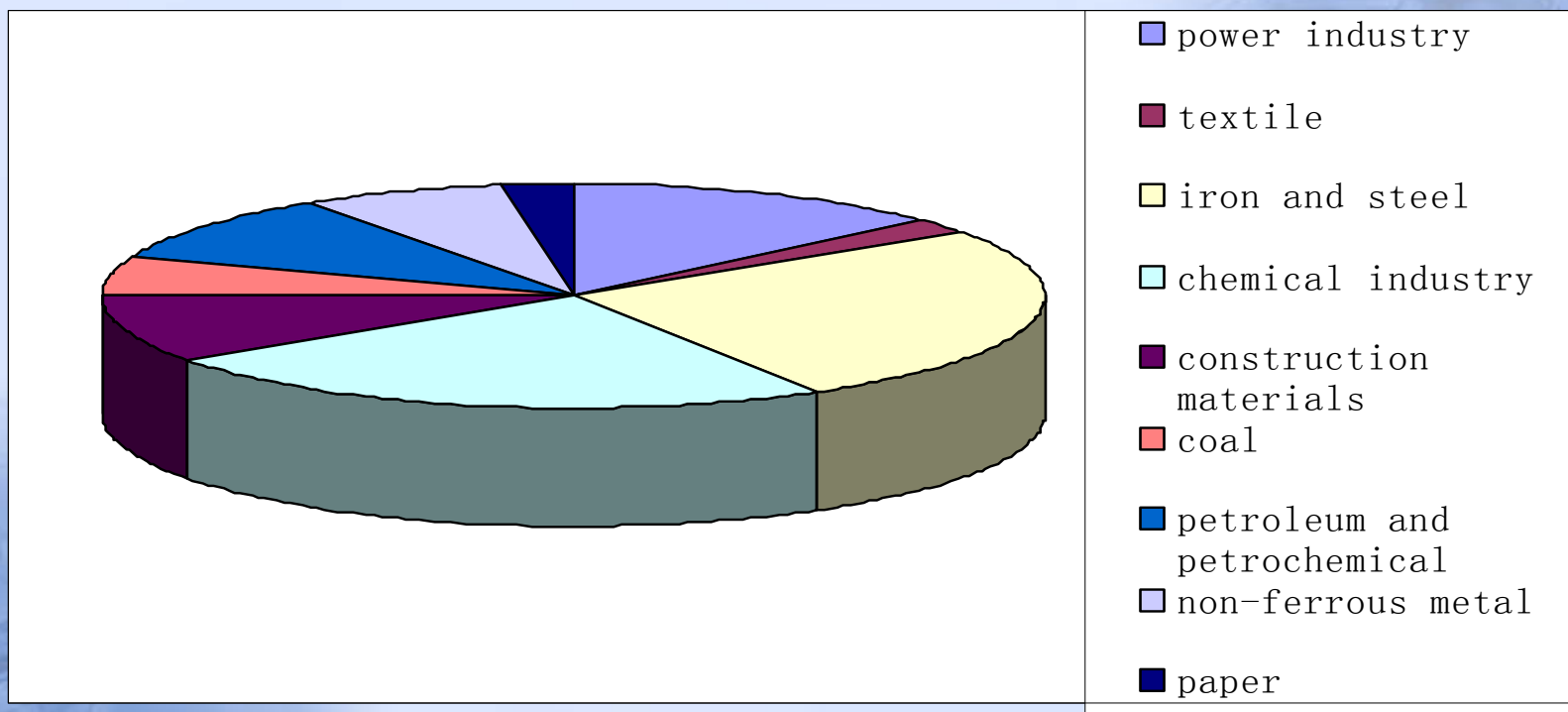
Background:

- Rapid economic growth and energy consumption
- Targets of the eleventh five-year-plan (2006-2010): 20% reduction of energy consumption for per unit GDP output in the next five years
- Industry consumes 70% of the total energy of the country.
- For the top 1,000 enterprises, the minimum annual amount of energy consumption is 180,000 tce (2004).
- The top 1000 industrial enterprises consume around 0.67 billion tce in 2004, take about 33% of the total energy consumption of the Country, and 47% of the total energy consumption of industry in China.

