用能产品节能政策与重点合作研究课题

Energy-saving Policies and Main Cooperation in Energy-using Products Research Subject

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1. 节能政策现状 Present Situation of Energy-saving Policies

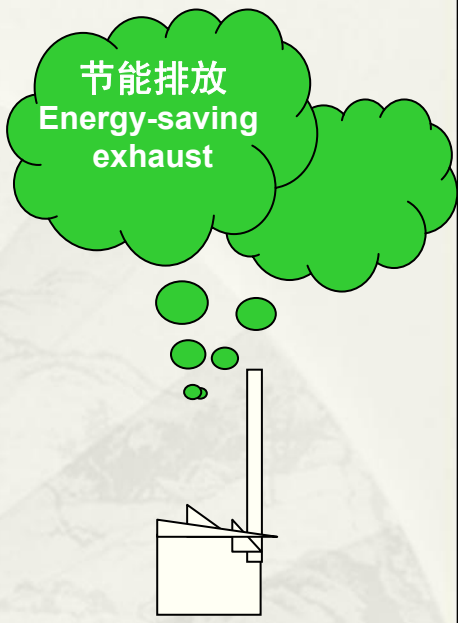
1.1 节能目标 Energy-saving objective

— 单位国内生产总值能源消耗比“十五”期末降低20％

— Ratio of unit GDP to energy consumption reduces by 20% than that at the end of “10th five-year plan” period

— 在2010年主要耗能设备能效达到国际领先水平

— Energy efficiency of main energy-consuming equipment reaches the international advanced level in 2010



1.2 2009年关注点 Focus in 2009

— 扩大国内消费 Expand domestic consumption

— 低碳经济 Low-carbon economy

1.3 2009年主要节能促进措施
Main Actions of Energy-saving Promotion in 2009

* 节能产品惠民工程
* Energy-saving products discount program
* 家电下乡
* Household appliances to the countryside
* 推广使用节能灯
* Promote the use of energy-saving lights
* 新能源和可再生能源推广使用
* Promote the use of new energy and renewable energy
* 以旧换新
* Exchange the old with the new
* 政府节能产品采购
* Governmental energy-saving products procurement
* 节能产品税收优惠目录
* Catalogue of tax discount for energy-saving products

节能产品惠民工程

Energy-saving Products Discount Pro

- 主管部门：财政部、国家发展改革委
- Competent department: Ministry of Finance, National Development and Reform Commission
- 目的： 推广节能产品、促进制造行业技术升级以及扩大内需
- Purpose: promote energy-saving products, boost technical upgrading of manufacture industry and expand domestic demand
- 范围：节能空调。自2009年6月1日开始。
- Scope: energy-saving air conditioner, from Jun. 1, 2009

未来扩大到冰箱、平板电视、洗衣机、电机等高效节能产品

In future, expand to high-efficiency energy-saving products like the refrigerator, FPD TV, washing machine and motor.

- 效益预测：
- Forecast of benefit:
  - 每年可拉动需求4000-5000亿元
  - Expand 400-500 billion Yuan of domestic demand every year
  - 提高能效，节能产品市场份额提高10-20%
  - Improve energy efficiency, with market share of energy-saving products increasing by10-20%
  - 促进节能减排每年可节电750亿千瓦时， 减排7500万吨
  - Promote the energy-saving and exhaust reduction, which can save 75 billion KWH of electricity and reduce 75 million tons of exhaust
  - 产业技术升级
  - Industrial technical upgrading

实行“家电下乡”补贴政策
Implement “Household Appliances to the Countryside” Subsidy Policy

* 扩大农村地区消费，全国8亿左右的农村人口受惠
* **Expand the rural consumption, benefiting a rural population of 800 million**
* 产品：空调器、热水器（电、气)空调、彩电、手机、冰箱、洗衣机、电磁炉、微波炉
* **Products: air conditioner, water heater (electric, power) air conditioner, color TV, mobile phone, refrigerator, washing machine, induction cooker and microwave oven**
* 效益：2009年拉动1500多亿元的农村消费。
* **Benefit: expand over 150 billion Yuan of rural consumption in 2009**

“推广使用节能灯”
“Promote the Use of Energy-saving Lights”

- 《高效照明产品推广财政补贴资金管理暂行办法》
- Interim Measures on Administration of Financial Subsidies for Promoting High-Efficiency Lighting Products
- 目标：“十一五”期间（2006－2010年）通过财政补贴方式推广高效照明产品1.5亿只，逐步取代白炽灯和其他低效照明产品
- Objective: In “11th five-year plan" period (2006~2010), promote 150 million sets of high-efficiency lighting products by means of financial subsidy, which gradually replaces the incandescent lamps and other low-efficiency lighting products.

