



WORKSHOP on EMERGENCY OIL STOCKS

Klaus Rehaag

Head, Oil Industry & Markets Division

Editor, Oil Market Report

International Energy Agency

Paris, France

klaus.rehaag@iea.org

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Overview

- **Current Oil Market Assessment – short-term**
- **OPEC – Hitting The Wall (2Q2004)**
- **Oil market trends & developments – medium-term**
- **China - The Engine Of Demand Growth**
- **Russia – The Engine of Supply Growth**
- **Shifting Trade Patterns**
- **Anatomy of a supply disruption**
- **Miscellaneous-to-balance**



IEA Short-Term Outlook



- **Uncertainty over Iraqi supplies remains**
- **Geopolitical uncertainties remain - Russia, Iran, Saudi, Nigeria, Venezuela, Indonesia**
- **Strong economic growth in 2004?**
- **China growth outstanding, but will bubble burst?**
- **Winter mild so far**
- **Will OPEC cut in November, further tighten in 2004?**

- **Call on OPEC has been revised higher for 2004 in recent months – still sharp dip in second quarter**
- **OPEC has greater potential to control market with higher call, but faces internal pressures + rising non-OPEC & OPEC liquids production**
- **OPEC's ability to sustain high prices in 2004 depends on ability to keep stocks tight**



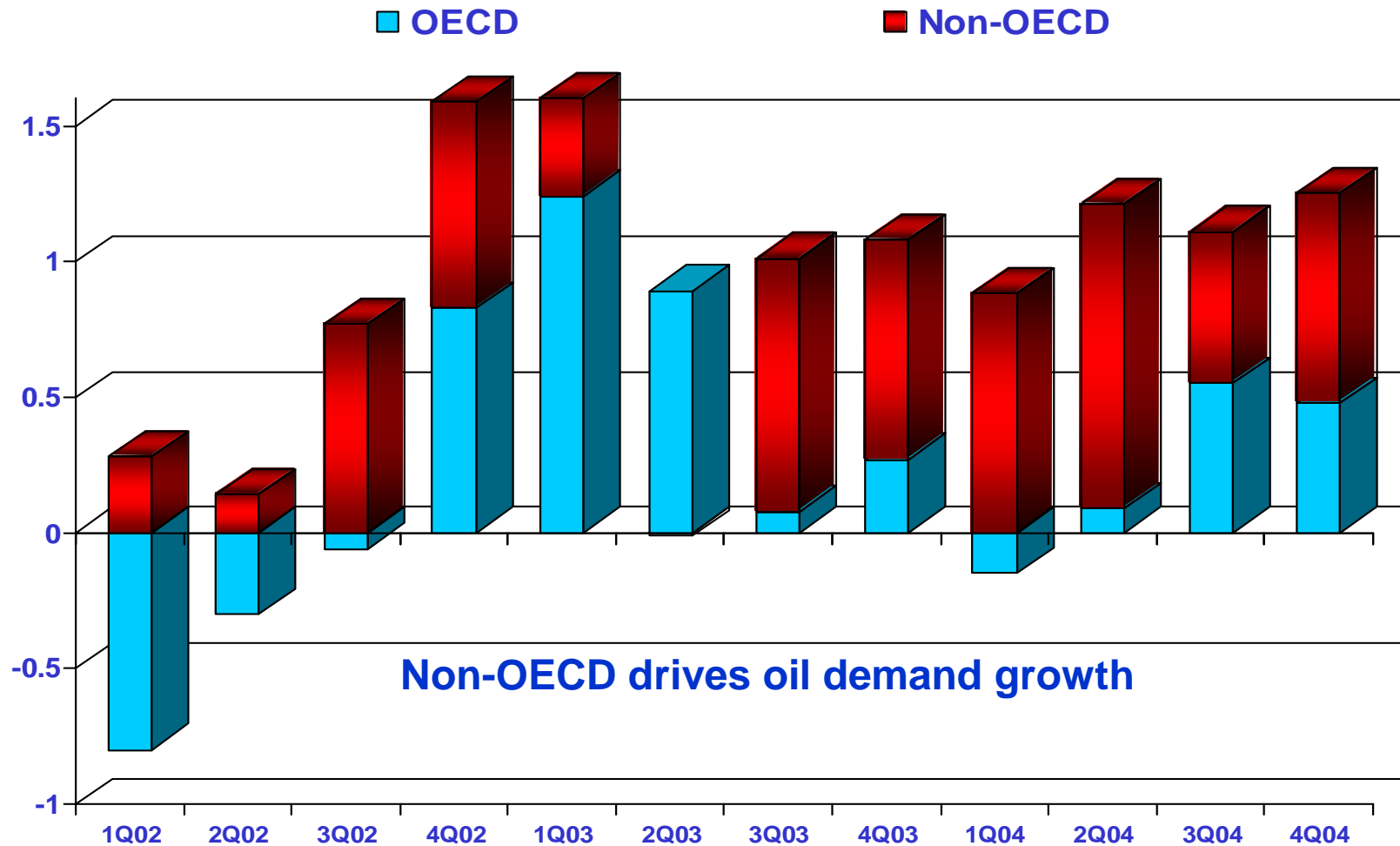
November Oil Market Report (OMR)

- Global economic recovery is picking up steam – US, Japan, Europe
- Chinese growth, while high, appears sustainable – risk of “bubble”
- With GDP up, should start to see higher oil demand growth
 - 2003 - +170 kb/d 1.3 mb/d
 - 2004 - +20 kb/d 1.1 mb/d
- While all regions contribute to increased oil demand growth, momentum is provided by China
- Chinese oil demand is fueled:
 - Transportation sector – car sales and registrations
 - Utility sector – building new oil-powered capacity
 - Industrial sector – shift in industrialization to China
- Recovery in Iraq also contributing to oil demand growth



Oil Demand Recovery: OECD Vs Non-OECD

October OMR Forecast of Quarterly Demand Growth (mb/d)



