



国家能源局

National Energy Administration

Sustainable Development of Energy in China

National Energy Administration

July, 2012



- 一、Current Situations of Sustainable Energy Development in China
- 二、Energy Development Goals and Tasks of China's 12th Five-Year Plan (FYP)

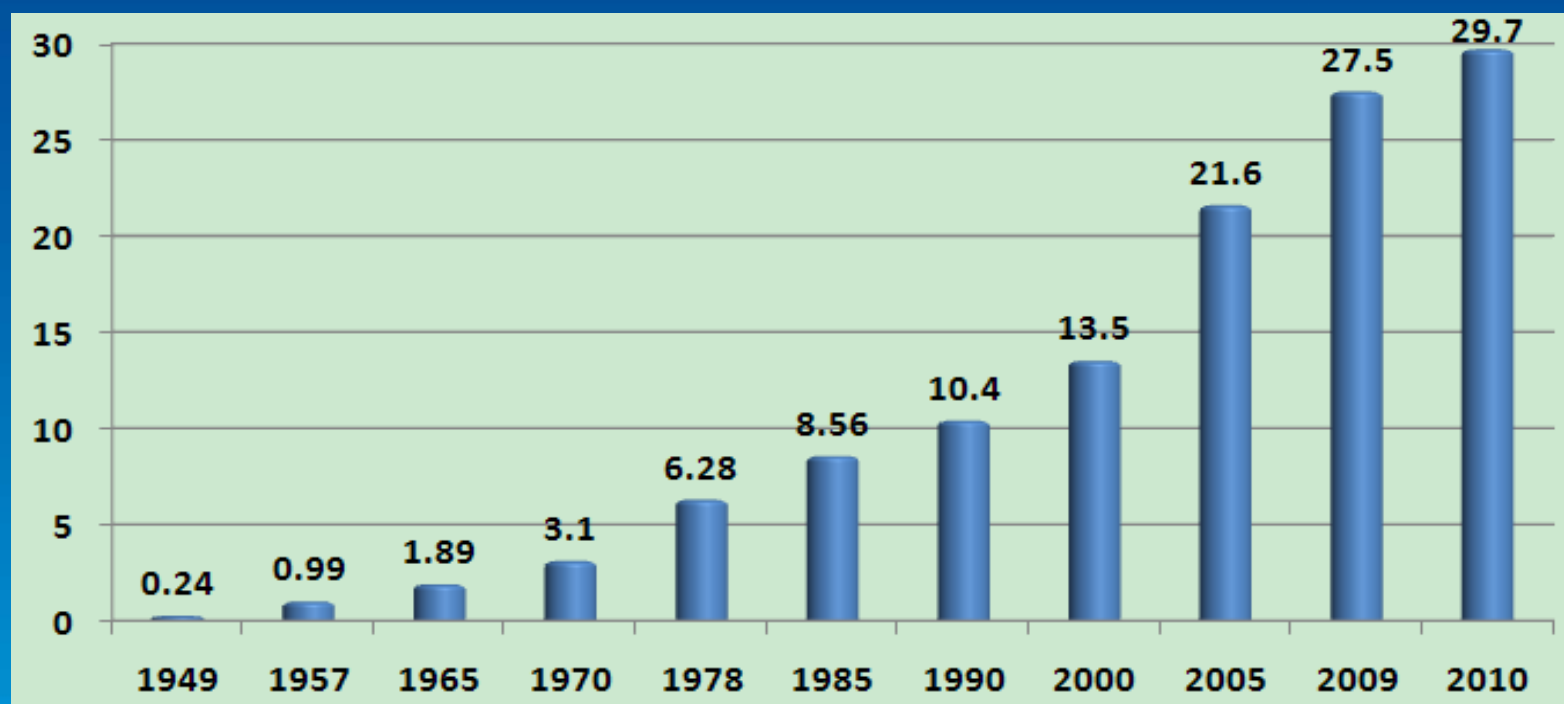
一、Current Situations



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(一) Overall Situation of Energy in China

Total Primary Energy Production in China (100 million tce)



China is a major energy producer and consumer in the world. In 2010, China's total primary energy production reached 2.97 billion tce.

