UNITED NATIONS Conference on Climate Change and Official Statistics

China's National Climate Change Programme

Xu Huaqing 15 April 2008,Oslo

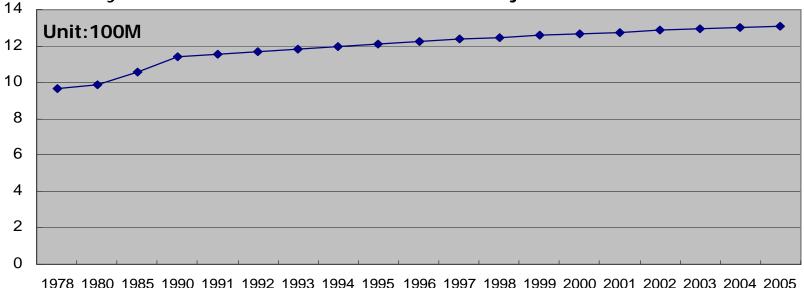
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Outline

- National Circumstances
- Principles and Objectives
- Policies and Measures
- CNPCC and the Official Statistics

1. Huge population & high employment pressure

- By the end of 2005, the total population in Mainland China was 1.31 billion, accounting for 22% of the world total, 750 M people still live in villages;
- Every year, 10 M new employment opportunities need to be created in cities/towns, and about 10 M people living in countryside move to cities/towns to find job.

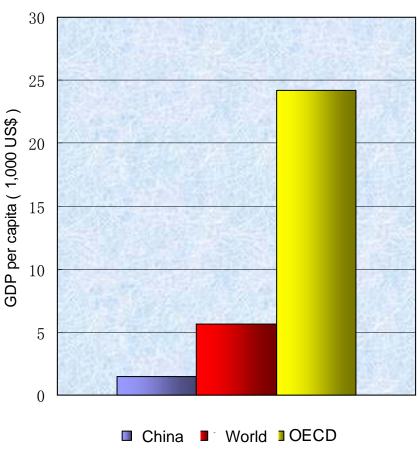


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2. Low level of economic development

- The GDP per capita of China in 2005 was USD 1,714 (based on exchange rate of that year), only ¼ of the world average;
- By the end of 2005, the annual per capita income of 23.65 million people living in villages was less than 683 RMB (USD 83).

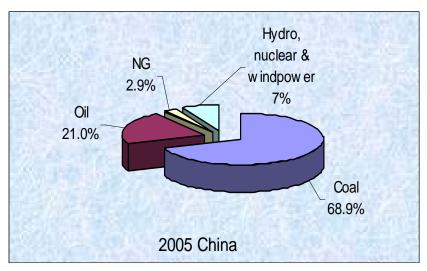
Per Capita of GDP in 2005

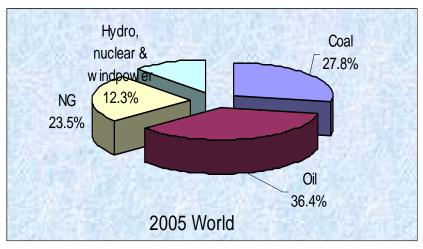


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3. Coal-dominated energy mix

- The primary energy consumption in 2005 was about 1,563 million toe, among which 68.9% came from coal;
- In 2005, coal accounted for 27.8% of the world's primary energy consumption.

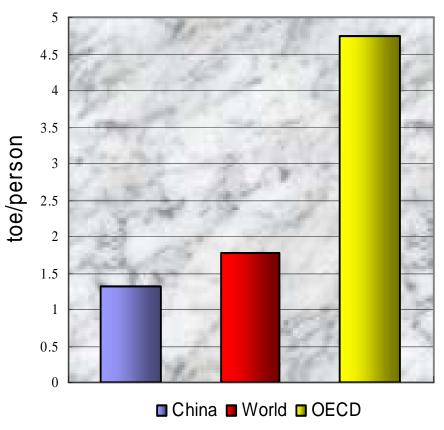




4. Low per capita energy consumption

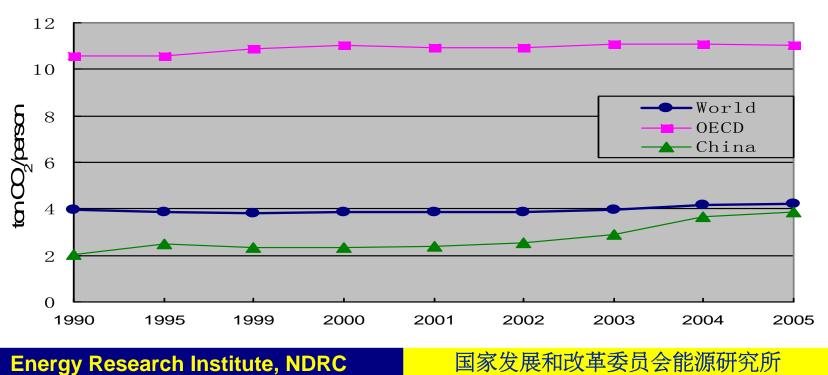
 In 2005, the commercial energy consumption per capita was about 1.3 toe, equal to 3/4 of world average and ¼ of the OECD countries.

