

RICE GLOBAL E&C FORUM

# **A HISTORIC SHIFT TO GOOD TIMES?**

## ***Oil Pricing Outlook***

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**Chief Economist, Eni**

# Summary

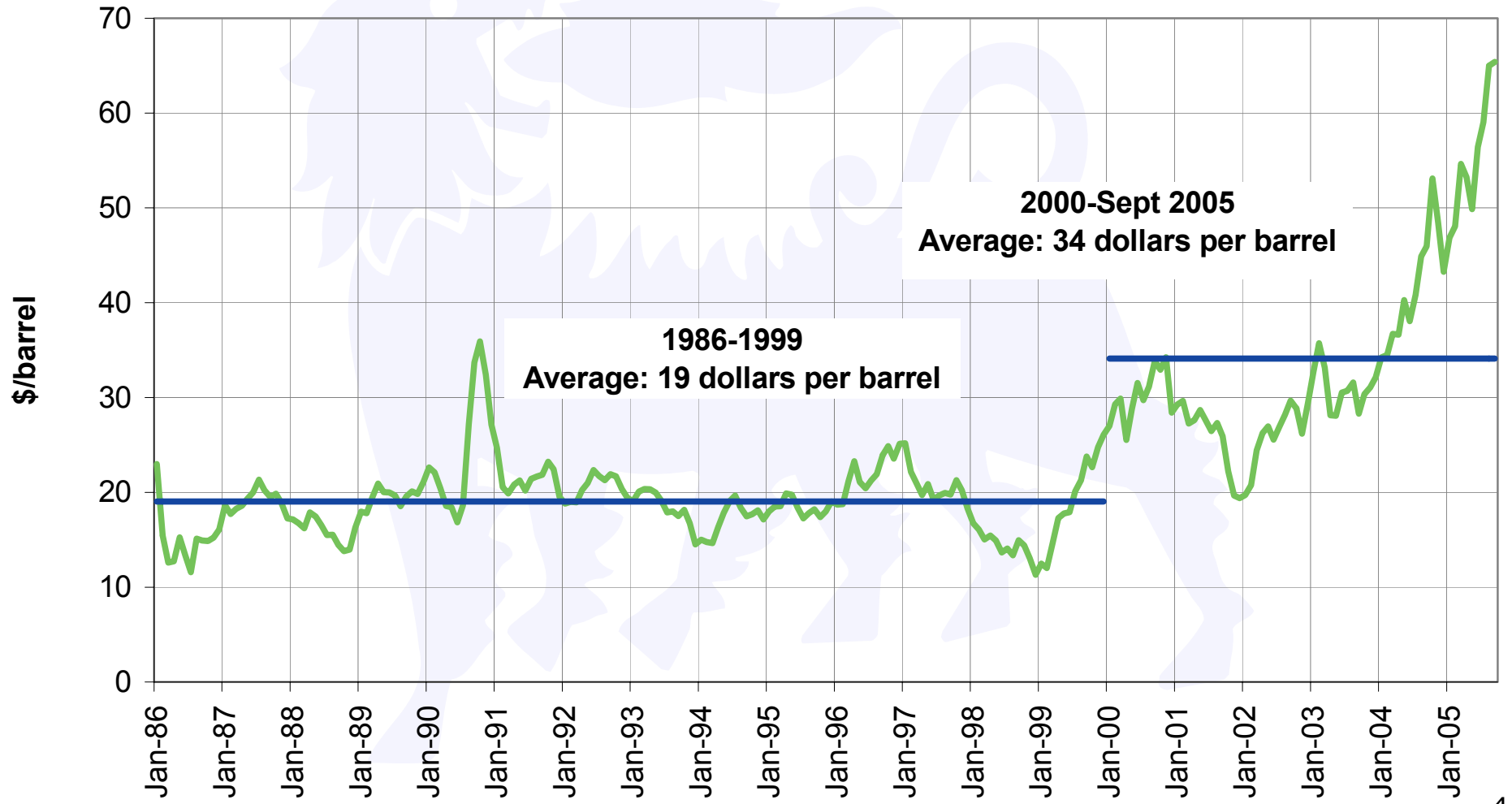
- Key factors in oil price dynamics
- Supply
- Refining
- Demand
- Financial markets
- Price outlook

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# Free climbing

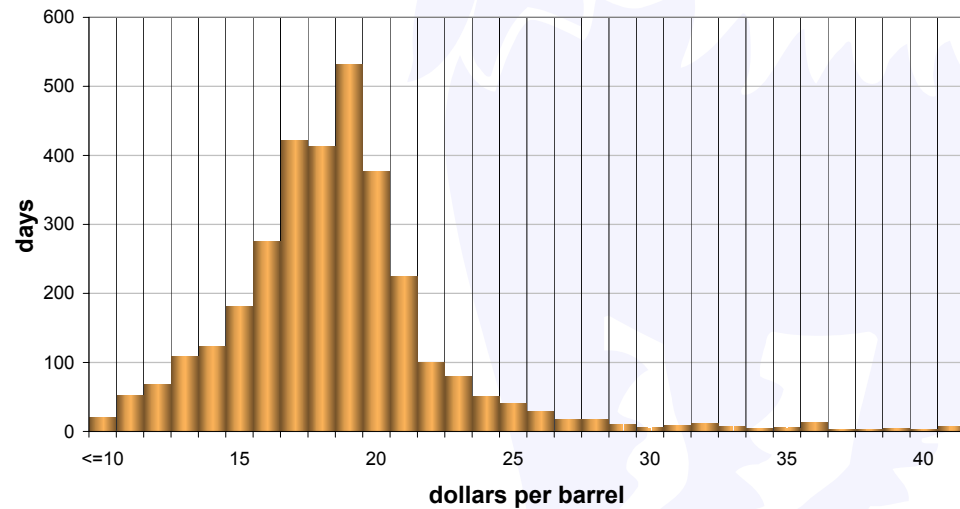
**NYMEX WTI 1986-2005**  
**1st month - monthly average**



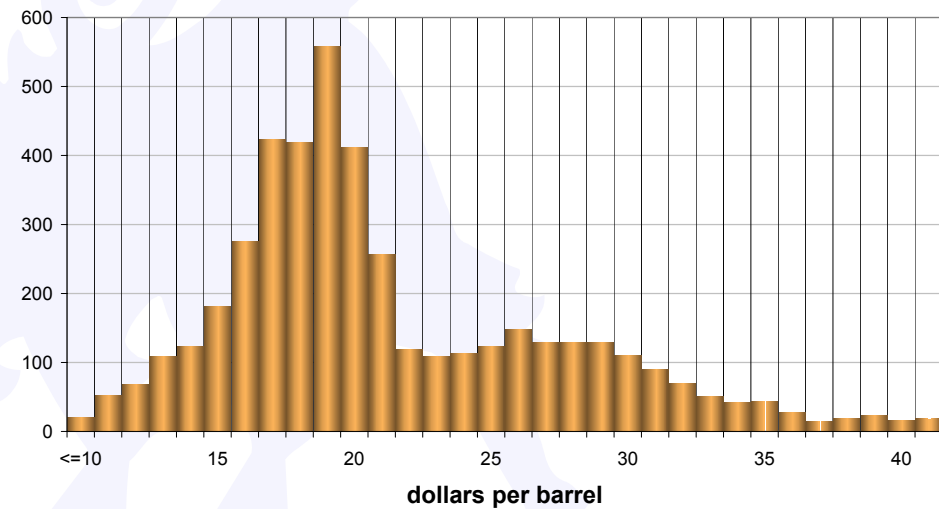
# Brent dated

## (Frequency Distribution, Daily Observations)

Jul 1987- Dec 1999



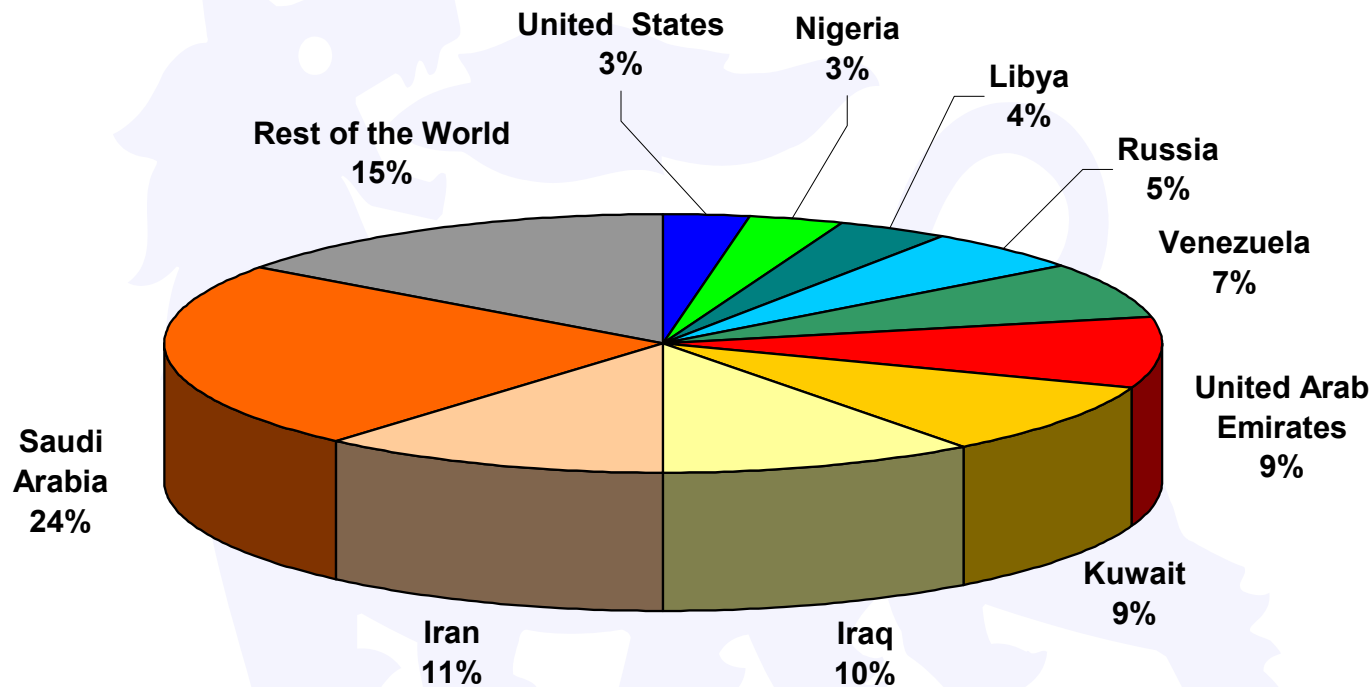
Jul 1987- Sept 2005



Source: own calculations on PLATT's data

# World Oil Reserves 01/01/2005

(1,111 billion barrels)



**OPEC\*: 885 billion barrels (80%)**

**IOC\*\* (*International Oil Companies*): 52 billion barrels (5%)**

\* OPEC countries: Algeria, Libya, Kuwait, Indonesia, Iran, Iraq, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, Venezuela.

