

**Actions and measures towards  
20% energy conservation target  
--- industrial energy conservation policy**

ERI, NDRC

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## Current Progress and the Next 3 Years

- Year 2006: 4% target was not realized, 1.33%;
- Year 2007: decrease 3.27%, save energy 89.80 Mtce;
- Mr. Xie Zhenhua, vice-chairman of NDRC: “average decrease of GDP intensity must exceed 5%”, “intensity decrease of this year must be more than last year”
- Year 2008, target should be over 5%
- Year 2009 & 2010, if decrease more than 6%, the five-year total would be 19.6%

Though the pre-set target was not reached in 2007, but energy efficiency improved prominently

■ Energy Efficiency improvement

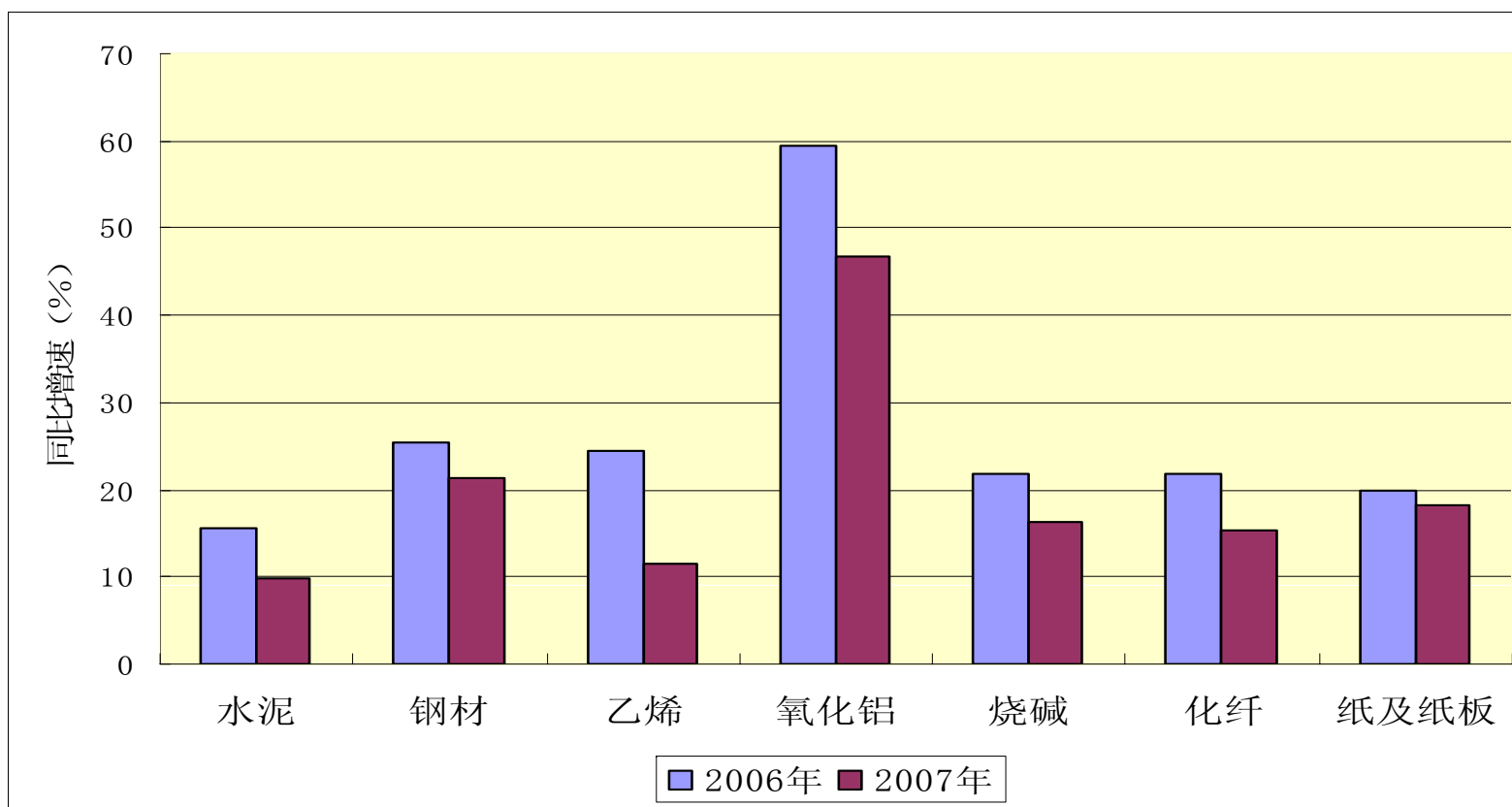
- energy intensity of steel production decrease 3.1% (Large and Medium enterprises)
- Coal consumption of power supply 357gce/kwh, decreased 10gce/kwh, decreased 2.7%

