

# **Energy conservation program in China and the role of international cooperation in S&L**

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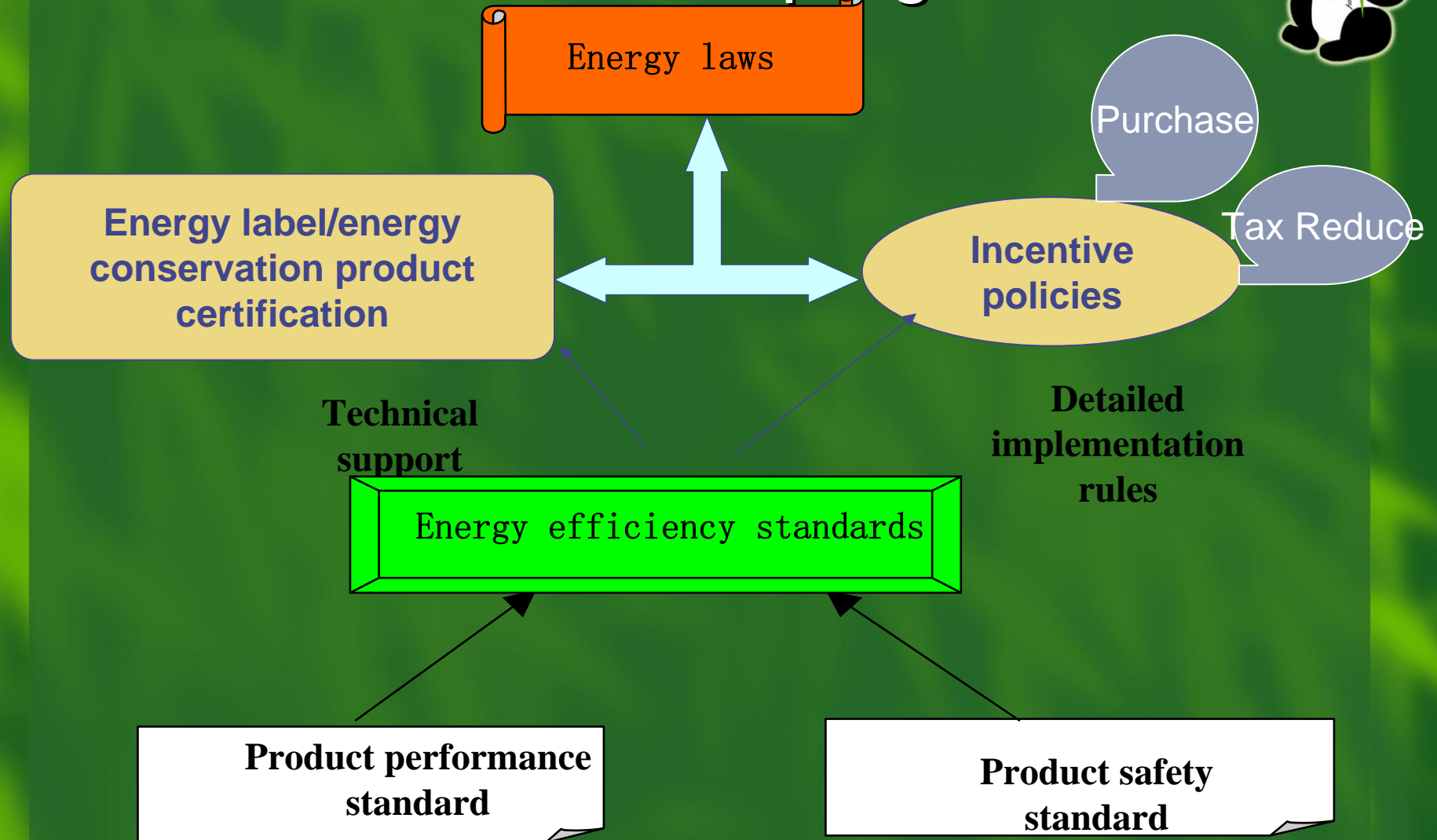
# Content

## **China's Energy Standards**

- ◆ Energy labels
- ◆ Incentive Policies for energy-saving
- ◆ International co-operation



