Asia-Middle East Energy Trade and Investment Trends

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"The New Silk Road: The Growing Asia-Middle East Energy Nexus"

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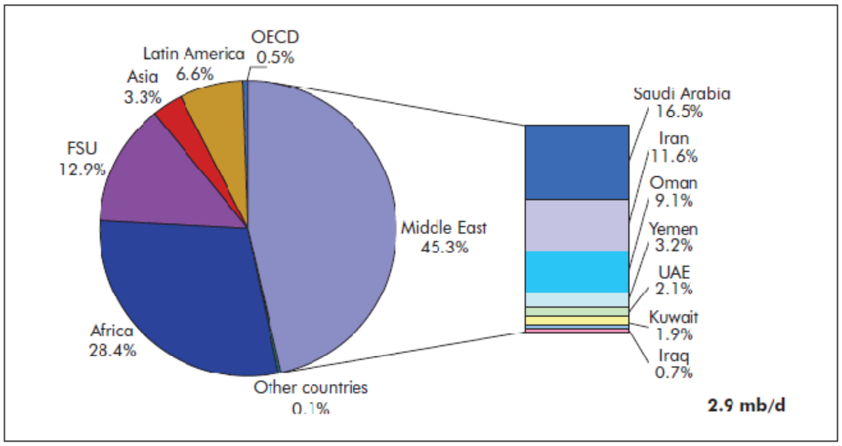
The New Energy Silk Road

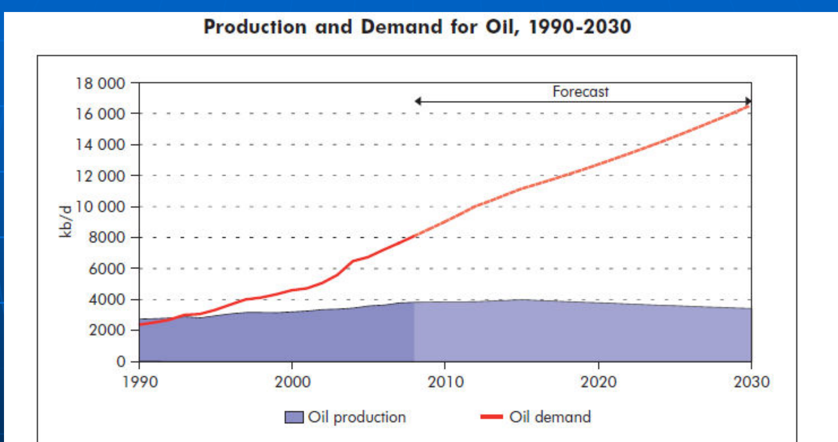
- Rapidly rising oil and gas demand in developing Asia and rising Asian dependence on Middle East oil and gas exports
- Asian NOC growing investments in oil and gas production in the Gulf
- Growing cross-investments by Gulf producer NOCs downstream in Asia
- The shifting global geopolitical and economic context: rise of China, end of US geopolitical primacy

China Crude Oil Imports 2006



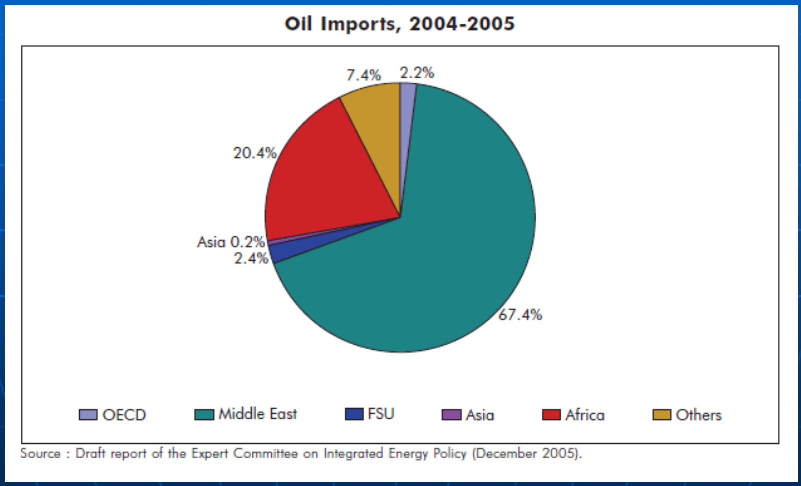
Sources: China Oil, Gas and Petrochemicals.

