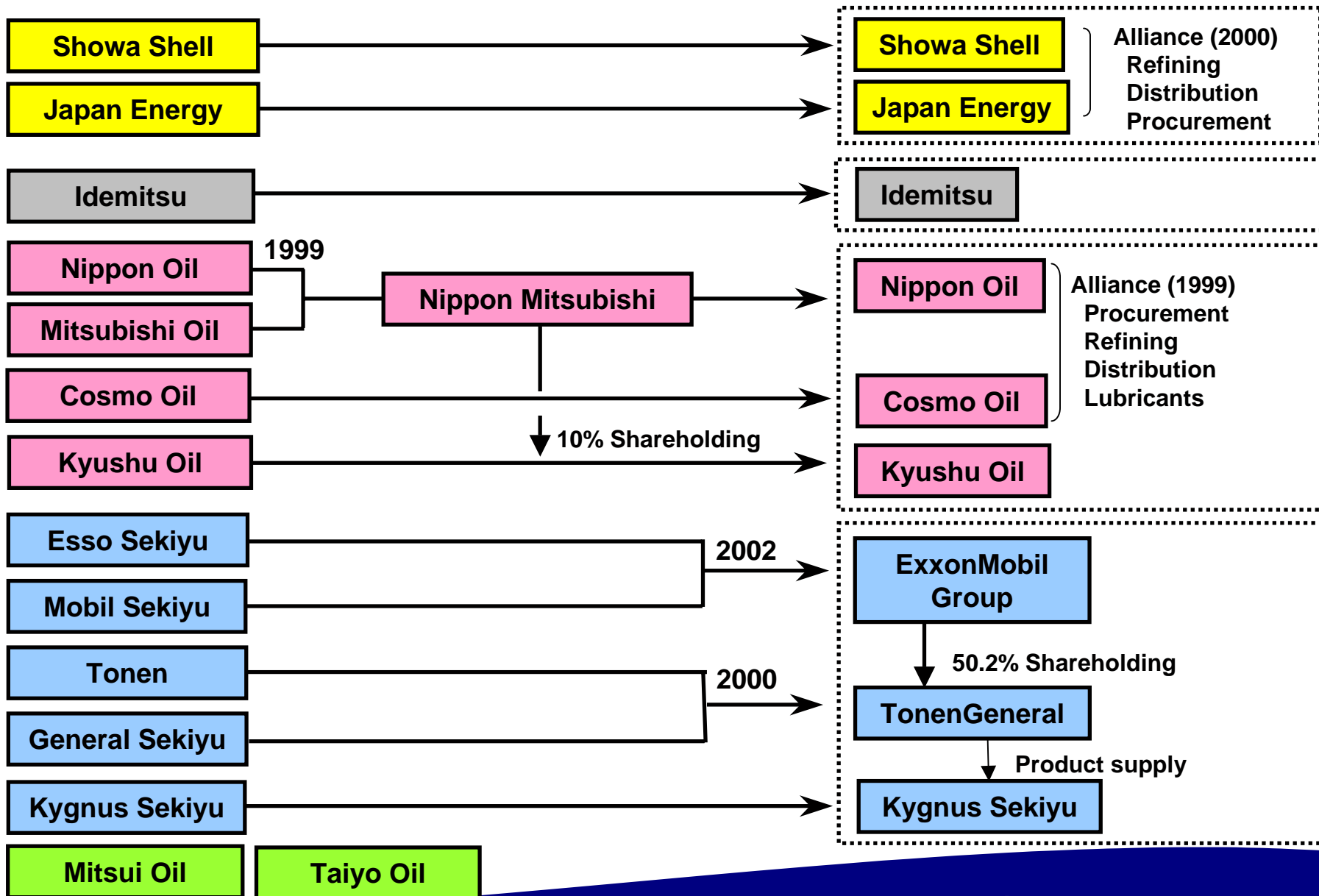


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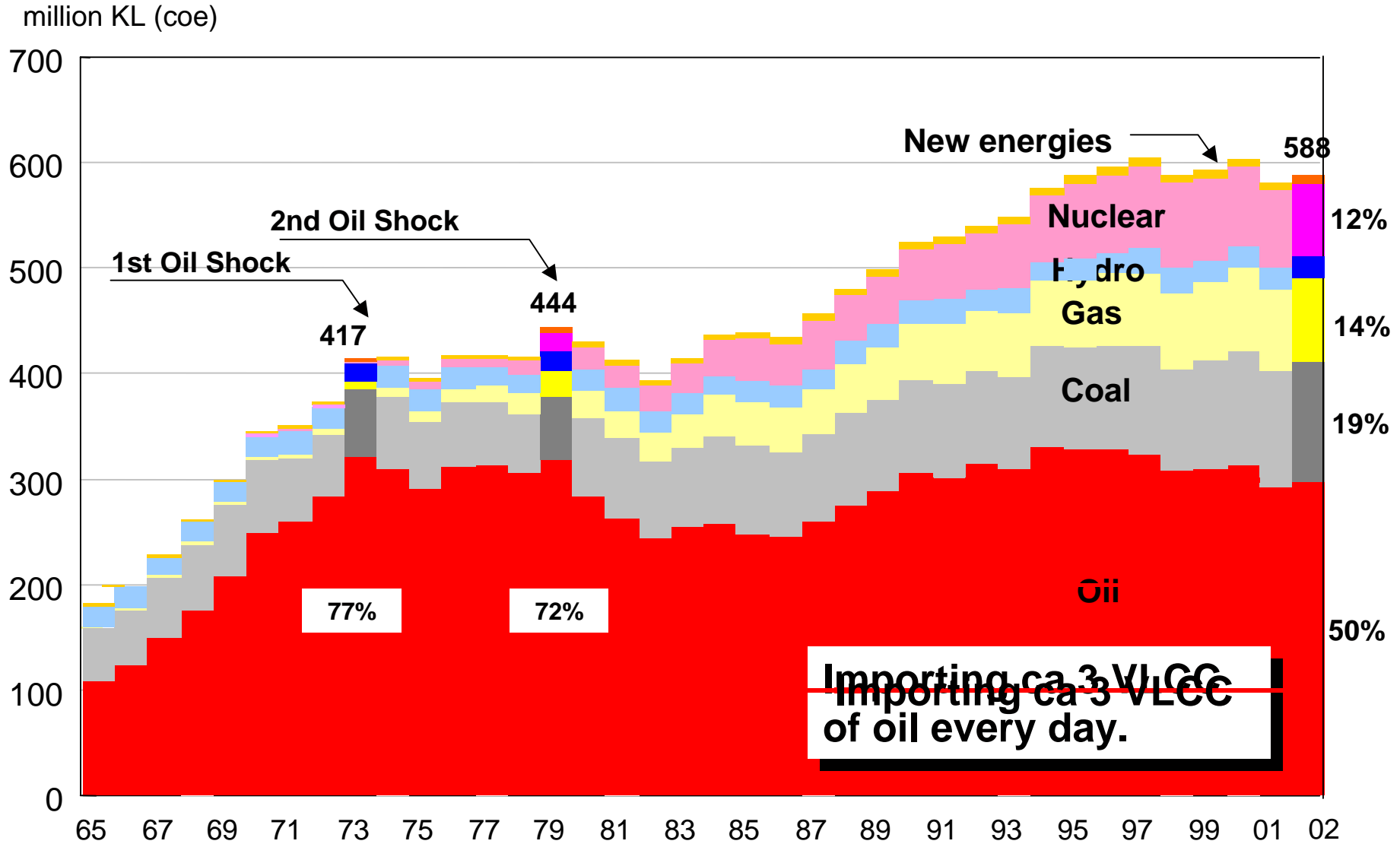
**Asia's Oil Supply and Demand
and Energy Security**