# 0 Framework of MEPS program





## 1.1 Type of Energy standard

- **MEPS for appliance, office equipment, industry equipment**
- **Economy operation standards for energy-use system**
- **Energy audit standard for enterprise**
- **Energy management standard (ISO PC242)**
- **Energy system standard(ISO 203)**





## 1.2 China's management organizations for energy standards

- ❖ General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China (**AQSIQ**)
- ❖ Standardization Administration of China (**SAC**) is a government organization, responsible for the planning, approval promulgation and market monitoring of China's national standards
- ❖ China National Standardization Technical Committee for Energy Basis and Management (**CNTC**)
- ❖ **Workgroup** for the national standardization, include: institutes, universities, labs, manufactures, associations



## 1.3 MEPS

- **Started from 1989**
- **Mandatory standards**



# Content of China's MEPS

- ❖ **Limited value** of energy efficiency (or energy consumption), mandatory requirement.
- ❖ **Evaluating value** of energy conservation, voluntary index. China's energy conservation products;
- ❖ **Energy grade**, products are divided into 5(or 3) grades. Grade 1 is of the highest efficiency. China's energy label system;
- ❖ Test methods and inspecting rules



# List of 35 MEPS

- ❖ involving 5 product categories
  - -- Household appliances, 11
  - -- Lighting equipment, 8
  - -- Commercial equipment, 5
  - -- Industrial equipment, 6
  - -- Vehicles, 2
  - -- Office equipment, 3

China National Institute of Standardization





# List of Energy standards until now, 35 MEPS



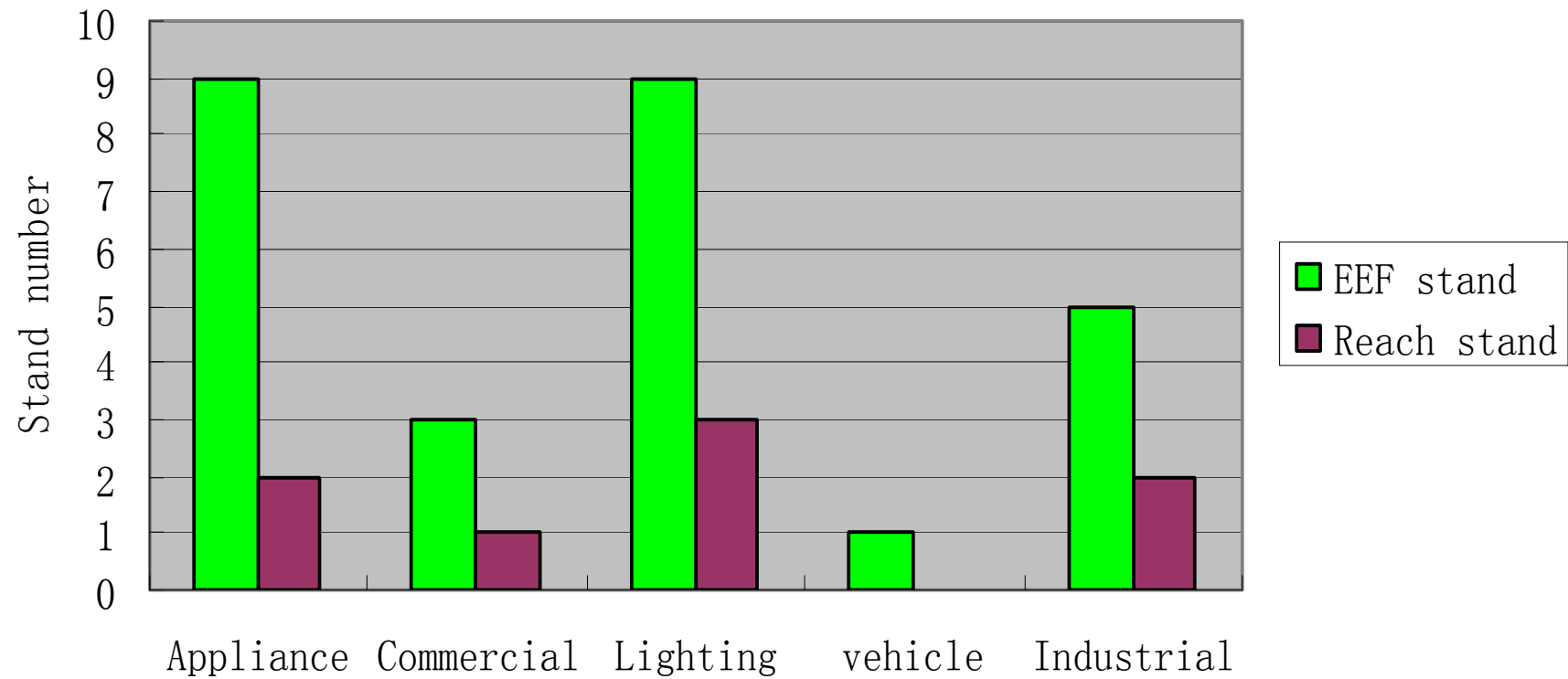
Product	Standard No.	Description
refrigerator	GB12021.2	The limited value and energy grades of the energy consumption for household refrigerators
air-conditioner	GB12021.3	The limited value and energy grades of the energy consumption for household air-conditioners
Washing machines	GB12021.4	The limited value and energy grades of the energy consumption for household washing machines
Iron	GB12021.5	The limited value and energy grades of the energy consumption for household irons
cooker	GB12021.6	The limited value and energy grades of the energy consumption for household cookers
TVs	GB12021.7	The limited value and energy grades of the energy consumption for household televisions
Radio	GB12021.8	The limited value and energy grades of the energy consumption for household radios
Fan	GB12021.9	The limited value and energy grades of the energy consumption for electric fans