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\*\* IOC: ExxonMobil, BP, Shell, Chevron, Total, ConocoPhillips, Eni, Repsol YPF



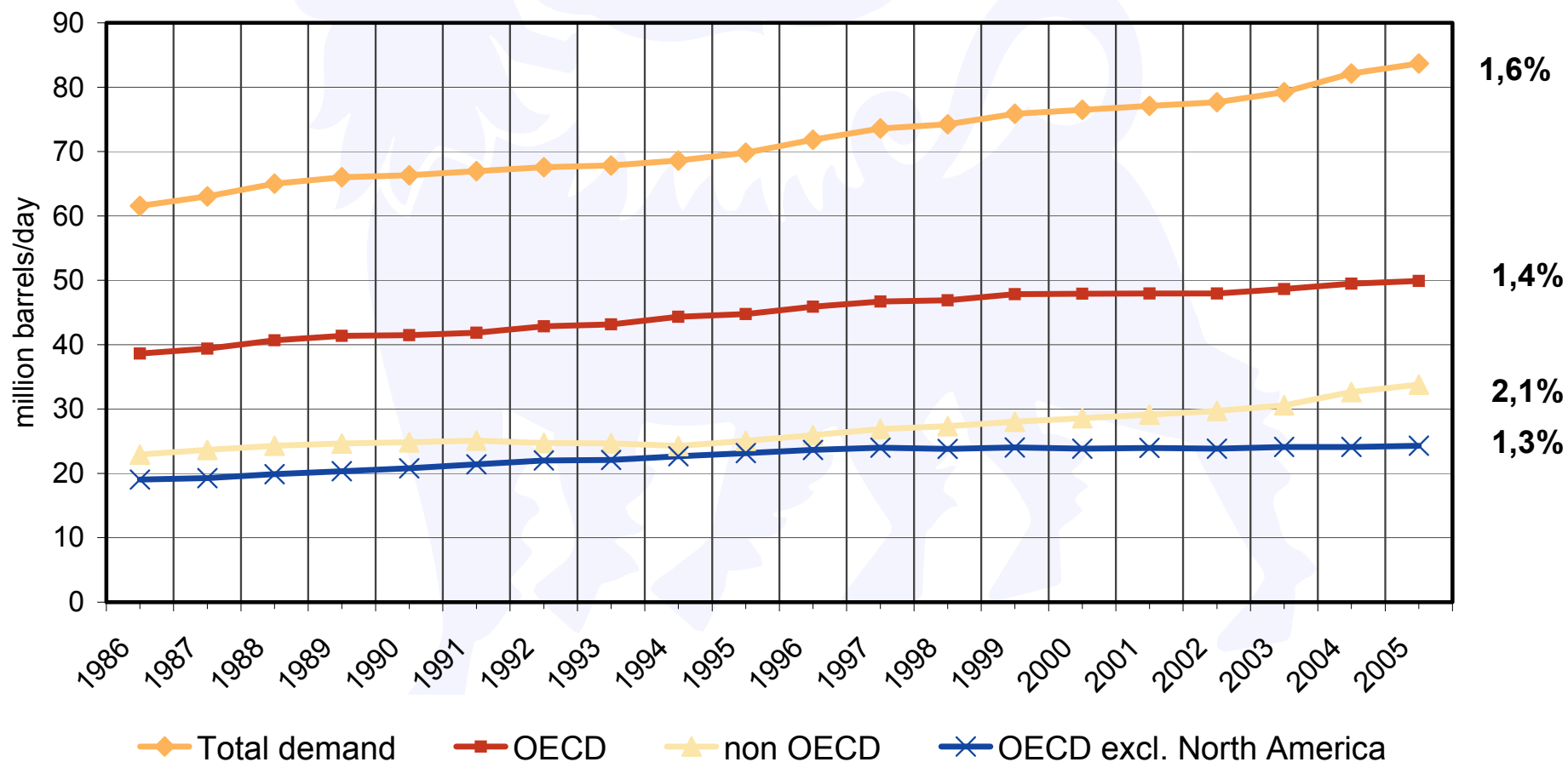
**Eni's Way**

# Key Factors

- Oil prices are by far higher than historical trend: short term or structural change?
- Oil prices are affected by a complex system of factors:
  - fundamentals (supply, demand, stocks)
  - political events
  - financial market expectations
  - environmental regulation
  - weather
  - climate change
  - ...

# World Oil Demand 1986-2005

The numbers shown represent the yearly average growth rate for the '86-'05 time frame





# Oil Pricing: the Time Horizon

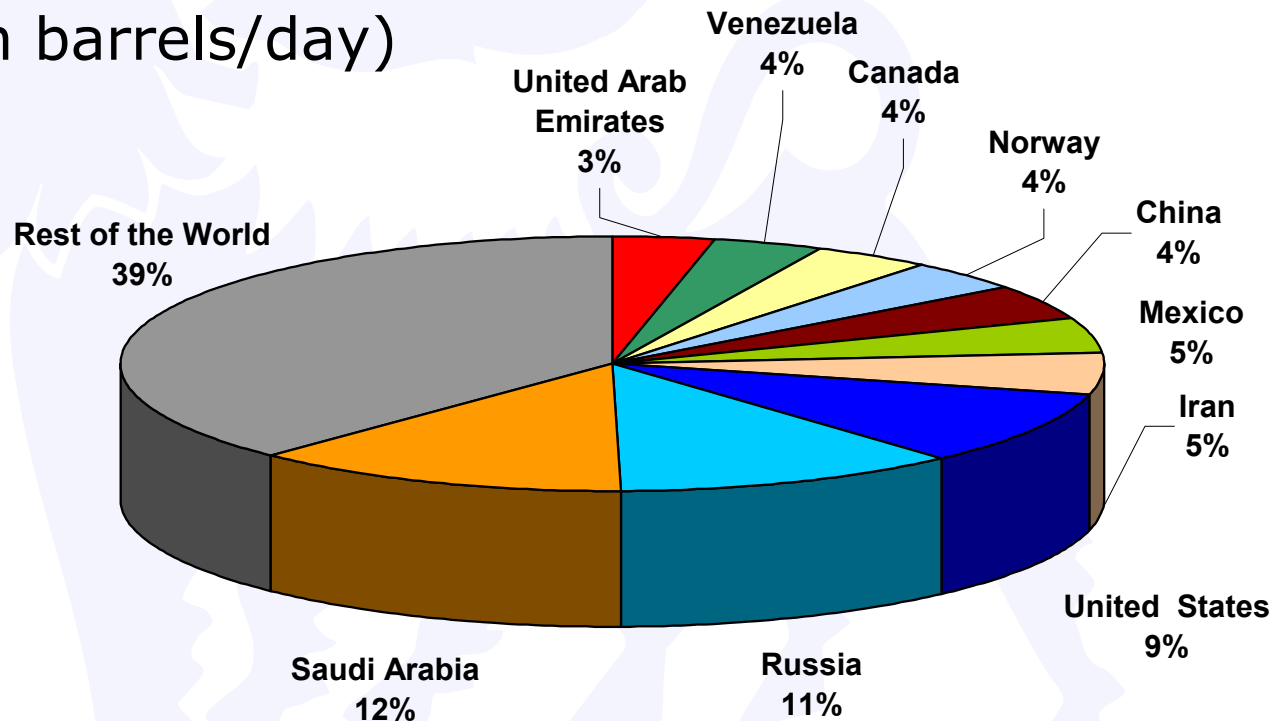
- Short term
  - spare capacity, stocks, OPEC's meeting outcomes, refining shortages, sabotages, strikes, weather, ...
- Medium term
  - economic cycle, non OPEC supply, OPEC countries budget, investments, events in the Middle East, ...
- Long term
  - demography, oil policy of Middle East producers, Kyoto Protocol, technology, ...

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# Main Oil Producers

World Oil Supply, 2004  
(81.2 million barrels/day)