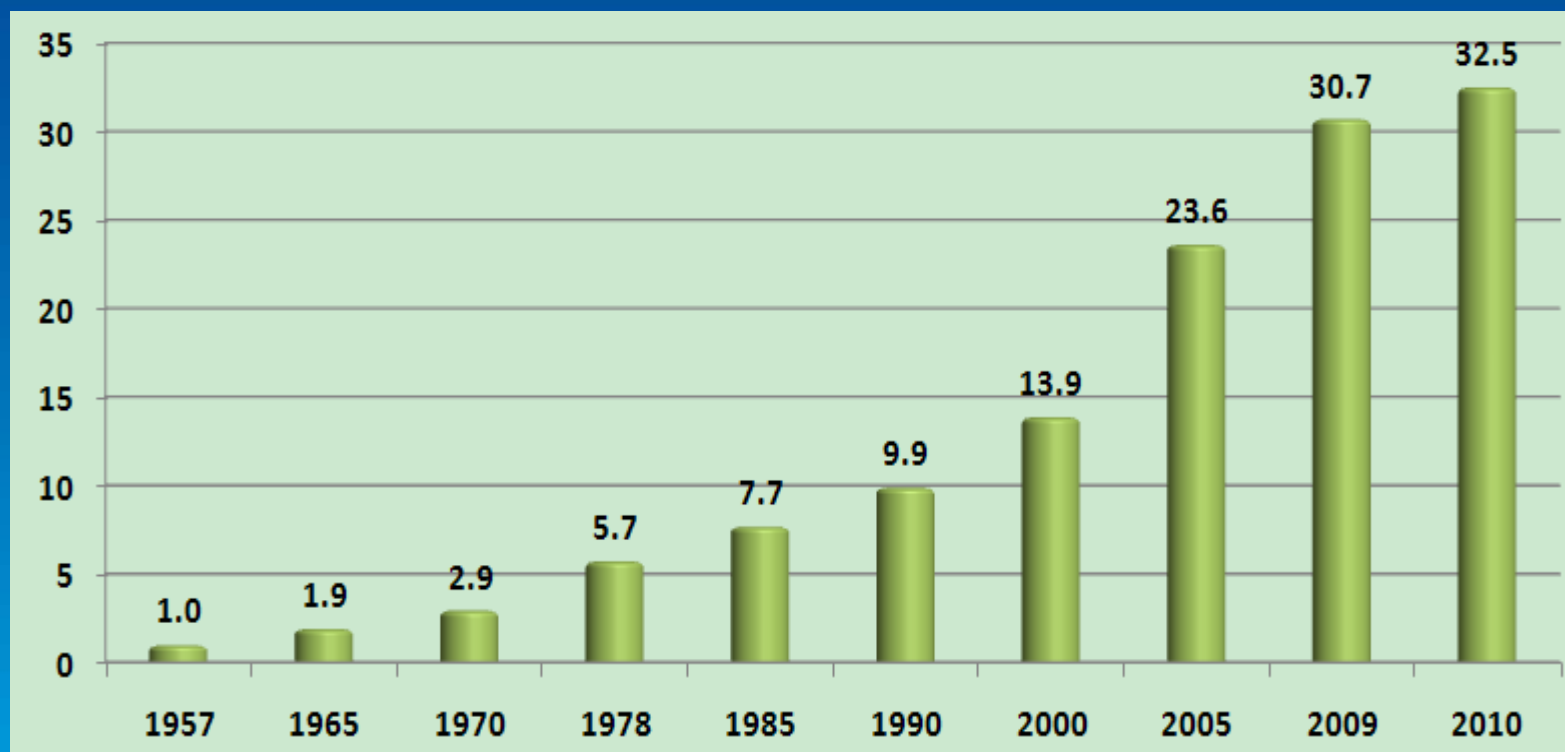
一、Current Situations



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(一) Overall Situation of Energy in China

Total Primary Energy Consumption in China (100 million tce)



In 2010, China's total primary energy consumption reached 3.25 billion tce. Over the past decade, China's self-sufficient energy rate has remained around 90%.

