

THE ROLE OF GOVERNMENTS & INTERNATIONAL ORGANISATIONS

IN PROMOTING ENERGY SECURITY



Ambassador William C. Ramsay

Deputy Executive Director International Energy Agency

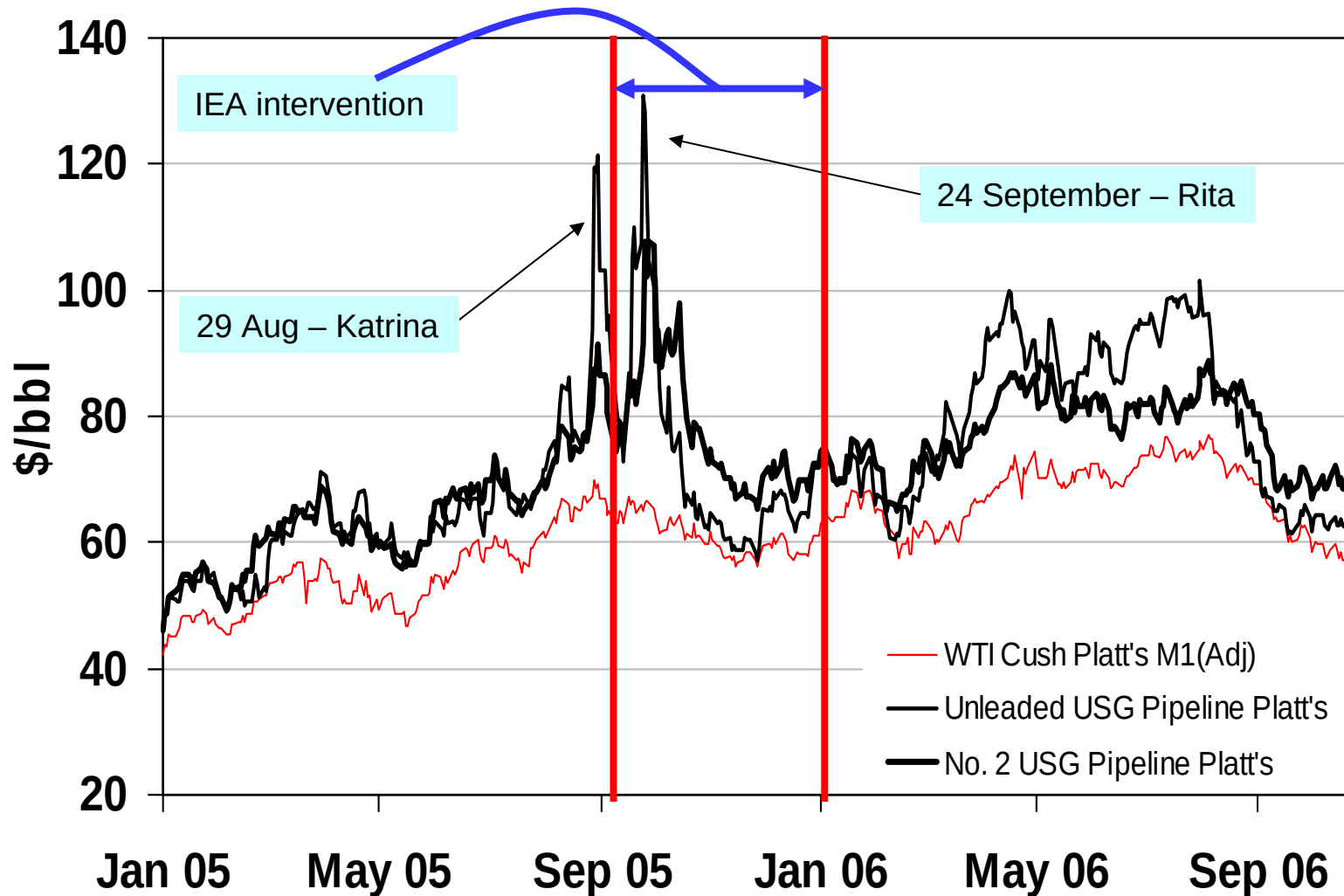
Organised with the Energy Charter Secretariat, and the Organisation for Security and Cooperation in Europe