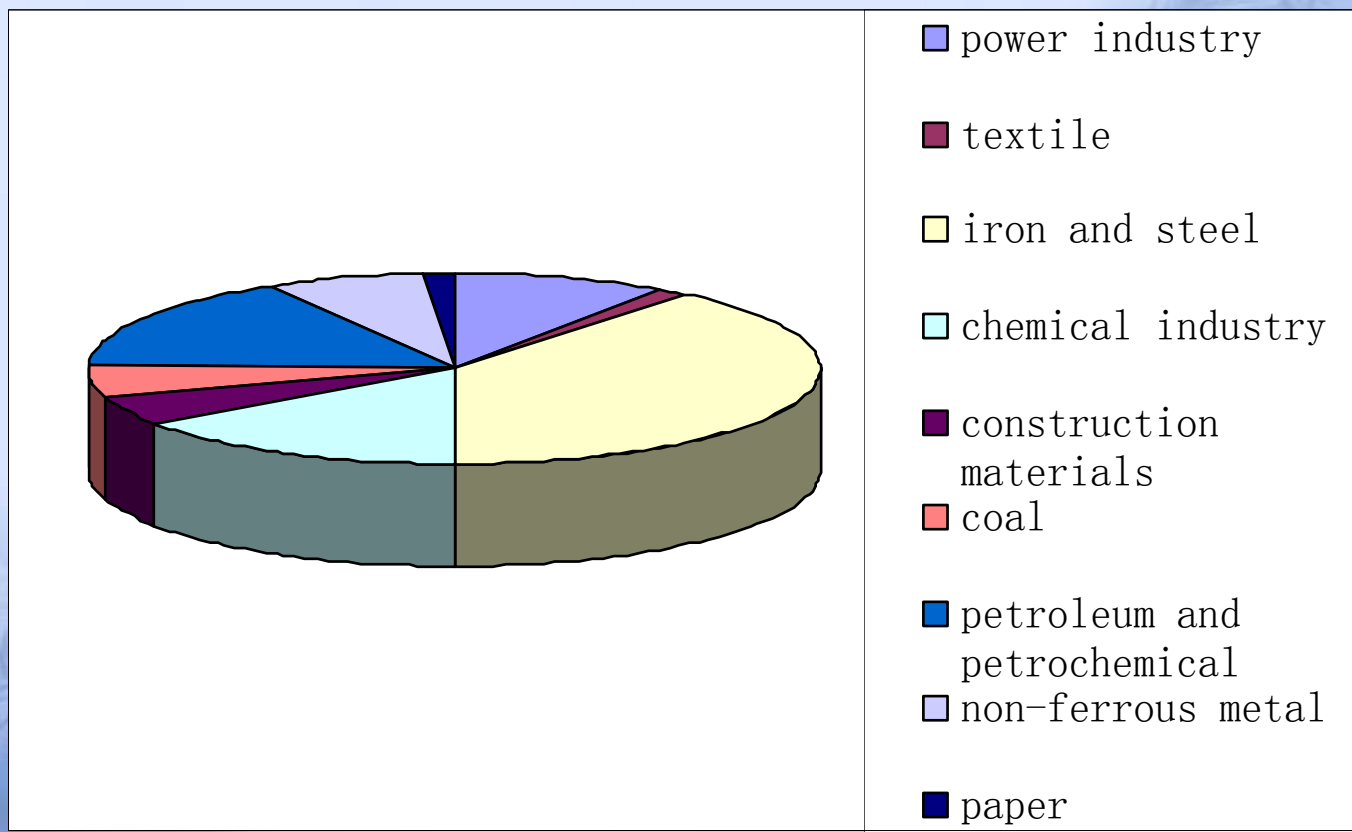


The 1,008 enterprises come from the following sectors:

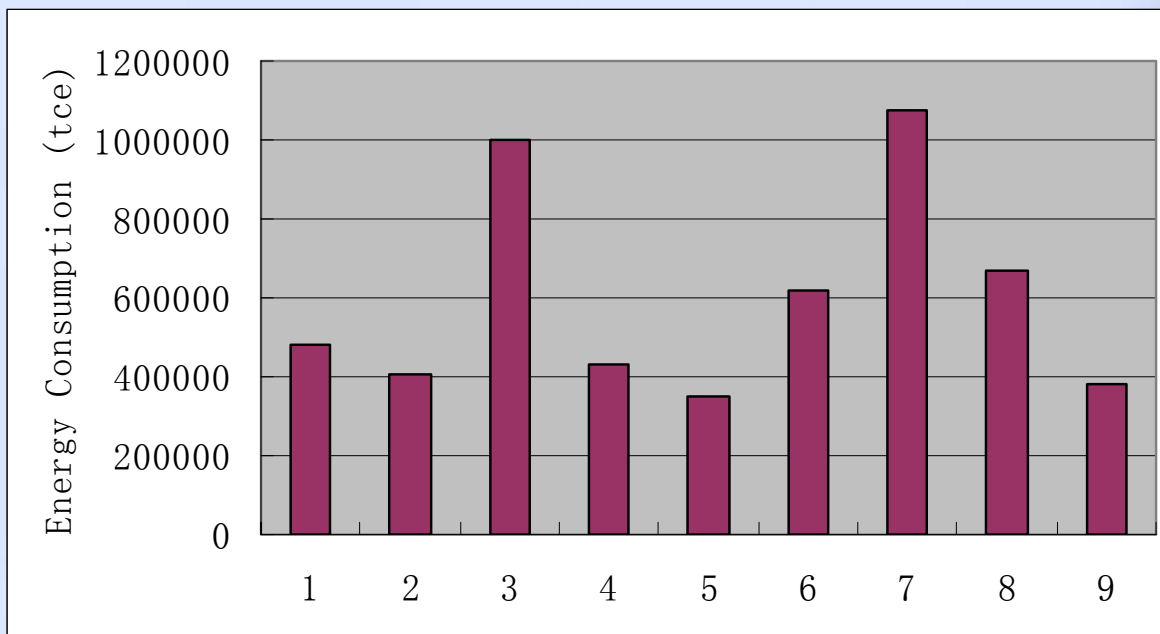
- power industry
- textile
- iron and steel
- chemical industry
- construction materials
- coal
- petroleum and petrochemical
- non-ferrous metal
- paper



Number of Enterprises in Each Sector (Top-1000, 2004)