**Haruyuki Niimi
Chairman
Showa Shell Sekiyu KK**

Japanese Oil Industry

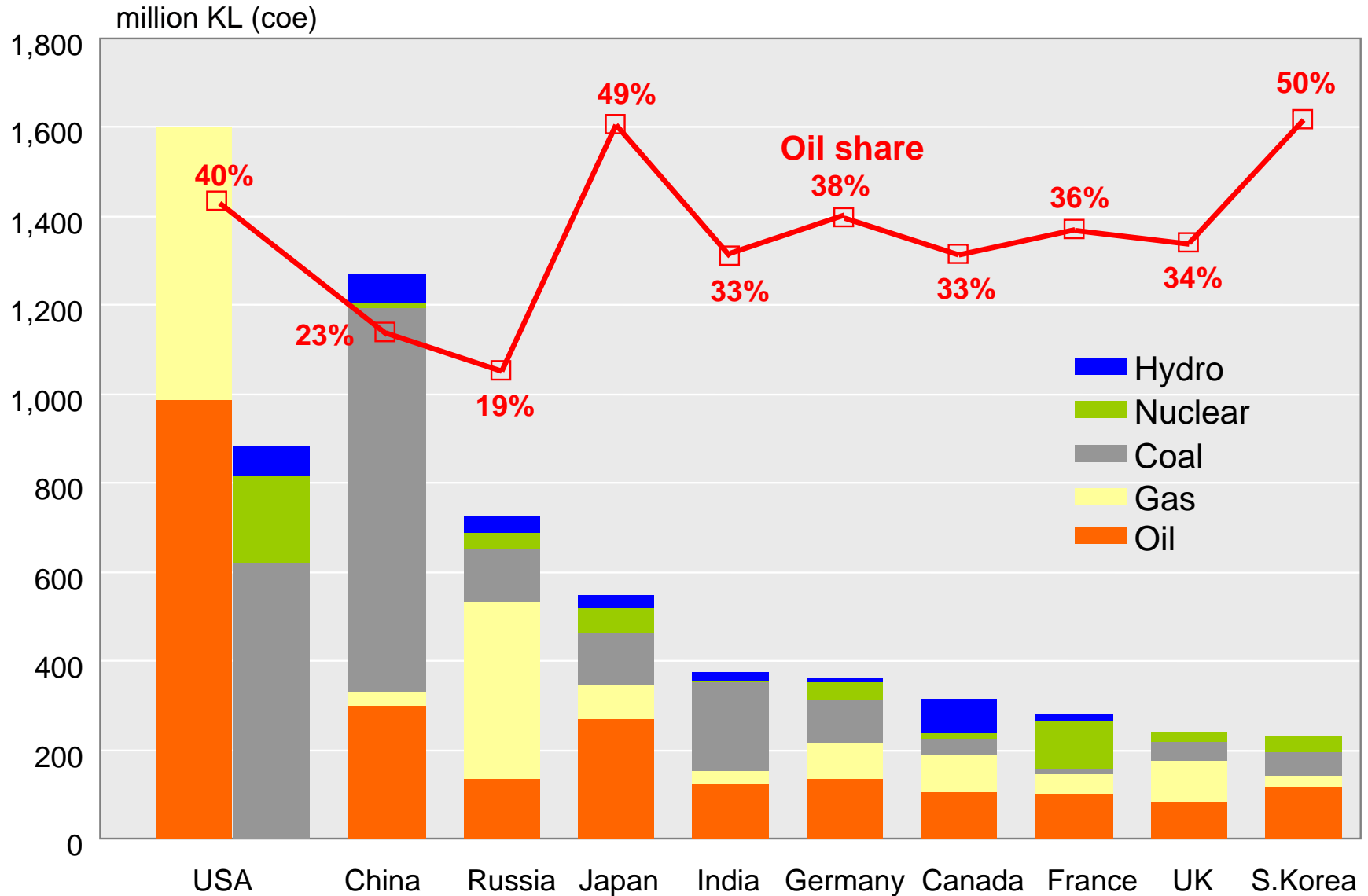


Japan's Primary Energy Supply



Source: METI

Primary Energy Supply in Major Countries (2003)

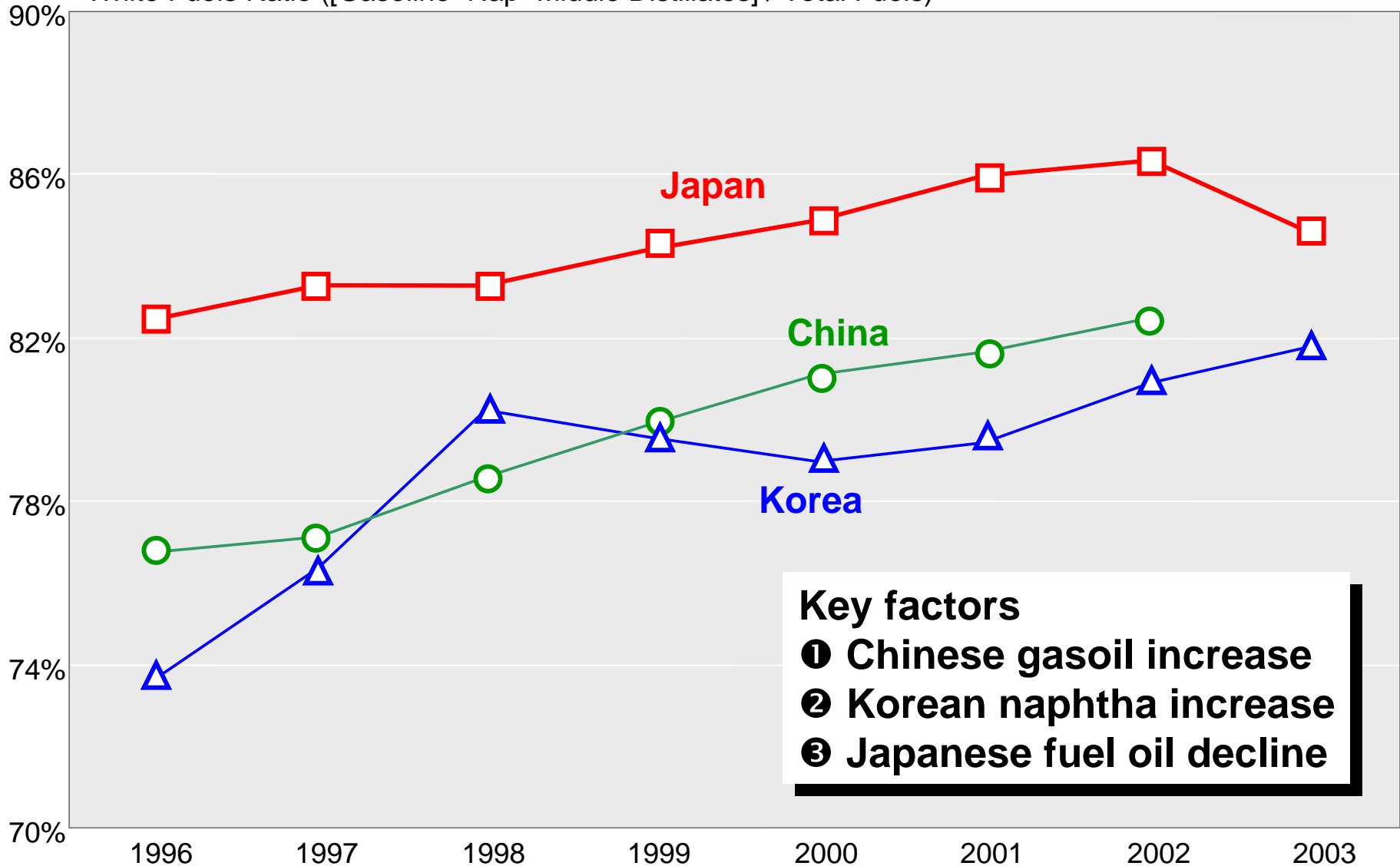


Source: BP

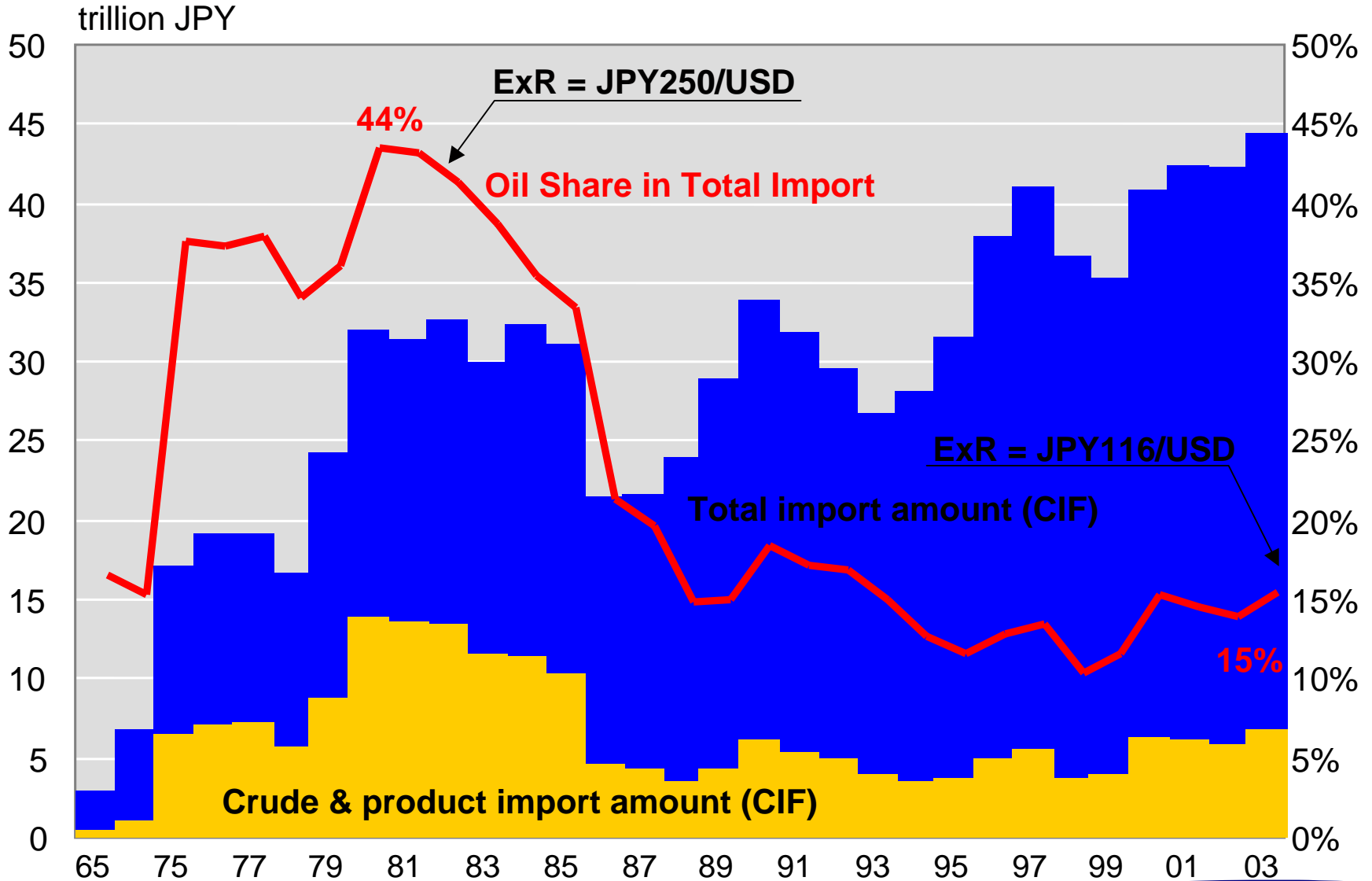
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Whitening Product Mix in North East Asia