■ Elimination of outdated production capacity:

- ◆ Small power generation 21.57 GW, 11.2 thousand small coal mines
- ◆ Iron & steel: blast furnace <100 m<sup>3</sup> and BOF <15 ton are almost eliminated, eliminated iron production capability 46.59 Mton, Steel production capability 37.47Mton
- ◆ Cement 87Mton, dry method are stopped and decomposed, share of NSP reached 55%

## Macro control took effect, grow of energy intensive industry become slow

- Cement: decreased 5.6 percentage point
- Ethylene: decreased 13 percentage point
- Steel: decreased 4 percentage point



## Urban Capital Investment by industry (year 2006/ year 2007 1-11)

Industry	1-11, 2007	1-11, 2006
Energy intensive industries		
paper	27.4	12.8
chemical	39.5	20.8
Non-metallic Mineral Products	56.1	34.2
Ferrous Metals	15.2	0.1
Non-ferrous Metals	36.4	25.3
Tertiary industry		
Transport, Storage and Post	14.9	29.8
Among which, railway	5.4	105.1
road	11.8	14.5
urban public transportation	31.9	51.1
waterway	15.4	23.3
airway	25.4	51.7
Financing	21.5	30.4
Rental and service	21.1	35.4
R & D	12.4	18.6
Social affaire	18.8	21.9
Cultural	27.4	29.9
公共管理和社会组织	-5.4	23.5

## Still facing challenge

- Growing method and inertia of energy consumption will continue
  - ◆ In 2007, Steel, value added of non-ferrous, building material, chemical industries grew 21.4%、17.8%、24.7% and 21%, more than the average of 18.5%
  - ◆ In month 1-11, 2007, urban capital investment of building material, non-ferrous, chemical grew 56.1%, 36.4% and 39.5%, higher than the average of 26.8%
  - ◆ In 2007, China exported steel material 62.65 Mton, increased 45.7%
  - ◆ In 2007, production of steel, ten types of non-ferrous metal, glasses, ethylene increased 21.3%, 22.7%, 13.4% and 11.4%

## Lack of long term mechanism and relevant policy system

- Guided by central government; rely on political measures; disintegrate the target to local government and enterprises; not spontaneous actions
- Lack of law system; quitting system of small enterprises is not established
- reform of pricing mechanism is slow
- Investment toward energy intensive industry is high
- Taxation policy system supporting energy conservation is not formed
- Taxation policies in limit low efficiency and industry development is empty. Carbon tax, energy tax is being far, fuel tax is slow

## Energy conservation target is not accordant with other social economic target

- Local government: drive economic grow with large investment
- local employment, local financing, social steady decreased the enthusiasm of eliminating inefficient plants
- Expert driven economy in some regions, increased production of energy intensive product and low value added product

## Weak Basis of Energy Conservation

- Energy consumption statistics
- Comparability and reliability of energy consumption data
- Besides market doorstep and energy consumption limitation rating mechanism in a few industries, other important policies are not issued yet
- Assessment mechanism on energy conservation measures are not established
- The strength of monitoring and punishment are weak

## Growth of industrial production output

	2007年	
	Production (10 kton)	increase (%)
Crude steel	48966	16.8
Steel material	56894	21.3
10 non-ferrous	2351	22.7
Plate glass	49748	13.4
Caustic soda	1759	16.4
Chemical fiber	22390	15.3

资料来源：国家统计局网站，下同

## Durable consumables increase, need guidance for rational consumption

	Refrigerator	Air-cond.	Computer	TV	Vehicle
2000	80.1	30.8	9.7	116.6	0.5
2004	90.2	69.8	33.1	133.4	2.2
2005	90.7	80.7	41.5	134.8	3.4
2006	91.8	87.8	42.2	137.4	4.3
2007年1~11月	95.1	94.8	53.2	137.5	5.9

