Asian NOCs in the Western Hemisphere Investments and Geopolitics

2007 Asian Energy Security Conference

The Rise of Asia's National Oil Companies:
Competitive Issues and Geopolitical Implications

May 3-4, 2007 Washington D.C

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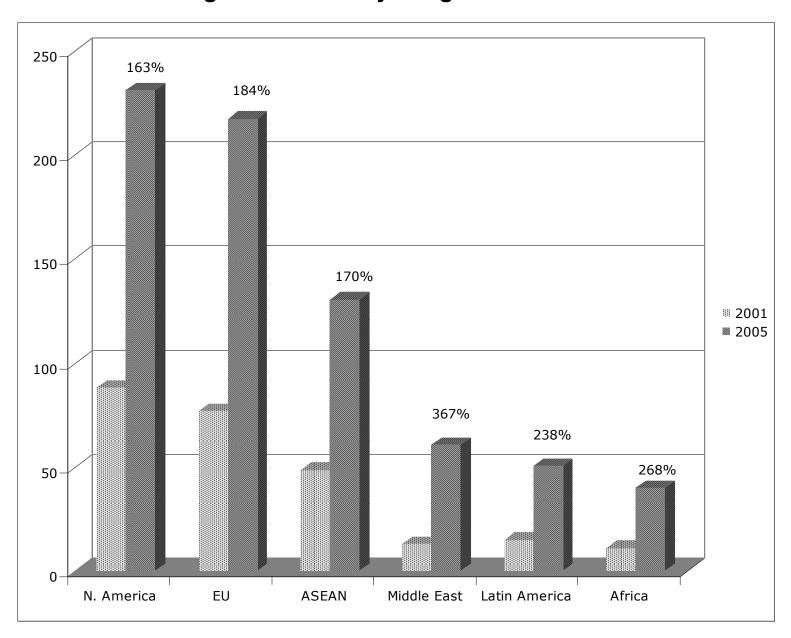
I. China, India & the Western Hemisphere

1. The two countries' energy situation

2. The global context

3. China's fast growing ties with the region

China's trade growth with major regions of the world 2001-2005



The Bilateral Trade Statistics between China and Venezuela 2000-2005 (100 million US Dollars)

Year	Total amount	China's Export	Venezuela's Export
2000	3.51	2.56	0.95
2001	5.89	4.43	1.46
2002	4.78	3.33	1.45
2003	7.41	1.99	5.42
2004	13.34	5.96	7.39
2005	21.418	9.078	12.34

(Sources: China Customs)

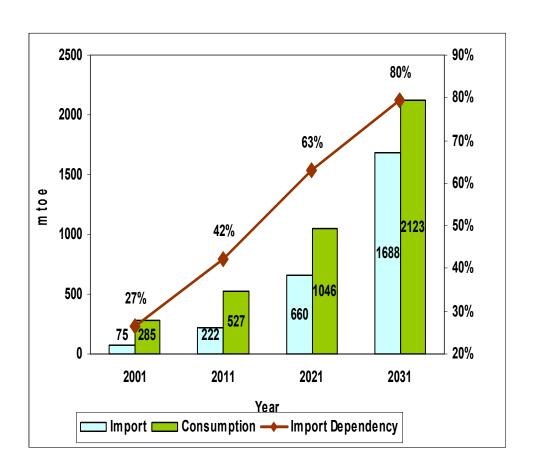
China's engagement:

- In 2004, 49 percent of China's total foreign investment went to Latin America
- China's trade with Latin America increased 600 percent from 1993 to 2003 and reached about \$50 billion by early 2005
- Business deals between China and Latin American countries have numbered up to 400 in the past few years
- Top Chinese leaders frequently visit the Hemisphere: Jiang Zemin, Wen Jiabao, Hu Jintao, Zeng Qinghong, Li Changchun
- Strategic partnerships: Brazil, Venezuela, Mexico, Argentina (Cuba, Canada)

Increase in India's Energy Needs – an Inevitability

- 6th largest in terms of total commercial energy use
- Low per capita commercial energy consumption
- Only 55% of households have access to electricity
- Economic growth, structural changes, development goals & electricity to all by 2012
 - → rapid increase in energy needs