25 October 2006

Palais d'Egmont, Brussels, Belgium

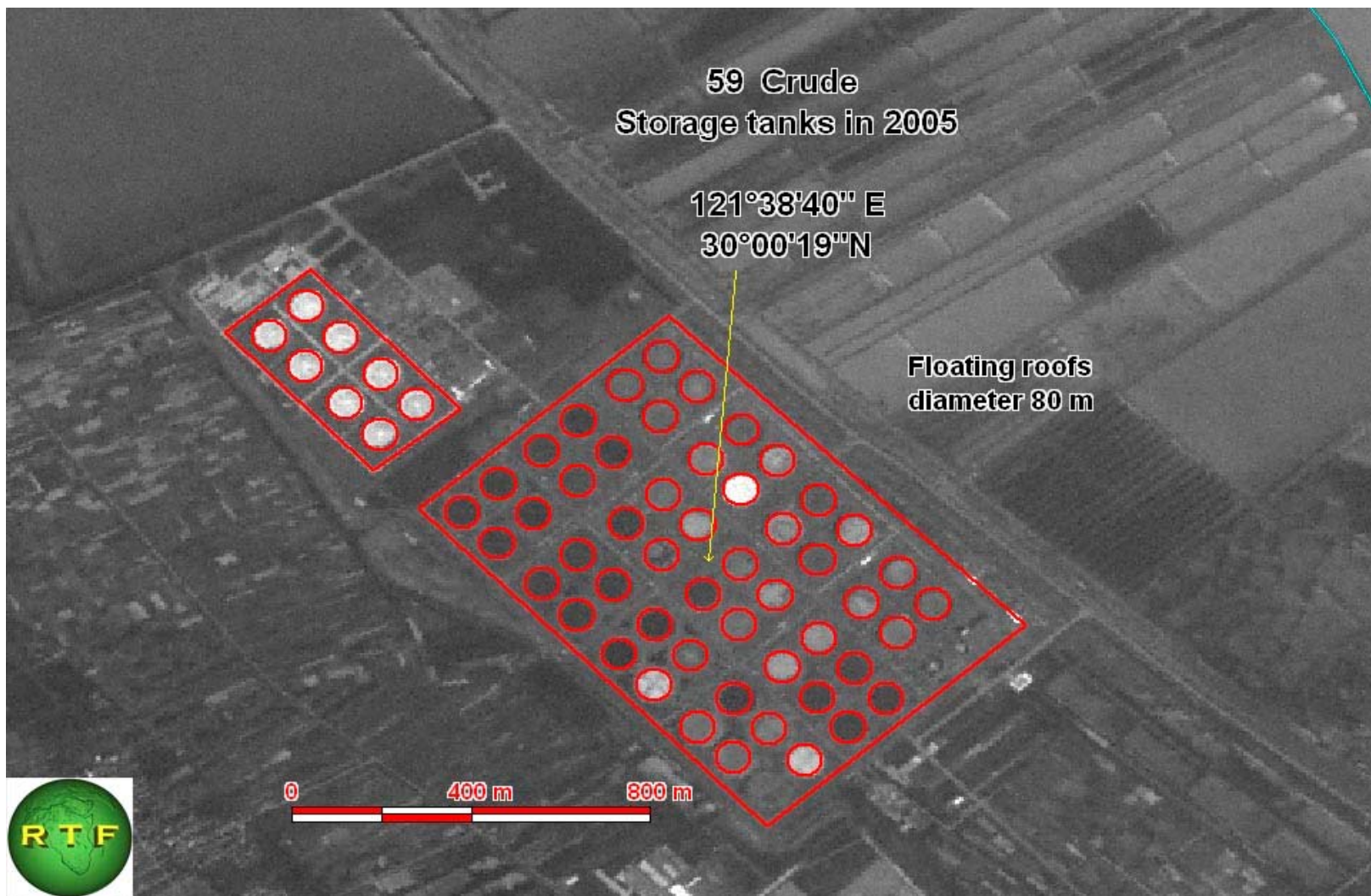
Hurricanes Katrina & Rita

Market design key to manage disruptions