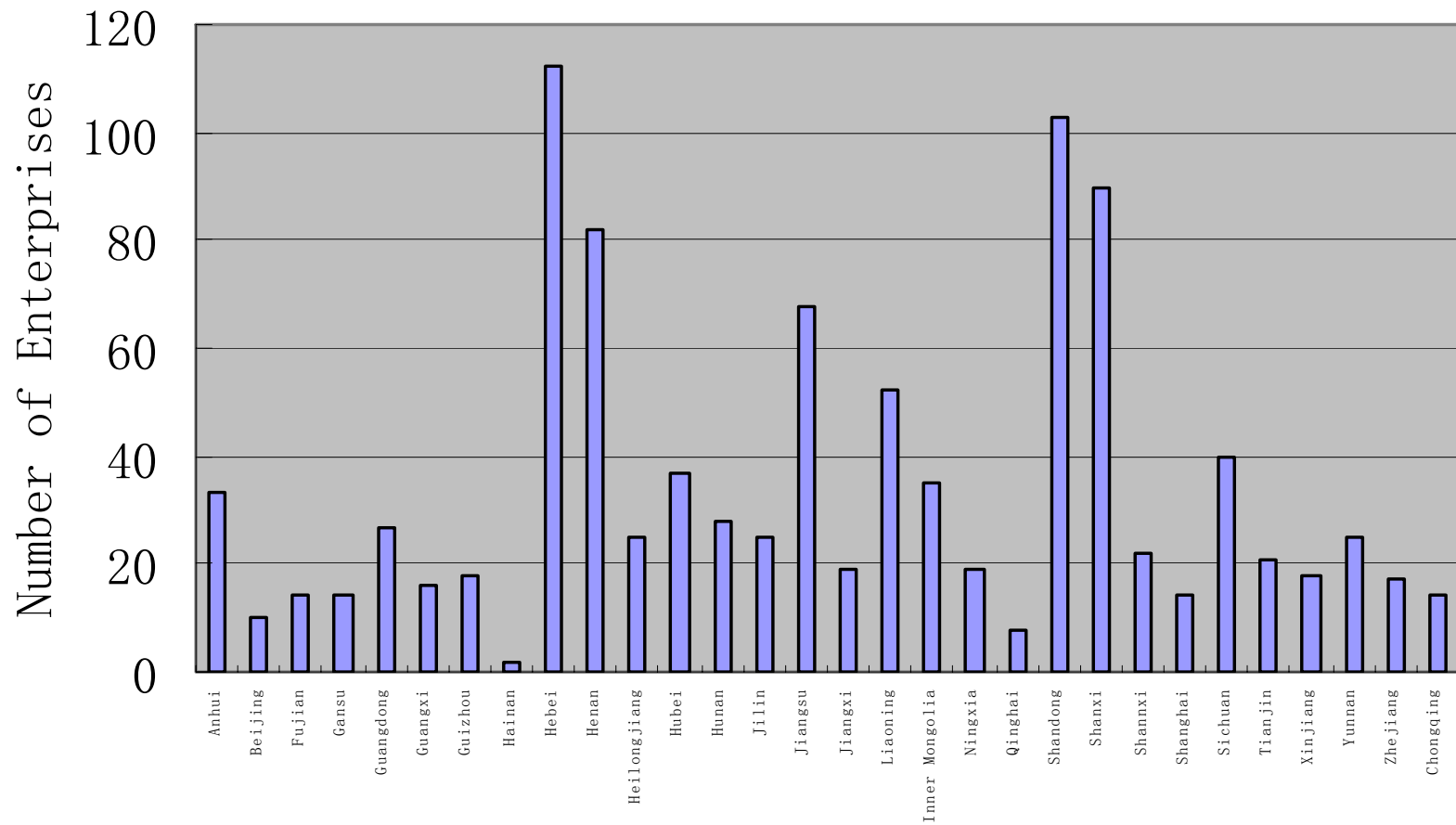


Energy Consumption in Each Sector (Top-1000, 2004)