India: Energy Security: High Import Dependency - BAU



Fuel Import in 2031

❖Coal import: 1438 MT

➤~4 times of consumption in 2001

➤ Import dependency: 78%

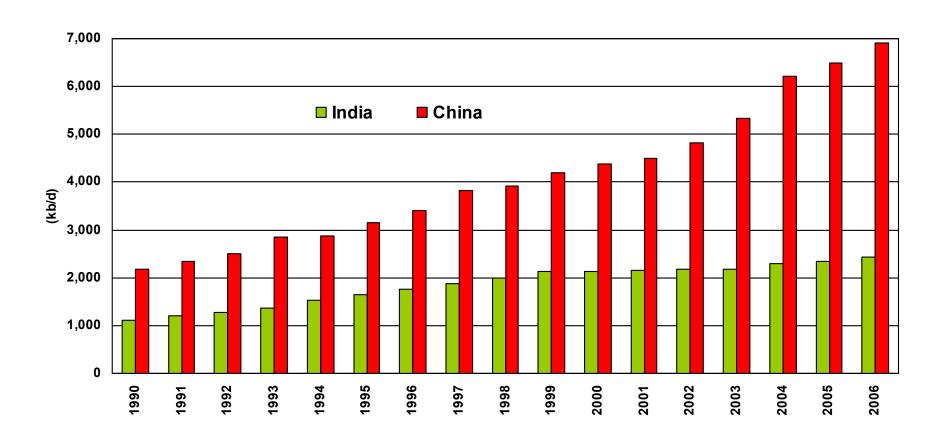
❖Oil import: 680 MT

➤ Import dependency: 93%

❖Gas import: 93 BCM

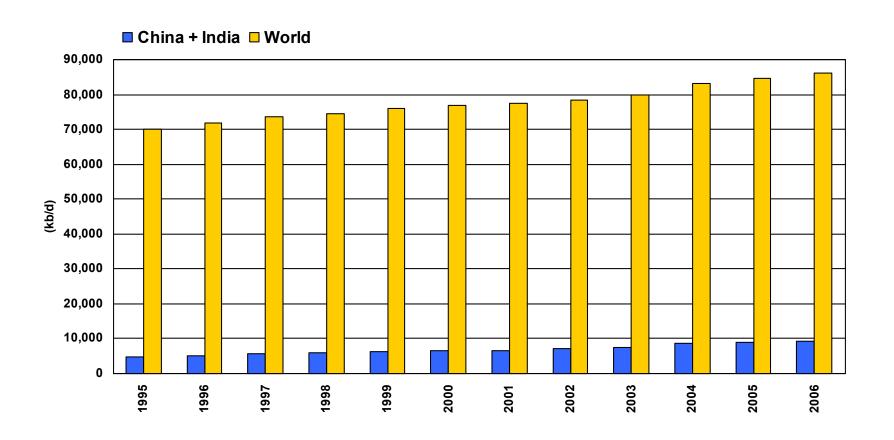
➤ Import dependency: 67%

Oil Demand Compared

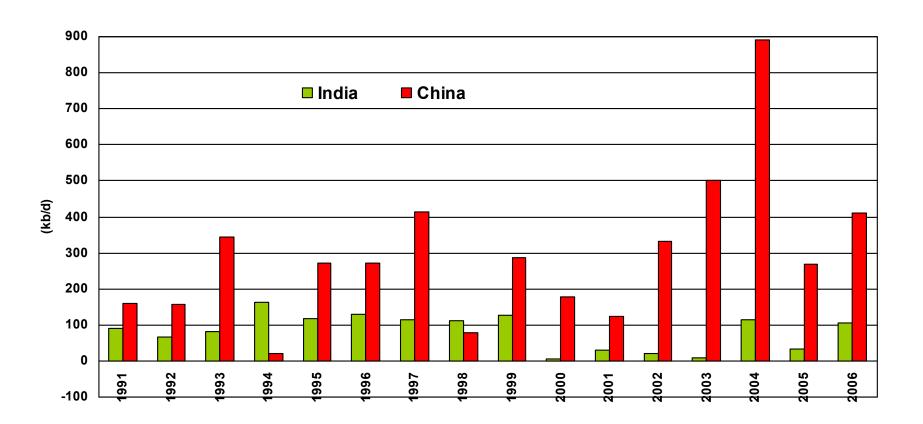


FACTS Global Energy

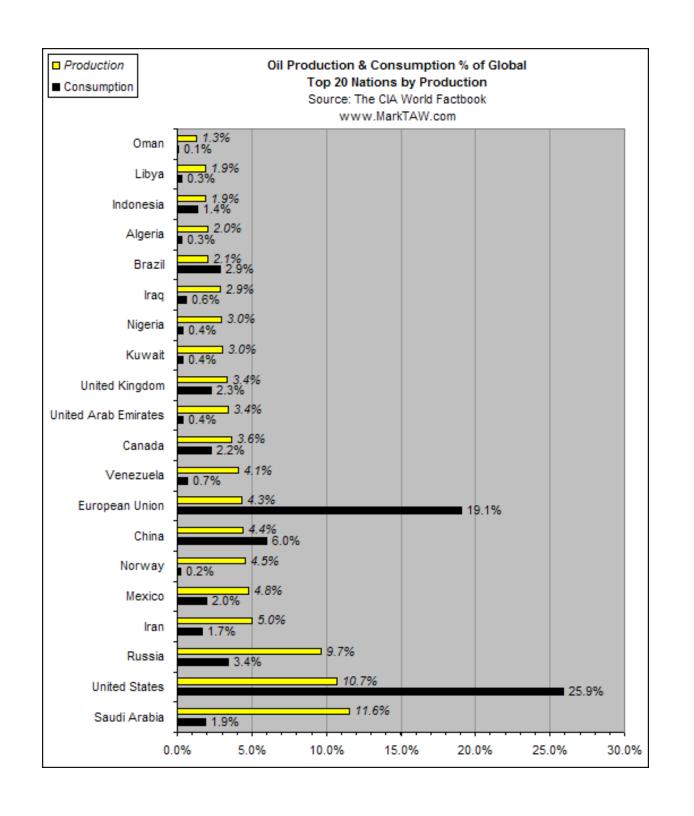
Oil Consumption: China, India and the World