This is the core task of governments

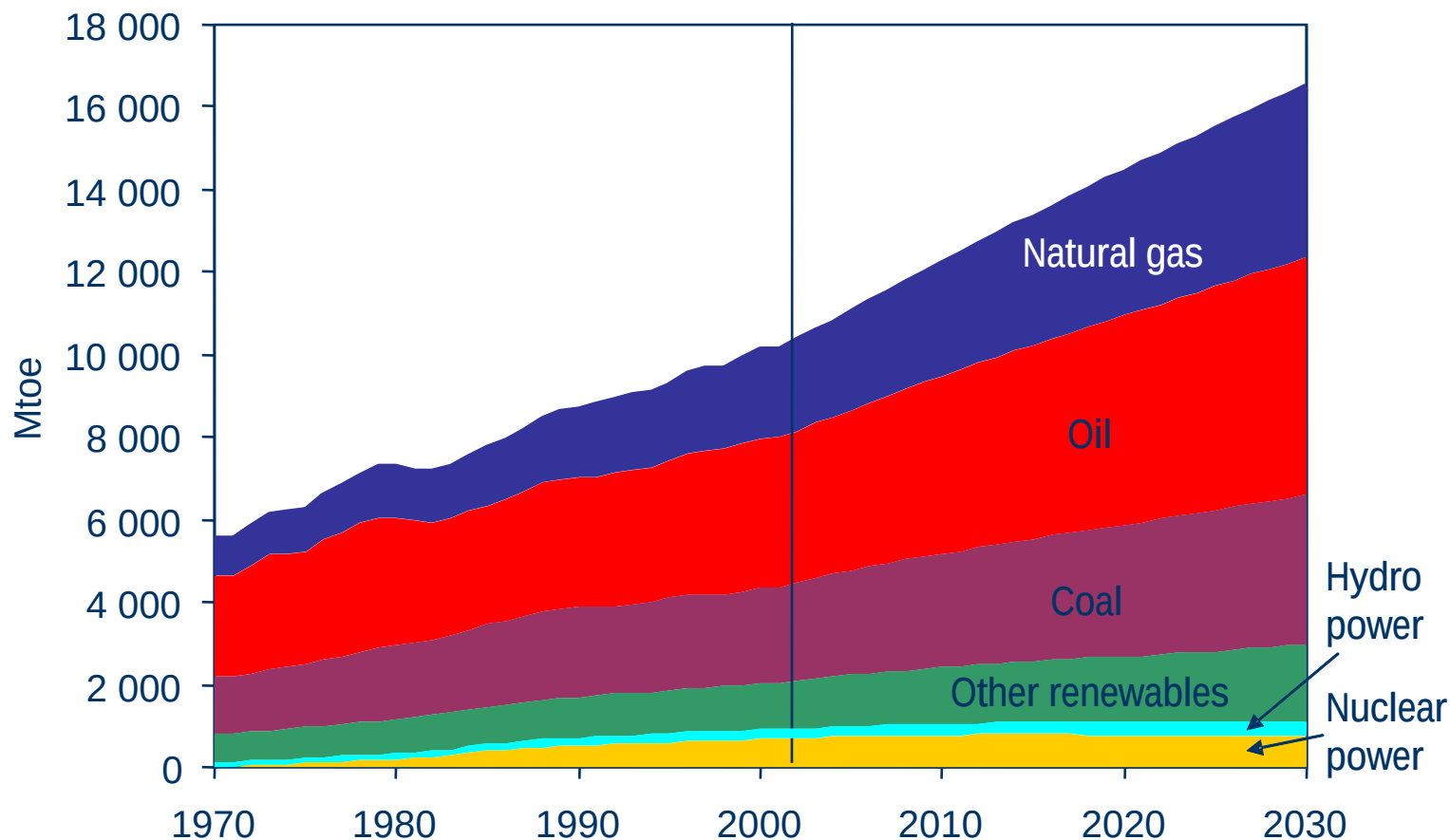
Chinese Strategic Storage at Zhenhai



Meanwhile in China...