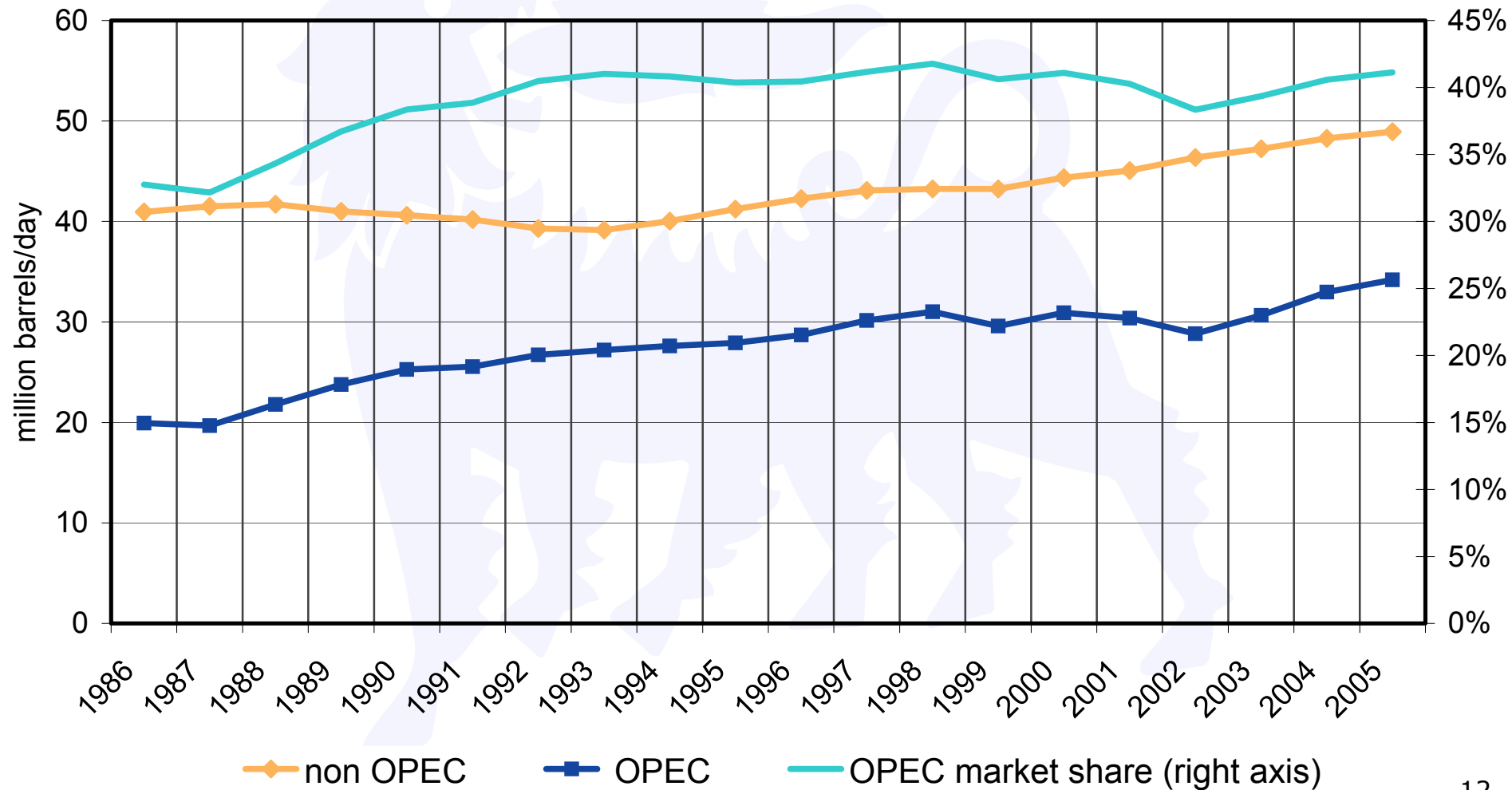


**OPEC: 33 million barrels/day (41%)**

**OCSE: 21 million barrels/day (26%)**

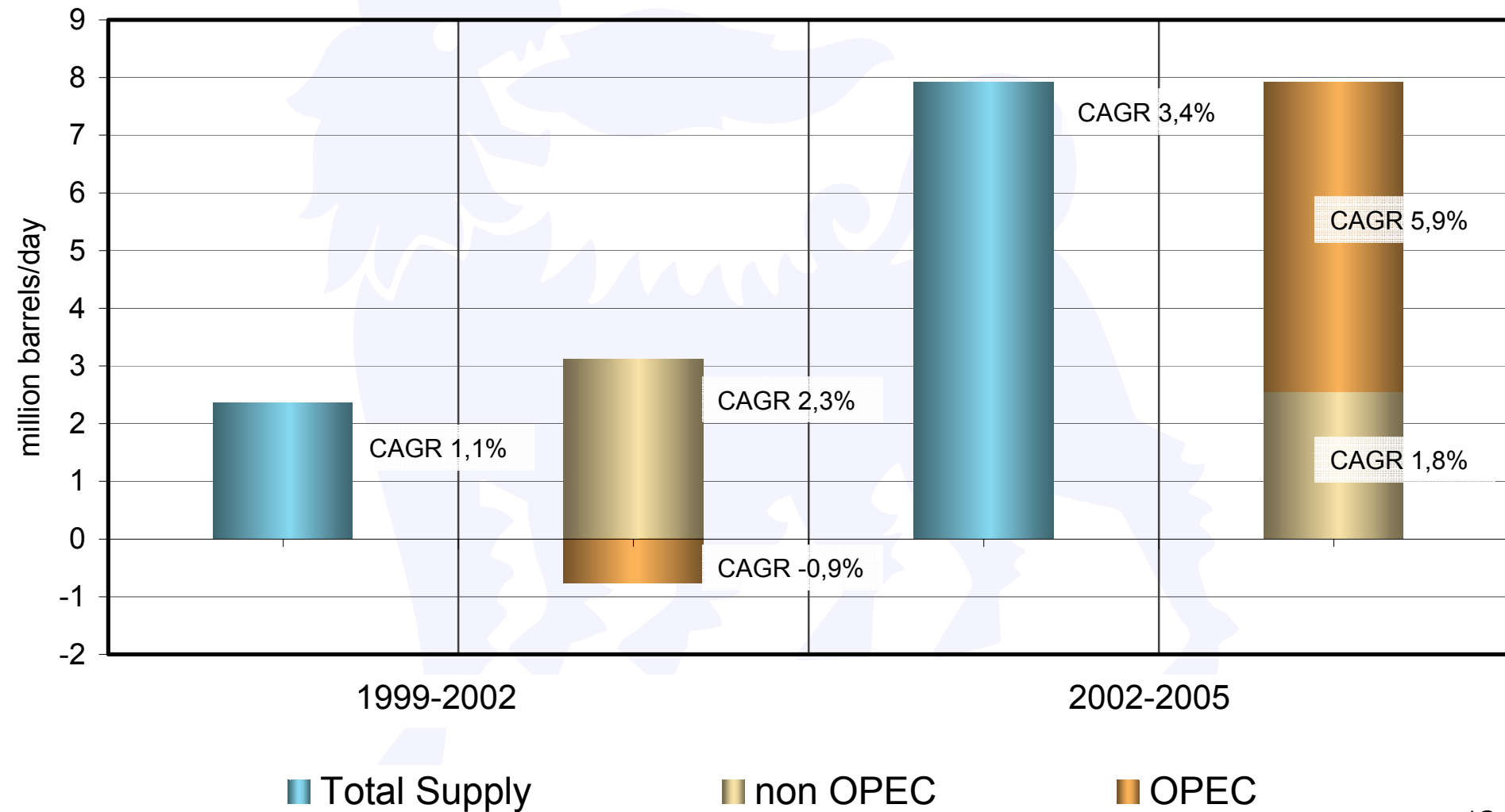
**IOC: 13 million barrels/day (16%)**

# World Oil Supply: OPEC and non OPEC 1986-2005



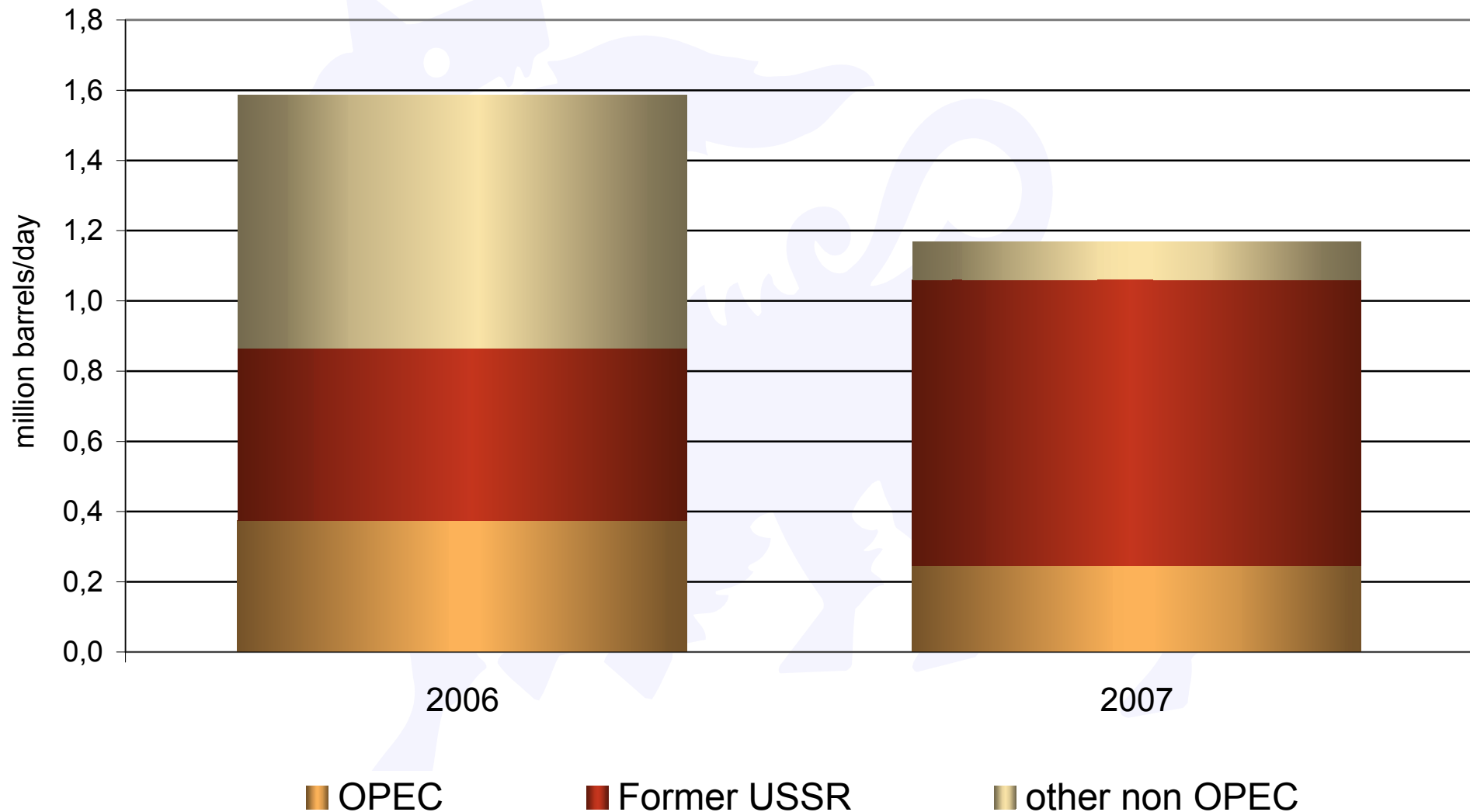
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# World Oil Supply change



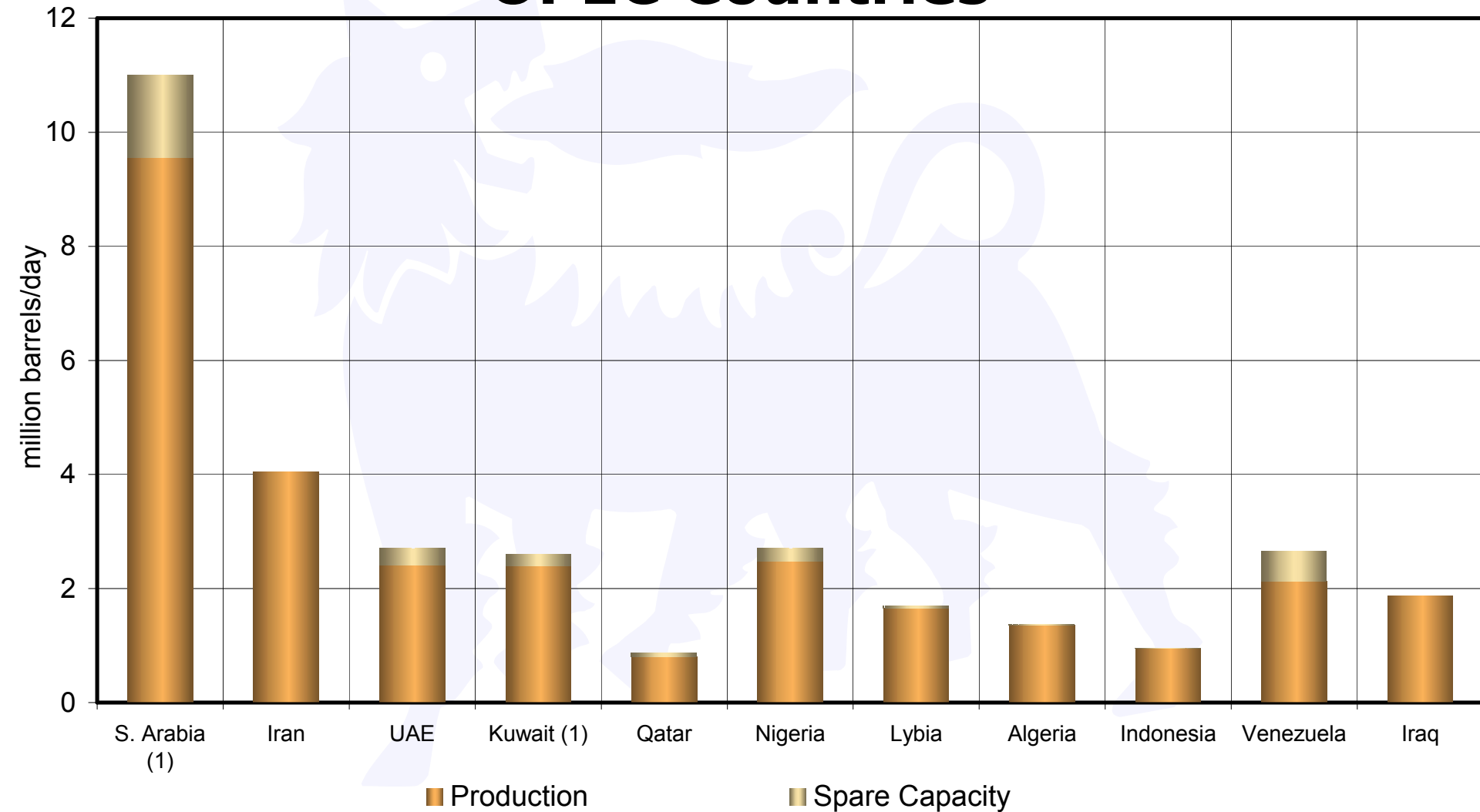
# World Oil Supply

(year on year change)



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# Production and Spare Capacity in OPEC Countries



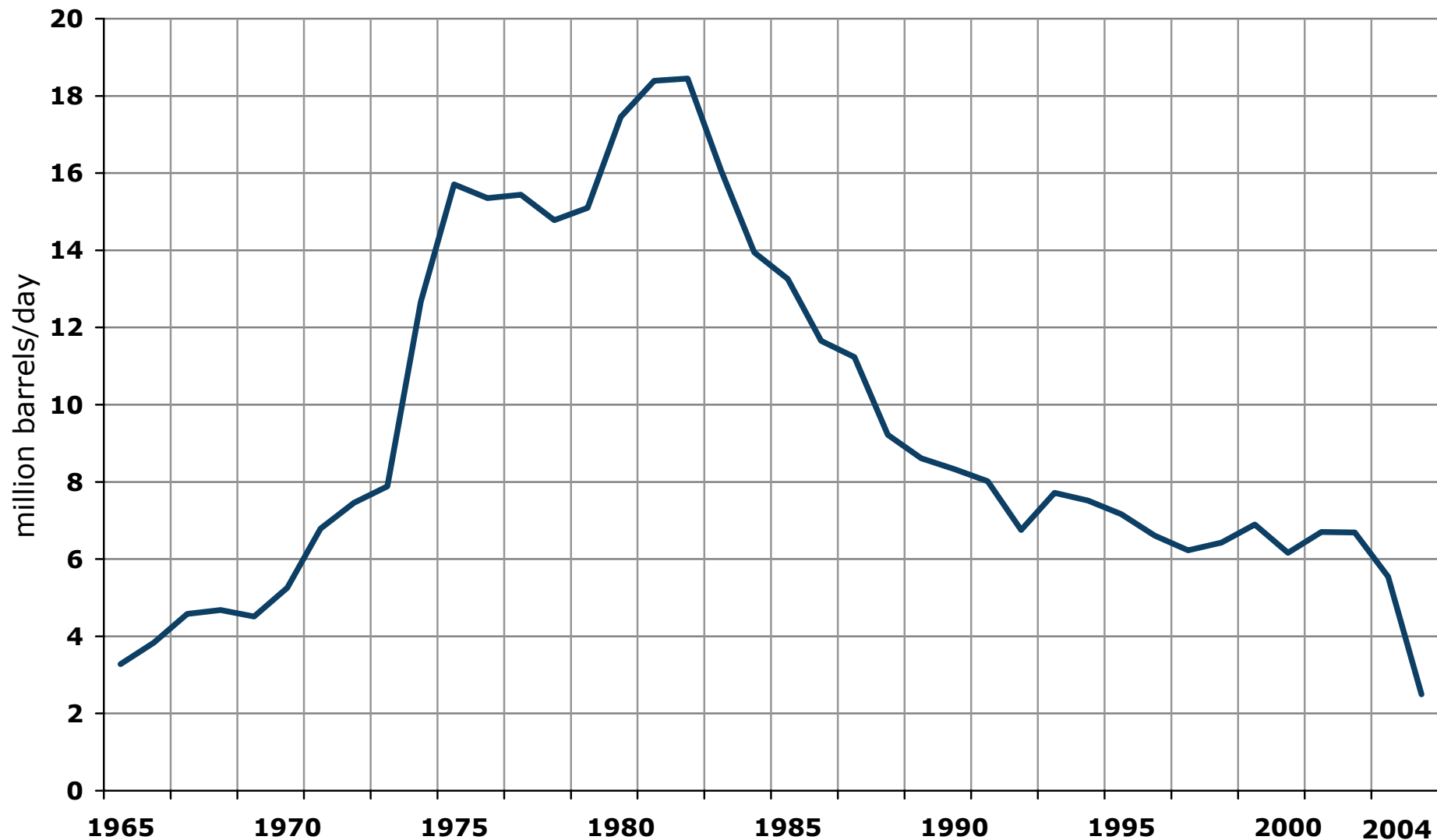
(1) The figures include 50% of Neutral Zone