China's Long-Term Oil Balance

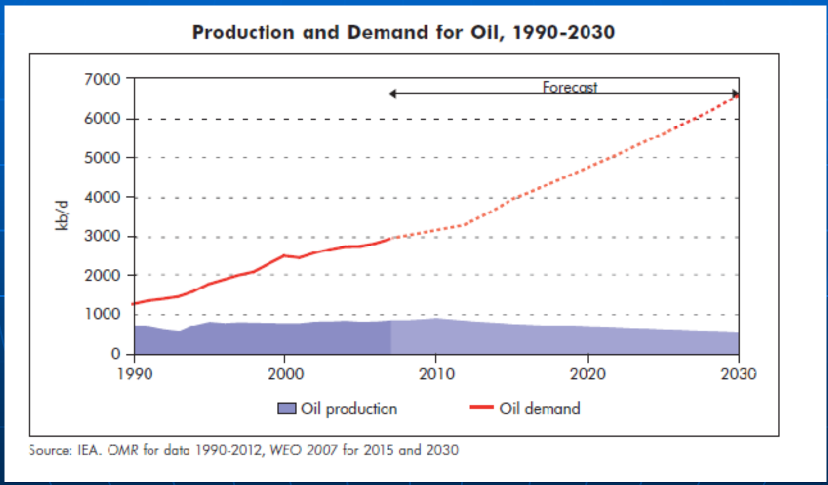


Source: IEA. OMR for data 1990-2012, WEO 2007 for 2015 and 2030

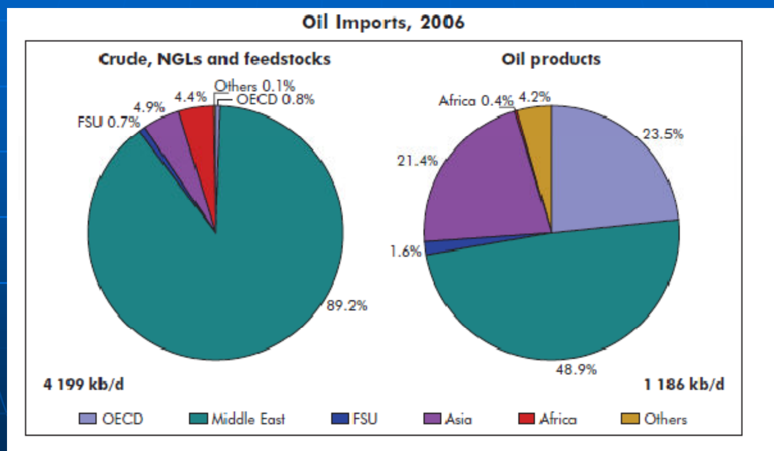
India's Oil Import Sources



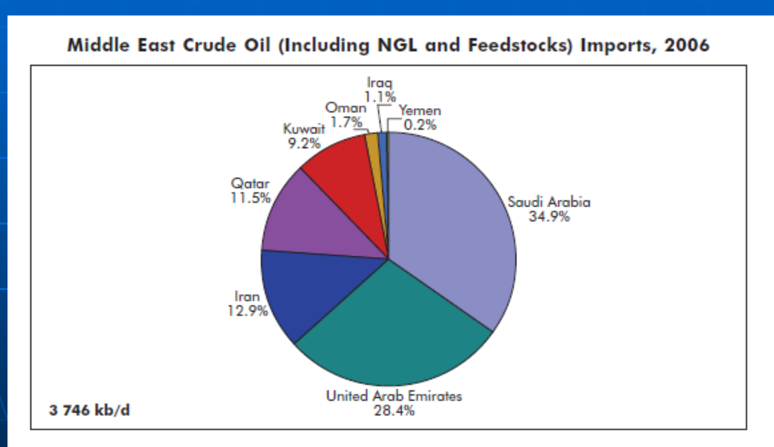
India's Long-Term Oil Balance



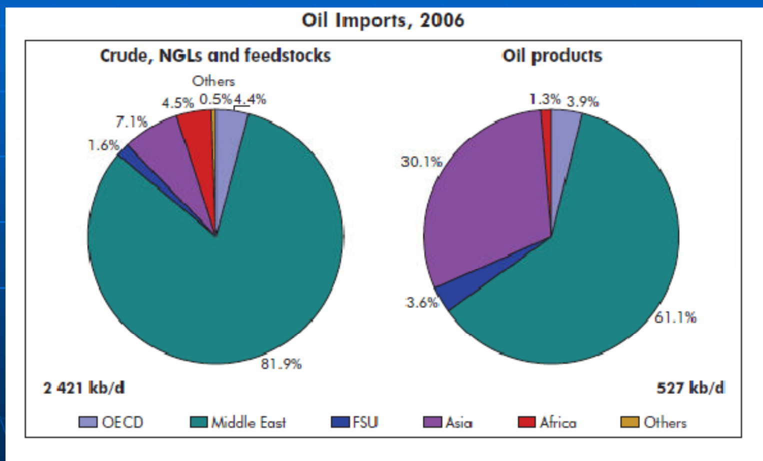
Japan's Oil Imports



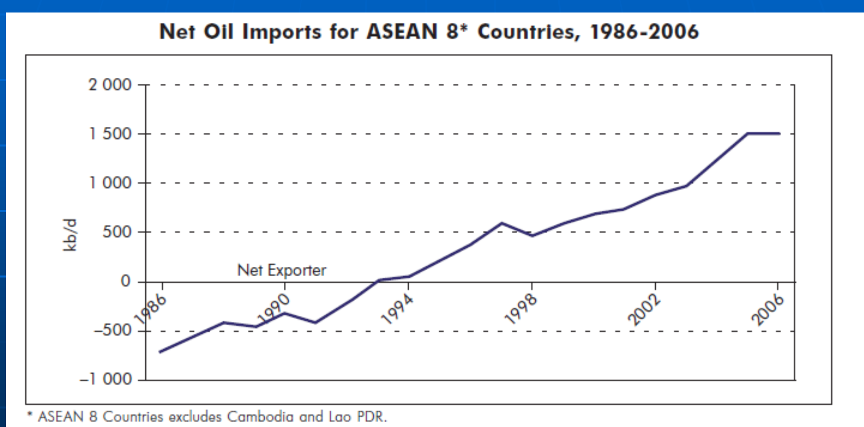
Japan Middle East Oil Imports



Korea's Oil Imports



ASEAN Oil Import Demand Growth



ASEAN 8 Oil Balances

Oil Statistics, 2006

Country	Production kb/d	Demand kb/d	Net imports kb/d	Refining capacity kb/d
Brunei Darussalam	220.2	13.7	-	8.6
Cambodia	-	-	-	-
Indonesia	1 061.9	1 214.6	152.6	992.7