World Primary Energy Demand

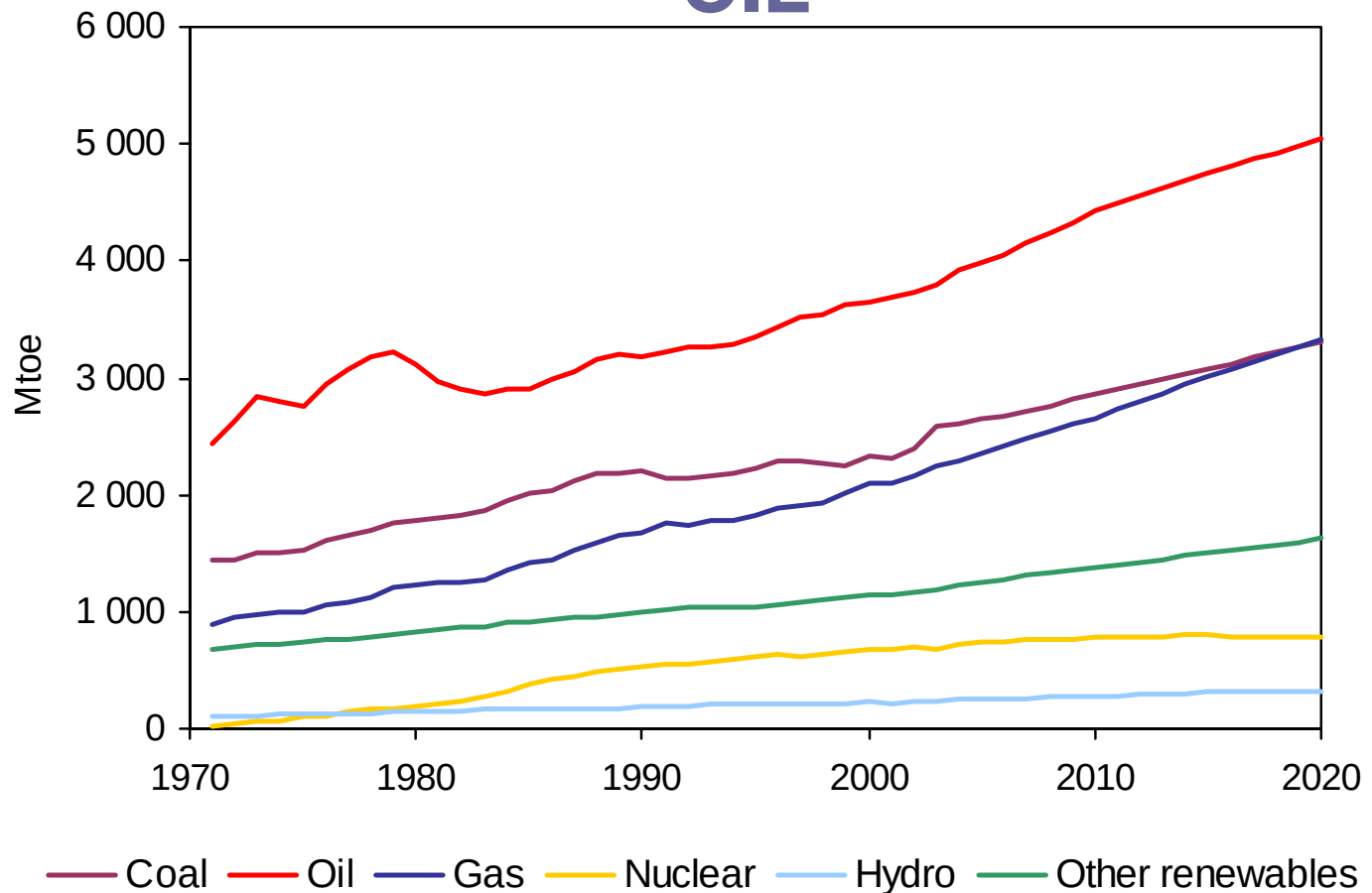
Business as usual...?