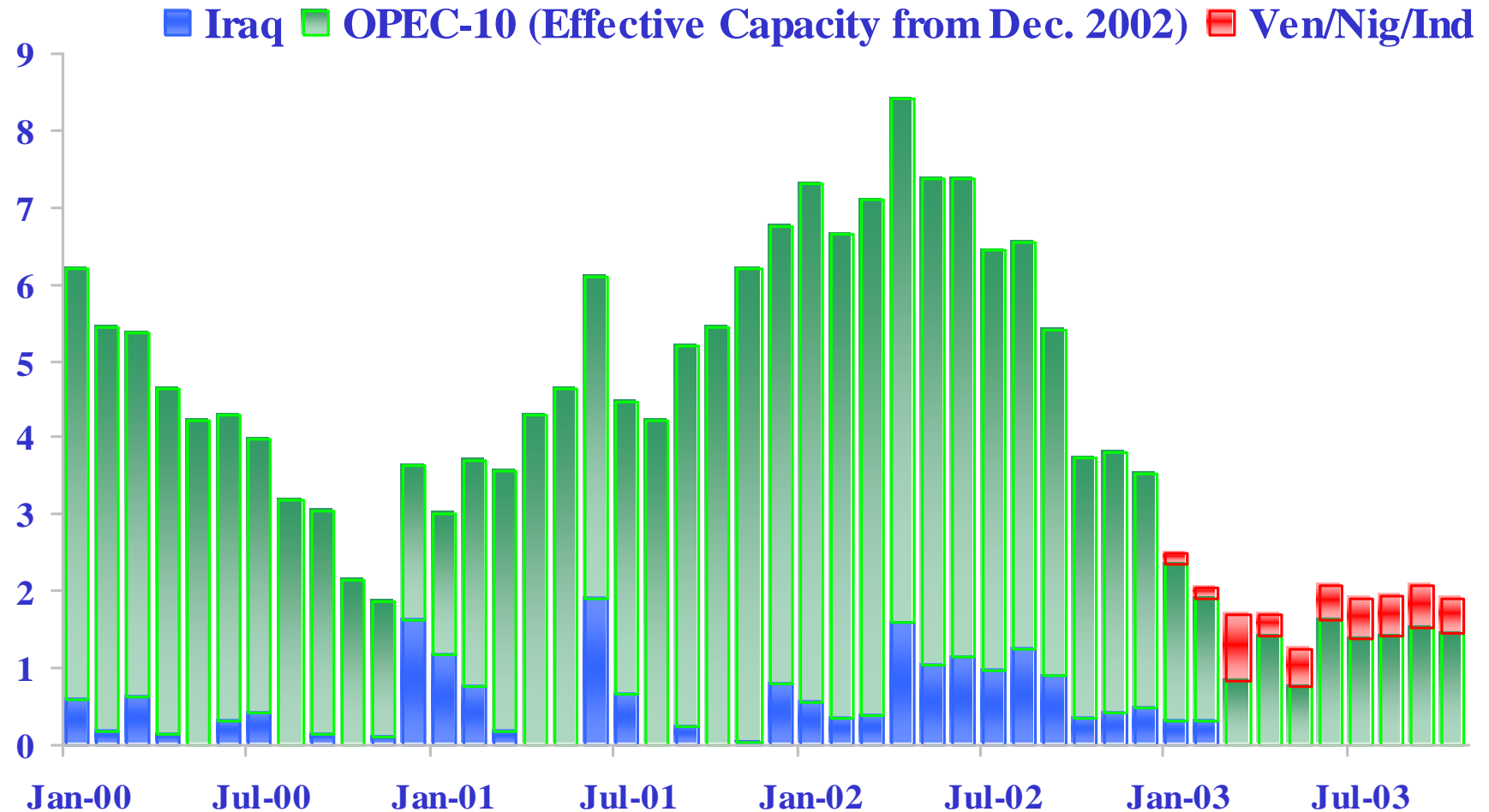
Non-OECD drives oil demand growth

Oil Demand Growth: 2003: 1.3 mb/d (1.7%); 2004: 1.1 mb/d (1.4%)



Current OPEC Spare Production Capacity

mb/d

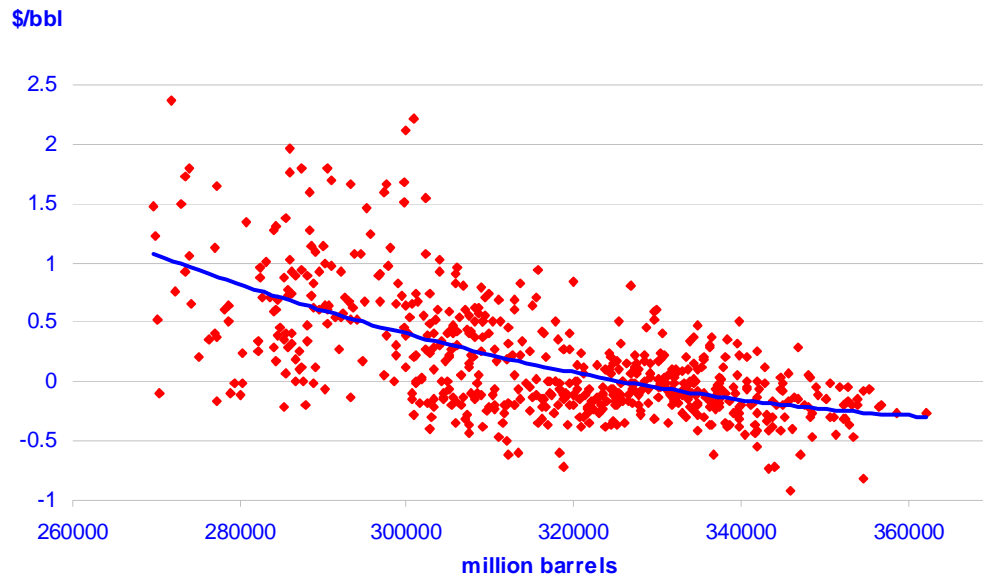
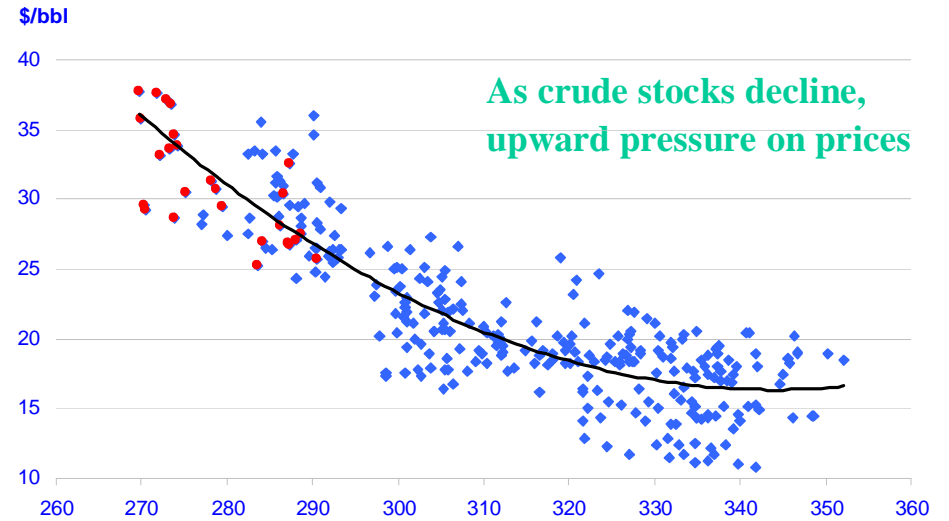


*Heading into winter, with balanced/low stocks and supply-side risks
- Effective spare capacity around 1.5 mb/d*



US Crude Stocks vs. Prices

US winter crude stocks & WTI prices. Higher prices are associated with lower inventory levels.