White Fuels Ratio $([\text{Gasoline} + \text{Nap} + \text{Middle Distillates}] / \text{Total Fuels})$



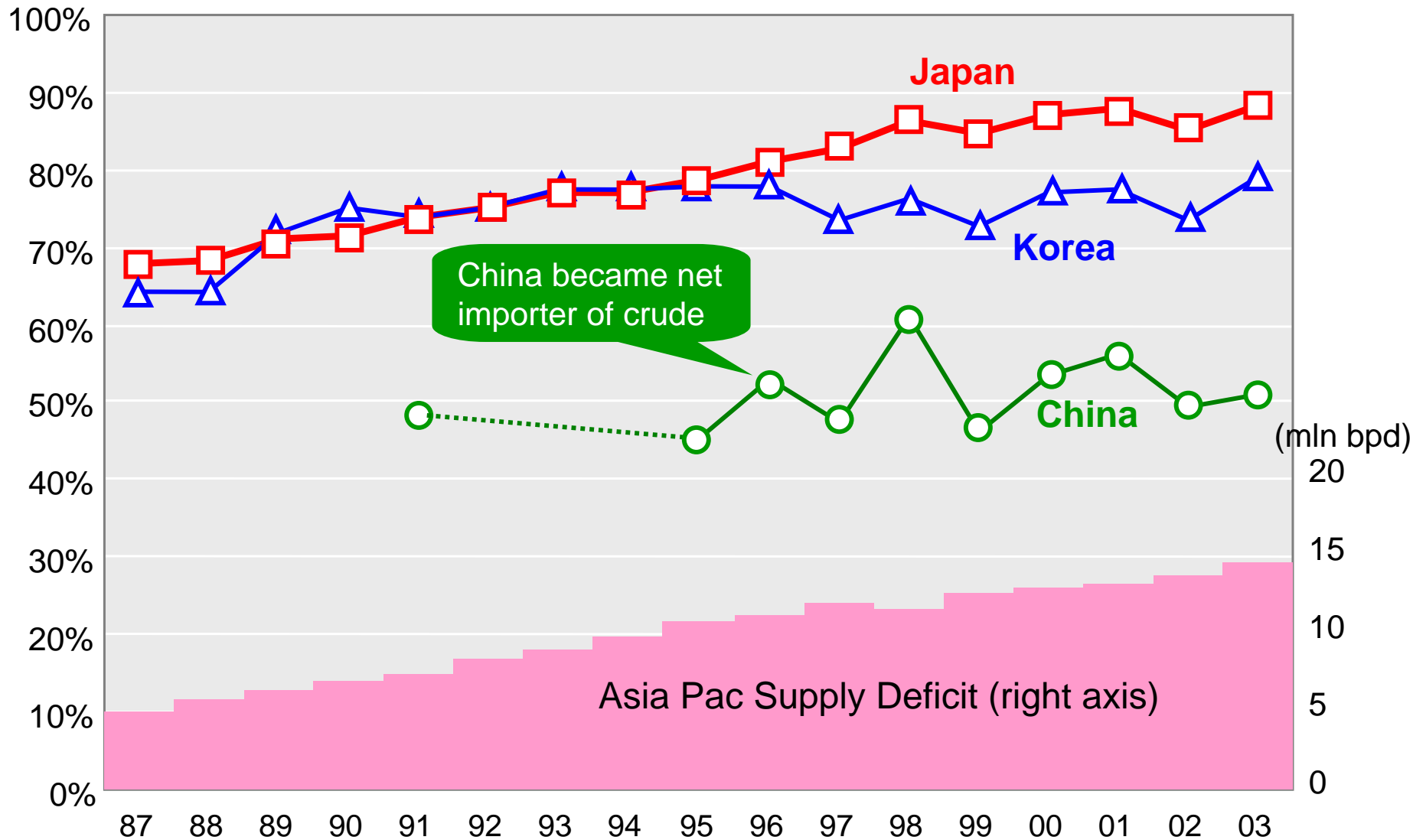
Decreased Oil Share in Japanese Import



Source: PAJ

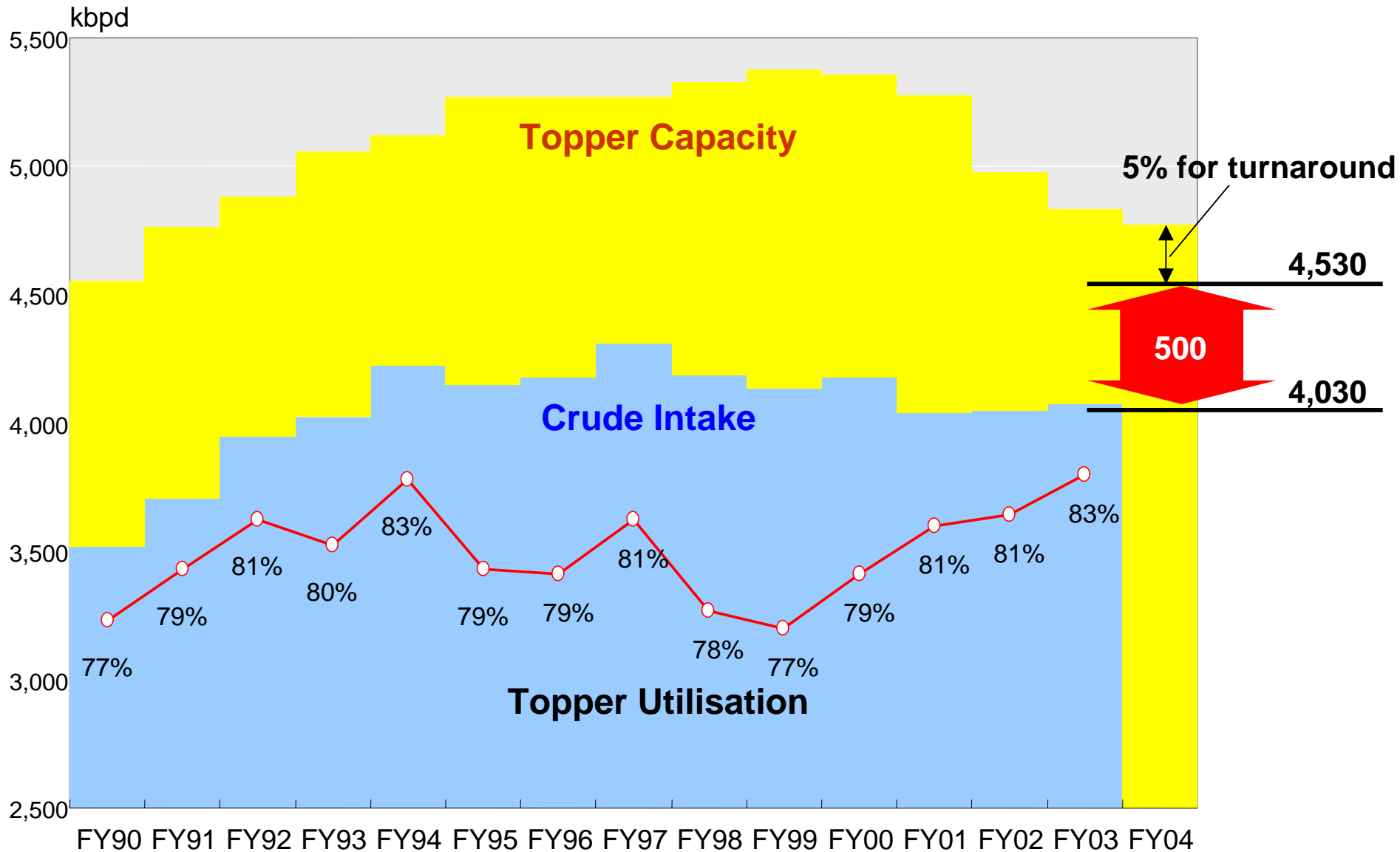
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Increasing Oil Dependence on Middle East