Lao PDR	-	-	-	-
Malaysia	749.8	520.8	-	544.8
Myanmar	21.9	42.0	20.2	57.0
The Philippines	25.0	343.3	318.3	333.0
Singapore	-	920.0	920.0	1 336.6
Thailand	314.2	932.0	617.8	729.1
Viet Nam	367.4	280.9	-	-
ASEAN	**2 760.5**	**4 267.3**	**1 506.8**	**4 001.9**

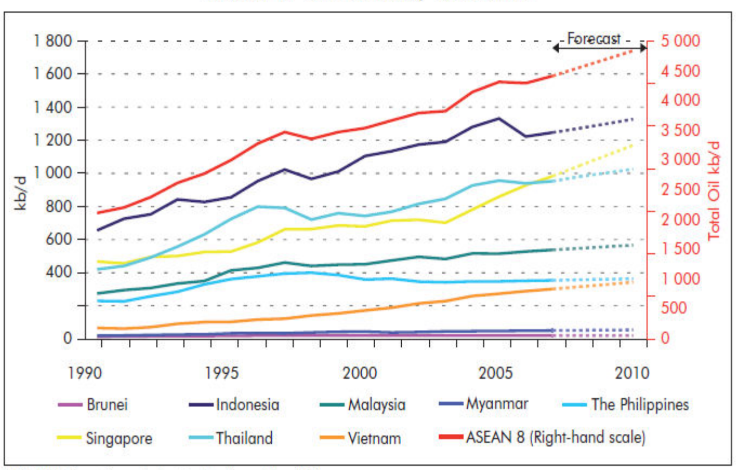
Oil Statistics, 1990-2010

	1990	1995	2000	2005	2006	2010
Production (kb/d)[1/]	2 451.5	2 808.2	2 848.4	2 783.6	2 760.5	1 952.4
Demand (kb/d)[2/]	2 091.4	2 980.7	3 514.6	4 291.3	4 267.3	4 811.2
Net imports (kb/d)	–360.0	172.4	666.2	1 507.7	1 506.8	2 858.8
Import dependency (%)	*	5.8	19.0	35.1	35.2	59.4
Refining capacity kb/d[3/]		**2 850.0**	**3 918.0**	**3 975.9**	**4 001.9**	