In the Reference Scenario, based on current trends, global energy demand will rise by 52 % by 2030

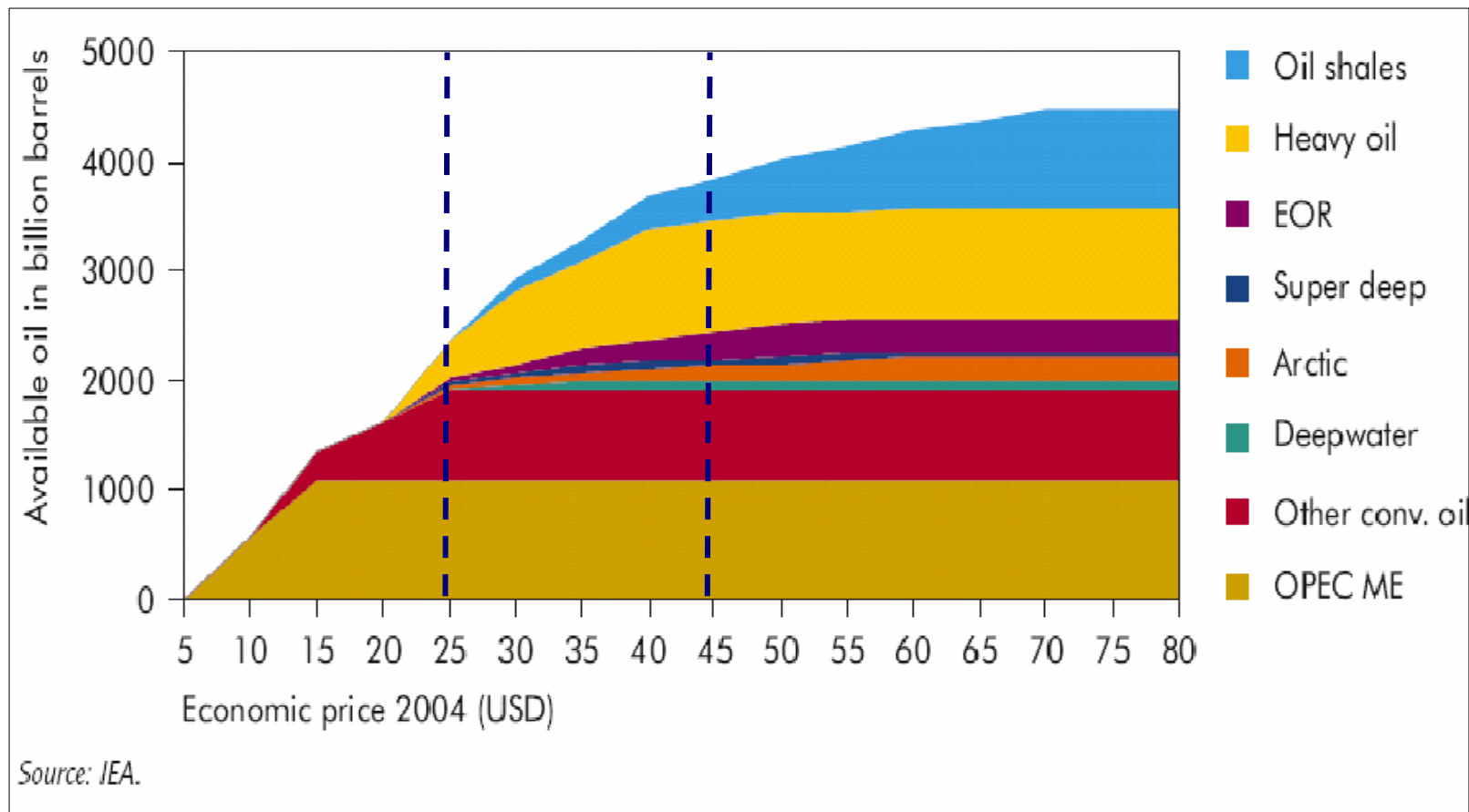
World Primary Energy Demand

OIL



Global energy demand will increase by more than a third by 2020. Fossil fuels will account for over 80% of the increase.

