Study on Prompting Mechanism of Energy Efficiency Technology

The Second U.S.-China Energy Efficiency Forum
2011-5-7 San Francisco

China Quality Certification Center
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China Quality Certification Center (CQC)

* Under General Administration of Quality Supervision, Inspection and Quarantine of the PRC
* Specialize in Energy-saving Product Certification and Research in Energy Efficiency Policy and Technology
* International Programs of Energy Efficiency (UNDP, WB, EF, EUEEP, ICA)
During the 11th Five-Year Plan (2005-2010), the energy conservation objectives were achieved mainly by energy efficiency technologies.

There still has great potential space to save energy by EETs.
# Background

- 12th Five-Year Plan on National Economic and Social Development
  Chapter 22, Section 1: Promote Energy Efficiency

## Energy Efficiency Key Projects

<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Energy Efficiency Renovation Project</td>
<td>Continuous implementation of cogeneration of heat and electricity, motor system energy efficiency, energy system optimization, waste heat and pressure utilization, boiler renovation, oil efficiency and substitution, building and transportation energy efficiency and green lighting etc.</td>
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<tr>
<td>02</td>
<td>Energy-Saving Product Incentive Project</td>
<td>Enhance the incentive promotion and expand the application scope of high-efficiency energy-saving home appliances, automobiles, motors and illumination products.</td>
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<tr>
<td>03</td>
<td>Demonstration Project of Energy-Saving Technology Industrialization</td>
<td>Support the demonstration projects of waste heat and pressure utilization, high-efficiency motors, key energy-saving technology and product; promote large-scale production and application of important energy-saving technology</td>
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<tr>
<td>04</td>
<td>Promotion of Energy Management Contract</td>
<td>Encourage and promote energy-saving service companies to help energy-intensive enterprises implement energy efficiency renovation and develop energy efficiency industry in the form of energy management contract.</td>
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Energy Efficiency Technology

* Energy Efficiency Technology
  * Products, equipment, process, method, software, system
  * Legitimacy
  * Timing: “Obsolete Energy-Saving Technology”

* Classification Basis
  * Base on energy Flow
  * Base on demand
  * Base on industry/Transportation/Building/Agriculture
System and Mechanism of Prompting Energy Efficiency Technology

- Obstacles of prompting Energy Efficiency Technology
  - Decentralized
  - Information asymmetry between technology owner and user
  - Application limitation
  - Dynamic change of energy efficiency technology
  - Different mechanisms are needed for prompting different technologies

- The characteristics of the Chinese management

- Information Gathering and Evaluation of Energy Efficiency Technologies
- Grading and Sub-sector Classification of Energy Efficiency Technologies
- Dynamic Tracking and Verification of Energy Efficiency Technologies
- Marketing Methods of Energy Efficiency Technologies
Information Collection and Evaluation of Energy Efficiency Technologies

- The distribution of energy-saving technologies
- Continuous improvement and innovation of energy-saving technologies
- Merits, limitations and application scope of each energy-saving technology

- Establishment of the Information Collection and Evaluation System and Mechanism
  - International and domestic
  - Technical organization, industry association, government unit
  - Organizations who has used EET

- Pre-evaluation of EE Technology
  - Identify energy-saving potential ability, technology characteristics, economic features
Grading and Classification of EETs

- Take into account China characteristics, adopt differentiation policy and classification management, conduct promotion at individual sub-sector

- A: National level
- B: Geographical area or sub-sector/industrial application
- C: Guidance of the free market and application of marketing mechanism

- Managed by dynatic EETs list/catalog
Dynamic Tracking and Verification of Energy Efficiency Technologies

- Energy-saving technologies will continuously be improved, innovated and adjusted
- The application environment of energy-saving technology is constantly improving
- Review and verification of the effectiveness of energy-saving technology

- Energy-saving technology list requires dynamic tracking and management
  - Innovation of energy-saving technology
  - Tracking and verification of the effectiveness
  - Future consideration of different historical periods
Methods/Tools of prompting EETs

- **Government Promotion**
  - Legal support
  - Encourage Policy: Publication, tax incentive, subsidies, modeling
  - Information platform: EETs information release and trading,

- **Market Mechanism**
  - EPC, list publication, exhibit, energy-saving technology release and trading

- **Financial Tools**
  - EPC, EPC contract trading, loan, guarantee

**Differentiation and Personalization**

Distinguish the positioning and roles of government, industrial association, market and public
Suggestions on Technical Exchange of EETs between U.S. and China

* Welcome appropriate U.S. energy-saving technologies to join Chinese market
* Promote energy-saving technical exchange and interaction between U.S. and China
* Improve the energy efficiency, reduce energy consumption, protect ecological environment in U.S. and China

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THANKS!