1/ Brunei, Indonesia, Malaysia, Myanmar, Philippines, Thailand and Viet Nam.
2/ ASEAN minus Lao PDR and Cambodia.
3/ ASEAN minus Lao PDR, Cambodia and Viet Nam (no Brunei in 2000 data).

ASEAN Oil Demand Growth

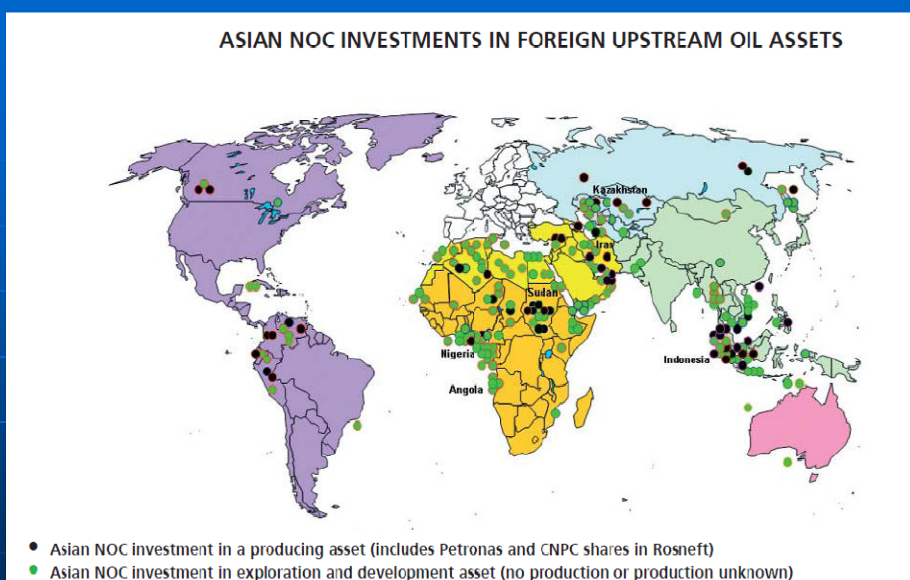
ASEAN 8* Oil Demand, 1990-2010



*ASEAN 8 Countries excludes Cambodia and Lao PDR.

Energy Investment and Trade Follow Demand

- Growing scale of crude supply contracts from Saudi, Iran, UAE, Iraq
- Large LNG contracts and investments by Japan, Korea (Qatar, UAE, Oman, Yemen); with China, India as new fastest growing potential customers (Qatar, Iran)
- Japan and Korea NOCs have long pursued upstream oil investments in the Middle East with very limited success
- China's NOCs rapid emergence, new efforts by Indian NOCs have intensified the competitive upstream oil investment environment
- Caught between rising dependence, extremely limited access to ME resources
- All trying to diversify imports away from Gulf, but resource base will dictate growing importance of Gulf supplies



Source: Mitchell & Lahn,Chatham House 2007

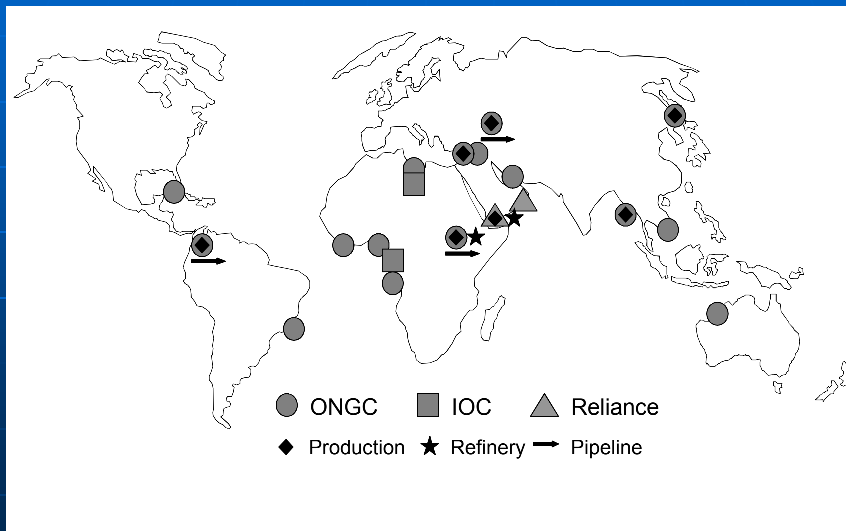
What are the Geopolitical Implications of the growing Asia-Middle East Energy Nexus?