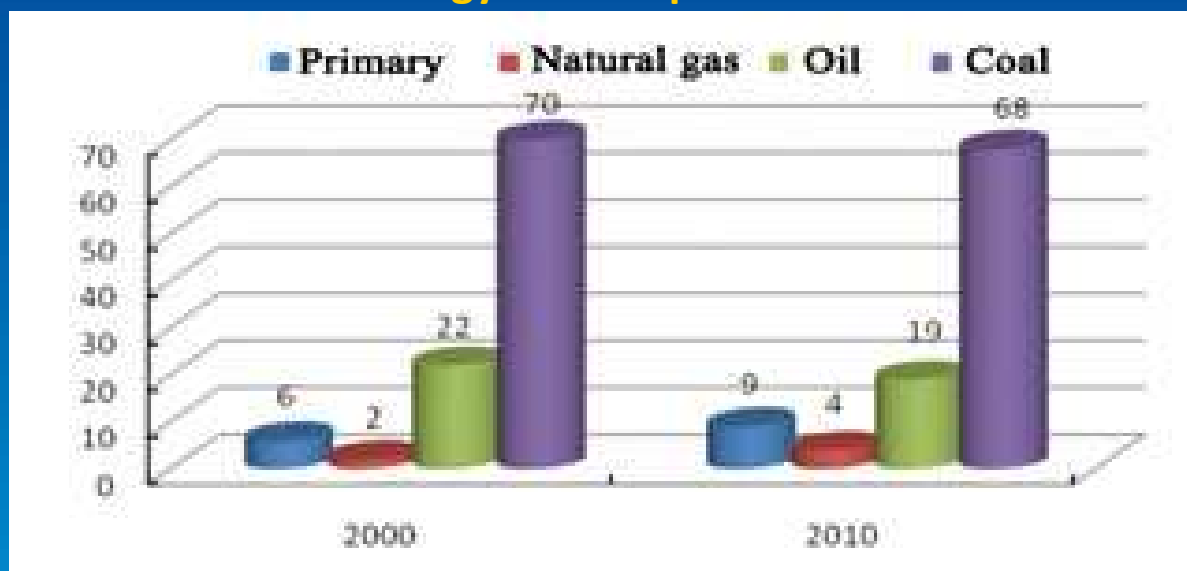
一、Current Situations



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(一) Overall Situation of Energy in China

China's Energy Consumption Structure



Note: Primary = Non-fossil Fuel

Coal accounts for 70% of China's total energy consumption. With a shortage of petroleum resources, it is inevitable for China to choose a sustainable energy development path that saves energy, adjusts the energy structure and develops new energy sources.

一、 Current Situations



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(一) Overall Situation of Energy in China