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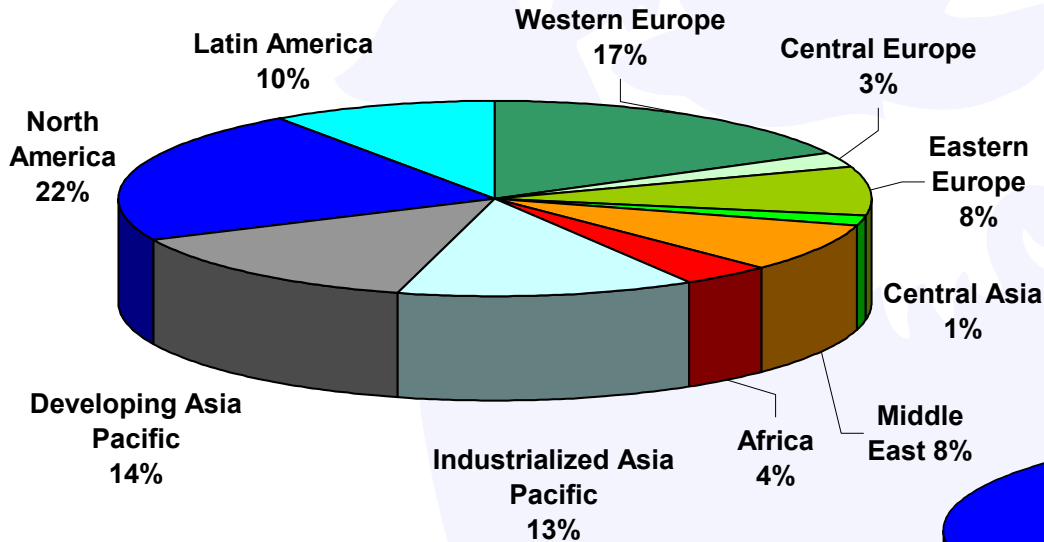
# WORLD SPARE REFINING CAPACITY