## Industry is still the key field of energy conservation

- About 80% contribution to the 20% target

Year	Industrial Energy Consump.	Growth rate	Industrial added Value	Industrial energy consumption intensity	Decrease rate
	(万吨标煤)	(%)	(亿元)	(吨标煤 /万元)	(%)
2005	157952		<b>76190</b>	2.07	
2010 (GDP 7.5%)	<b>176299</b>	2.2	111948	1.57	24.0
2010(GDP 9%)	<b>188947</b>	3.6	123152	1.54	25.7

# Policies promoting industrial energy conservation

- State council
  - ◆ 2006, Aug "Determination on promoting energy conservation"
  - ◆ 2007, Jun." The comprehensive scheme of energy conservation and emission reduction"
  - ◆ 2007, Nov. "The implementation scheme and method of statistical monitor and check concerning about energy conservation"
    - Responsibility and one ticket refuse
    - Provincial government officials and top-1000 enterprises
    - Top 1000 enterprise progress in this March; this June, provincial progress evaluation
  - ◆ quit of customs tax on partial commodities
  - ◆ Reform on resource tax

## Policies promoting industrial energy conservation

- National People's congress

- ◆ **The New Energy Conservation Law, April. 1st**

- ◆ **Mechanism**

- **Capital investment assessment and censor mechanism**
    - **Elimination system of low efficiency equipment, devices and process**
    - **Energy statistics mechanism**
    - **Responsible system of energy conservation target**
    - **Resource utilization mechanism**
    - **Electricity price**

## Energy conservation measures of the new ECL

- Energy consumption products, energy efficiency labeling
- Energy conservation product certification
- Power generation system
- Regulation on newly constructed power generation set
- Energy consumption reporting of public institutions
- Energy utilization report of key energy consumption enterprises
- Energy management carrier in key energy consumption enterprises
- Energy saving technology and product list
- Differential electricity price for energy intensive industries

## Incentive measures in new ECL

- Special fund on energy conservation from central government and provincial government.
- Favorable policy support for technologies, product in the promoting list
- subsidy for promoting and using energy conservation product
- Favorable loan for R&D, production and retrofit
- Price policy favoring energy conservation

## Policies promoting industrial energy conservation

### ● NDRC, MOF

- ◆ Guidance on structural optimization on 13 industries
- ◆ Urgent notice on promoting industrial structure adjustment
- ◆ differential electricity price , list, the income will be kept to local government
- ◆ Award fund for energy conservation retrofit
- ◆ Subsidy for efficient lighting product

## Policies promoting industrial energy conservation

- Central bank
  - ◆ Financing service
    - Green credit and loan
- General Bureau of Environment Protection
  - ◆ Regional ratification limitation policy.
  - ◆ Differential electricity price and water price, pollutant charge system
  - ◆ Green insurance system
    - to change the situation of "enterprises gains, and public pays"
    - charge of environmental insurance is proportional to the pollution of the enterprise

# Central Economic Work Meeting of 2008

- First important mission in 2008: Two Preventions: overheating of the economy, and obvious inflation
- General requirement: control the total quantity, stabilize price, adjust structure and promote balancing
  - ◆ Control the total quantity: capital investment
  - ◆ Stabilize price: 6 measures
  - ◆ Adjust structure: optimize industrial structure and competitiveness
  - ◆ Promote balancing: international I/O balance”
- Main measure:
  - ◆ steady financial policy & tightened monetary policy;
  - ◆ restrain capital investment growth, limit energy intensive industry;
  - ◆ Strengthen monitoring
  - ◆ Exportation quota system, control resource material and energy intensive material
  - ◆ Promote merging of energy intensive enterprises

# Policies promoting industrial energy conservation

- Year 2008: a most challenging year and Mid-term evaluation year
  - ◆ 10 measures put forward by Premier Wen Jiabao
    - Eliminate outdated production capability in energy intensive industries
    - Energy conservation in key enterprises and key projects. 10 Key Energy Conservation Project
    - Develop and promote advanced technologies, and do demonstrations
    - Encourage and support recycle economy
    - Strengthen protection of resources and publish un-ratified development
    - Perfecting punish and awarding mechanism of resource conservation and environment protection
    - Raise the awareness of resource conservation and environment protection

## Policies promoting industrial energy conservation

- Promote top-1000 enterprise conservation action, and industrial energy conservation
  - ◆ Energy auditing
  - ◆ benchmarking
  - ◆ Energy consumption report
- Examination of energy conservation target responsibility allocation
- Research to promote SME's energy conservation
- Research oil saving and electricity saving policies and measures

**Thank you!**