Source: BP, PAJ, Korean Petroleum Association
China OGP etc

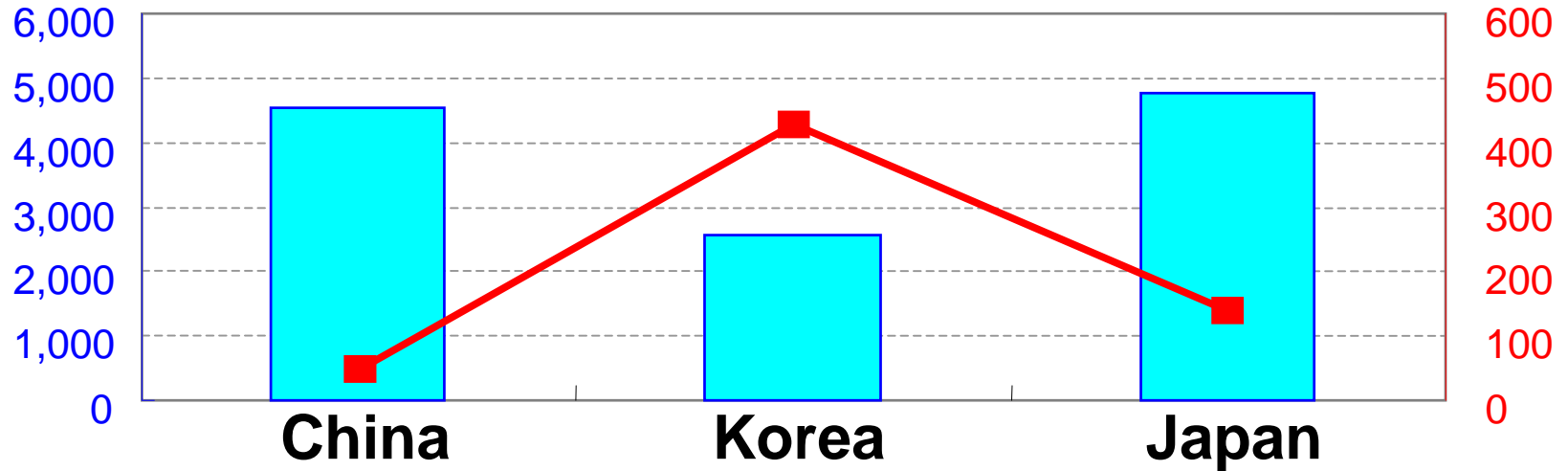
Excess Refining Capacity in Japan



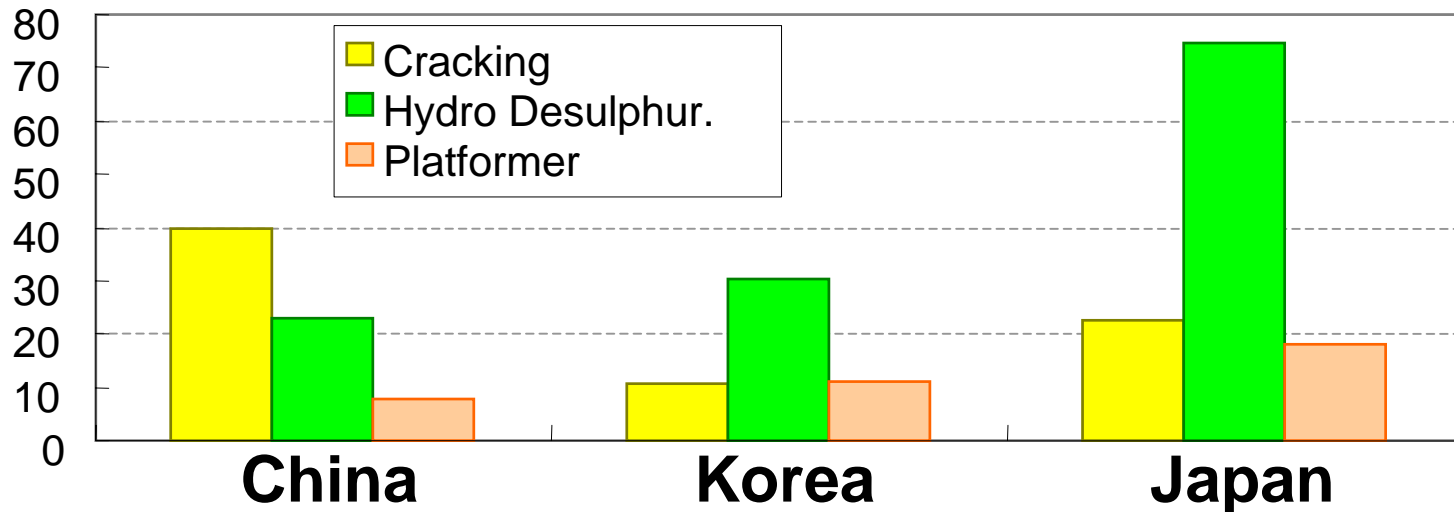
Differences in Refining Configuration in NE Asia

Total CD Unit Capacity kbpd

CD Unit Capacity / Refinery kbpd



Proportion to 2ndary Units against CD %



Review on Japanese Oil Policy



Reduce Oil Dependency

Oil share in primary energy
Efficiency (prim energy/real GDP)

1973	Current
77%	50%
100	66



Prepare for Emergency

Crude oil stockpiling

1973	Current
ca 30 d	180 d



Reduce Dependency on ME

Crude oil dependency on ME

1973	Current
78%	89%

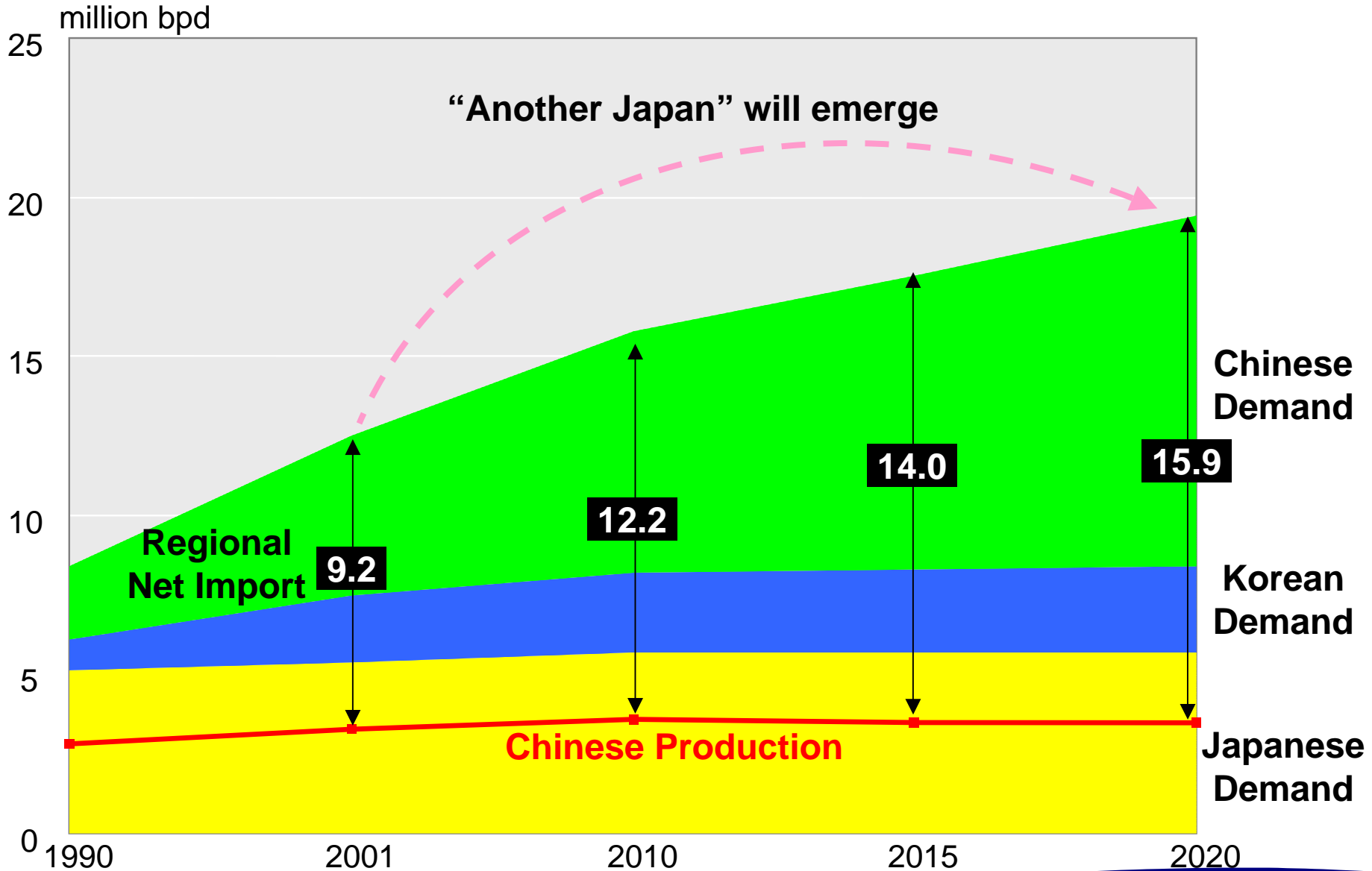


Secure Equity Crude

Share of equity crude import
Strategy consistent with business viability ???