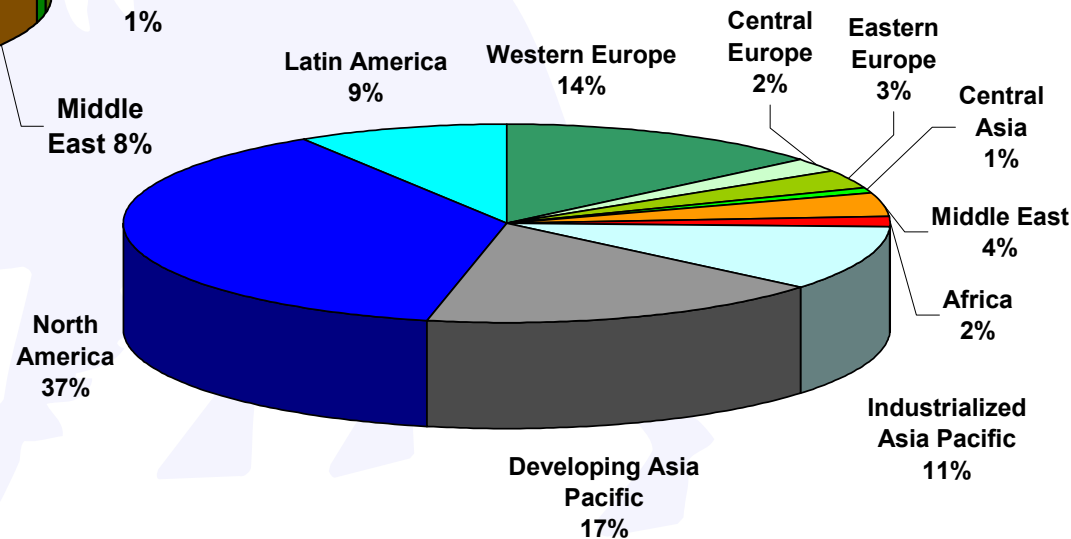
Eni's Way

# Refining Capacity (2004)

## Primary Capacity World: 86 million b/d



## Conversion Capacity World: 33 million b/d



## Primary Capacity

**OCSE: 45 million b/d (52%)**

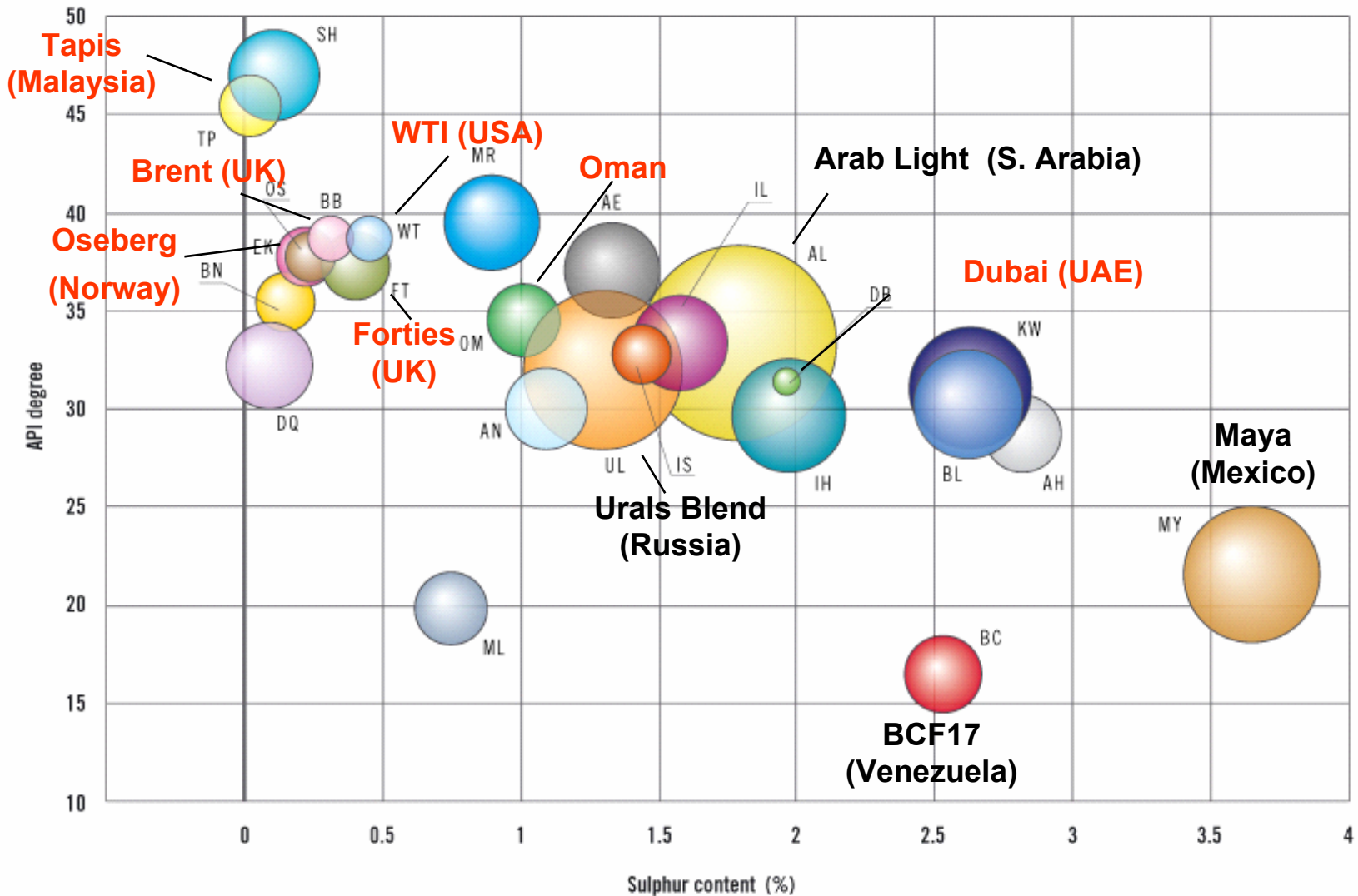
**OPEC: 10 million b/d (11%)**

## Conversion Capacity

**OCSE: 21 million b/d (62%)**

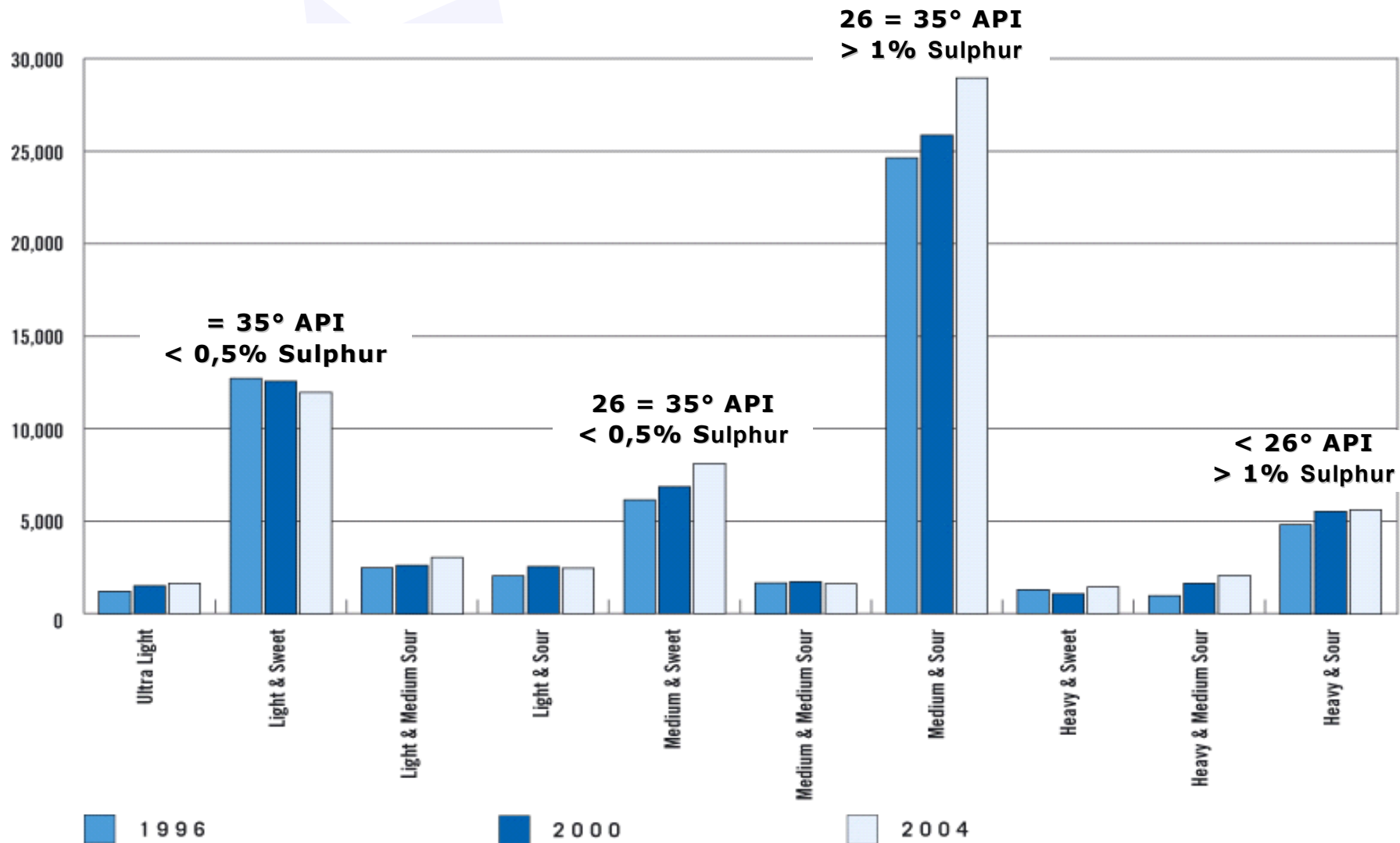
**OPEC: 2 million b/d (6%)**

# Quality and production volume of main crudes

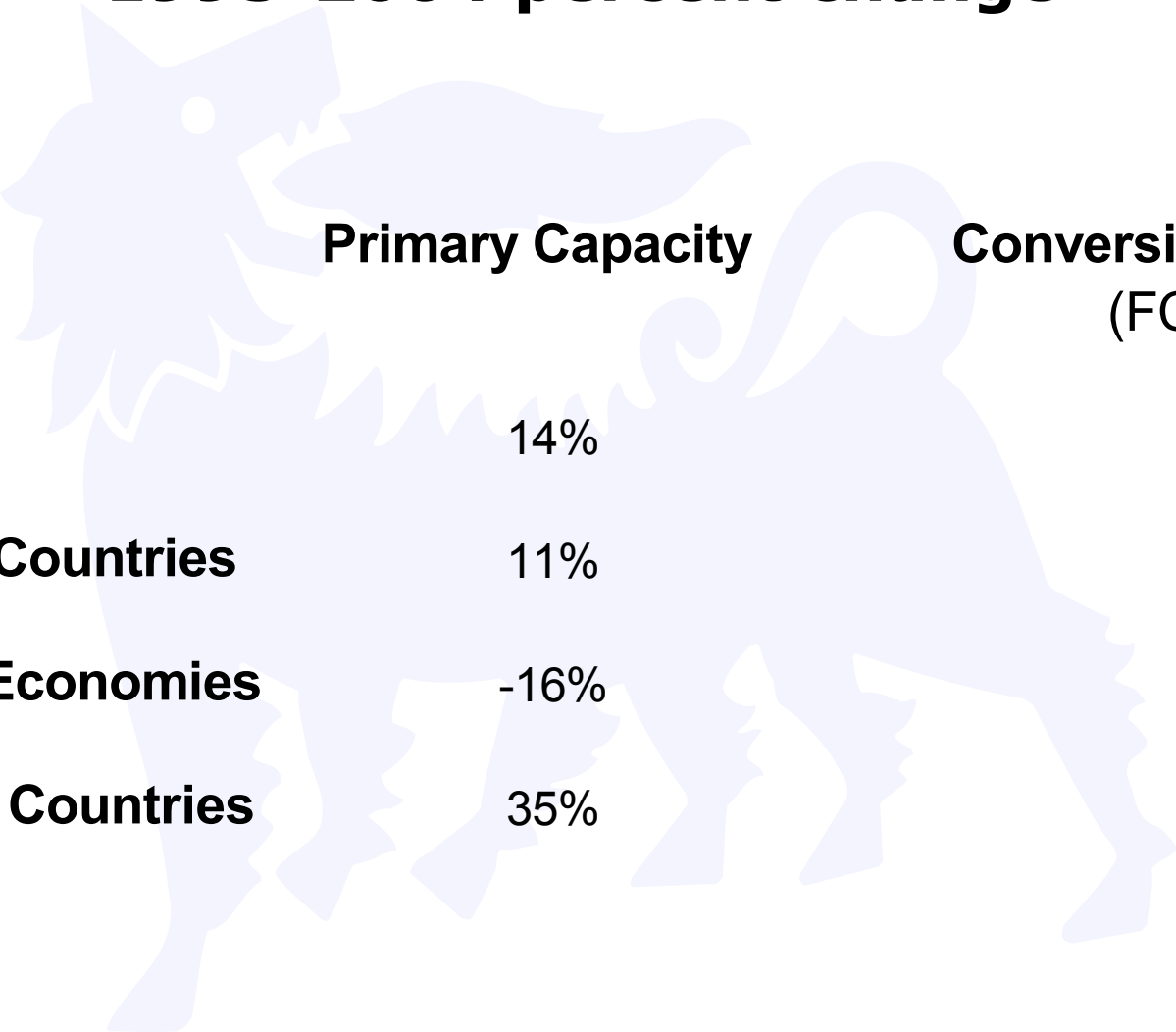


# Crude production by quality

(selected years, thousand barrels/day)

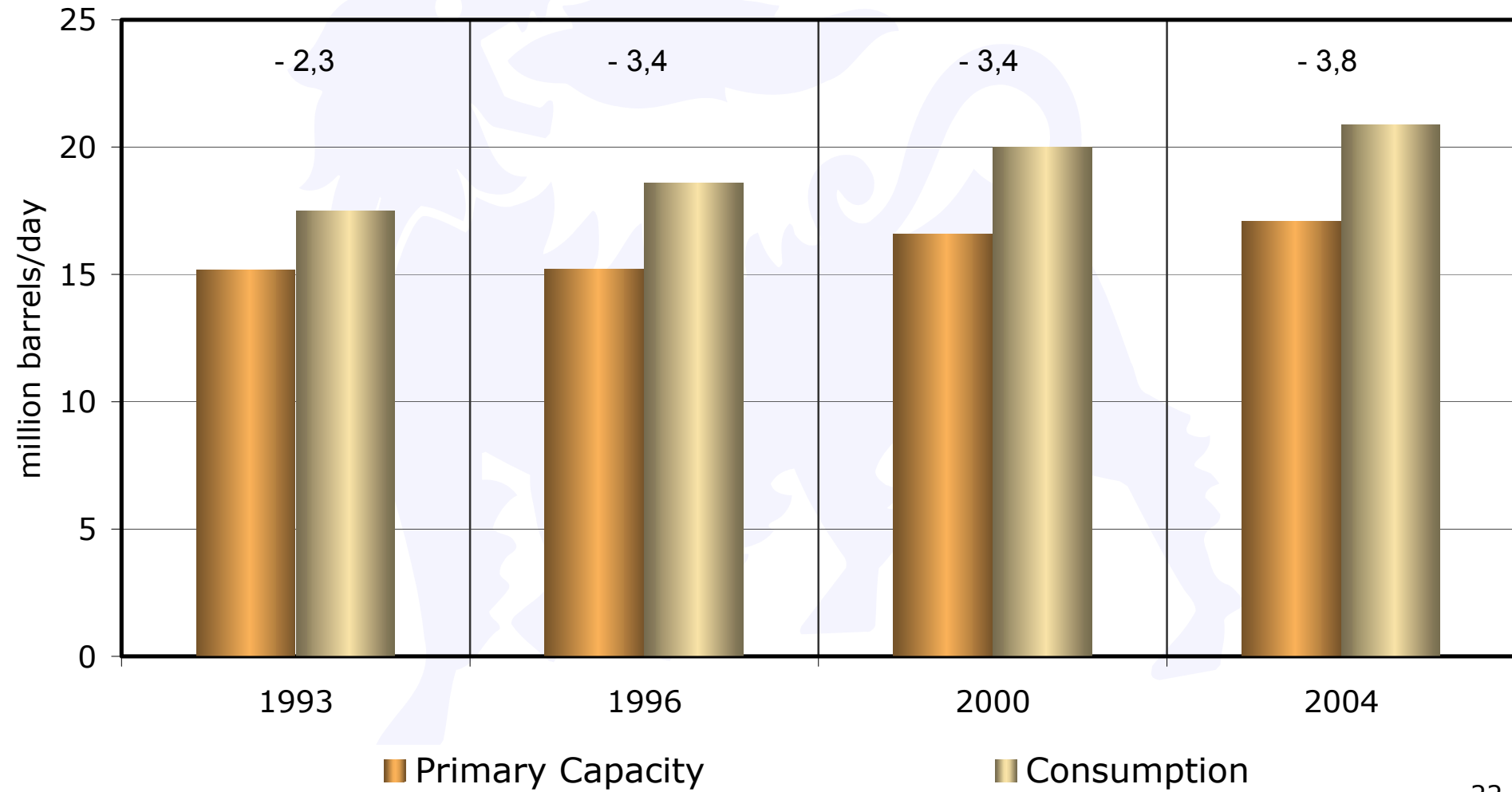


# World Refining Capacity 1993-2004 percent change

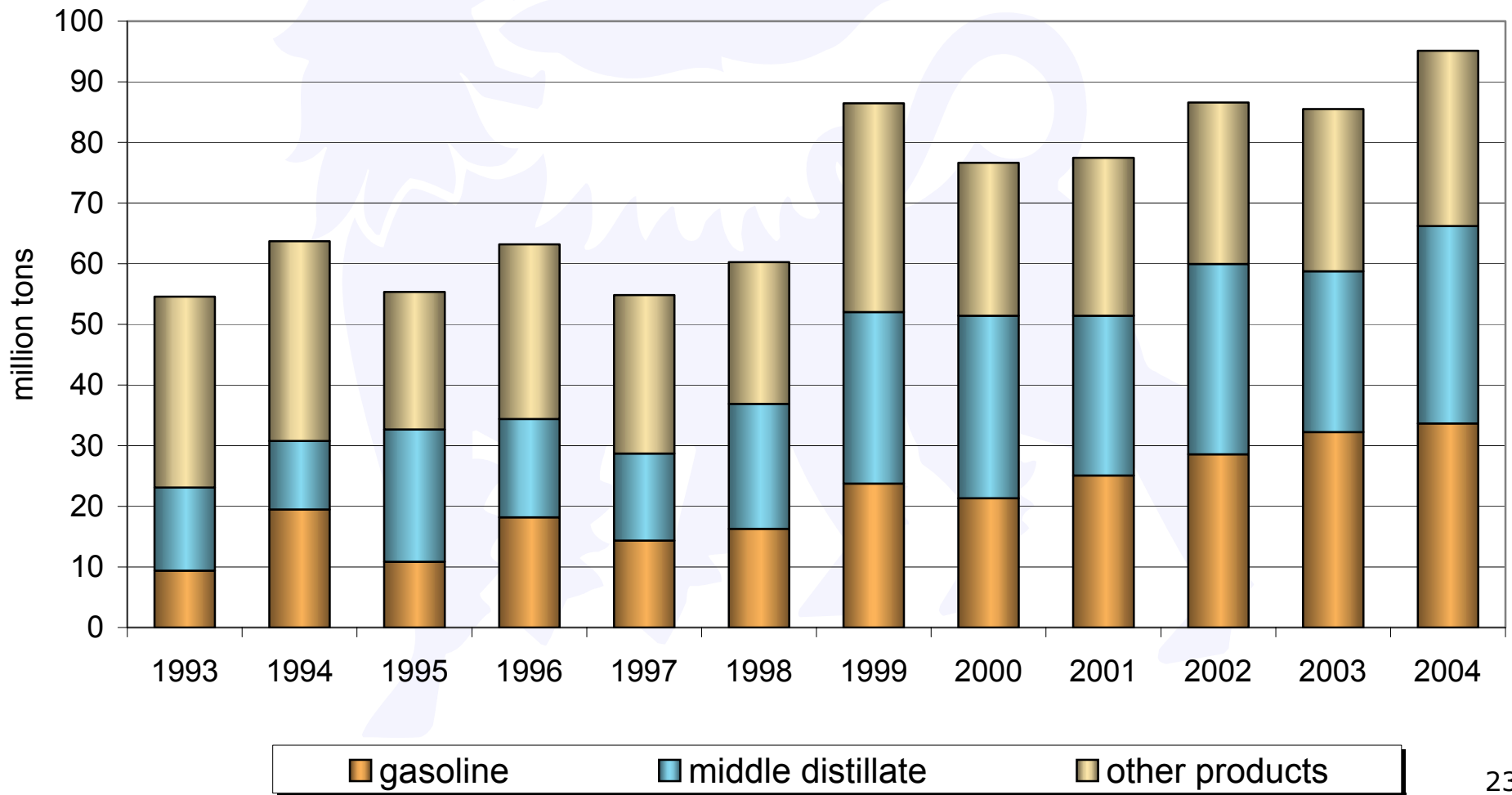


	<b>Primary Capacity</b>	<b>Conversion Capacity (FCC eqv.)</b>
<b>World</b>	14%	44%
<b>Developed Countries</b>	11%	26%
<b>Transition Economies</b>	-16%	11%
<b>Developing Countries</b>	35%	115%

