



The Challenges of Growing Energy Demand

Mr. HUANG Xing

Chinese Ambassador to Finland

19th Oct, 2011

Energy affects our daily life, economic development and progress of the mankind



Rapid growth in world energy demand

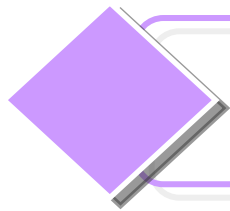
IEA:

World primary energy demand increased by 2% per year in the past 27 years until 2010

EIA of USA:

World marketed energy consumption will increase by 53% by 2035 compared with that of 2008

Two of the most serious challenges to humanity



Growing energy demand



Climate change

Increase of energy demand in China, caused mainly by three factors:

- The largest population in the world
- Rapid economic development, industrialization and urbanization
- Transfer of manufacturing facilities, especially energy demanding ones

➤ **EU: China's per capita energy consumption is only 35% of OECD average**

Energy demand : the most constraint for further development in China

- IMF: China's GDP per capita was US\$4,382 in 2010, ranking 94th in the world
- 150 million people living below the poverty line by the U.N. standards
- The accelerated industrialization and urbanization

Important strategy committed in China's basic state policy:

✓ following a road with energy efficiency and carbon emission reduction

- China: the first developing country to adopt and implement a National Climate Change Program
- The most intensive efforts made in energy conservation
- The fastest growth of new energy and renewable energy
 - *Between 2005 and 2008, China's renewable energy increased by 51%*
 - *UNEP : in 2010, China led all nations investing in renewable energy, with US\$49.8 billion*
- the largest area of man-made forest in the world
 - *The total area of man-made forest : 45 million hectares*

Positive results:

- From 2006 to 2010, China's energy intensity, or units of energy used per unit of GDP was cut by nearly 20 percent
- An average annual economic growth of 11.2 percent with a yearly rise in energy consumption of only 6.6 percent



Chinese Premier Wen Jiabao

The Twelfth Five-Year
(2011-2015) Plan devotes
great attention to energy
and climate change

China's key targets related to energy:

→ A 16 percent reduction in energy consumption per unit of GDP from 2010 by 2015

→ Increasing non-fossil energy to 11.4 percent of total energy use

→ An energy saving by 670 million tons of standard coal

→ Increasing the use of renewable energy sources to 15% of its total energy supply by 2020, from 9% in 2008

These targets are mandatory to ensure implementation

Application of science and technology in energy efficiency pursuit



Experimental Fast Reactor



Green Coal-Fired Power Program



-International cooperation in energy saving

-China will adhere to learn from others

Business opportunities in energy sectors in China

In the next five years,

- ▲ The Chinese Government will invest more than US\$300 billion in the area of green economy and low-carbon development
- ▲ The market scale of energy conservation and environment protection in China will be more than US\$450 billion



Strong complementarity in energy saving
between China and Finland

Cooperation between China and Finland

- China International Green Industry Expo
- Finland International Clean-tech Expo
- Finnish Environment Cluster for China (FECC)

Cooperation between China and EU

- Sector Dialogue
- Bilateral forums and conferences
- China-EU summits
- Six priority areas
- Joint projects



Win-win Cooperation



Thank you !