科研课题：节能政策与市场转换机制研究
Research subject: Study on Energy-saving Policies and Market transformation Mechanism

* 各国节能市场转换机制及经验研究（日本、中国、美国、韩国等）
* **Study on energy-saving market transformation mechanism and experience of each country (Japan, China, America and Korea etc)**

2. 产品能效标准
Standard for Product Energy Efficiency

- 目的：提高所生产产品的能效水平
- Purpose: improve the energy efficiency of products produced
- 重点产品：
- Major products:
  - 家用电器。空调、电冰箱、电视机、洗衣机等；
  - Household appliances: air conditioner, refrigerator, TV and washing machine etc;
  - 商用设备。制冷陈列柜、冷水机组、多联式空调机组等；
  - Commercial equipment: refrigeration showcase, water chilling unit and multi-connected air conditioning unit etc
  - 工业设备。电机、变压器等。
  - Industrial equipment: motor and transformer etc.

科研项目：空调器能效标准制定与评价指标
Research Project: Establishment and Evaluation Indicators of air Conditioner Energy Efficiency Standards

- APF Project（中日合作研究 Sino-Japanese cooperation）
- Metering Project（中日合作研究 Sino-Japanese cooperation）

产品 Product	标准名称 Standard title	考核指标 Evaluation indicator	下一步计划 Next plan
房间空调器 Room air conditioner	GB12021.3-2004	*EER*	*APF*
单元式空调机 Unit air conditioner	GB19576-2004	*EER*	*APF*
冷水机组 Water chilling unit	GB19577-2004	*COP*	*IPLV*
多联式机组 Multi-connected unit	GB21454—2008	*IPLV*	*冷+热* *Cooling + heating*
变频空调 Frequency variable air conditioner	GB21455-2008	*SEER*	*APF*
家用电冰箱 Household refrigerator	GB12021.3-2008	*每24小时耗电量* *Power consumption per 24h*	*考虑：增加工况、开关门* *Proposals: increase working conditions, switching gate*