1998	Current
15%	10%

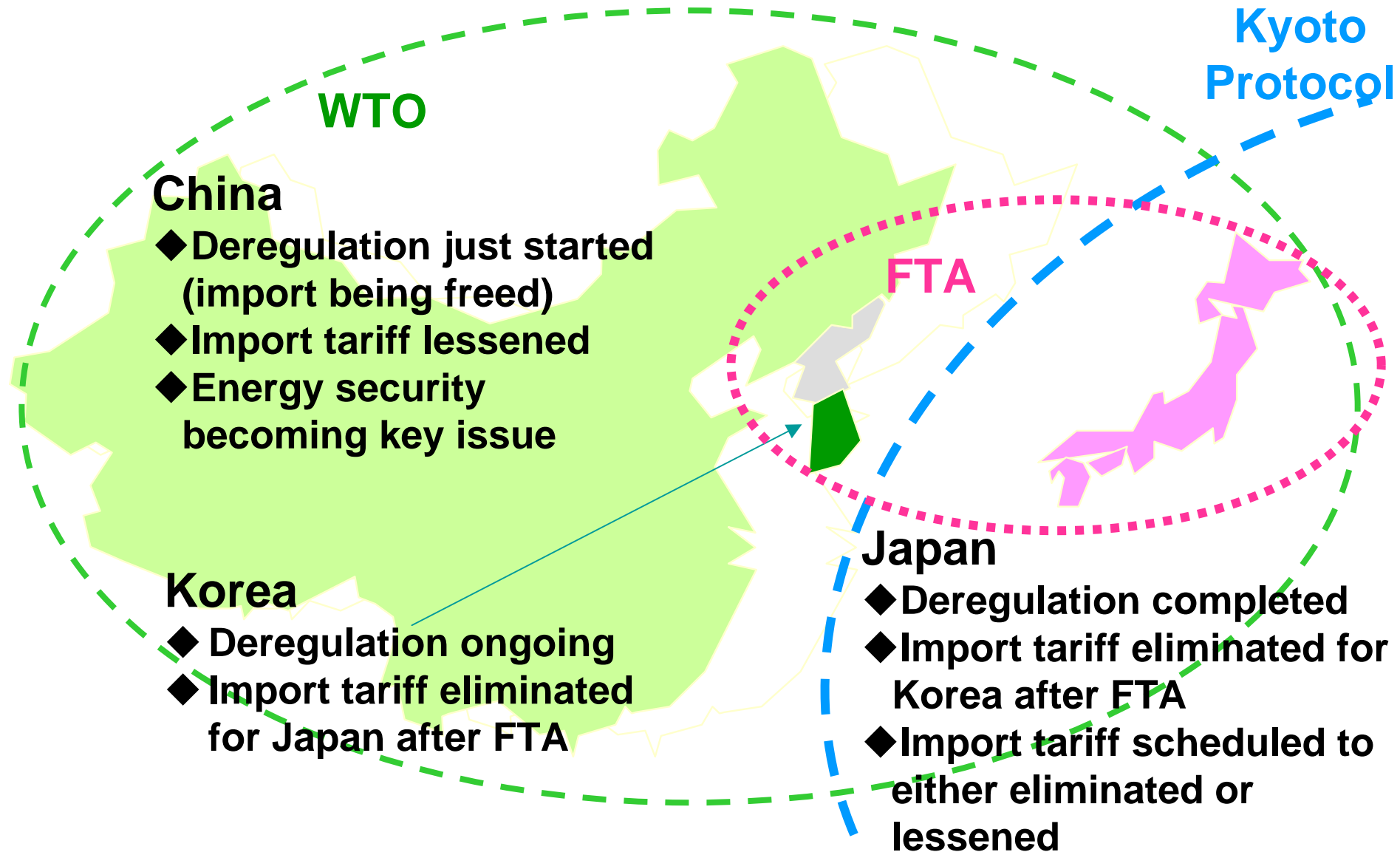
Oil Demand Outlook in North East Asia



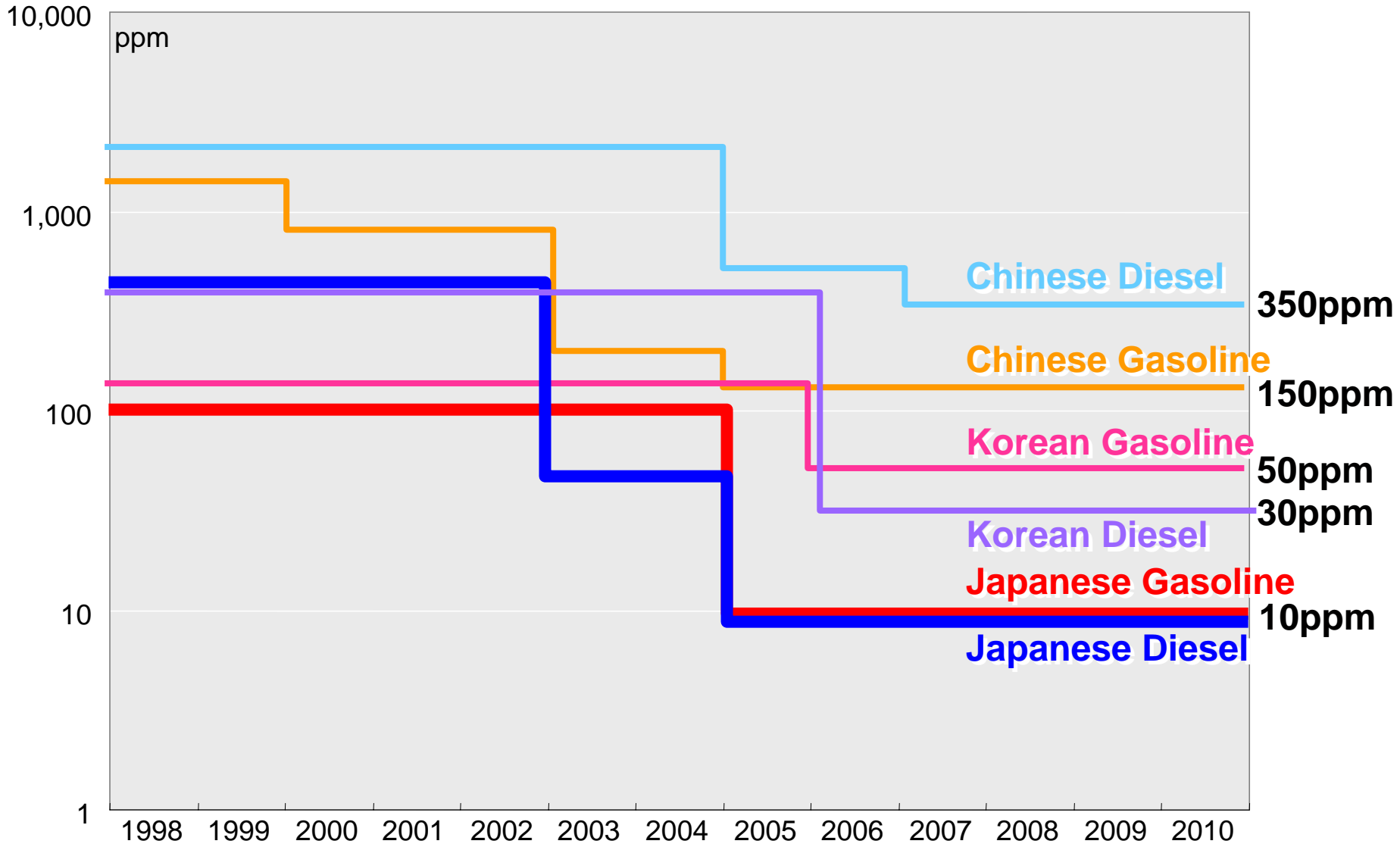
Source: EIA IEO2004

Asia Energy Forum 2004

Changing Market Environment in NE Asia



Product Specs Affect Oil Trade Flow?



Remark: Chinese specs above are for Beijing & Shanghai.

Source: JPEC

Oil Stockpiling in EA and Pacific (excl. LPG)

Vietnam

Demand 200kb/d
Stock 30days
Crude Prod 350kb/d

China

Demand 4,650kb/d
Stock 21days
Crude Prod 3,410kb/d

Korea

Demand 2,000kb/d
Stock 70days
(National 32 + Commercial 38)

Japan

Demand 4,690kb/d
Stock 170days
(National 90 + Commercial 80)

Thailand

Demand 770kb/d
Stock 36days(*)
Crude Prod 150kb/d

Taiwan

Demand 860kb/d
Stock 75days(*)
(National 15 + Commercial 60)

Malaysia

Demand 440kb/d
Stock 30days
Crude Prod 730kb/d

Phillipine

Demand 280kb/d
Stock 40days(*)
Crude Prod 20kb/d

Singapore

Demand 690kb/d
Stock 30days

Brunei

Demand 10kb/d
Stock 21days
Crude Prod 210b/d

East Asia and Oceania

Demand 17.1Mil.b/d
Crude Prod 6.6Mil.b/d
Stock 75days of demand
122days of import