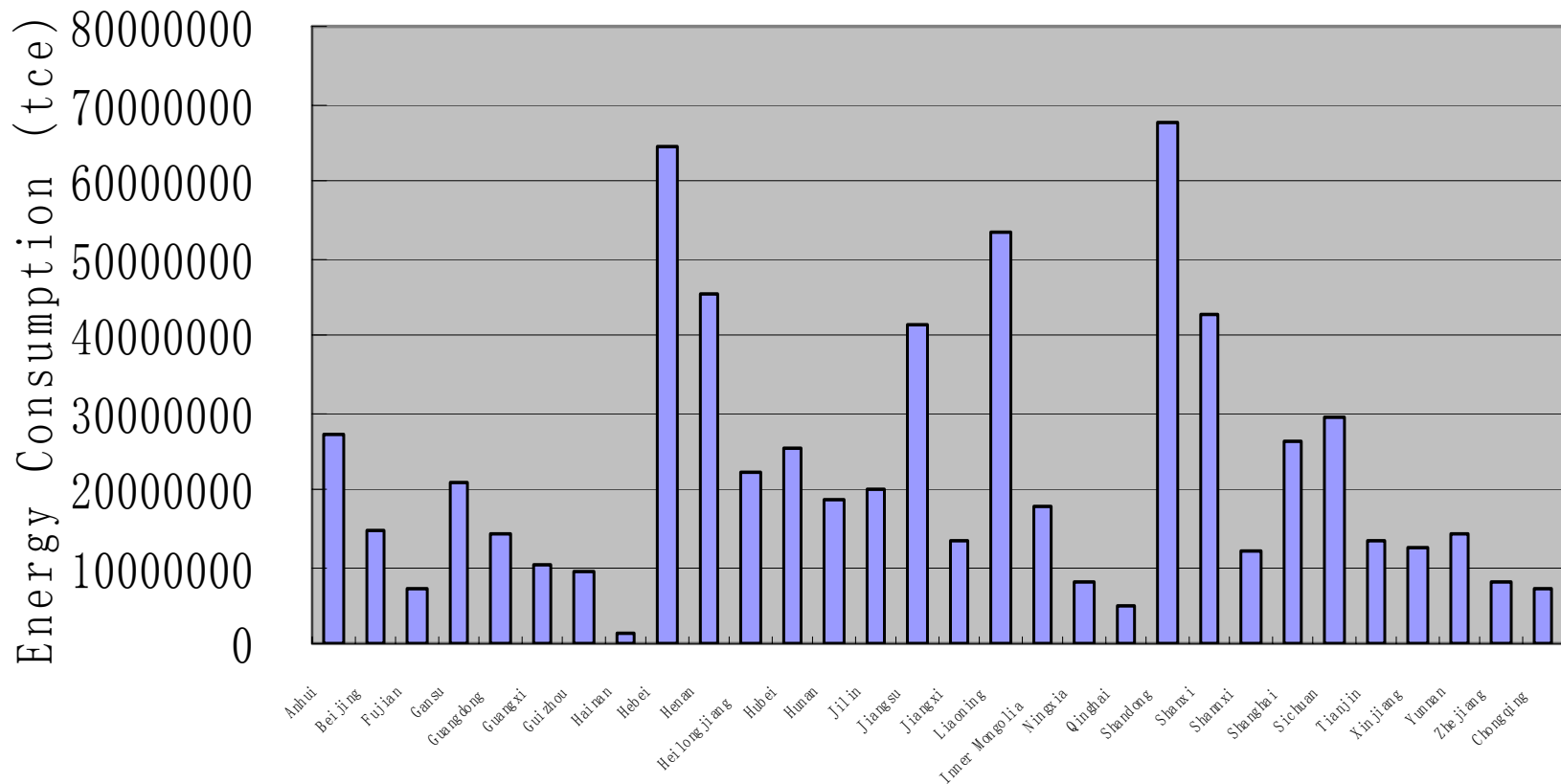


1: power industry; 2: textile; 3: iron and steel; 4: chemical industry
5: construction materials; 6: coal; 7: petroleum and petrochemical
8: non-ferrous metal; 9: paper