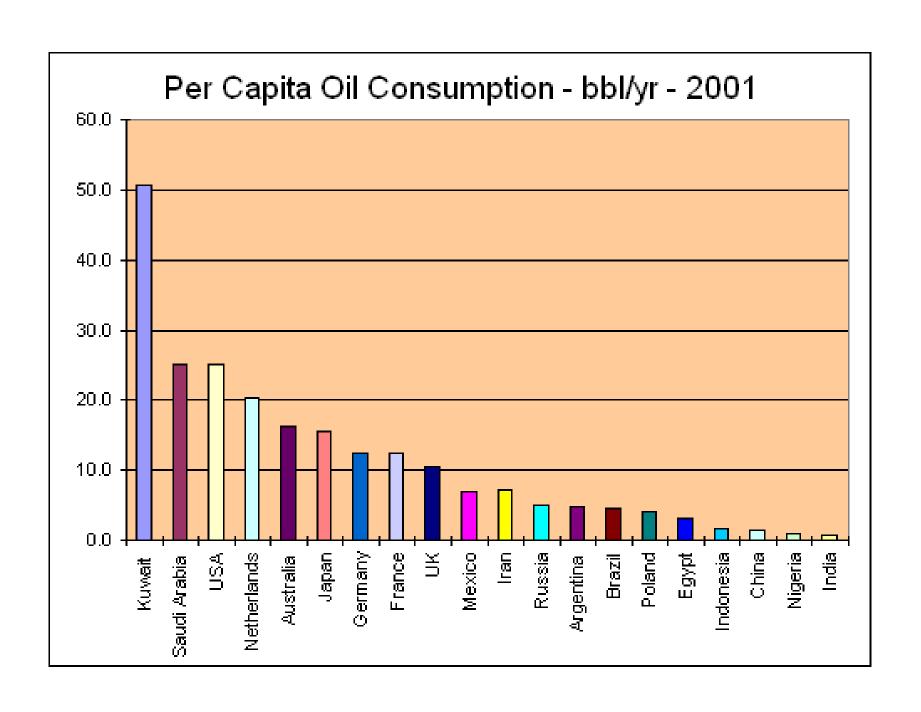


Oil Demand Growth Compared

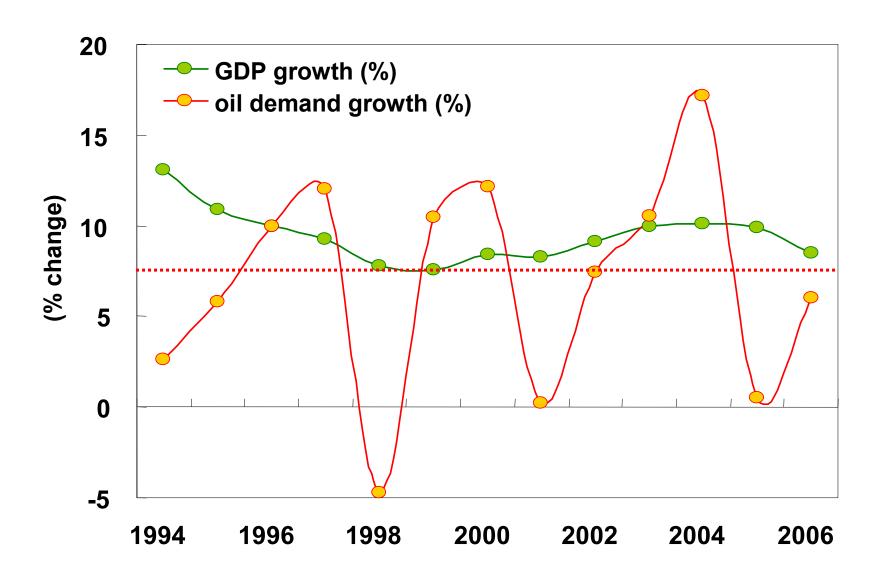


FACTS Global Energy





Volatility in China's oil demand growth

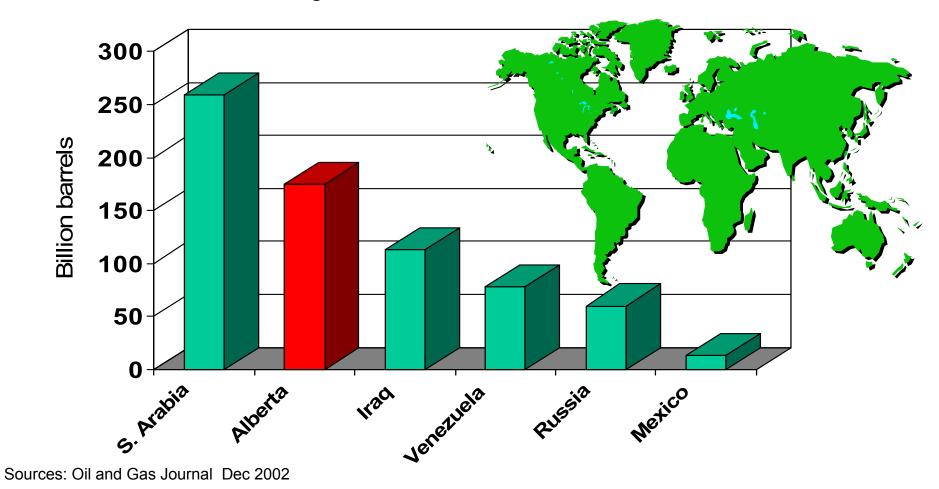


II. Chinese & Indian NOCs in the Hemisphere

- 1. Chinese NOCs in Canada
- 2. China & the US: the lessons of the Unocal
- 3. China in Latin America
- 4. India's engagement with the region & China

World Crude Oil Reserves

Ranked as the second largest crude oil reserve in the world, next to Saudi Arabia.



Alberta's Oil Sands

-- With total output of bitumen projected at 3.6 million barrels per day by 2020, Alberta's objective is to become a major refining and petrochemical hub that would produce and export a significant portion of its oil sands output as high value-added finished petroleum products around the world, rather than exporting only lower value raw materials. Attraction of investment in downstream energy sectors is a priority for the Alberta government.

Alberta's Oil Sands

- -- International interest is increasing in Alberta's oil sands, particularly since the *Oil and Gas Journal* officially recognized oil sands reserves, ranking Canada's proven crude oil reserves second only to Saudi Arabia (Dec. 2002).
- -- From 1996 to 2004, \$35 billion has been spent in developing Alberta's oil sands. Investment is projected to be approximately over \$100 billion for the period of 2005 2020.

Timeline of Canada-China relations

- 1970 Establishment of diplomatic relations
- 1994 Team Canada visiting China (nuclear cooperation)
- 1996 NRCan Minister visiting China
- 2003 Two CANDU 6 Nuclear reactors delivered to China
- 2004 Alberta Premier calling for Chinese investment
- 2004 NRCan NDRC Working Group first session
- 2004 Canada-China Energy Cooperation Conference (U of A)
- 2005 Canada-China Statement on Energy: Cooperation in the 21st Century
- 2005 1st China-Canada Energy Cooperation Conference (Beijing)
- 2005 Canada-China Strategic Partnership
- 2006 2nd China-Canada Energy Cooperation Conference (Beijing)
- 2006 China's NDRC Delegation to July PNWER Summit
- 2006 Energy Council leadership delegation to China

Chinese firms coming to Canada

Fall, 2004 -- China Minmetals tried to buy Noranda

2004 -- China became Canada's second largest trading partner

April, 2005 -- CNOOC took 17% stake in MEG with \$150 mil.