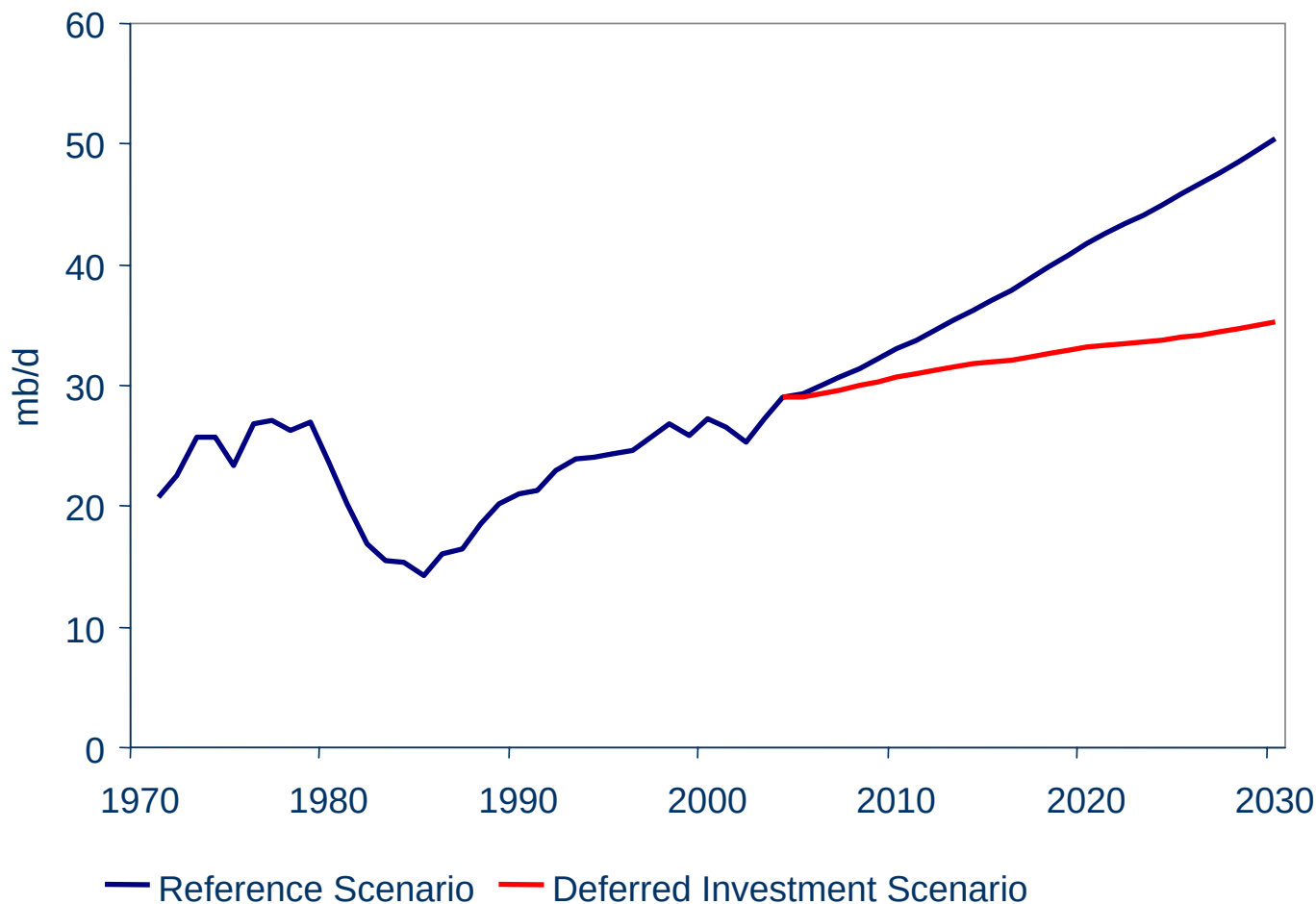
Resources to Reserves to Production



Oil resources are finite but we are far from exhausting them