# United States: the mismatch between refining capacity and oil products consumption



# United States: the net oil products imports



# Summary

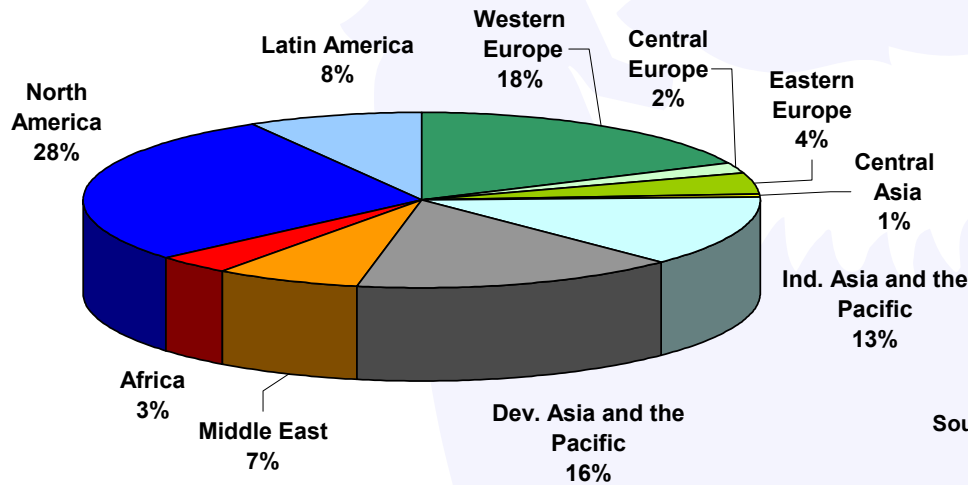
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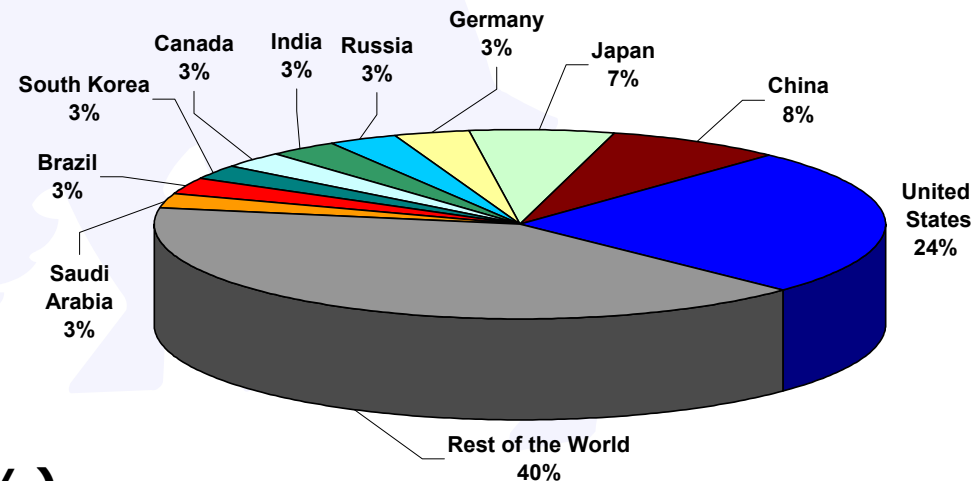
# World Oil Consumption, 2004

(82,5 million barrels/day)

## Consumption by area



## Main consumer countries

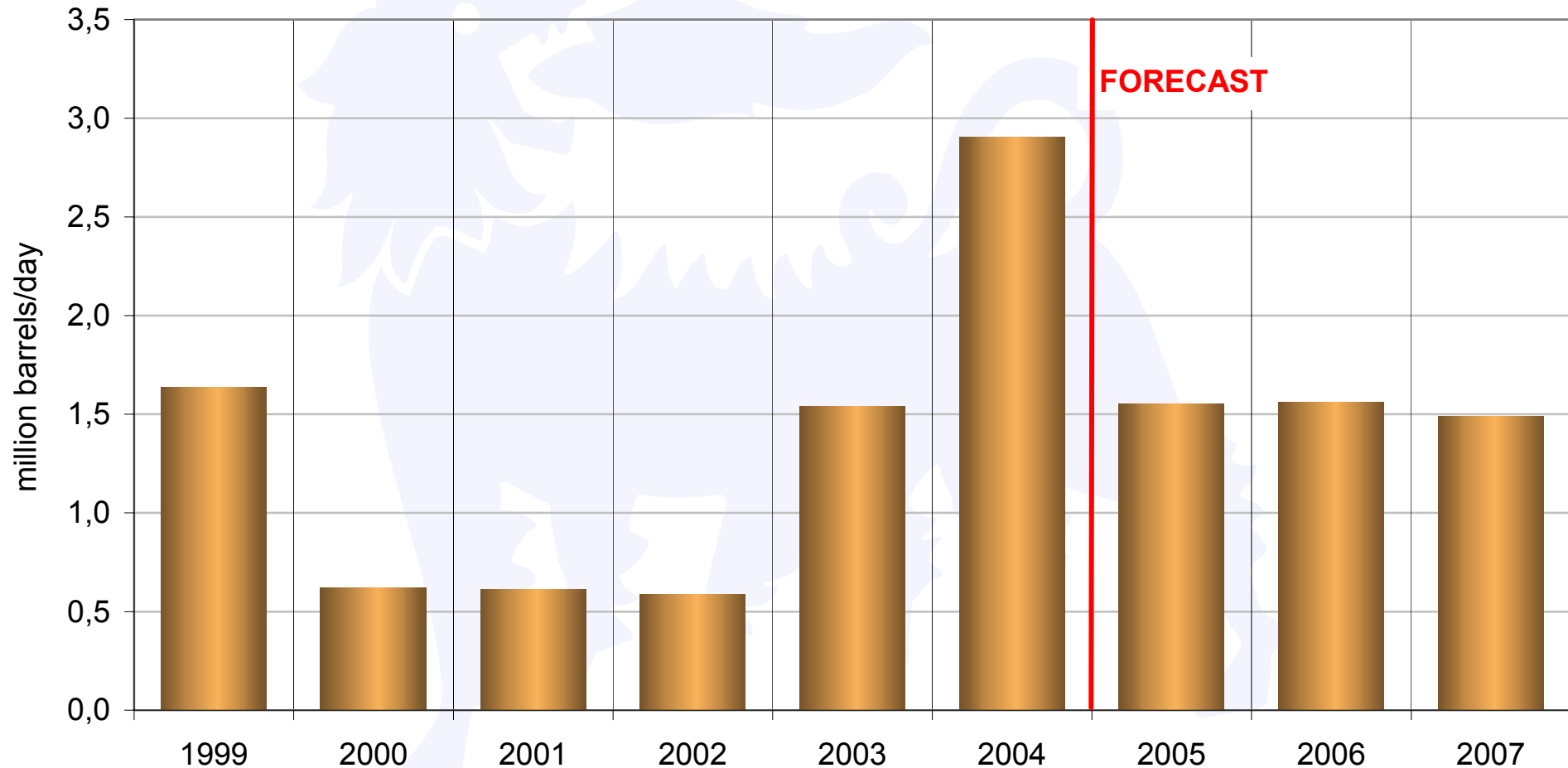


**PVS: 28 million barrels/day (34%)**

**OCSE: 50 million barrels/day (60%)**

# World Oil Demand

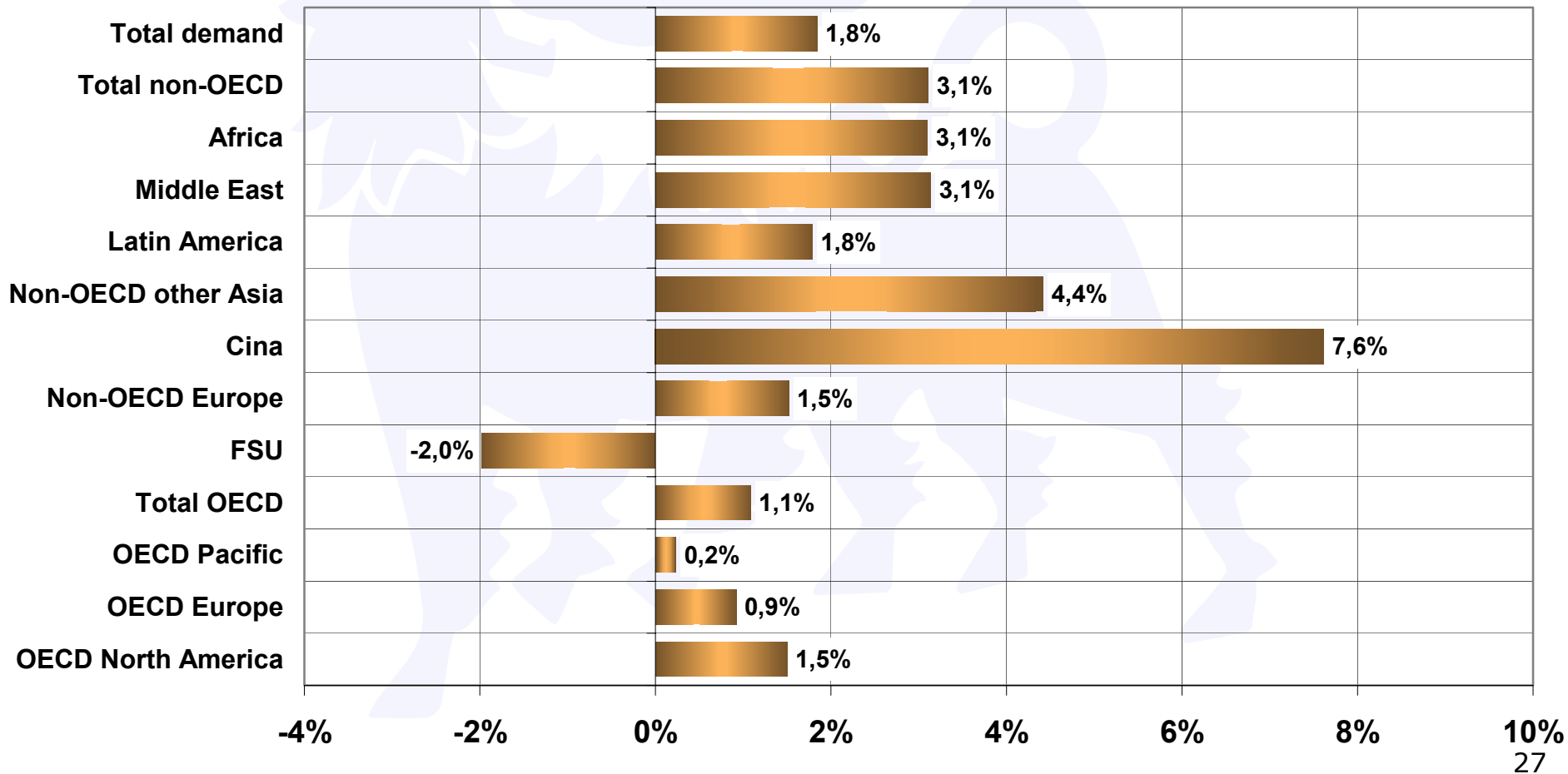
(year on year change)



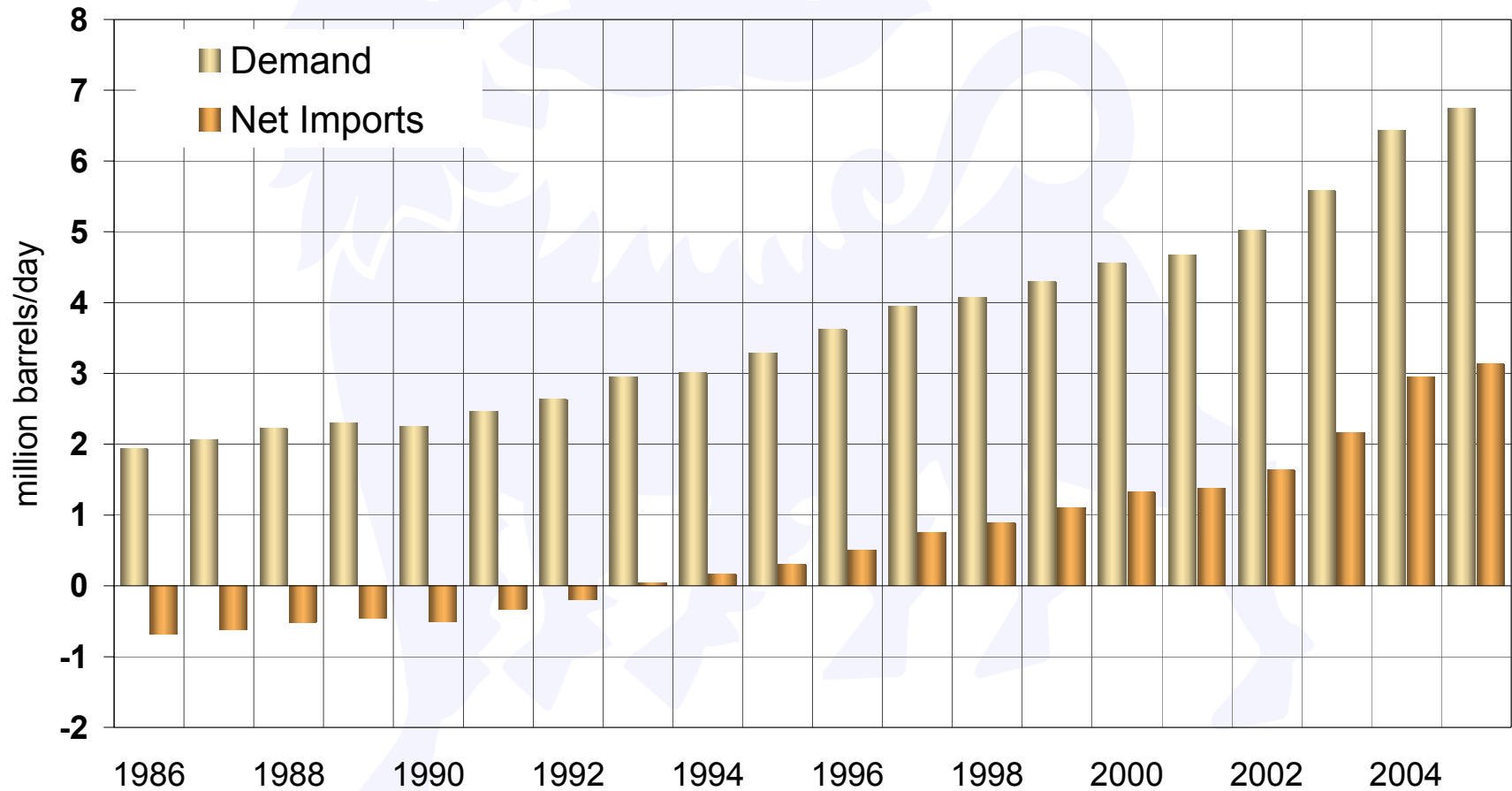
# Where Oil Consumption grows

## Oil Consumption 1995-2004

(yearly average % change)

