

Implications of China's Strategy on Energy Security

CHINA, INDIA AND EUROPE

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China's Energy Situation

China became a net oil importer in 1993

- Energy mix in China (in 2004)

Coal 66%

Oil 24%

Gas 3%

Hydro 4%

Nuclear 1.4%

Renewable 2.6%

- Oil demand & Supply (in 2005)

– 325 mts demands VS 183 mts product

- Oil imports:

In 1996

23mts, 10% of
total consumption

In 2005:

144mts, 44% of
total demand

By 2020:

500mts, 50% of
total demand

Renewable Energy in China

- China is the world's largest CO2 emitter, 90% of which comes from the coal-fired power plants
 - Renewable under developed
 - Electricity: 508,000mw power capacity
 - Thermal 75%
 - Hydro 22%
 - Nuclear 1%
 - **Renewable** (wind, biomass, solar, tidal, geothermal) 2%
- 10% by 2010 →
16% by 2020
- The law of renewable energy: came into effect in 2006
 - State subsidy to renewable energy
 - World Bank loan for wind mill

China's Energy Diplomacy

- **Evolution of China's "Energy diplomacy"**
 - Focusing on the energy "belt regions": Russia-C Asia-M East
 - Expanding new sources of supply: Venezuela, Africa, Canada
 - Stating more explicitly that foreign policy serves its energy security
 - Greater role of the military: safety of sea-lanes
- **But avoids irritating other powers, esp the USA**
 - Venezuela: China did not take initiative
 - Iran Nuclear Crisis: prefer a peaceful solution but not supporting Iran to own nuclear weapons

Map of China and Surrounding Area



Source: Central Intelligence Agency

Top 10 Oil Suppliers for China

| State and Region | 1999 | 2001 | 2005 |
|------------------|-------|-------|--------|
| Saudi Arabia | 6.8% | 14.6% | 17.5% |
| Iran | 9.6% | 18.0% | 11.2% |
| Oman | 13.7% | 13.5% | 8.5% |
| Yemen | 11.3% | 3.8% | 5.5% |
| Russia | 1.5% | 2.9% | 8.8 % |
| Angola | 7.8% | 6.3% | 13.7 % |
| Sudan | 0.7% | 8.3% | 5.2% |
| Congo | 1.0% | 1.1% | 4.4% |
| Equator Guinea | 2.2% | 3.6% | 3.0% |
| Indonesia | 10.8% | 4.4% | 3.2% |

Problems Facing China's Energy Security

- Lack of a coherent energy policy
 - No Energy Ministry
 - Energy Leading Small Group and Office established in 2005, but the effects remain to be seen
- Heavy reliance on coal: environmentally unsustainable
- Vulnerable to high oil price: 1bn b/a oil imports
- Energy inefficiency: 10-30% below the world average
- Sea-lanes communication: 80% oil-imports via the Malacca Strait

Implications of China's Policy on Energy Security

Oil Supply vs Geopolitics

- Middle East: oil supply & regional stability - USA
- Central Asia: oil supply & geopolitics – USA + Russia
- Africa: oil supply; Taiwan & political influence - Europe
- Latin America: supply of natural resources – USA
- East Asia: oil & territorial disputes
 - South & East China Seas – Japan + ASEAN
 - Taiwan – Japan + USA

Implications of China's Policy on Energy Security

China's "peaceful Development"

- Energy cooperation with other powers?
 - Nuclear: 32 new plants in the next 15 yrs - France, US or Russia?
 - Energy efficiency: with Japan & US
 - Clean-coal technology: with S Africa & Japan
- Chinese investment: *good or bad for the int'l oil market?*
 - China's overseas oil exploration may be good economically
 - But such activities are at the cost of its int'l reputation
 - What should China do to convince the world of its "peaceful rise"?

Thank You

*Questions and Comments
are Welcome*