Backwardation is related to low stocks, and increased price volatility



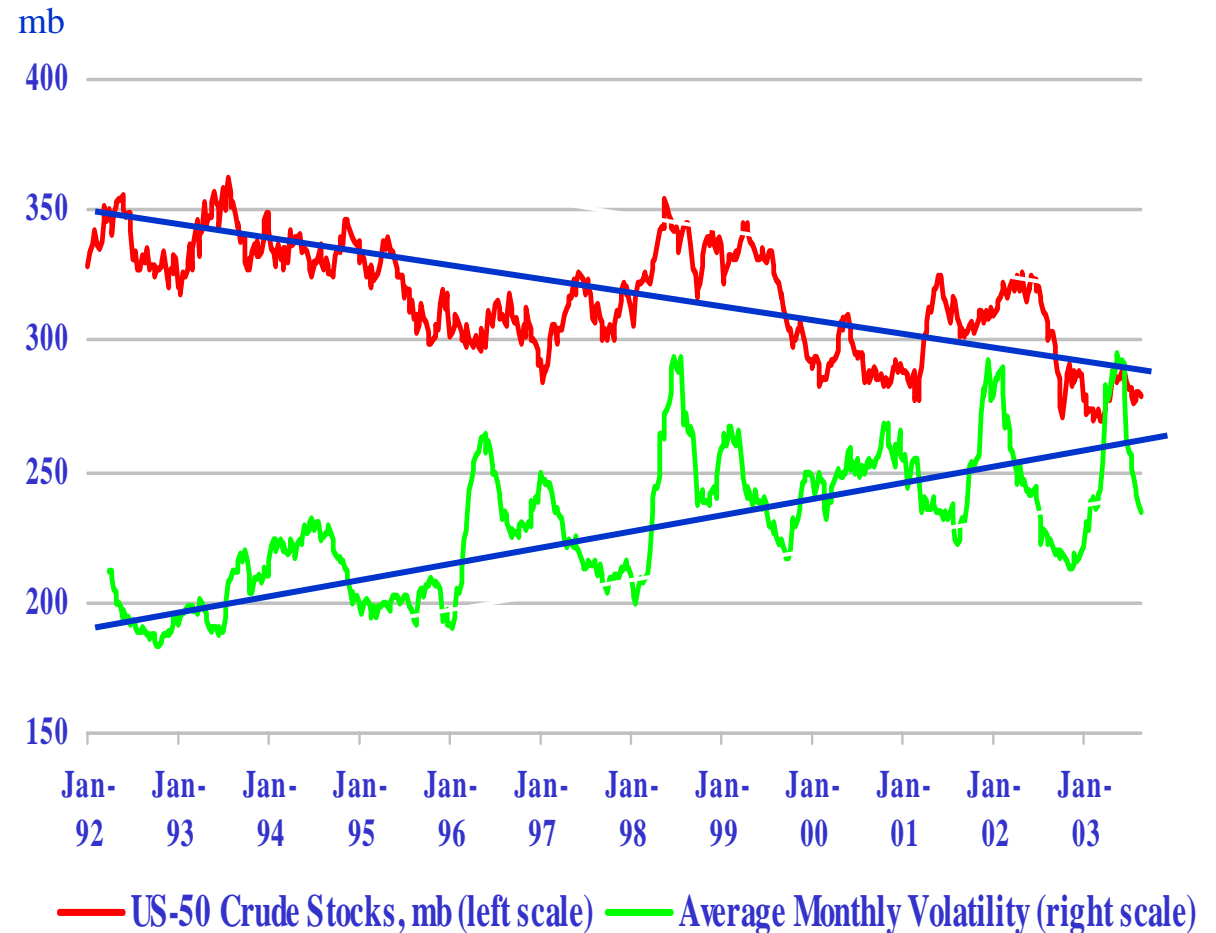
US-50 Crude Stocks vs. WTI Price Volatility

US industry crude stocks are on a long-term lower trend (mergers; IT; ROCE)

Clear relationship between lower stocks & increased price volatility

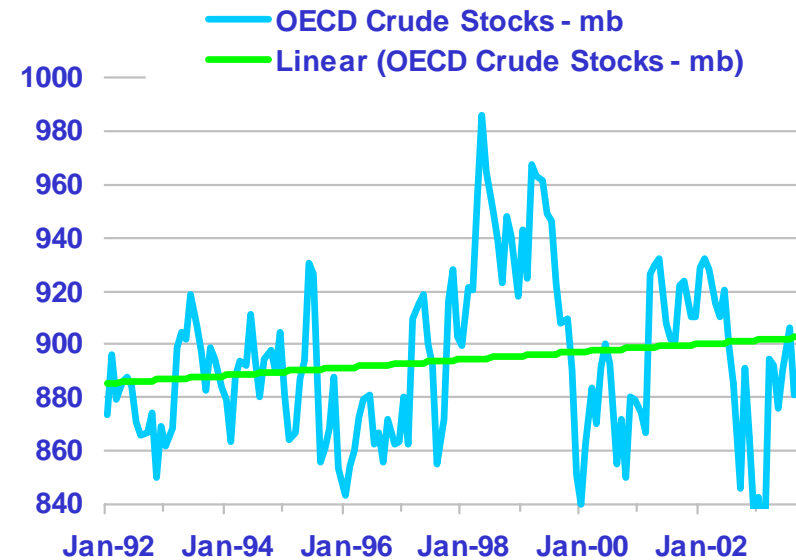
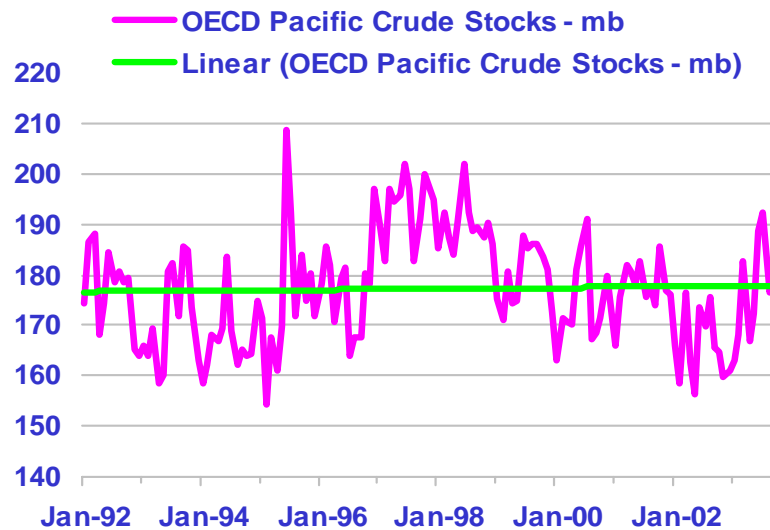
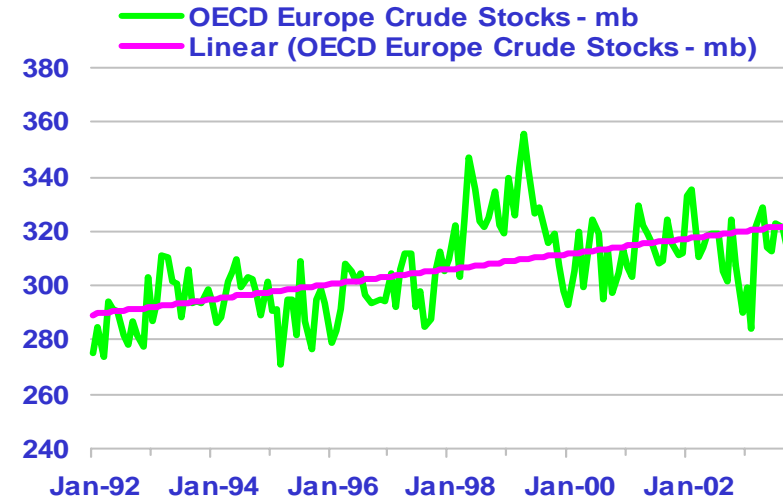
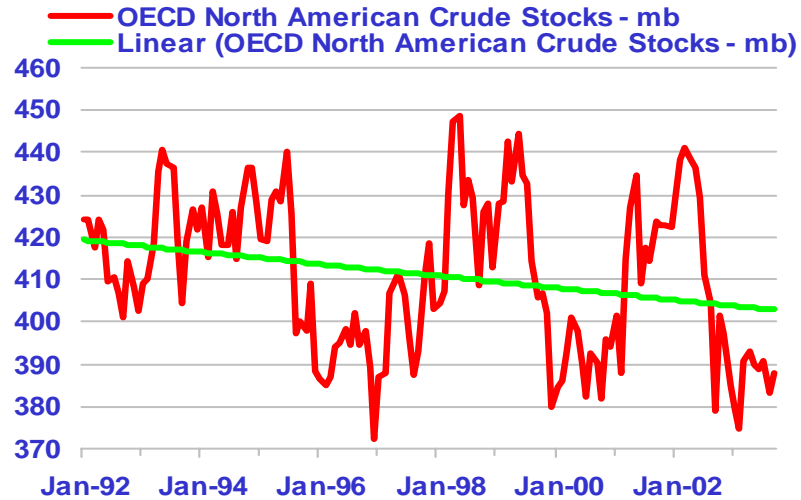
As stocks get tighter, takes longer, and costs more, to replenish supply from greater distances (heating oil stocks from Russia)