Energy production data of 2011

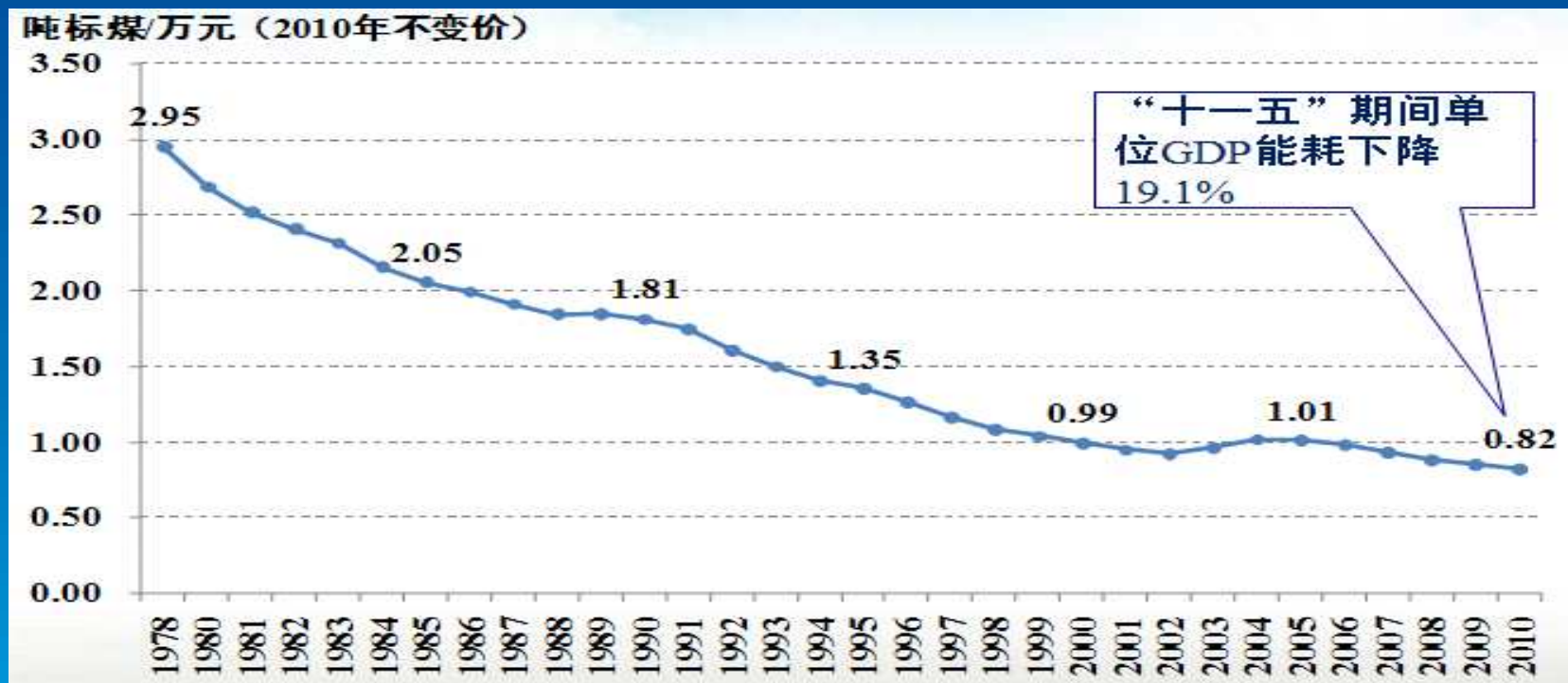
- Coal : 3.25 billion tons
- Crude oil : 200million tons
- Natural gas : 104 billion cubic meters with a rapid growth.
- Install electricity capacity : more than 1 billion KW.
- Hydropower install capacity : exceed 200 million KW
- Wind power install capacity : exceed 50 million KW
- China are leading the utilization of solar energy resources.

一、Current Situations



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(二) Improving Energy Efficiency



From 2006 to 2010, China's energy consumption per unit of GDP decreased by 19.1%, successfully saving up to 700 million tce of energy.

一、Current Situations



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(三) Energy Polices

- Since its reform and opening-up, China has issued series of laws and regulations, such as Coal Law, Electricity Law, Renewable Energy Law, Energy conservation Law.
- In 2009, Renewable Energy Law is revised.
- In 2010, The Law on the Protection of oil and gas pipelines comes into force.
- Now, China has been drafting its Eenergy Law, as well as some identified regulations in nuclear power, hydropower, marine pipelines protection, national oil reserve and natural gas infrastructure management region.