Australia

Demand 730kb/d
Stock 55days
Crude Prod 520kb/d

Indonesia

Demand 1,110kb/d
Stock 30days(*)
Crude Prod 1,110kb/d

NZ

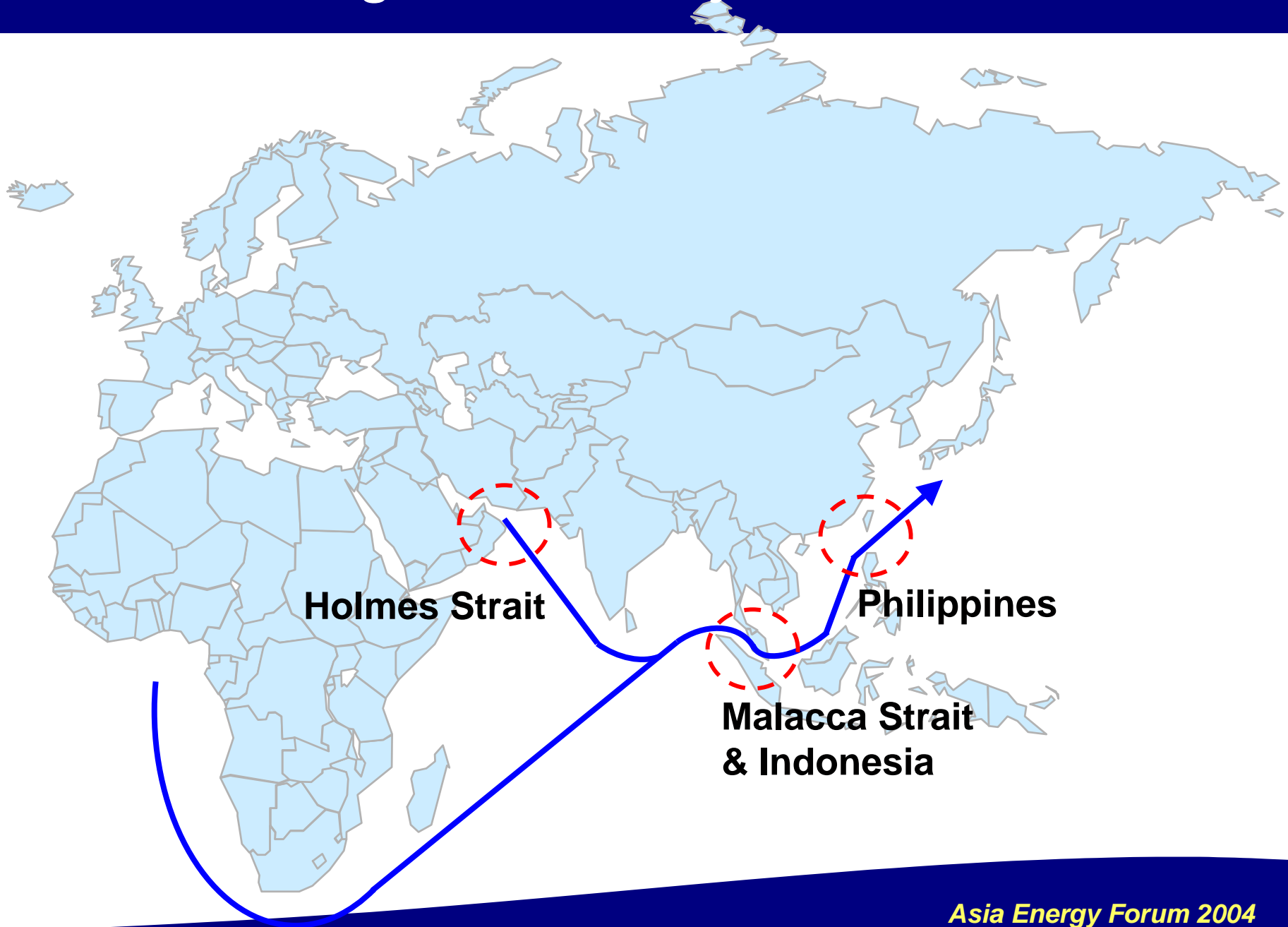
Demand 130kb/d
Stock 60days

*- set in statutory

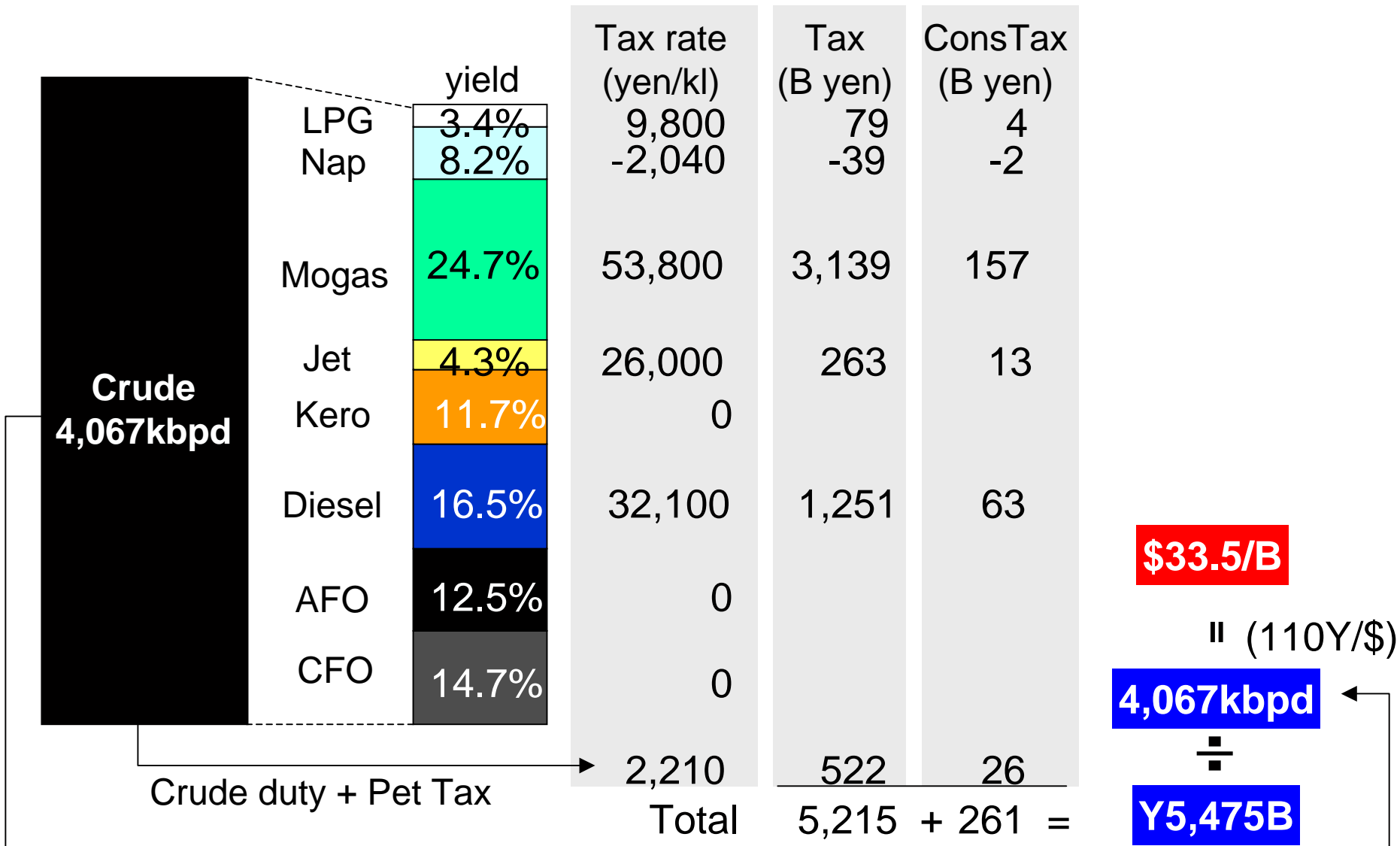
Source: FACT Inc.