What if cold winter in both Russia and US East Coast?
What if Black Sea ports closed due to storms?



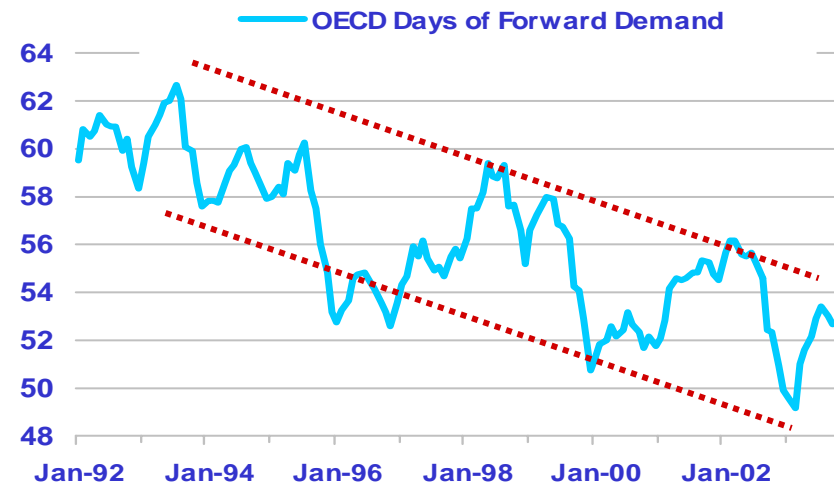
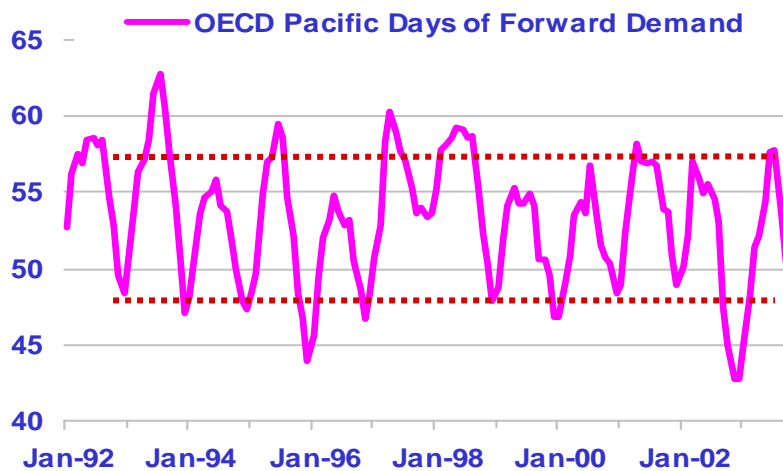
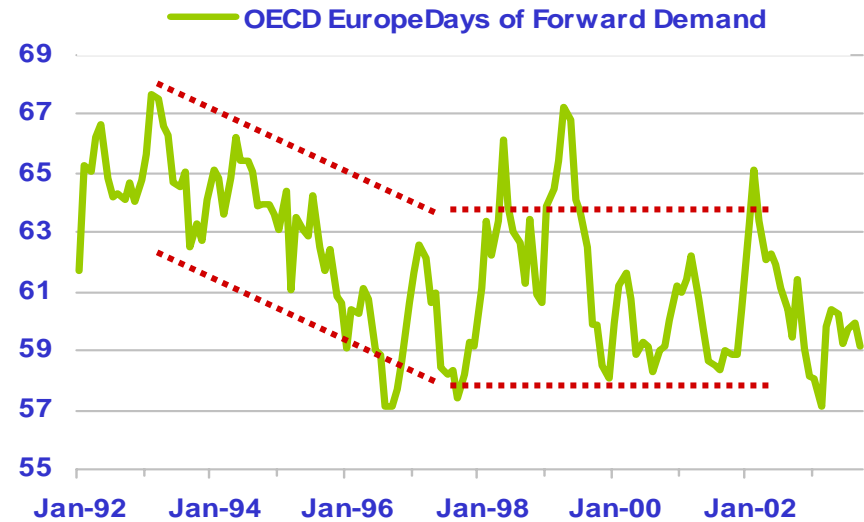
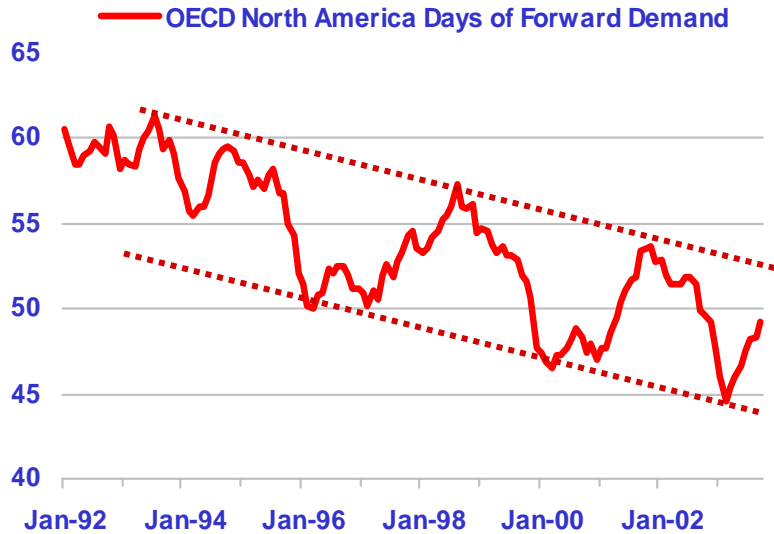