一、Current Situations



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(四) Energy Market

- The market mechanism has play a basic role in resource allocation of energy.
- Crude oil price has become fully integrated with the world market. Coal price is almost market-based. Refined oil price can reflect the domestic and international market changes.
- Separation of Generation from Grid in Electricity marked reform, and a full competitive generation market has been established.
- Encourage and guide private investment in the energy field

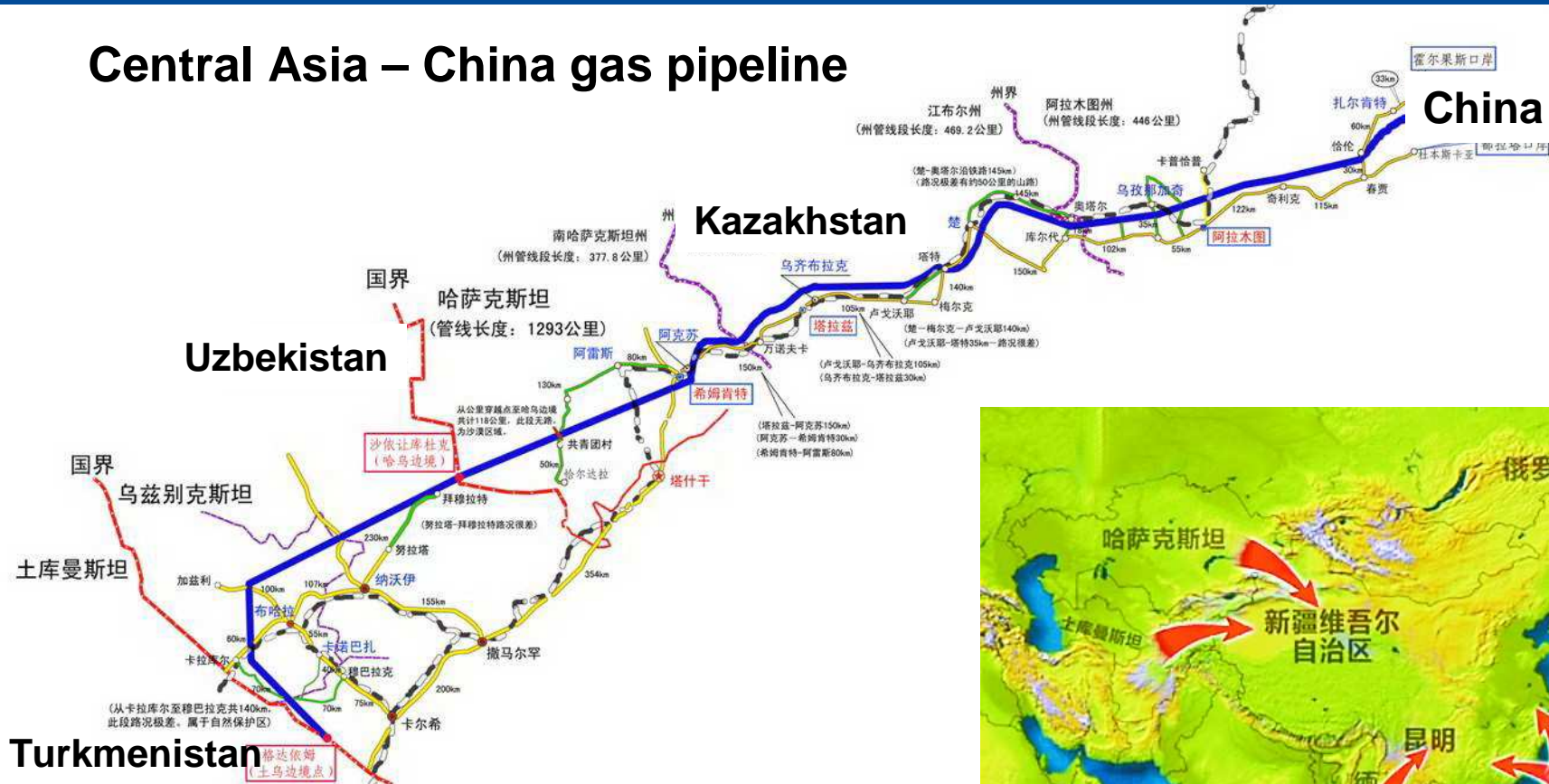
一、 Current Situations



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(五) Chinese-foreign cooperation: a win-win context