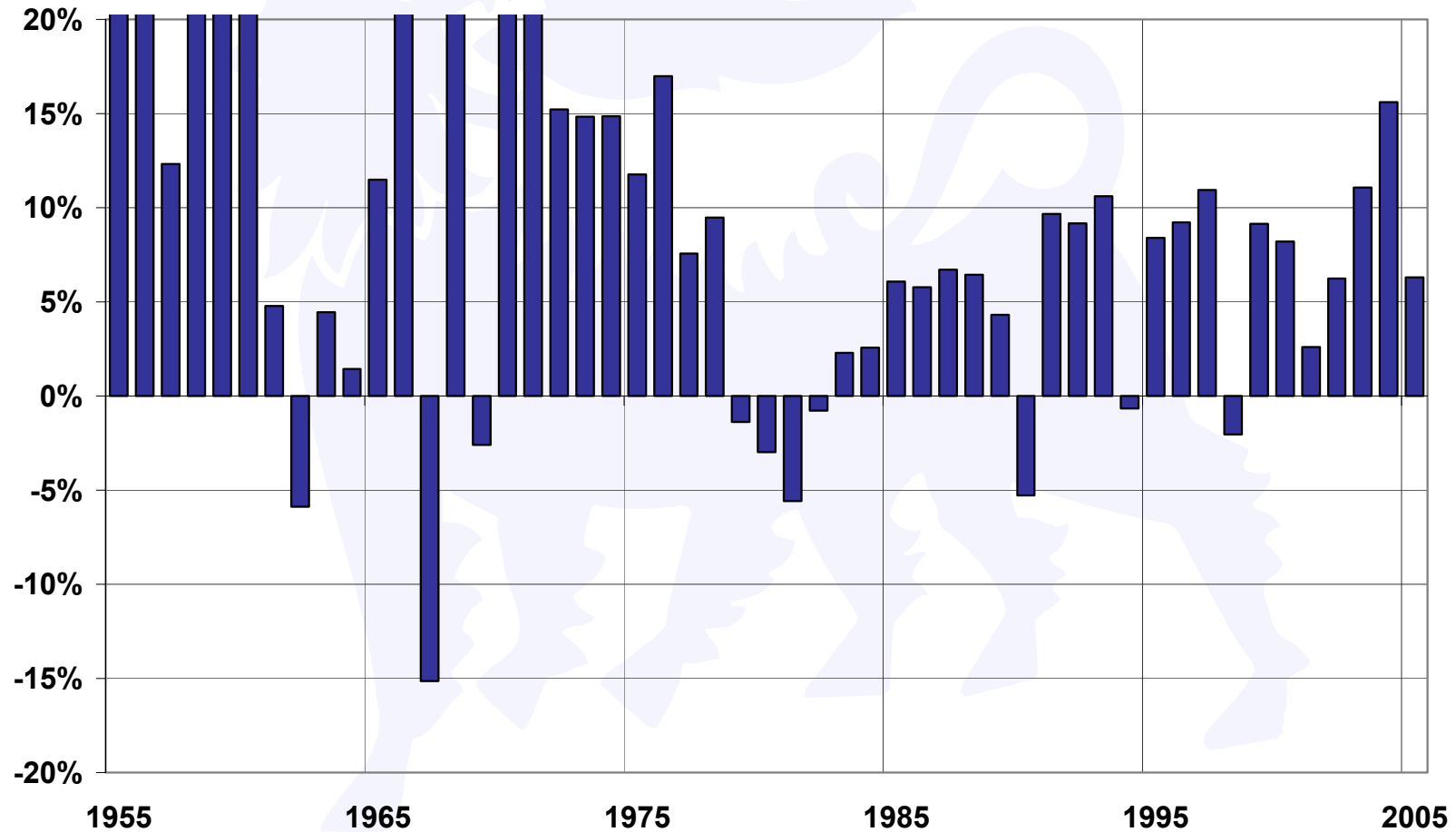


# China: Oil Demand and net Imports



# China Oil Consumption: 1955-2005

(yearly percent change)



The graph only considers a +/-20% change in oil consumption to better appreciate the trend during recent years.<sup>29</sup>

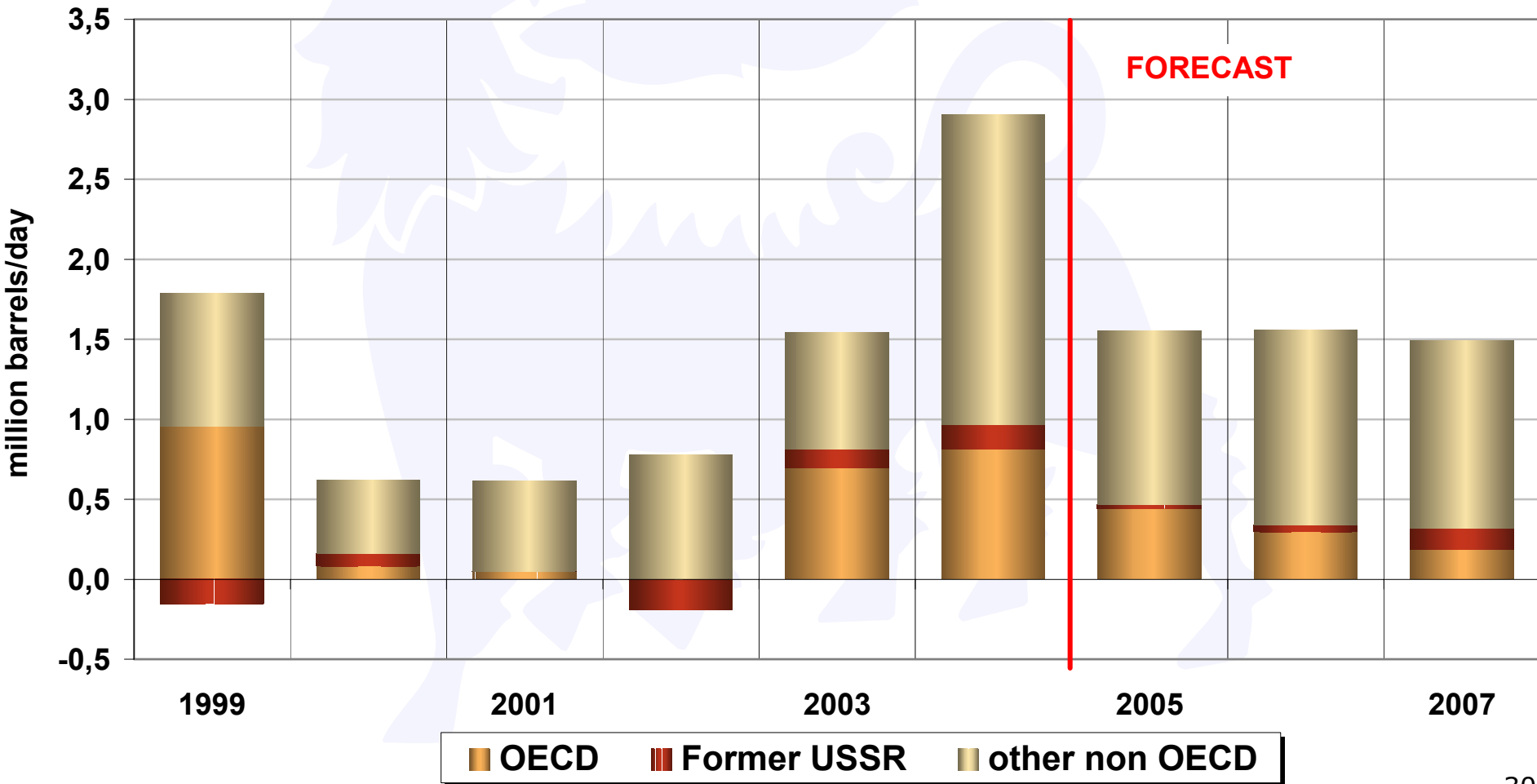
Source: International Energy Agency; Eni Forecast.



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# World Oil Demand: OECD and non OECD

(year on year change)