Long Term Industry Crude Stocks Trends in the OECD



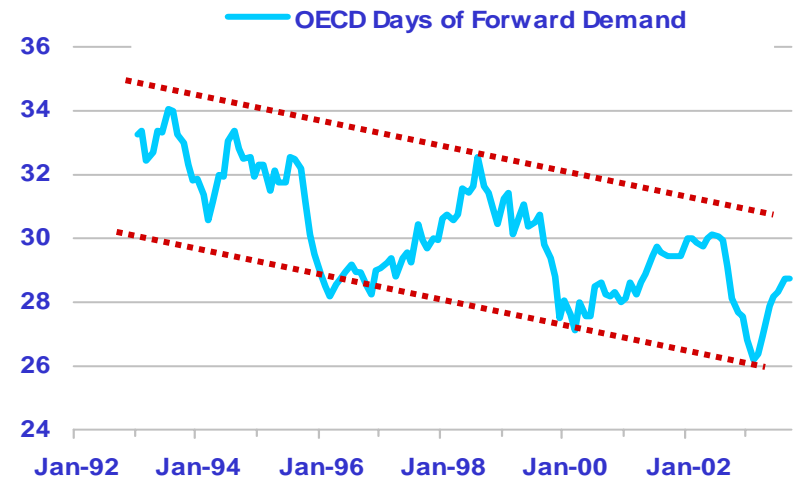
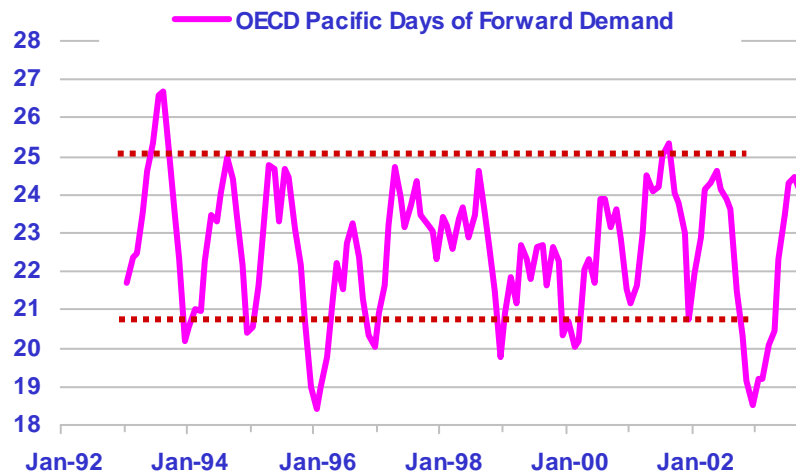
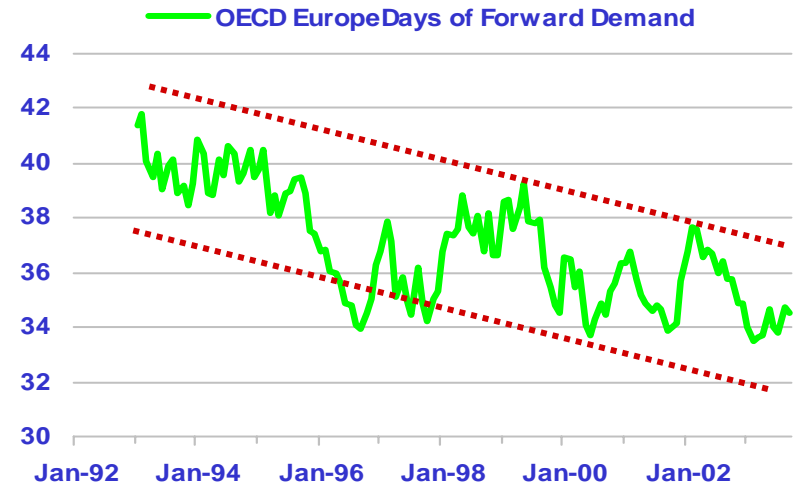
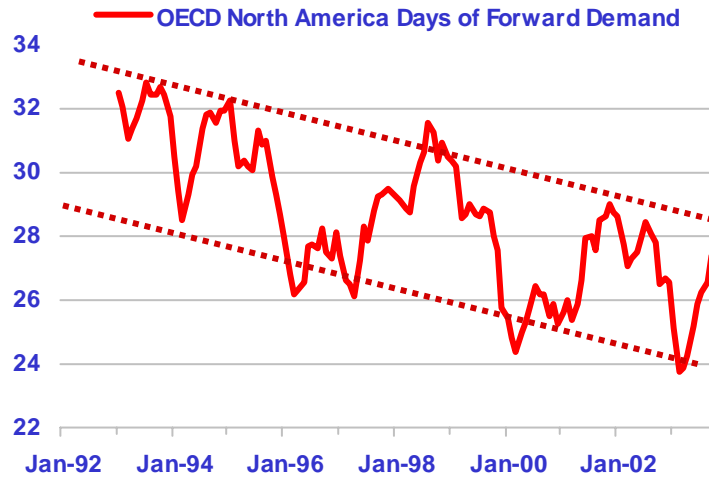