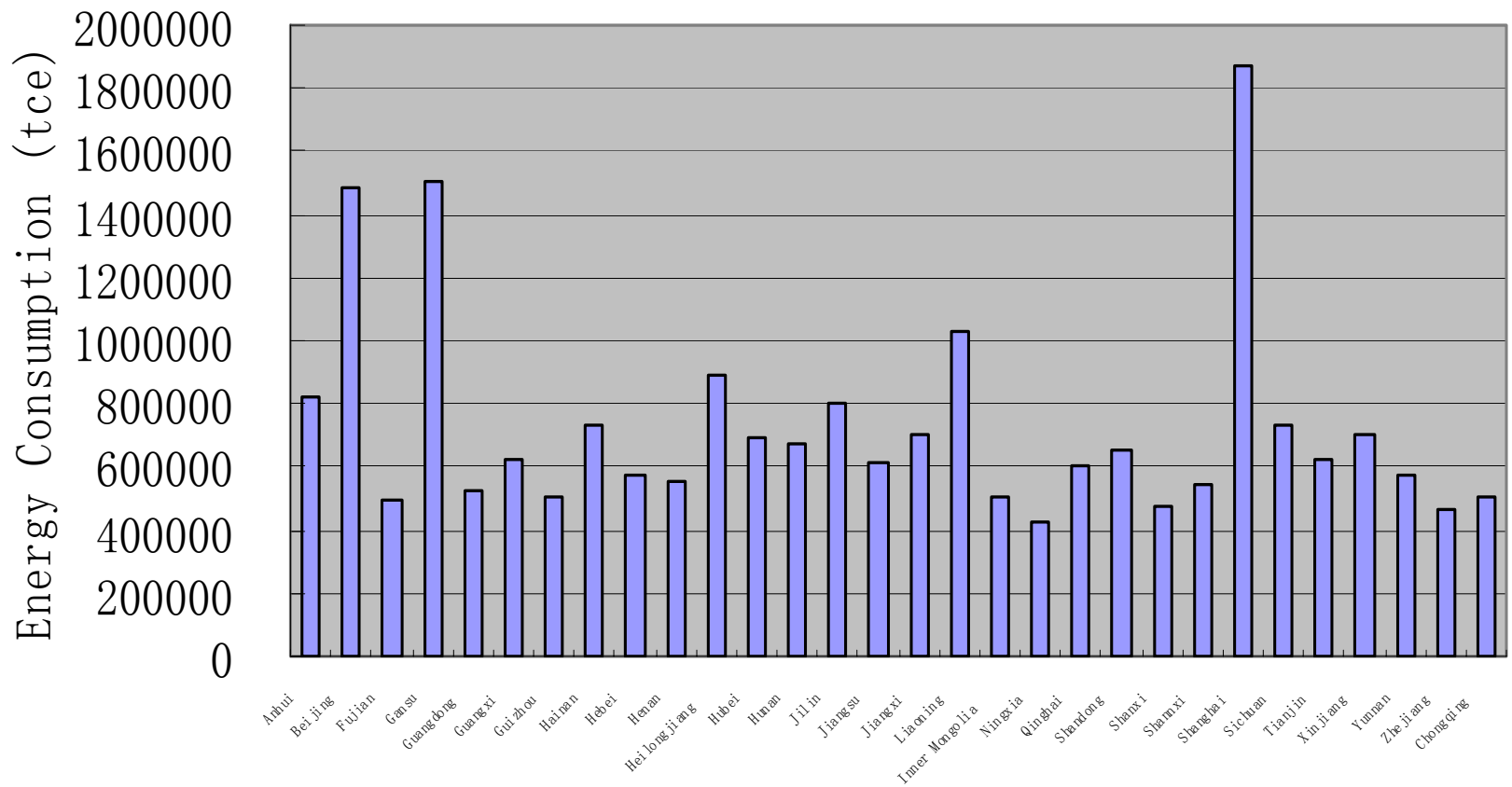
Average Energy Consumption of Enterprises in Each Sector (Top-1000, 2004)



Number of Enterprises in Each Province (Top-1000, 2004)



Energy Consumption in Each Province (Top-1000, 2004)



Average Energy Consumption of Enterprise in Each Province (Top-1000, 2004)



Objectives

- After a five year effort, energy utilization efficiencies in these 1000 enterprises shall be improved significantly. The energy efficiency levels of major products should reach the advanced domestic levels.
- Selected enterprises should reach a leading domestic level or advanced international level.
- Within five years, the total energy saving shall reach 0.1 billion tce.



The top-1000 program is led by the following five government agencies

- The Department of Environment and Resource Comprehensive Utilization of NDRC is responsible for the promoting of energy saving in China, and thus will play a leading role in the top-1000 program.
- The National Bureau of Statistics has the role of collecting and managing statistical information of enterprises in China. Therefore, the involvement of the National Bureau of Statistics will be helpful.
- State-owned Assets Supervision and Administration Commission manages major state owned enterprises in China. Among these enterprises, many are within the list of the top 1000. Therefore, State-owned Assets Supervision and Administration Commission will play another key role in this program.
- The Office of National Energy Leading Group and the General Administration of Quality Supervision, Inspection and Quarantine are also involved.



Besides the five central governmental agencies, provincial governments (provincial Development and Reform Commission or Economic and Trade Commission) will play important roles in this project in data collection, monitoring and guiding on enterprises, etc.

Sector associations will play key roles in the creation of indicator and evaluation system. They will also play important roles in information collection and disclosure, training, and others.