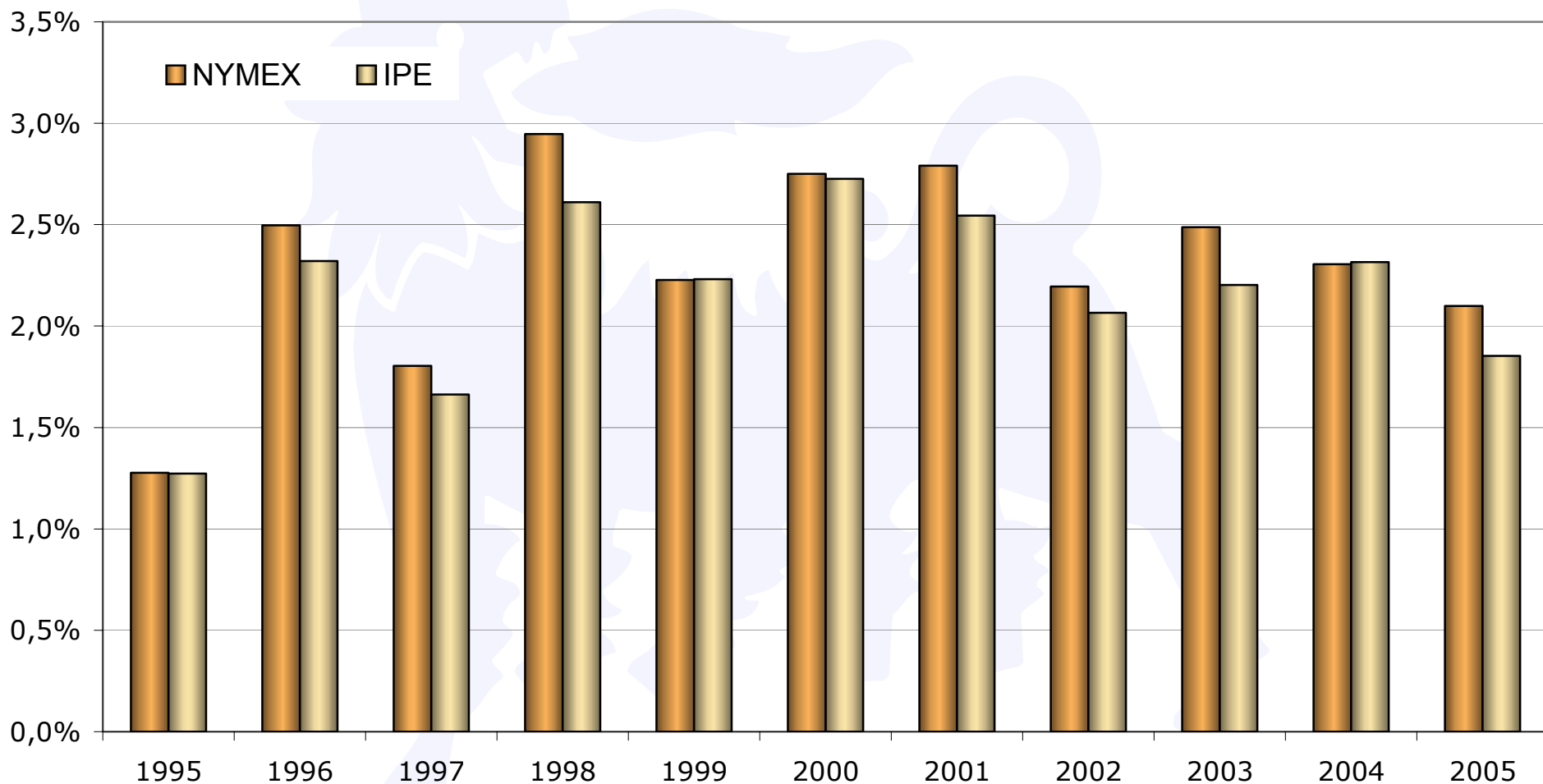
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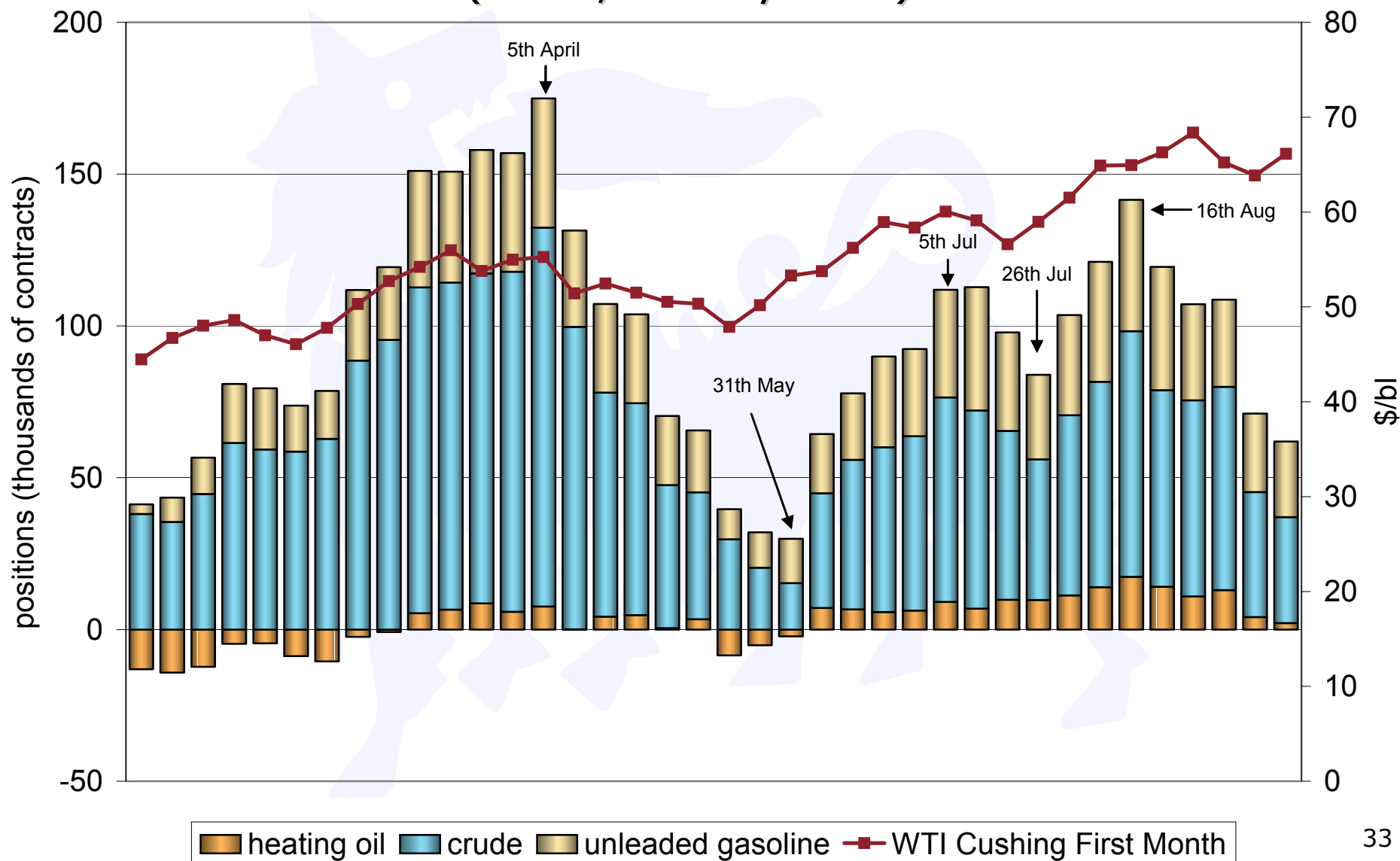
# Crude oil price daily volatility

## Futures 1 month NYMEX vs IPE





# Non Commercial Net Long Positions and Crude Oil Price (2005, weekly data)

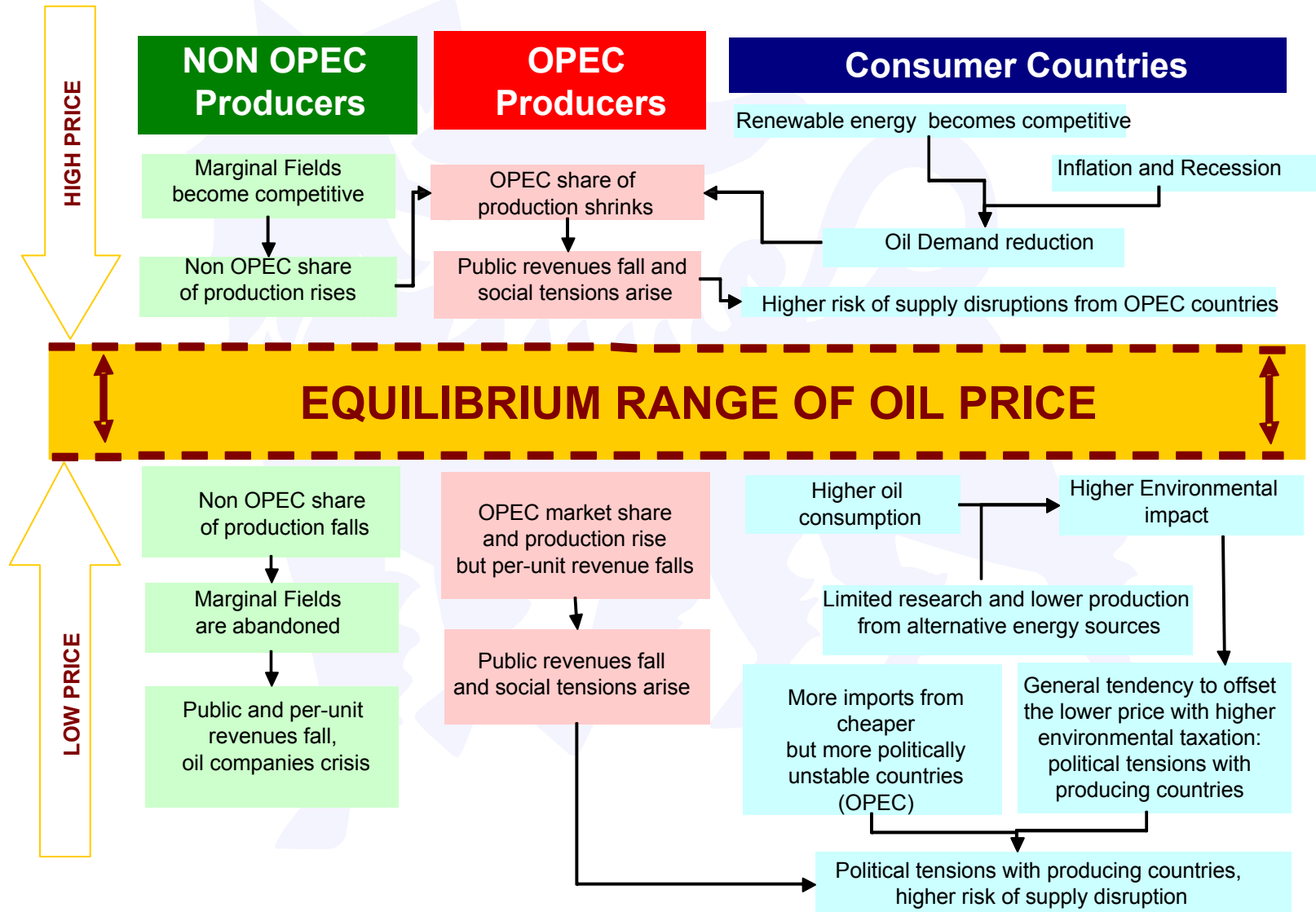


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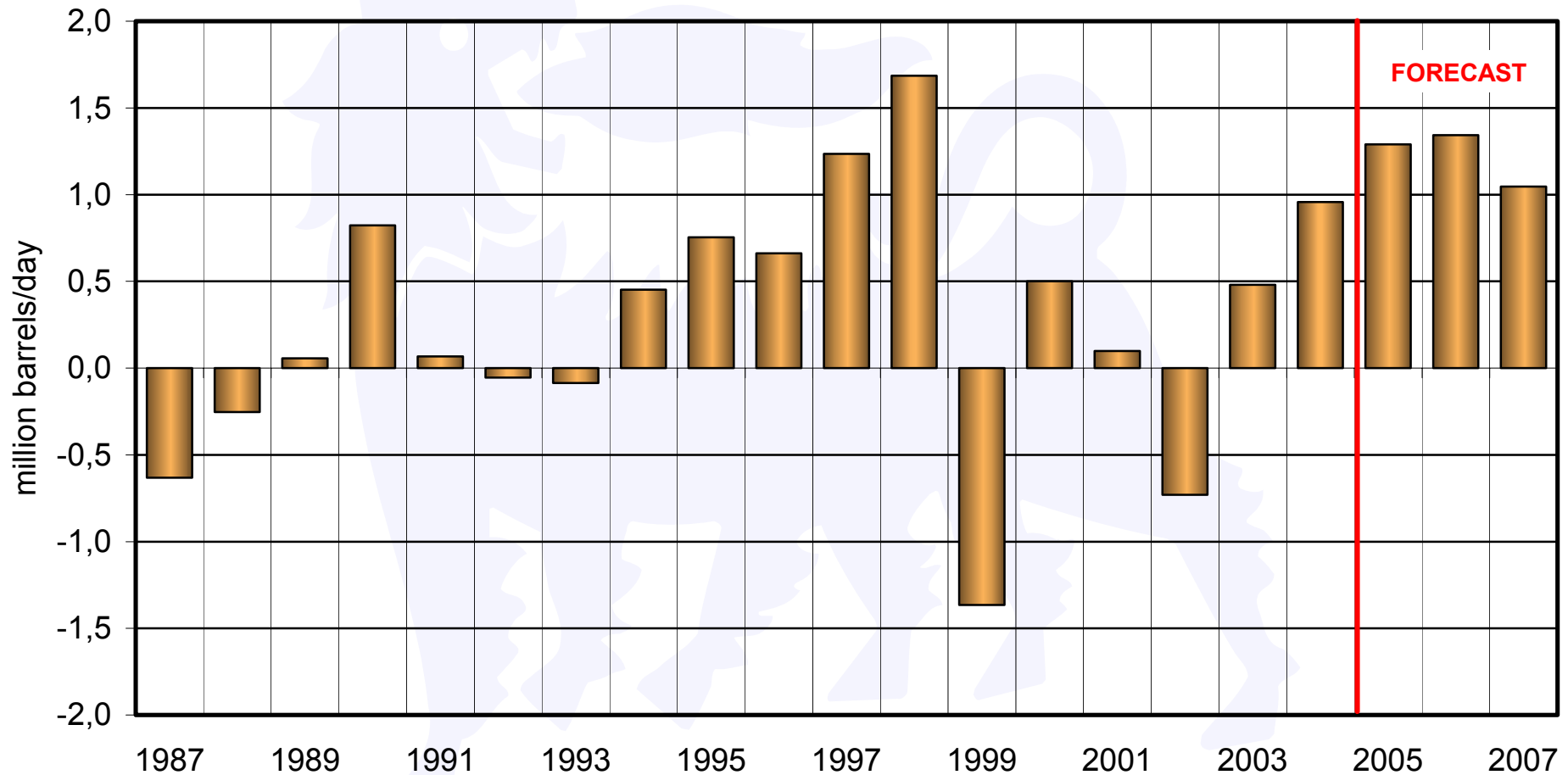
# The price of crude oil: aiming at a long run equilibrium



# Medium Term Oil Price Outlook

- In 2006 there are factors that could bring some downward pressure on oil prices:
  - Opec capacity should increase more than production;
  - Supply and Demand dynamics should significantly increase stocks for the fourth consecutive year.
- In the medium term, the recent high level of oil prices is expected to give new impulse to non OPEC supply and non conventional oil.
- On the demand side, the expected delayed reaction to high oil prices, will contribute to curb the oil price profile.

# World Oil Stock change (Supply-Demand)<sup>1</sup>



(1) Crude, feedstocks and products

# Crude Oil Price, Brent dated