OECD Days of Forward Demand by Industry Total Oil Stocks



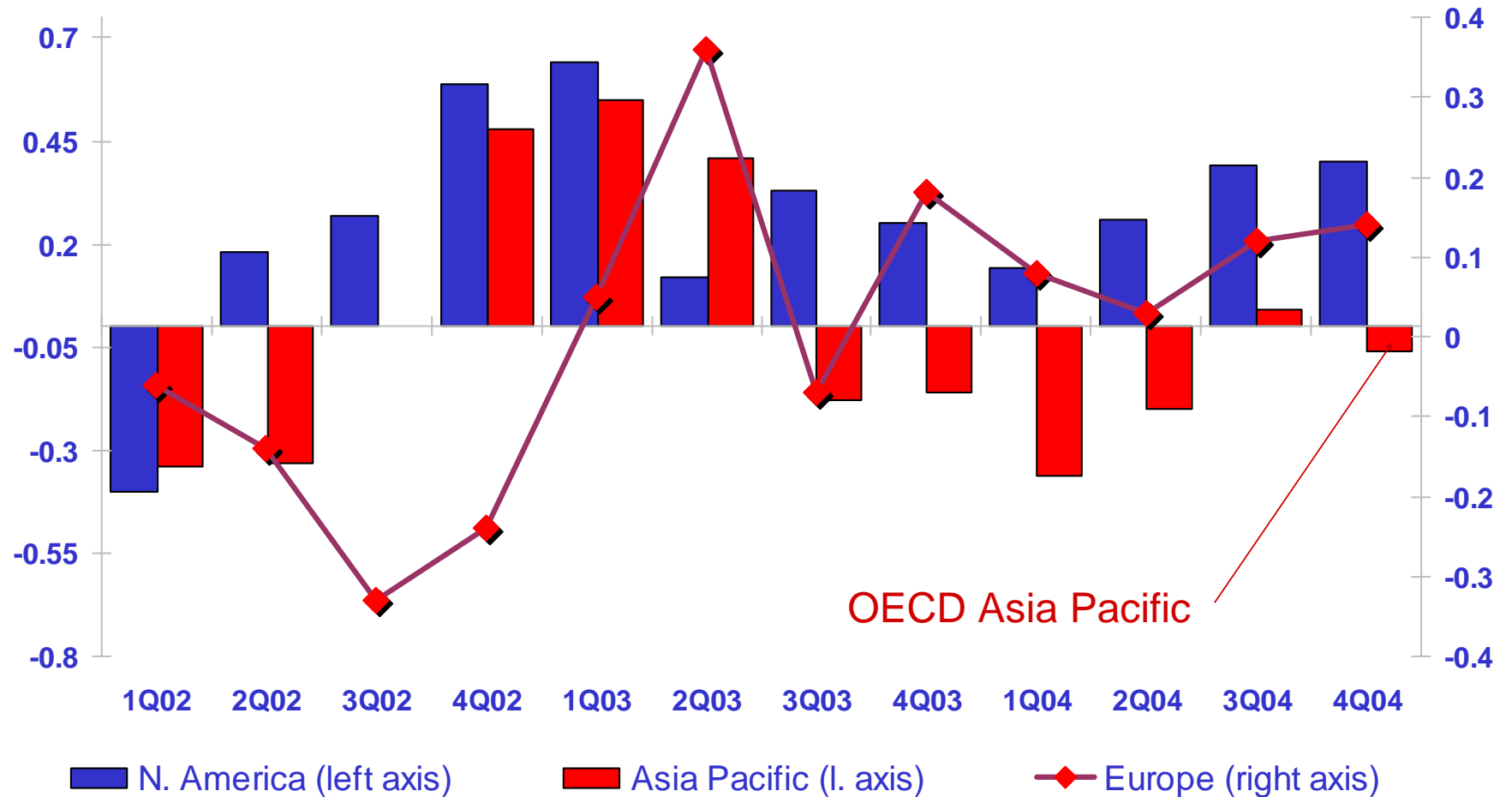


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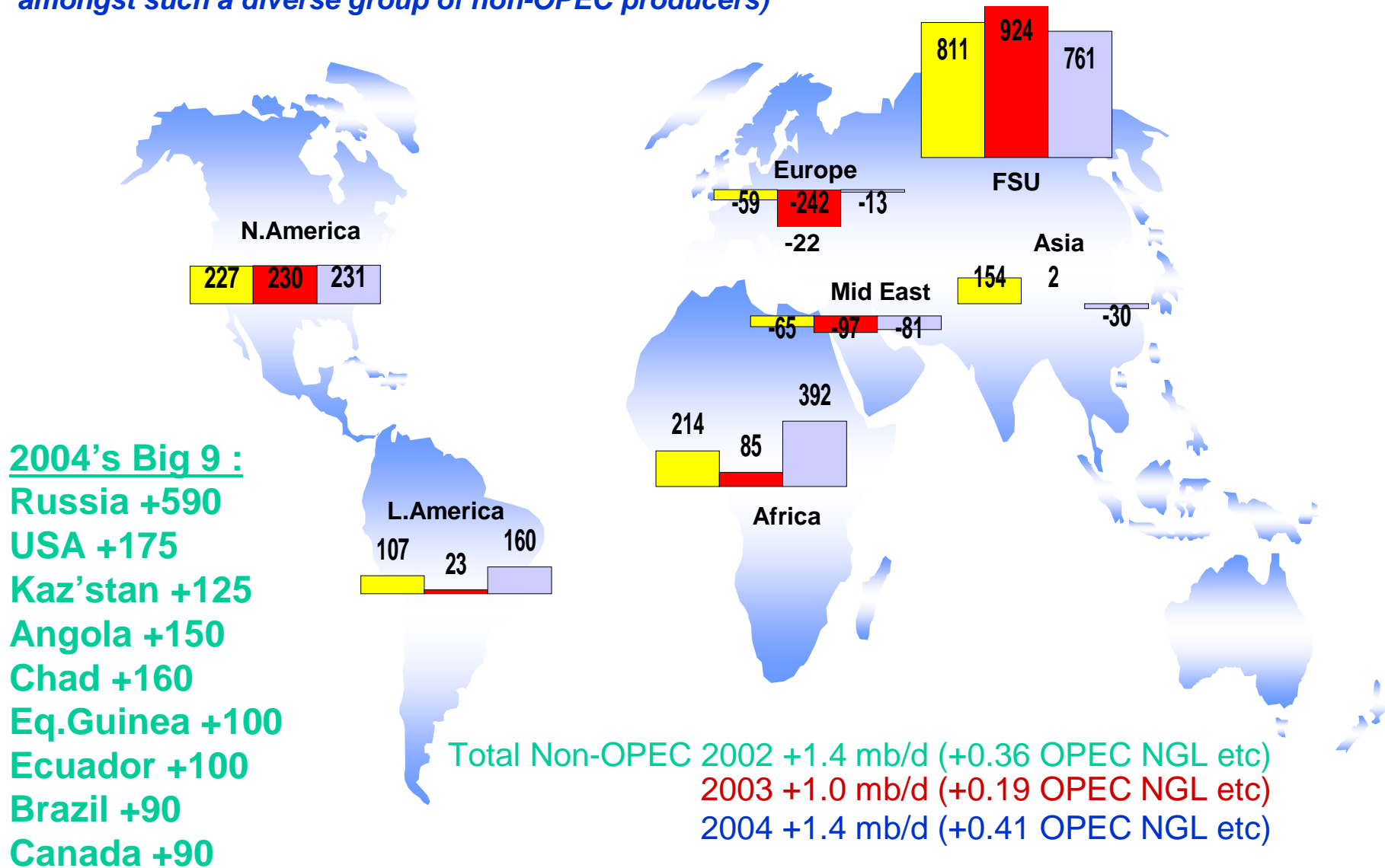
OECD Demand: Asia Bucks the Trend (mb/d)