Central Asia – China gas pipeline



- Ensure domestic energy demand
- Achieve common development



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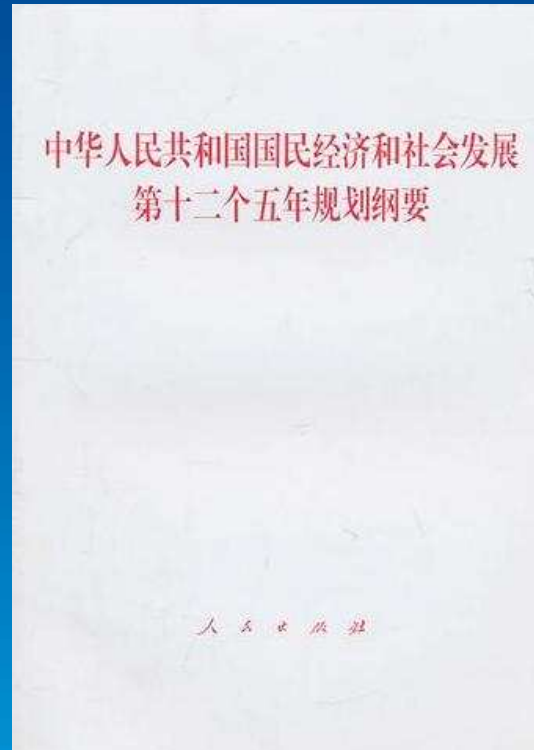
二、China's 12th Five-Year Plan



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China's 12th FYP Outline points out that:

The basic themes of China's energy strategy are giving priority to thrift, relying on domestic resources, encouraging diverse patterns of development, protecting the environment, increasing international cooperation for mutual benefit, adjusting and optimizing the energy structure and aiming to build a safe, stable, economical, and clean modern energy industrial system.



二、China's 12th Five-Year Plan



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(一) Development Goals

China's major energy development goals during the 12th FYP period:

- *Energy consumption per unit of GDP to be cut by 16 percent;*
- *Non-fossil fuel to account for 11.4 percent of primary energy consumption.*



(二) Energy Policies

- Strengthen domestic energy supply ability.
- Develop non-fossil energy, optimization and adjustment of energy structure .
- Implement energy livelihood projects, improve universal service level.
- Both control the total supply and energy intensity level, to be an Energy-efficient country.
- Strengthen international cooperation, to ensure the stability of global energy market.
- Promote energy industrial innovation, further deepening energy system reform.

二、China's 12th Five-Year Plan



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(三) Main Tasks

- 1、Exploiting and using coal resources intensively and efficiently
- 2、Developing clean coal-fired electric power
- 3、Accelerating the development of natural gas

In 2015, the production of conventional natural gas will be more than 130 billion cubic meters and 6.5 billion cubic meters in shale gas. Commercialized CBM production will be over 20 billion cubic meters .

- 4、Vigorously developing new energy and renewable energy

By the end of 2015, hydropower install capacity will amount to 290 million kw; as well as Wind power install capacity 100 million kw; Nuclear power install capacity 40 million kw; Solar power install capacity over 11 million kw; The coverage of solar water heating panels will be over 400 million square meters, biomass power install capacity 13 million kw, and 1000 gas distributed energy projects will be finished.

- 5、Carrying out Housing Projects



(四) International Cooperation

- Carry out positive dialogue with energy supply, consumption, transit countries and international organisations.
- Take an active part in global energy market, to be responsible for energy market stability and security together with other countries.



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谢谢！

Thanks!