# China's MEPS developed

EEF standards in 2007



# The role of energy efficiency standards in China's energy conservation efforts



## ❖ Functions

- The new measure for the government to control the market under the conditions of market economy
- To eliminate the products with high energy consumption from the market
- To mitigate the supply and demand contradiction of energy, and ensure sustainable development of economy
- To meet the requirements of international trade, and it is the technical tie of the activities of international market economy
- To improve the environmental protection
- One of the main foundations for China to carry out energy conservation

## ❖ Characteristics

- Small investment
- Take effect quickly
- Great influence



# Content

- ◆ **China's Energy Standards**

  - ☞ **Energy labels**

- ◆ **Incentive Policies for energy-saving**

- ◆ **International co-operation**





## 2.1 Energy Conservation Product Certification Label

- ❖ Chinese character “节”
- ❖ The first letter of “energy”
- ❖ The first letter of “China”
- ❖ Great wall
- ❖ The color is “sky blue”. This means clean sky, environment protect and beautiful future





# Energy Conservation Product Certification

- ❖ Voluntary Labeling
- ❖ Certification program for energy conservation products
  - Launch: 1998
  - Mode: factory examination (**ISO9002**) + product test + reexamination & inspection
  - Products covered: home appliances, lighting, office equipments, industrial equipments, etc.
  - Initiated by China Development and Reform Commission, CQC



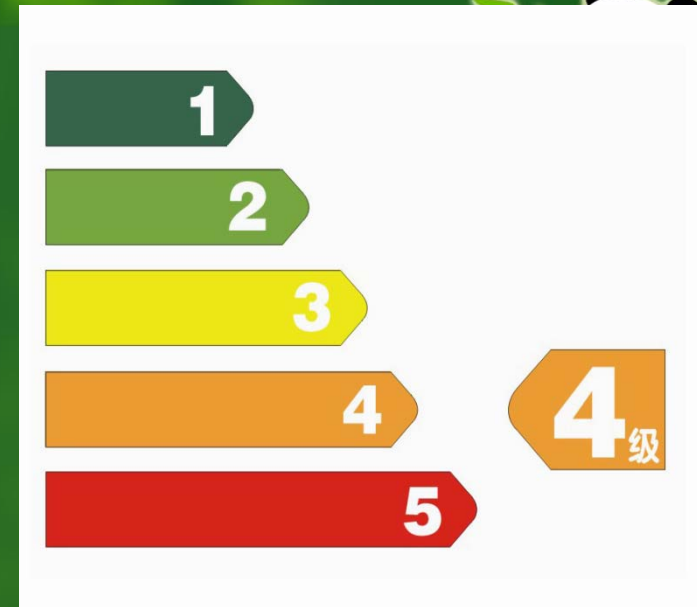
## 2.2 Energy information labeling



### content of the energy labeling

- ❖ Brand or trademark
- ❖ mode
- ❖ Energy efficiency classification
- ❖ Necessary information concerning energy consumption
- ❖ National The standards to be based
- ❖ Registration number