April, 2005 -- PetroChina & Enbridge Gateway pipeline MOU for \$2.5 bil.

June, 2005 -- Sinopec took 40% holding in Synenco with \$149.7 mil.

Summer 2005 -- CNOOC failed in its bid to buy Unocal

Sept. 2005 -- President Hu visiting Canada, "Strategic Partnership" formed

Sept. 2005 -- Andes Petroleum got EnCana's Ecuador assets for US\$1.42 bil.

Oct. 2005 -- CNPC bought PetroKazakhstan for US\$4.18 bil., largest ever

Dec. 2005 -- CNPC & ONGC got 37% of Petro-Canada's Syrian assets for \$676 mil.

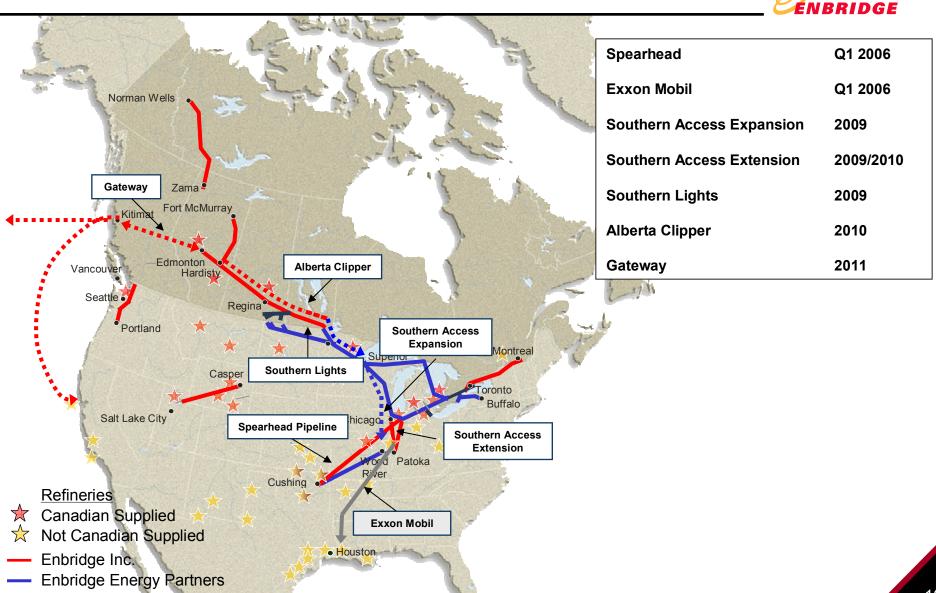
Dec. 2006 - CITIC purchase Nations Energy Kazakhstan asset for \$1.2 bil.

Canada-China Energy Relations

- 1. Canada as an opportunity for China -- still the case
- 2. Much talk, little action -- less talk, some action
- 3. China is yet to strike a major deal -- not yet
- 4. Strategic concerns -- stronger today
- 5. Canada's market-oriented response -- sort of
- 6. Canadian export to Asia contributes to security

Liquids Pipelines Expansion and New Market Access



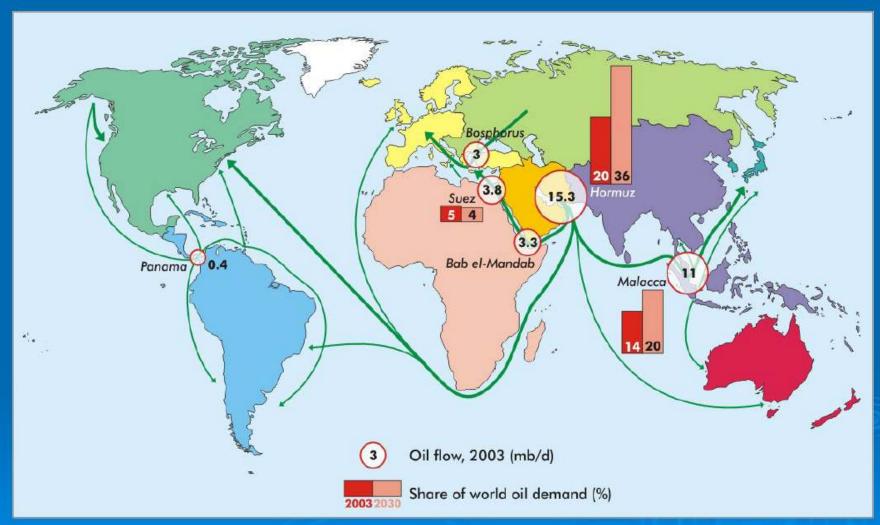


Liquids Pipelines Incremental Disposition Summary





Oil Flows & Major Chokepoints: The "Dire Straits"



Oil flows through the Malacca Straights will roughly triple by 2030.
WEO 2004. Will China continue to focus on overseas assets?