Per Capita TPES in 2005



5. The CO₂ emission per capita of China is lower than that of the world average

 In 2005, the CO₂ emission per capita of China from fossil fuel utilization was 3.88 tons, equal to 92% of the world average and 35% of the OECD countries.



Principles and Objectives

1. Guiding Principles:

- Addressing climate change within the framework of sustainable development;
- Equal importance of mitigation and adaptation;
- Integration of climate policy into other relevant policies;
- Reliance on technological progress and innovation;
- Common but differentiated responsibilities;
- Active participation and broad cooperation.

Principles and Objectives

2. Overall Objective:

- Make achievements in controlling greenhouse gas emissions;
- Enhance adaptation capacity;
- Make new progress in advancing science and technology R&D;
- Remarkably raise public awareness;
- Further strengthen institutions and mechanisms.

Principles and Objectives

3. Objectives by 2010:

- Reduce energy consumption per unit GDP by 20%;
- Increase the share of renewable energy to 10% in primary energy supply;
- Stabilize nitrous oxide emissions from industrial processes at 2005 level;
- Control the growth rate of methane emissions;
- Increase the forest coverage rate to 20%; and
- Increase carbon sink by 50 million tons over 2005 level.

1. Promote 10 key energy conservation projects

- Renovation of coal-fired industrial boilers;
- District CHP;
- Waste heat and pressure utilization;
- Oil conservation and switching;
- Motor system conservation;
- Energy system optimization
- Building energy conservation;
- Green-lighting;
- Energy conservation in government agencies;
- Energy saving monitoring and technical service.

Estimated 550 Mt CO₂ emissions to be avoided by 2010

2. Develop hydropower

- Hydropower is a key measure towards a low carbon energy structure;
- Together with environmental protection and migration, develop and use hydropower resources in a rational manner;
- Accelerate the development of hydropower and small hydro based on local conditions.

Estimated 560Mt CO₂ emissions to be avoided by 2010

3. Promote nuclear power

- Nuclear energy is a key element in national energy strategy;
- Guideline: self-sufficient, international cooperation, technology introduction, domestic built;
- Common technology route and adoption of advanced technologies;
- Achievement of domestic development and production of large scale unit.

Estimated 60Mt CO₂ emissions to be avoided by 2010.

4. Optimize thermal power development

- Develop 600+MW supercritical (ultra-supercritical) units;
- Start the IGCC power station project;
- Develop natural gas power generation;
- Acceleration of the elimination of small coal-fired power generators;
- Strengthen power grid construction.

Estimated 110 Mt CO₂ emissions to be avoided by 2010.

5. Promote coal-bed methane utilization

- Coal-bed methane investigation, development and utilization should be adopted as important instruments to expedite the structural optimization of coal industry, reduce coal mining accidents, improve resources utilization efficiency and prevent environmental pollution.
- Exempt or partly exempt coal bed methane projects from utilization fees for prospecting and mining rights;
- Adopt preferential tax policies for coal bed methane projects;
- Encourage coal bed methane CDM projects.

Estimated 210 Mt CO₂ eq emissions to be avoided by 2010.

6. Development of wind, solar and geothermal energy

Together with the development and construction of large scale wind power plants, to:

- Actively develop photovoltaic and solar heating utilization;
- Actively promote the development and utilization of geothermal and tidal energy.

Estimated 70 Mt CO₂ emissions to be avoided by 2010.

National Leading Group to Address Climate Change (NLGACC):

- The Leading Group will be responsible for deliberating and determining key national strategies, guidelines and measures on climate change, as well as coordinating and resolving key issues related to climate change;
- National Bureau of Statistics of China (NBSC) is a member of the NLGACC.

The national inventory agencies need to work closely with the NBSC:

- It is good practice to consult with NBSC and seek their advice on which method is the most complete and accurate indication of activity data;
- The most important measure is that official statistical data were used wherever possible;

- China Energy Statistical Yearbook and China Statistical Yearbook on Environment as a good base of the activity data for development of the national emissions inventory;
- Uncertainties introduced by the nature of the statistical databases;

The Programs for Statistics, Monitoring and Appraisal of Energy Saving as a good base for assessment nationally appropriate mitigation actions in a MRV manner:

- Implementation Program for the Statistical Index System for Energy Consumption Per Unit GDP;
- Implementation Program for the Monitoring System for Energy Consumption Per Unit GDP;
- Implementation Program for the Appraisal System for Energy Consumption Per Unit GDP.

Capacity building needs:

- Establishment of statistical system catering to the compilation of emission inventory;
- Methodologies for inventory quality control, assessment of adaptation;
- Projection of future emissions;
- Development and management of national greenhouse gas emission database.

Thanks!