Asia Pacific Energy Research Center

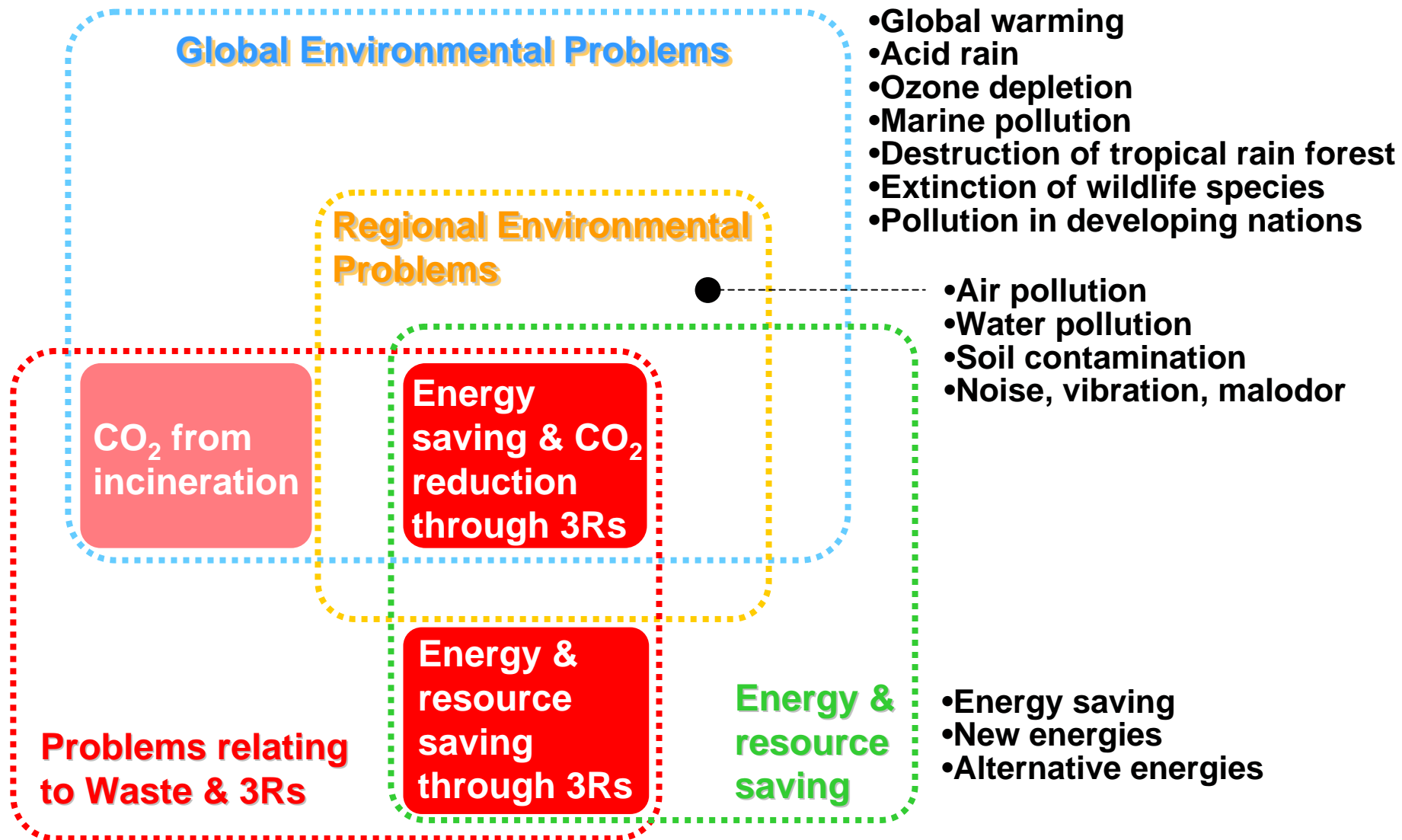
Sea Lane is Regional Security Issue



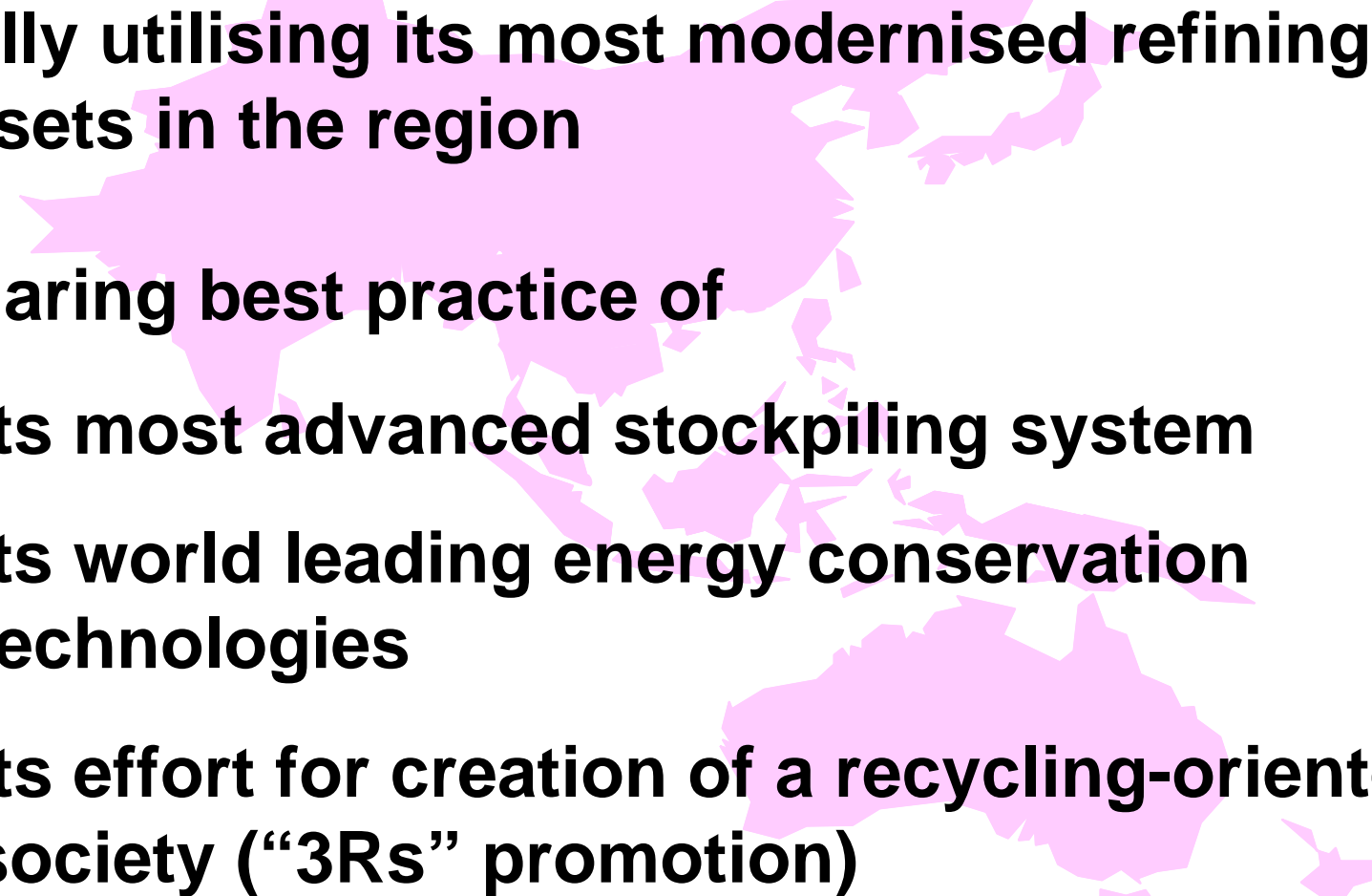
More than \$30/bbl of Tax Imposed on Crude



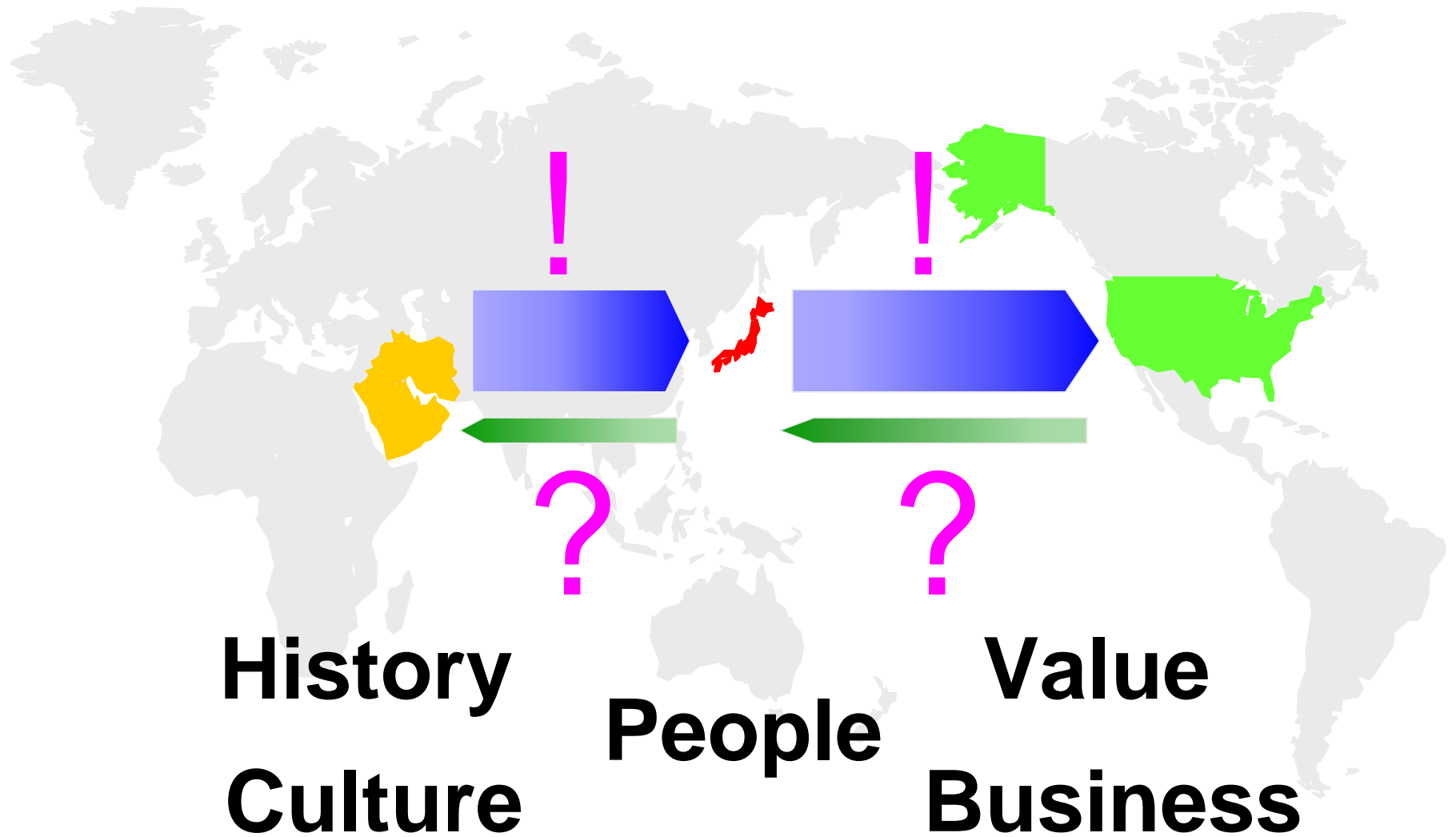
Outline of Environmental Problems & 3Rs



Japan's Contribution to Regional Energy Security

- 
- ◆ **Fully utilising its most modernised refining assets in the region**
 - ◆ **Sharing best practice of**
 - ✓ **its most advanced stockpiling system**
 - ✓ **its world leading energy conservation technologies**
 - ✓ **its effort for creation of a recycling-oriented society (“3Rs” promotion)**