Canadian oil export to Asia:

The amount of crude oil & products which pass the Straits of Malacca will increase from 9.2 mb/d in 2003 to 12.8 mb/d in 2115.

Canadian export to Asia will reduce significant amount of oil passing through S of M, which will mitigate congestion from 4,687 VLCC vessels/yr of passage to 3,987 vessels/yr.

(AED/IEEJ preliminary finding)

Oil Imports of Four Asian Countries (by Region)

Unit: Million b/d

	2004	2006 1 st half	Middle East dependence	Africa dependence
Japan	4.19	4.16	88%	4%
China	2.46	2.57	49%	29%
Korea	2.23	2.26	78%	5%
India	2.03	1.91	61%	24%

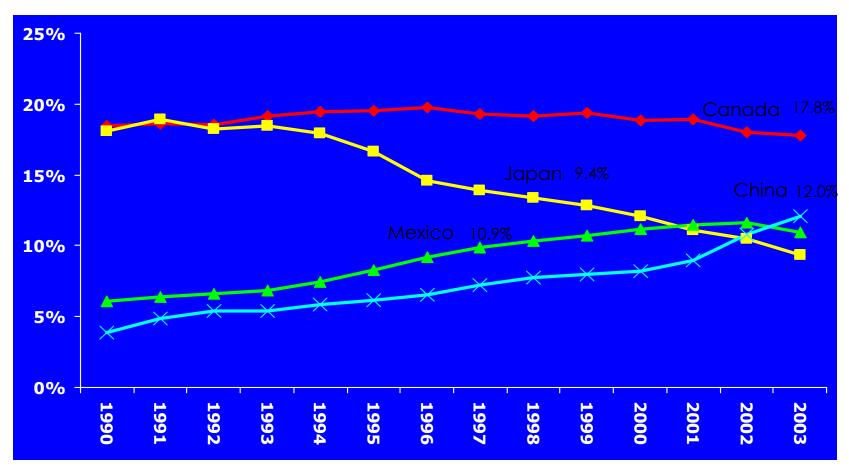
Source: PIW, August 15, 2005

Note: China has imported 2.93 million b/d of crude oil and 0.7 million b/d of petroleum products during the first half of 2006. China's major sources for crude oil are Angola, Saudi Arabia, and Russia.

Chinese firms coming to the US

Participation in the US market

(% according to total imports)



Source: U. S. Census Bureau

CNOOC's bid on Unocal: lessons

1. Short term: Backlash against perceived US hypocrisy

2. Medium term: Investment flow into troubled states

3. Long term: Impediment to China's NOC reform along the market logic

Beijing has put more emphasis on Latin American countries

More emphasis on Latin American countries

49% of China's overseas investment went to L.A. in 2004

China's trade with L.A. increased 600% from 1993-2003

400 business deals between China & L.A. in the past few years

Promised to double trade volume from \$50 bil. to \$100 bil. by 2010

Brazil in China's largest trade partner in L.A.