Role of NDRC

This program will be led by NDRC in cooperation with other government agencies. NDRC's responsibilities include:

- (1) play a leading role in this program
- (2) supervise and urge each level of the DRC and industrial associations to strengthen relative supervision on enterprises;
- (3) provide incentive policies and other measures;
- (4) organize and develop commendation and awarding activities.



Roles of Provincial DRCs

The provincial DRC (ETC) will be responsible for main activities on tracing, guiding and supervising the performances of enterprises within their territory. Their responsibilities include:

- (1) supervise and urge enterprise to submit relevant documents;
- (2) review the audit reports and energy conservation plans prepared by enterprises;
- (3) regularly or irregularly conduct supervision, examination, and spot-checks on enterprises;
- (4) formulate appropriate local policies and measures;
- (5) issue and approve energy efficiency agreements for these enterprises, and implement supervision and management.

Role of the National Bureau of Statistics



An information system and website for the top-1000 program will be established by the National Bureau of Statistics. This website will link with NDRC website and the websites of these enterprises.

NBS will be responsible for the tracing, statistics and auditing the energy utilization status of these enterprises.

On April of every year, NDRC and NBS will jointly release the energy utilization information of these enterprises, as well as the advanced levels of domestic and foreign enterprises of the last year at public medias.



Roles of Industrial Associations

The responsibilities of industry associations and energy conservation centers includes:

- (1) formulate and assist in the implementation of the indicator and evaluation system for industry energy utilization and conservation, and conduct evaluation of enterprise energy usage;
- (2) collect information concerning the advanced levels of energy consumption of the domestic and western enterprises, and establish relevant database;
- (3) provide enterprises with information and technical assistance;
- (4) provide training for enterprises

Roles of Enterprises Involved in the Program

According to the action plan of the program, the top-1,000 enterprises shall:

- establish energy conservation organization, formulate energy efficiency goals
- establish energy utilization reporting system
- conduct energy auditing
- formulate energy conservation plan
- invest in energy efficiency improving
- adopt energy conservation incentives, training

Management, Supervision, and Incentives - Information System

Information system and website for the top-1000 program will be established.

- regularly provide related energy conservation information, enterprise evaluation information
- provide a free link to enterprise home pages
- key information will be released to the public through major media.

Management, Supervision, and Incentives - Energy Conservation Plan

All participating enterprises are asked to formulate and implement energy conservation plan.

Clear targets for energy conservation should be established in the Plan. Energy conservation measures should be provided. Annual implementation plan should be involved.

The Plan must be reviewed by provincial DRC or ETC.

Management, Supervision, and Incentives - Energy auditing

Participating enterprises should conduct energy auditing, and prepare energy audit report.

Energy auditing report should be submitted to provincial DRC or ETC for review.

Management, Supervision, and Incentives - Energy Utilization Report

Enterprises are asked to compile and submit energy usage report regularly.

This report should include the energy utilization status, energy efficiency, energy saving benefits, energy saving measures, etc.

Detailed requirement on the preparation and submission of the report shall be made by the National Bureau of Statistics.

Management, Supervision, and Incentives - Award

Implement award for in the 1000 enterprises based on annual evaluation results and benchmarking.

In this process, enterprise energy consumption is evaluated in two ways: (1) by comparison with current domestic and international levels; (2) by comparison with past performance.

Management, Supervision, and Incentives - Information and Technical Support

DRC and the participating industry associations shall provide enterprises with information and technological support.

Management, Supervision, and Incentives – Voluntary Energy Efficiency Agreements

VAs could play an extremely important role in this program.

Enterprises involved in this program will be encouraged to sign energy efficiency agreements with governments.

Management, Supervision, and Incentives- Other Incentives

Governments at different levels should provide enterprise with economic incentives. For example, a List of Energy Conservation Products will be formulated. For those products in the List, tax incentives may applied.

These policies will be adopted step by step during the implementation process of this plan.

These incentives should be applied combined with the current energy conservation and other measures.



Problems

- Target setting
- Data collection, management and information system
- Benchmarking (world best practices)
- Indicator system and evaluation methodology for different sectors and products
- Policy incentives



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Thank you