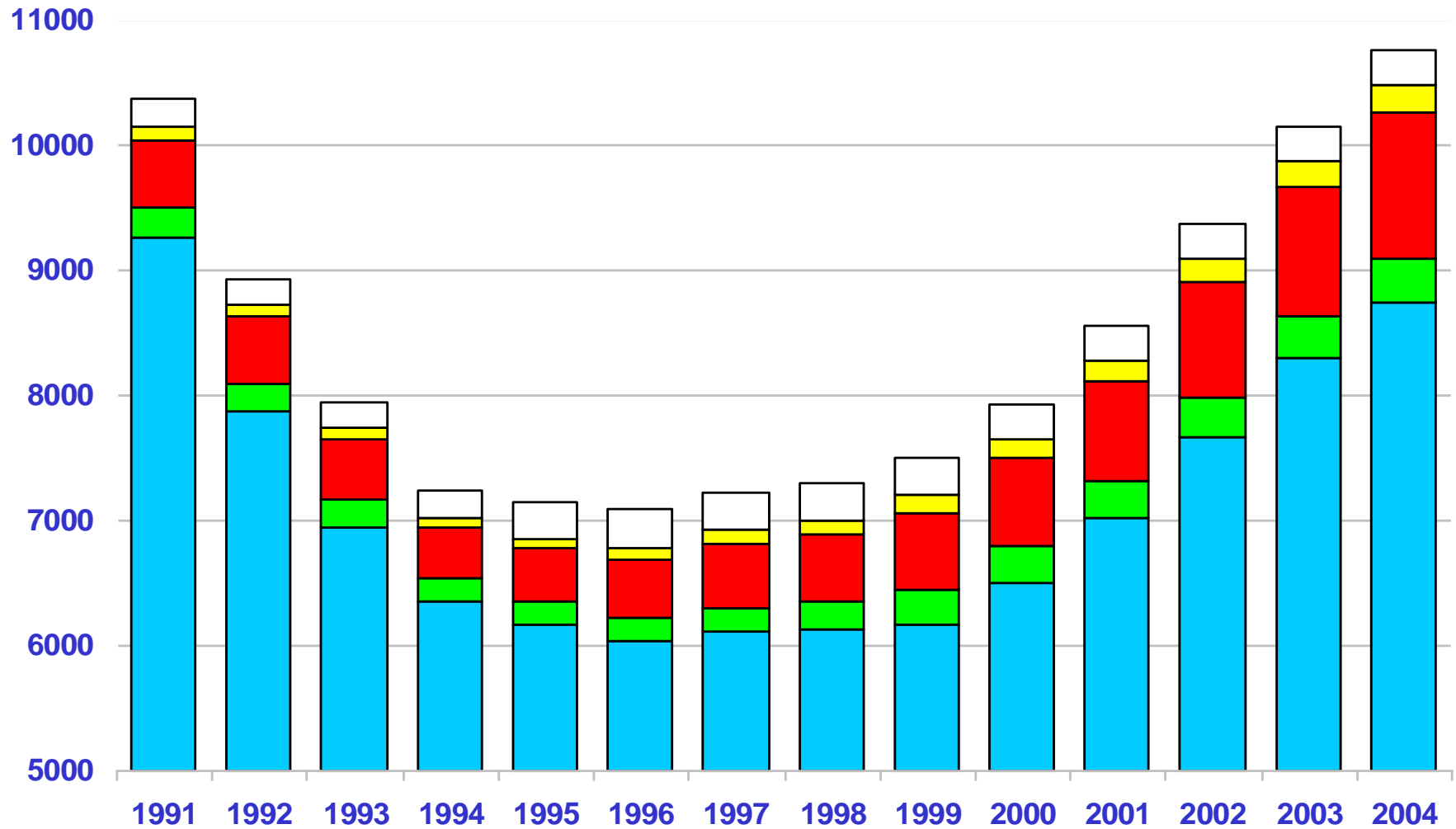
Main Non-OPEC Supply Gains 2002/2003/2004

(Difficult for OPEC to engineer constraint amongst such a diverse group of non-OPEC producers)