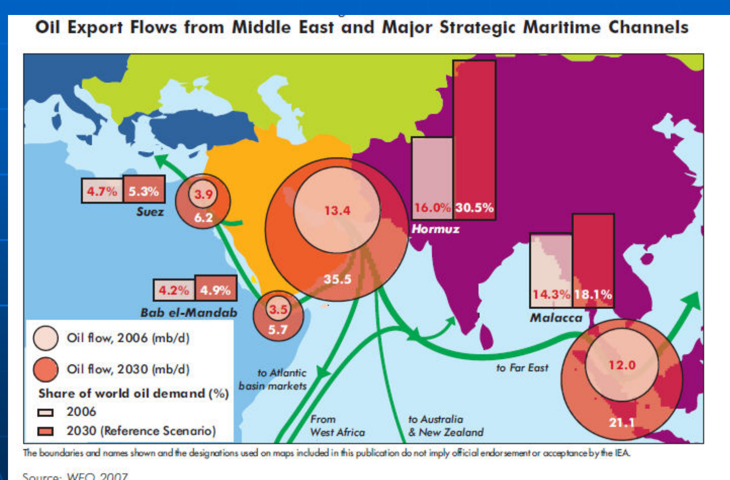
- US long-term role as energy and strategic superpower in the Gulf?
- Global oil markets, resource access?
- The US-Saudi strategic alliance?
- Western policy toward Iran?
- China's rising global power, influence?
- India's regional role?
- US-China relations?
- Key Asian rivalries?
  - China-Japan
  - China-India

Japan and Korea

- Japan: raise Japan controlled oil from 15% to 40%
  - Strengthen energy diplomacy: aid, technical assistance, JBIC loans, etc.
  - Qatar, UAE account for 25% of LNG imports
- Korea: raise Korean controlled oil from 4% to 15%
  - Strengthen energy diplomacy: aid, technical assistance, loans, etc.
  - Qatar, Oman account for 45% of LNG imports

India's national oil companies investments span 19 countries on five continents.



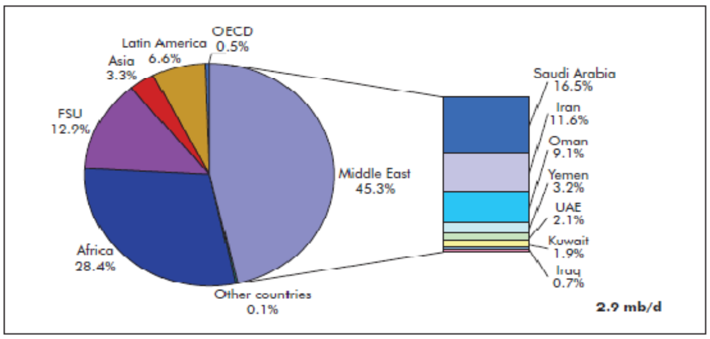


China's Oil Supply Demand Balance and Imports

Oil Statistics, 1990-2010

	1990	1995	2000	2005	2006	2010
Production (kb/d)	2 768.1	2 986.5	3 228.8	3 617.3	3 674.0	3 893.7
Demand (kb/d)	2 253.0	2 283.0	4 553.0	6 693.2	7 157.0	8 975.2
Net imports (kb/d)	–515.1	296.5	1 324.2	3 075.9	3 483.0	5 081.5
Import dependency (%)	*	9.0	29.1	46.0	48.7	56.6
Refining capacity kb/d		**2 867.0**	**4 347.0**	**4 649.6**	**6 246.0**	**8 762.0**

Crude Oil Imports, 2006



Sources: China Oil, Gas and Petrochemicals.