

Energy Efficiency for Energy Security: with a focus on China

International Cooperation on Energy Efficiency:
working together for a low carbon economy
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Zha Daojiong, Professor
School of International Studies
Peking University
Email: zha@pku.edu.cn

Energy Security

- In times of war, sufficient energy for military maneuver
 - The very bare-bone core of the concept
 - Not a problem for China, a producer of coal & oil
- Security of supply
 - Experience of embargo and blockade
 - Low likelihood of future blockade
 - Energy independence not an option

Energy Security

- Protection of the environment
 - SO₂ a more tangible problem than CO₂
 - Diversification of energy mix: limited potential
- Low cost energy for households and industries
 - A necessary evil?
 - Lesson to draw from liberalizing food prices?
- Market-based energy pricing
 - Waiting for the right timing?
 - Leading to widening of growth gaps?

China's record in energy efficiency

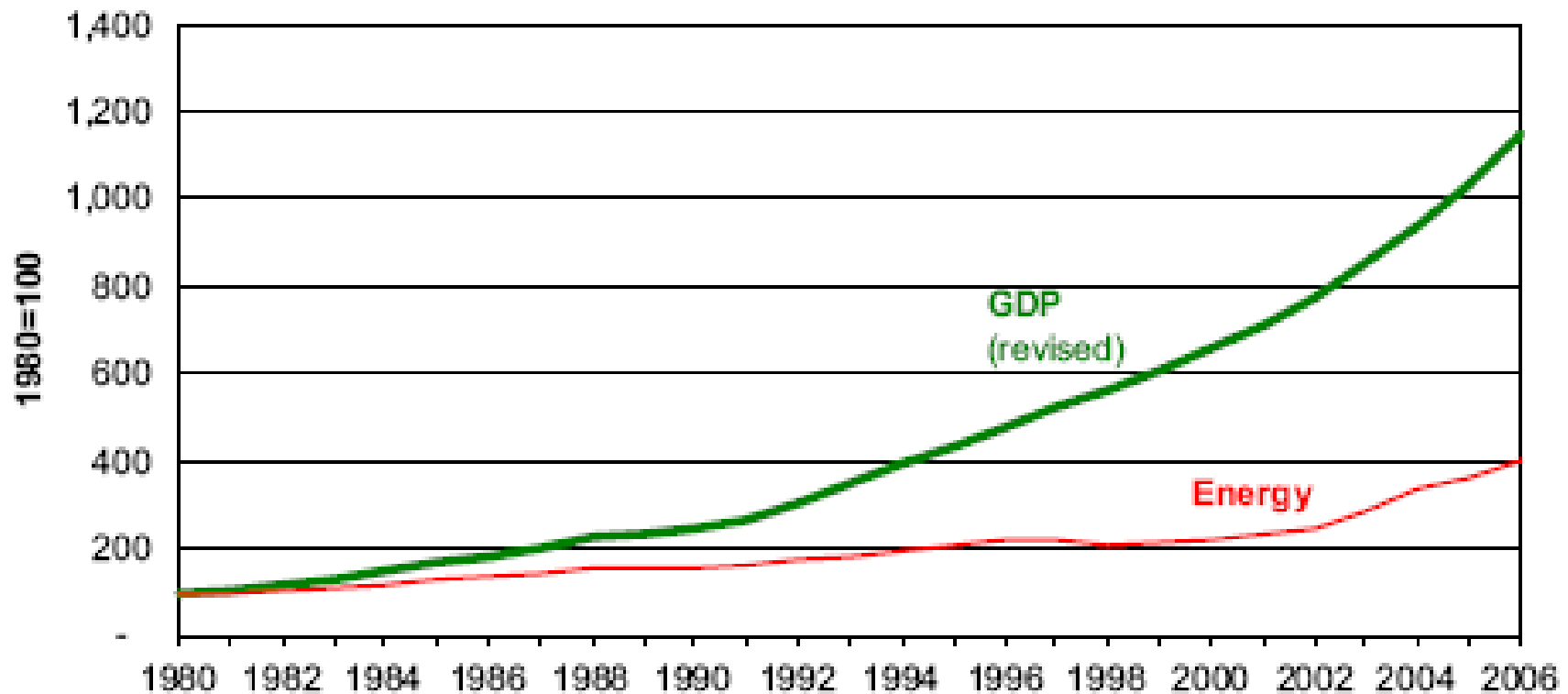


Fig. 1. Energy consumption and GDP growth in China, 1980–2000.

China's record

- Standard line of observation
 - Between 1980 and 2000, GDP quadrupled; while energy consumption only doubled
 - Energy conservation projects and institutions across the country, with international participation
 - From 2000 to 2007, growth of energy consumption on par with that of GDP
 - Latest gov't statistics: 2.65 Btce (3.27% down from 2006)

Energy Efficiency

- Declared target: reduce energy intensity of GDP by 20% from 2005-2010
 - Annual reduction of over 1.5 billion tons of CO₂ by 2010
- One praise-worthy policy: adjusting export tax rebate, since Oct. 2006
 - Targeting high energy-consuming, resource-intensive and environmentally-harmful products

International Cooperation

- For most of the 1980s, international energy cooperation with China focused on efficiency
 - Japan, the U.S., the EEC
- New issues complicating interactions
 - IPR in technology trade more prominent
 - Changes in government-energy industry relations
 - Consumer activism weak in a society of scarcity

International cooperation

- Basic rationale
 - Energy saved in China equals increase in global supply
- Recommended areas of action
 - Energy auditing: make it an industry
 - Solar power: support its spread throughout China
 - Schemes to reward imports of energy saving products from China
 - *Priority to projects & demonstration effect*