China has replaced Japan as Mexico's 2nd largest trading partner

China & India – L.A. energy relations have developed rapidly in recent years

Venezuela now supplies China with about 200,000 bpd

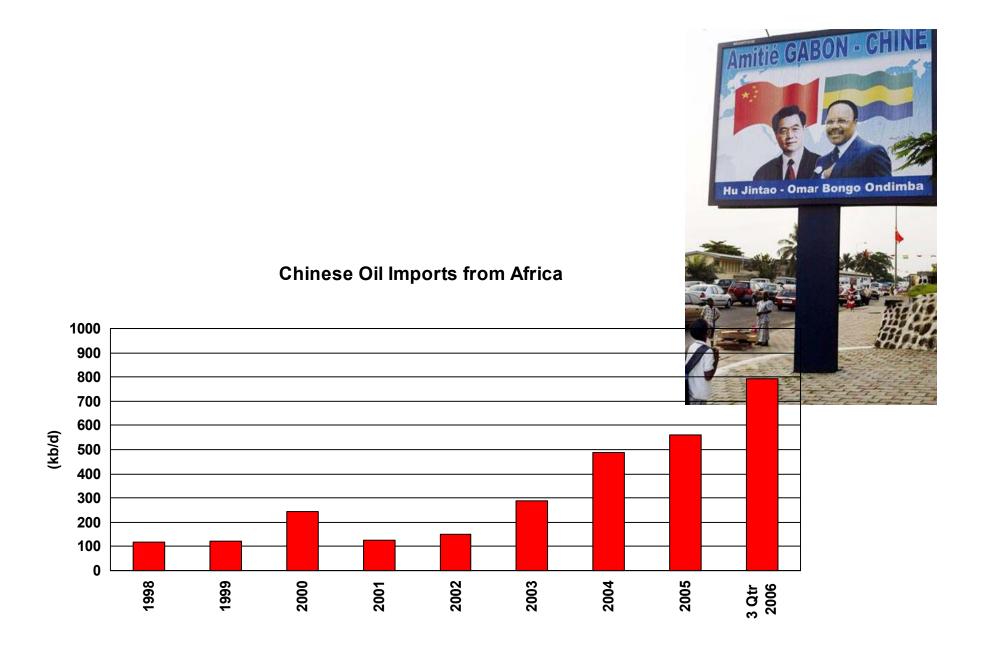
Brazil & China have signed over \$2 bil. In energy related projects

CNPC spent \$1.2 bil. to purchase EnCana's assets in Ecuador

Argentina will get \$25 bil. from China for railways & energy

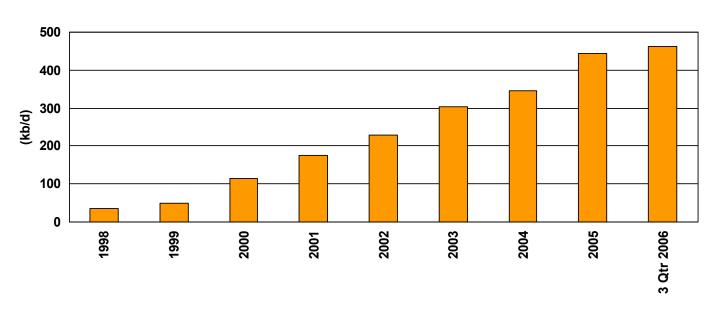
India & Venezuela has extensive energy relations as well

Venezuela had shipped 2 mil. barrels of oil to India by early 2006





Chinese Oil Imports from Saudi Arabia





Chinese Oil Imports from Venezuela

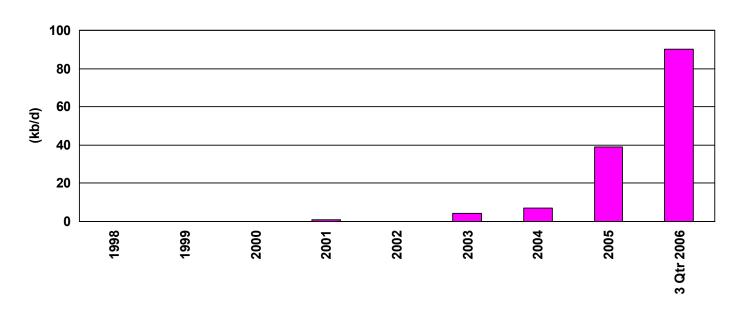


Figure 3.1: Chinese Crude Oil Imports by Source, 1992

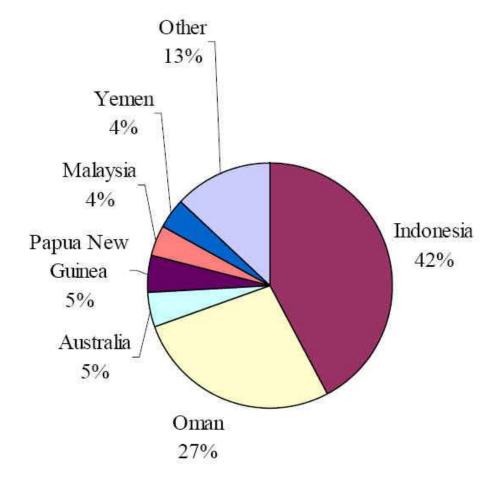
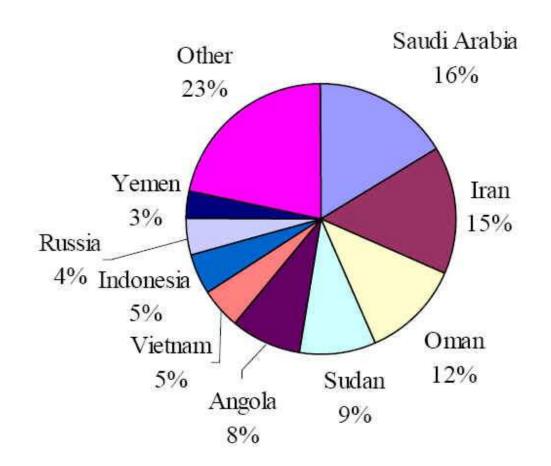