The “easiest oil” is concentrated in MENA

MENA Crude Oil Production

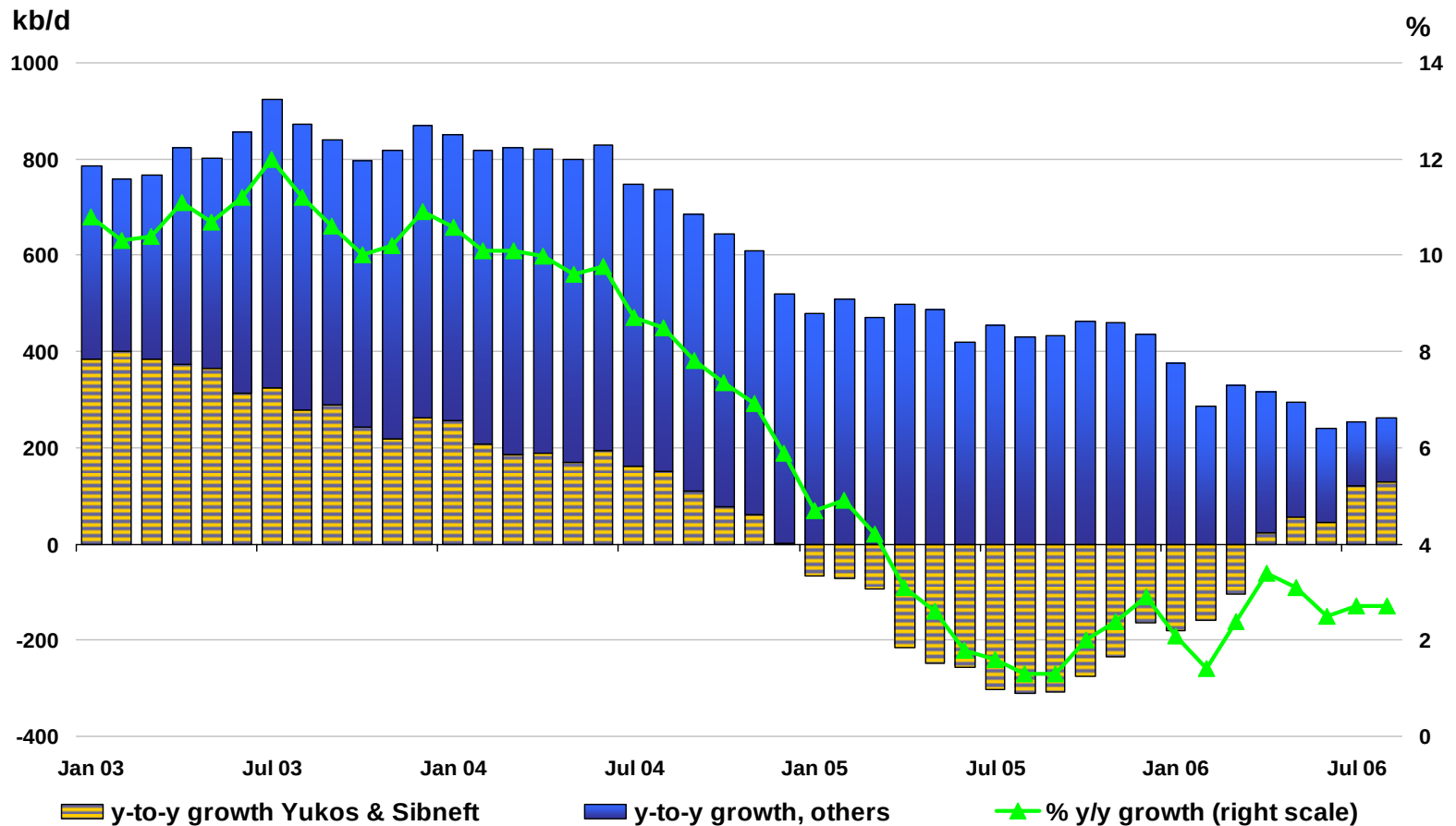
(including NGLs)