Mutual Understanding as Platform for Relation



Backup

Strategic Direction of Japanese Energy Policy

In Reality

- ✧ Concerns more on Nuclear Safety
- ✧ Changing demand mix
 - industrial demand declining but retail demand increasing
- ✧ Remaining unchanging high dependency on Middle East for economic reason
- ✧ Accelerating leadership in environmental improvement

- 
- ◆ More Nuclear
 - ◆ Less Oil
 - ◆ Lower Dependence on Middle East
 - ◆ Efficient Energy Supply

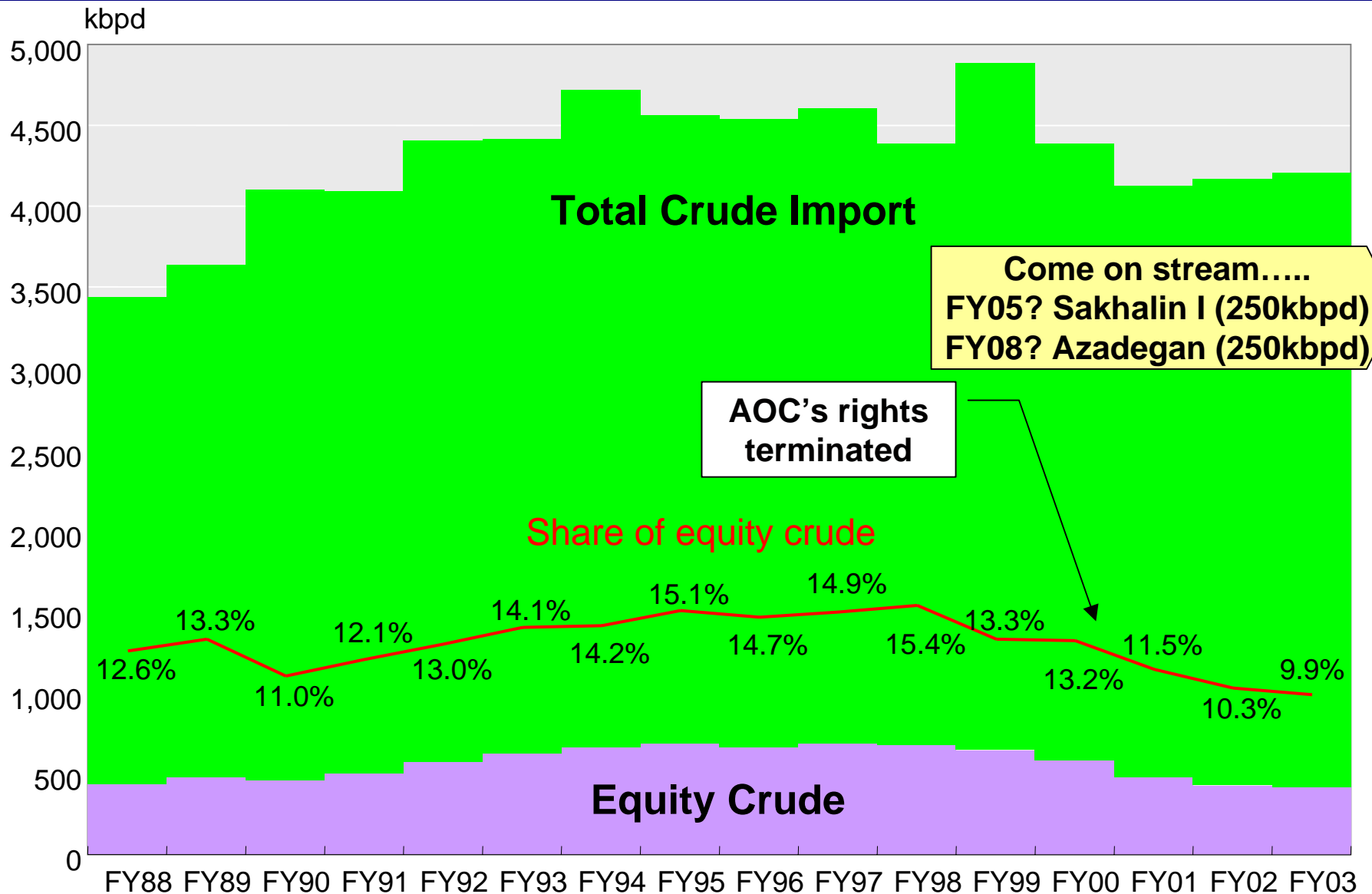
“3Es Policy”

Economic Efficiency
Market Liberalisation

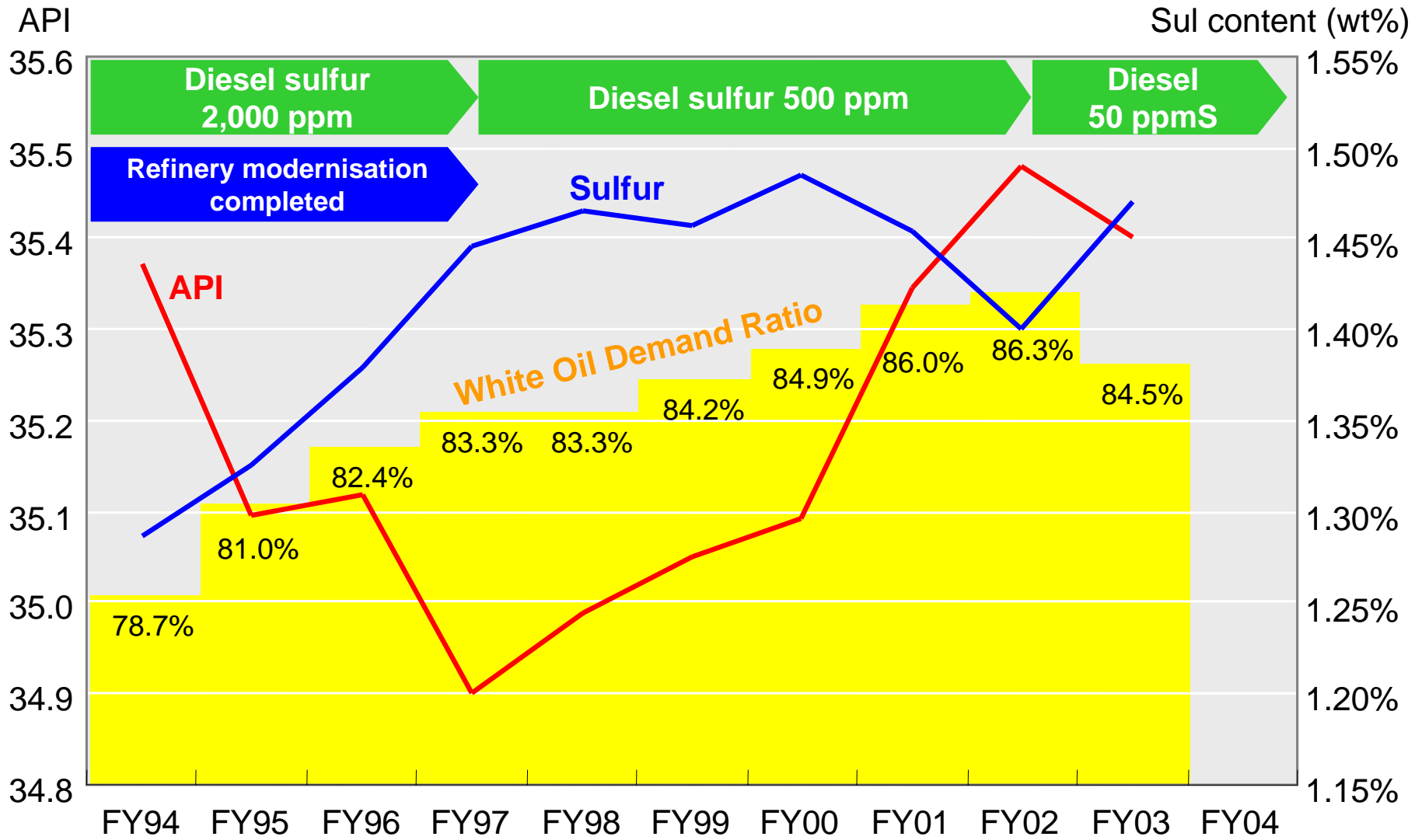
Environment
Energy Conservation
Sulfur-free Fuels

Energy Security
Source Diversification
Adequate Stockpiling
Relation with Oil Producers

Upstream, Uphill Battle?!



Japan's Crude Slate Lighter & Sourer



Remark: White Products Ratio is on CY basis.

Source: PAJ, IEA

Unmatching Product Mix and Refinery Configuration