Figure 3.2: Chinese Crude Oil Imports by Source, 2002



China's Crude Imports by Source, 2005

Source	Volume (kb/d)	Share (%)	Source	Volume (kb/d)	Share (%)
Saudi Arabia	443.6	17.5	Angola	349.3	13.7
Iran	285.5	11.2	Sudan	132.4	5.2
Oman	216.7	8.5	Congo	110.7	4.4
Yemen	139.6	5.5	Equat. Guinea	76.8	3.0
UAE	51.4	2.0	Libya	45.2	1.8
Kuwait	32.9	1.3	Nigeria	26.2	1.0
Iraq	23.4	0.9	Algeria	16.3	0.6
Qatar	6.9	0.3	Chad	11.0	0.4
Middle East Total	1,199.8	47.2	Egypt	1.6	0.1
Indonesia	81.7	3.2	Africa Total	769.4	30.3
Vietnam	63.9	2.5	Russia	255.5	10.1
Thailand	23.8	0.9	Kazakhstan	25.8	1.0
Brunei	10.0	0.4	Venezuela	38.6	1.5
Malaysia	7.0	0.3	Brazil	26.9	1.1
Australia	4.6	0.2	Argentina	18.2	0.7
The Philippines	2.1	0.1	Norway	10.4	0.4
Mongolia	0.4	0.0	Ecuador	1.9	0.1
Asia-Pacific Total	193.7	7.6	Guatemala	1.5	0.1
			Europe/Other Total	378.7	14.9
			TOTAL	2,541.7	100.0

China's Crude Imports by Source, January-September 2006

Source	Volume (kb/d)	Share (%)	Source	Volume (kb/d)	Share (%)
Saudi Arabia	481.3	16.5	Mauritania	14.5	0.5
Iran	345.6	11.8	Gabon	21.5	0.7
Oman	244.6	8.4	Chad	13.3	0.5
Yemen	104.3	3.6	Nigeria	8.3	0.3
UAE	59.5	2.0	Algeria	6.9	0.2
Kuwait	55.3	1.9	Cote d'Ivoire	3.8	0.1
Iraq	20.6	0.7	Egypt	1.9	0.1
Qatar	8.9	0.3	South Africa	1.2	0.0
Middle East Total	1,320.1	45.2	Africa Total	906.2	29.2
Indonesia	48.8	1.7	Russia	334.5	11.4
Thailand	25.1	0.9	Venezuela	90.1	3.1
Vietnam	19.5	0.7	Kazakhstan	50.1	1.7
Brunei	11.2	0.4	Brazil	42.7	1.5
Australia	8.6	0.3	Peru	21.3	0.7
Malaysia	3.0	0.1	Argentina	21.9	0.7
The Philippines	1.0	0.0	Norway	7.5	0.3
Mongolia	0.9	0.0	Guatemala	2.7	0.1
Asia-Pacific Total	118.1	4.0	Colombia	2.5	0.1
Angola	487.5	16.7	Cuba	1.5	0.1
Congo	113.9	3.9	Ecuador	1.3	0.0
Equat. Guinea	100.6	3.4	Canada	1.2	0.0
Libya	79.9	2.7	Europe/Other Total	577.3	19.8
Sudan	52.9	1.8	TOTAL	2,921.7	98.2

III. Implications for the US

Three perspectives

Strategic thinking

Opportunities

North America-China Energy Conference

Strategic questions

- 1. Ignore the dragon?
- 2. Contain the dragon?
- 3. Slay the dragon?
- 4. Lure the dragon?
- 5. Dance with the dragon?

Opportunities

- 1. China & India as the largest potential market
- 2. Oil, gas, nuclear, renewable, alternative
- 3. New technologies for leap-frogging
- 4. Carbon credit, CDM
- 5. Environment
- 6. Easing the labor shortage of producers?

North America-China Energy Cooperation Conference

June 20-22, 2007 Edmonton, Alberta

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