FSU Oil Production 1991-2004

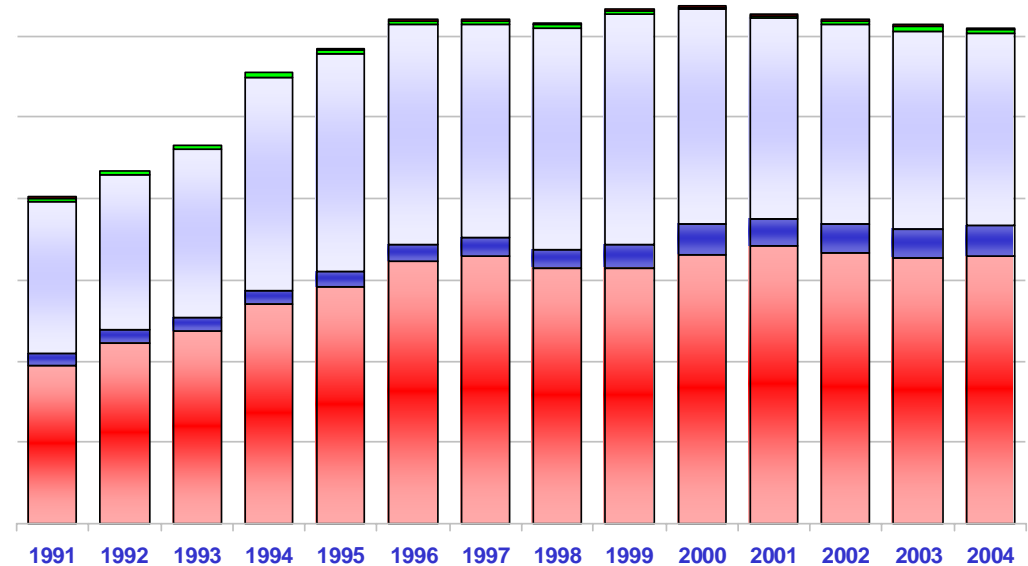


■ Russia ■ Azerbaijan ■ Kazakhstan ■ Turkmenistan ■ Others

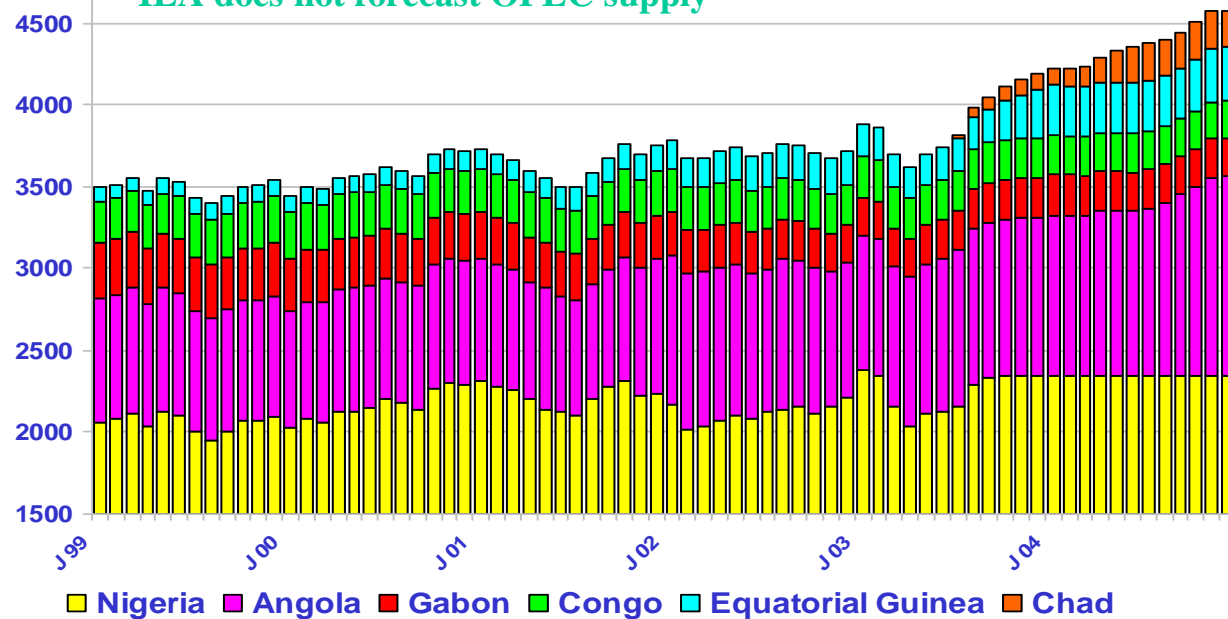


Atlantic Basin Supply

North Sea: slow decline, partly offset by increased liquids production



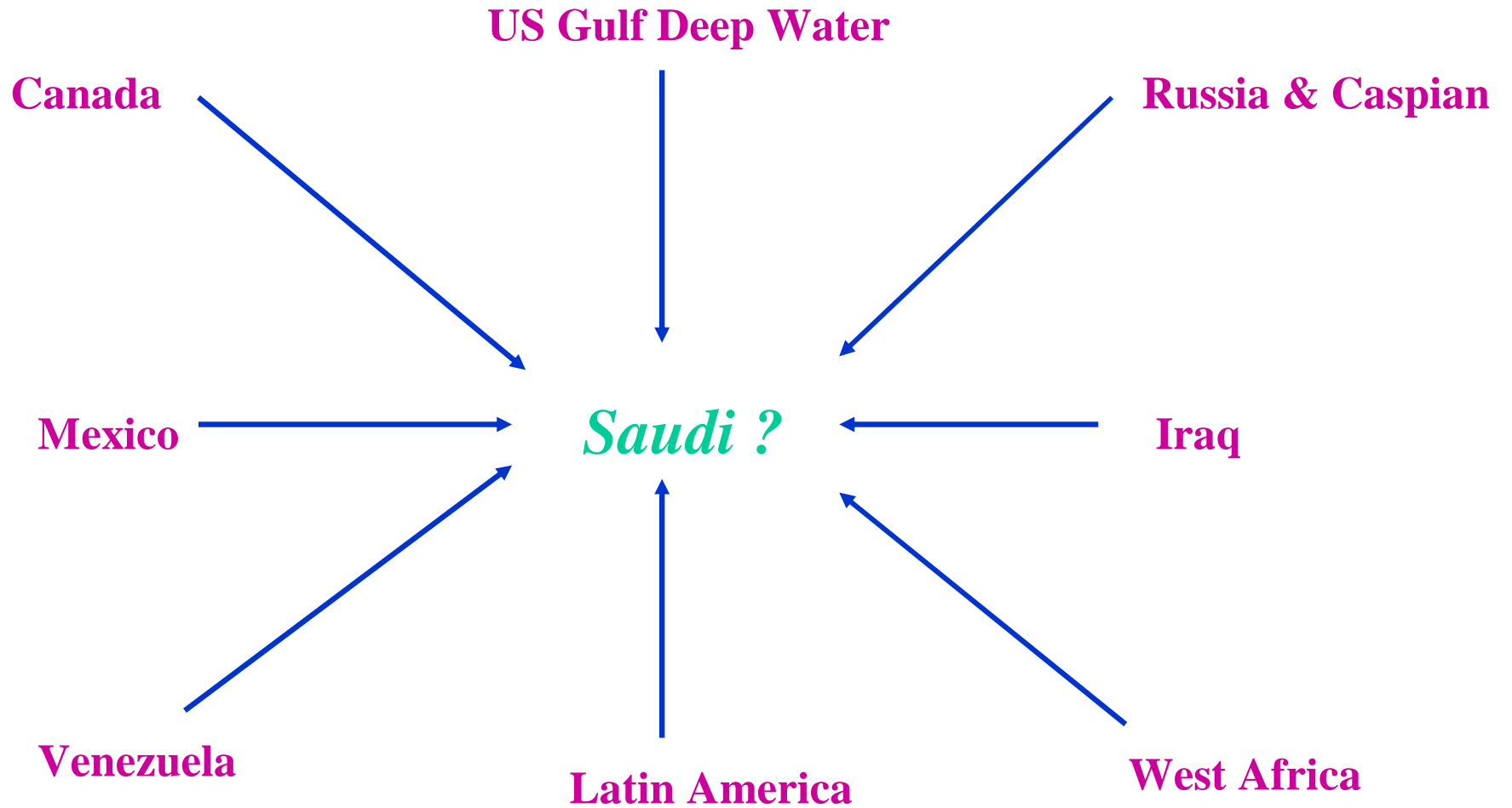
Nigerian production also increasing – IEA does not forecast OPEC supply



Nigeria assumed flat at pre-disruption levels through 2004 due to political unrest



Atlantic Basin – Supply Push



Increasing supply pressure on Atlantic Basin – highly competitive “buyers” market
Saudi is “swing” marginal supplier – crowded out? Security of Demand: +60% Asia



Pacific Basin – Demand Pull



Increasing demand pressure on Pacific Basin – highly competitive “sellers” market

Declining regional production entails Atlantic Basin will have to be “pulled” to region

Few options: conserve, diversify or become more dependent on Middle East oil



Shifting Trade Patterns

➤ Atlantic Basin

- Flat demand, growing supply
- “*buyers*” market
- Many suppliers, few buyers
- Supply “*push*”
- Middle East – swing supply
- Extremely competitive – *discount* price structure

➤ Pacific Basin

- Surging demand, declining supply
- “*sellers*” market
- Few suppliers, many buyers
- Demand “*pull*”
- Middle East – highly dependent
- Extremely competitive – *premium* price structure

Atlantic Basin supply will be “*pushed*” out of region – price falls to China parity (Asian price less freight)

Atlantic Basin supply will be “*pulled*” to Asia – with few supply alternatives, producers extract premium vs. Atlantic Basin (freight less discount)



Thank You

Klaus Rehaag

Head, Oil Industry and Markets Division

Editor, Monthly Oil Market Report

International Energy Agency

Paris, France

Oilmarketreport.org