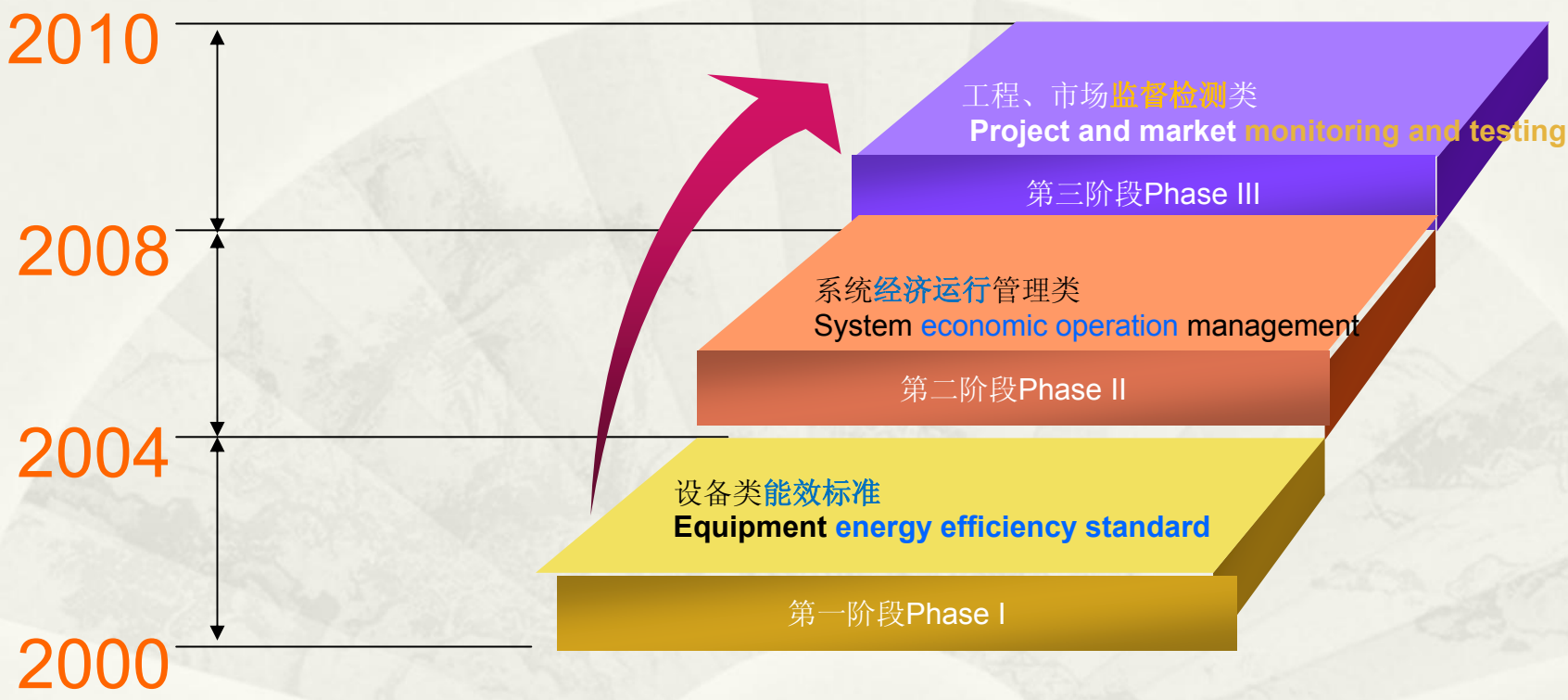
能效测试方法
Energy Efficiency Testing Method in MEPS

产品 Product	进展 Progress	考核指标 Evaluation indicator	测试方法 Testing method
房间空调器 Room air conditioner	GB12021.3-2004	*EER*	*1点测试* *One-point test*
变频空调 Frequency variable air conditioner	GB21455-2008	*SEER*	*2点测试* *Two-point test*
单元式空调机 Unit air conditioner	GB19576-2004	*EER*	*将实施3点测试* *Three-point test will be done*
多联式机组 Multi-connected unit	GB21454—2008	*IPLV*	*4点* *Four-point*

2010年重点产品
Major products in 2010

产品 Product	能效标准进展 Progress of energy efficiency standard
房间空调器 Room air conditioner	制定中 Under establishment
热泵热水器（机） Heat-pump water heater	筹备中 In preparation
水源热泵机组 Water-source heat-pump unit	制定中 Under establishment
制冷陈列柜 Refrigeration showcase	制定中 Under establishment
饮水机 Water dispenser	筹备中 In preparation
家用洗衣机 Household washing machine	筹备中 In preparation

3.节能运行管理
Emery-saving Operation Management



3.1 经济运行标准
Economic Operation Standard

- 针对使用中的产品或系统，通过科学管理及必要的技术改进，使系统达到最佳工作状态，降低耗能量与费用
- **According to the products or systems in use, through scientific management and necessary technical improvement, enable the system to reach the optimal working state and reduce the consumption and cost**
- 突出问题 **Big problems**
  - 实验室测试方法与实际使用的差异
  - **Difference between laboratory testing method and actual use**
  - 消费者使用习惯
  - **Consumers' using habit**

3.2 研究课题：消费者使用习惯和家庭节能潜力 Research subject: consumers' using habit and household energy-saving potential

- 方向 Orientation
  - 家庭节能潜力和节能途径
  - Household energy-saving potential and energy-saving methods
  - 关注产品运行中的节能因素（气候、使用习惯、使用设计等）
  - Pay attention to the energy-saving factors in product operation (weather, using habit and using design etc)
  - 能效测试方法的完善。额定测试结果与消费者使用情况的可比性
  - Improvement of energy efficiency testing method. Comparison between rated testing method and consumers' using conditions
- 项目 Project
  - 家庭耗电量调查（中日合作）
  - Investigation of household power consumption (Sino-Japanese cooperation)
  - Metering project（中日合作）(Sino-Japanese cooperation)
  - Small-scale metering（中日合作)）(Sino-Japanese cooperation)

研究课题：消费者教育
Research Subject: Consumers' Education

——如何区分产品的节能性？

How to distinguish the product energy saving property?

