

Asia Clean Energy Forum

Knowledge Management Tools and Approaches

Clean Energy in China

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Energy Consumption in China

Year	Total (m-tce)	Coal (%)	Oil (%)	NG (%)	Ren. E (%)
2000	1,386	67.8	23.2	2.4	6.6
2005	2,233	68.9	21.0	2.9	7.2

Annual Growth rate (2000-2005)

GDP	9.6 %
Energy consumption	10.0 %

Energy/GDP elasticity: 1.04

Clean Energy Development in China

[1] Clean Coal Technology (CCT)

- ◆ Coal washing
- ◆ Coal shaping
- ◆ Coal slurry
- ◆ Coal-bed methane capture and use

- ◆ CFBC
- ◆ PFBC-CC
- ◆ IGCC

- ◆ FGD

[2] Renewable Energy

- ◆ **Solar**
- ◆ **Wind**
- ◆ **Hydro**
- ◆ **Geothermal**
- ◆ **Tidal**
- ◆ **Biomass/Biogas**

[3] Nuclear Energy

- ◆ **PWR**
- ◆ **HTGR**

[4] Hydrogen Energy

Some barriers to the progress of China's clean energy deployment

◆ Technological

Some technologies are well under development, still far away from large-scale or commercial applications

◆ Economic

The costs for using certain type of these technologies are prohibitively high

◆ Institutional/Policy

The institutional reorganization is needed to create innovative system and more incentives remain to be well in place.

Some driving forces to push China's clean energy development

◆ Renewable Energy Law

This law was enacted in January 1, 2006, and is expected to play a more important role in boosting the clean energy development.

◆ Initiatives to build a conservation-minded and environmentally sound society

The central authority has mapped out a sustainable path for realizing the country's social and economic targets

- ◆ **National commitments to reducing the energy intensity**

During the 11th Five-Year Plan period, the energy consumption per value of GDP must be reduced by 20%, and major pollutants by 10%, two obligatory targets must be achieved by the end of 2010.

- ◆ **China's national climate change programme**

The action plan is announced in June 2007 for addressing the global climate change, at the same time for promoting clean energy development.

Prospects of China's clean energy development

- ◆ **Some R & D programs are well under way**
- ◆ **Some development plans have been formulated**
- ◆ **Some demo projects are being implemented**
- ◆ **Policies are being overhauled for creating strong incentives**
- ◆ **New potentials are being explored in terms of both natural resource availability and technological breakthroughs**

Thanks