# Energy grade indexes



- Grade 1 the goal for manufactures to strive for
- Grade 2 products with minimum LCC( life cycle cost)
- Grade 3、4 average energy efficiency level



# List of product using energy label



- ❖ Mandatory

  - August 2004, Regulation on Energy Efficiency Labeling Administration issued

- ❖ First list of product, 2005/3/1

  - household refrigerators & room air conditioners

- ❖ Second list of product, 2007/3/1

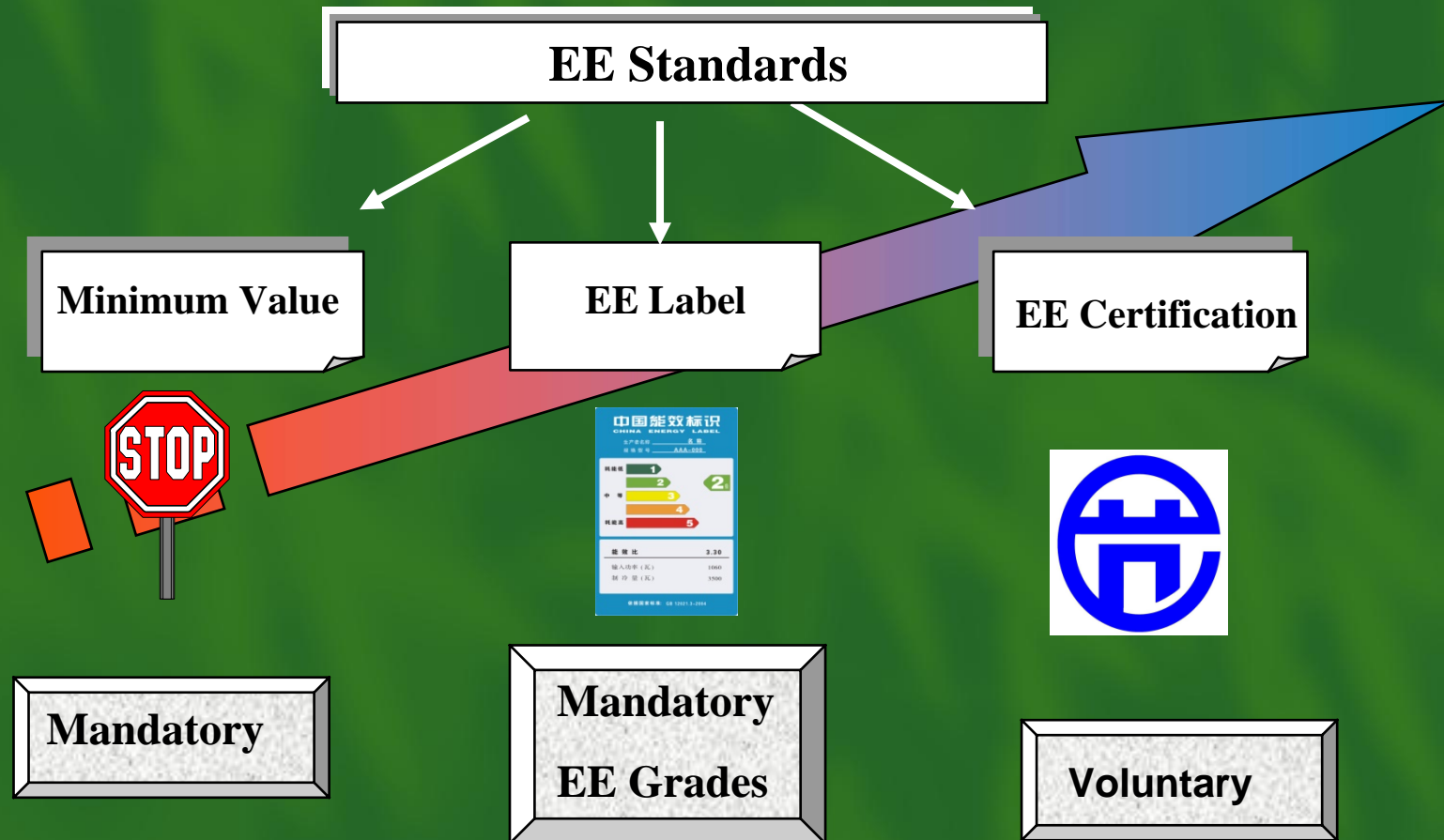
  - Unitary air conditioners & washing machines