——如何操作更节能

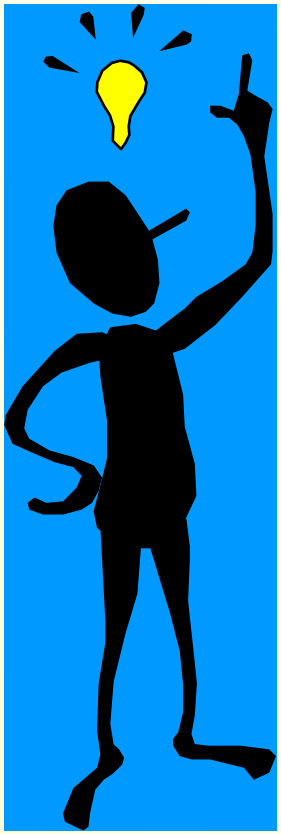
Which kind of operation can save more energy

——那种产品更适合消费者？

Which kind of product is more suitable for consumers?

——信息传递

Transfer information



4. 市场监测机制
Market Monitoring Mechanism

- 国家标准是进行节能监测的技术依据
- National standard is the technical basis of energy-saving monitoring
  - 对市场中用能产品的监督抽查
  - Supervision random check to the energy-using products in market
  - 对用能单位、用能设备与系统能源利用状况进行监测和评价
  - Have monitoring and evaluation to the energy users, energy-using equipment and system energy use conditions
- 突出问题 Big problems
  - 规章制度的完善 Improvement of rules and regulations
  - 监督检测能力建设 Construction of supervising and testing capacity

主要科研课题
Main research subjects

- 实验室循环比对
  （Round Robin Test project，中日合作）
- Laboratory cycle contrast
  (Round Robin Test project, Sino-Japanese cooperation)
- 测试方法的一致化（APP6项目）
- Consistency of testing methods (APP6 project)

5. 国际技术信息交流
International Technical Information Exchange

与METI、IEEJ、CLASP、APP6、LBNL、EF、ICA等机构开展交流合作
Carry out exchange and cooperation with METI, IEEJ, CLASP, APP6, LBNL, EF and ICA

•技术信息
•Technical information
•政策制定
•Policy making
•经验与措施
•Experience and measures

•技术信息
•Technical information
•政策措施制定
•Policies and measures making
•标准标识
•Standard and label
•经验教训
•Experience and lessons

发达国家
Developed countries

发展中国家
Developing countries

公益机构
Public-benefiting institutions

科研课题
Research subject

* 节能技术和能效标准国际研讨会（2009中国节能周）
* International seminar of energy-saving technology and energy efficiency standard (2009 Chinese Energy Saving Week)
* 中日空调能效评估方法研讨会（2009年11月天津）
* Sino-Japanese Seminar on Air Conditioner Energy Efficiency Evaluation Methods (Tianjin, Nov. 2009)
* 电冰箱耗电量测试方法（APP6项目）
* Refrigerator Power Consumption Testing Method (APP6 Project)

6.研究结果的作用和进展

Role and Progress of Research Findings

- 2009年度工作进展顺利
- The work goes well in 2009
- 是开展政策研究、标准标识制修订工作的基础
- Act as the basis for carrying out the work of policy research and standard and label establishment and revision
- 促进市场监督能力的提高
- Promote the improvement of market supervising capacity
- 推动消费者“行为节能”的基础研究
- Basic research on promoting consumers’ “behavior energy saving”

7. 建议 Proposals

- **目标 Objective**
  - 节能减排
  - Energy saving and exhaust reduction
  - 低碳经济
  - Low-carbon economy
- **合作领域**
- **Cooperative field**
  - 科研课题
  - Research subject
  - 经验与信息交流
  - Experience and information

谢谢！

Thank you !

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