- ❖ Third list of product, 2008/6/1 (planned)

  - Water chiller, gas heater, motor, Self-ballasted fluorescent lamps, high-voltage sodium lamp



# Relation of China's MEPS standards & labels





# Content

- ◆ China's Energy Standards
- ◆ Energy labels
- ☞ **Incentive Policies for energy-saving**
- ◆ International co-operation

# 3 Incentive Policies for energy-saving



- 3.1 Tax reduction
  - ❖ value added tax
  - ❖ income tax of company
- 3.2 Consumer price-support subsidy
  - ❖ appliance price reduce by 13% sale in countryside
  - ❖ First: TV, REF, Mobile phone(2007)
  - ❖ Second: TV, REF, Washer, Mobile phone(2008)
  - ❖ Third: RAC, heater, motorcycle,computer(2009)





## 3.3 China Government Procurement

- ❖ 2007.12.13 《China government procurement Law》 revised & take effect, **Mandatory**



## List have been published

- ❖ **First list**, published in Nov. 2004. include 1531 product model made by 88 manufactures
- ❖ **Sec list** , published in Sep. 2006. include 4770 product model made by 266 manufactures
- ❖ **New mandatory list**, DEC.,2007. include 9 sorts: Air-conditioner, lighting, TV, Heater, Computers, printer, Monitor, closetool, water tap,etc.




# Content

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- ◆ Incentive Policies for energy-saving
- ☞ **International co-operation**



# 4.1 International co-operation



**欧盟—中国**  
能源环境项目办公室



**IEA**  
国际能源署



**EMERSON**  
爱默生环境优化技术



**EF**  
美国能源基金会



**LBNL**  
美国劳伦斯·伯克利国家实验室



**ACEE**  
美国能源环境经济委员会



**UNDP**  
联合国开发计划署



**COPPER**  
国际铜业协会 (中国)



**AGO**  
澳大利亚温室气体办公室



**UNDESA**  
联合国经济和社会事务部



**CLASP**  
标识和器具标准合作项目



**WWF**  
世界自然基金会



**GEF**  
全球环境基金



**EPA**  
美国环保署



**UNIDO**  
联合国工业发展组织





## 4.2 Scope of International collaboration

- **Developing** Energy standards and label
- **Technical & Information** exchange
- **Share** successful experience and lessons
- Apply and **study** International Co-operation Projects



## 4.3 Developing Energy standards & label



- Standard
  - ❖ MEPS for household appliance: LBNL, EF foundation, CLASP, EU, WWF, ACEEE, IEEJ
  - ❖ Standby standards: LBNL, IEA, Aus
  
- Label
  - ❖ Certification Label: EF, LBNL
  - ❖ Energy information label: EF, GEF, CLASP, LBNL



## 4.4 Mechanism

### Market transformation system

- Project
  - ✓ APP Project 3
  - ✓ GEF- Green lighting engineering
  - ✓ RECEEP: Motor challenge engineering
  
- Relationship
  - ✓ GEF
  - ✓ APP 6 countries
  - ✓ BSI
  - ✓ Aus



## ● Policies and enforcement

- Tax reduction, consumer price-support subsidy
  - ❖ EF
- Implementation & monitoring of EE standards and labeling
  - ❖ CLASP
  - ❖ IEEJ
  - ❖ EU
  - ❖ EF



# Thanks!

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