MENA's share of global oil production falls from 35% in 2004 to 33% when investment is deferred. Saudi production reaches 14 mb/d in 2030



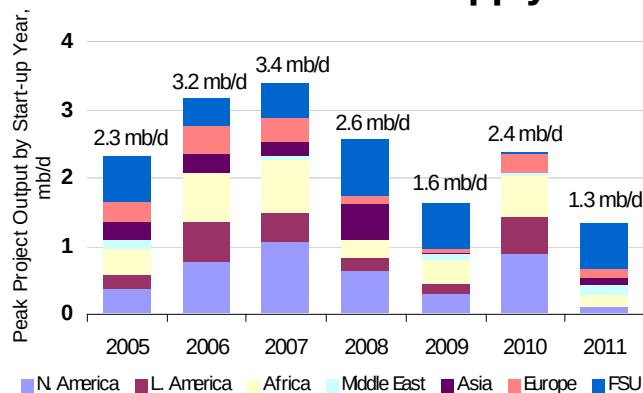
Signs of Russian Oil Production Growth Stabilising



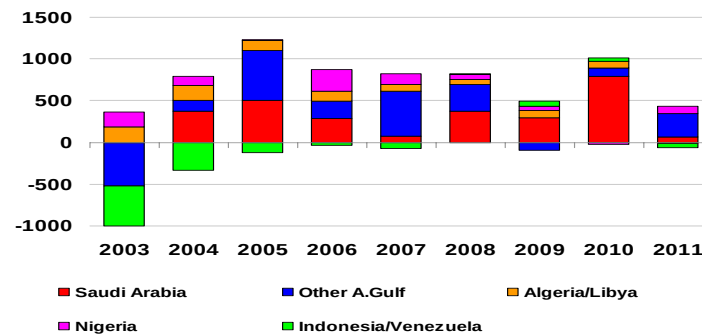
But concerns about sustainability given little greenfield development.

Many New Project Start-Ups

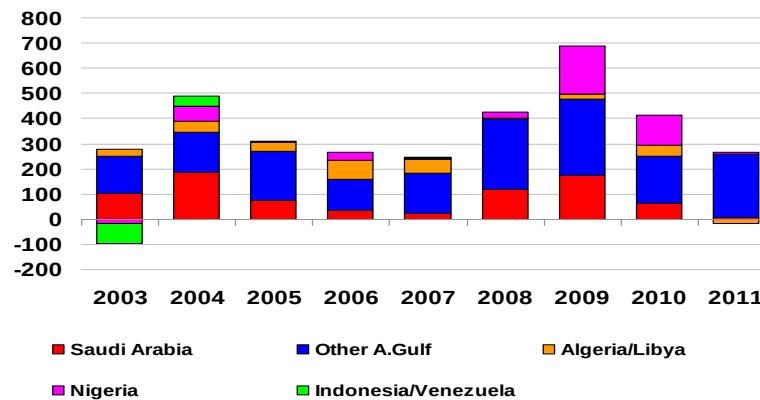
Non-OPEC New Supply



OPEC Additions (kb/d)

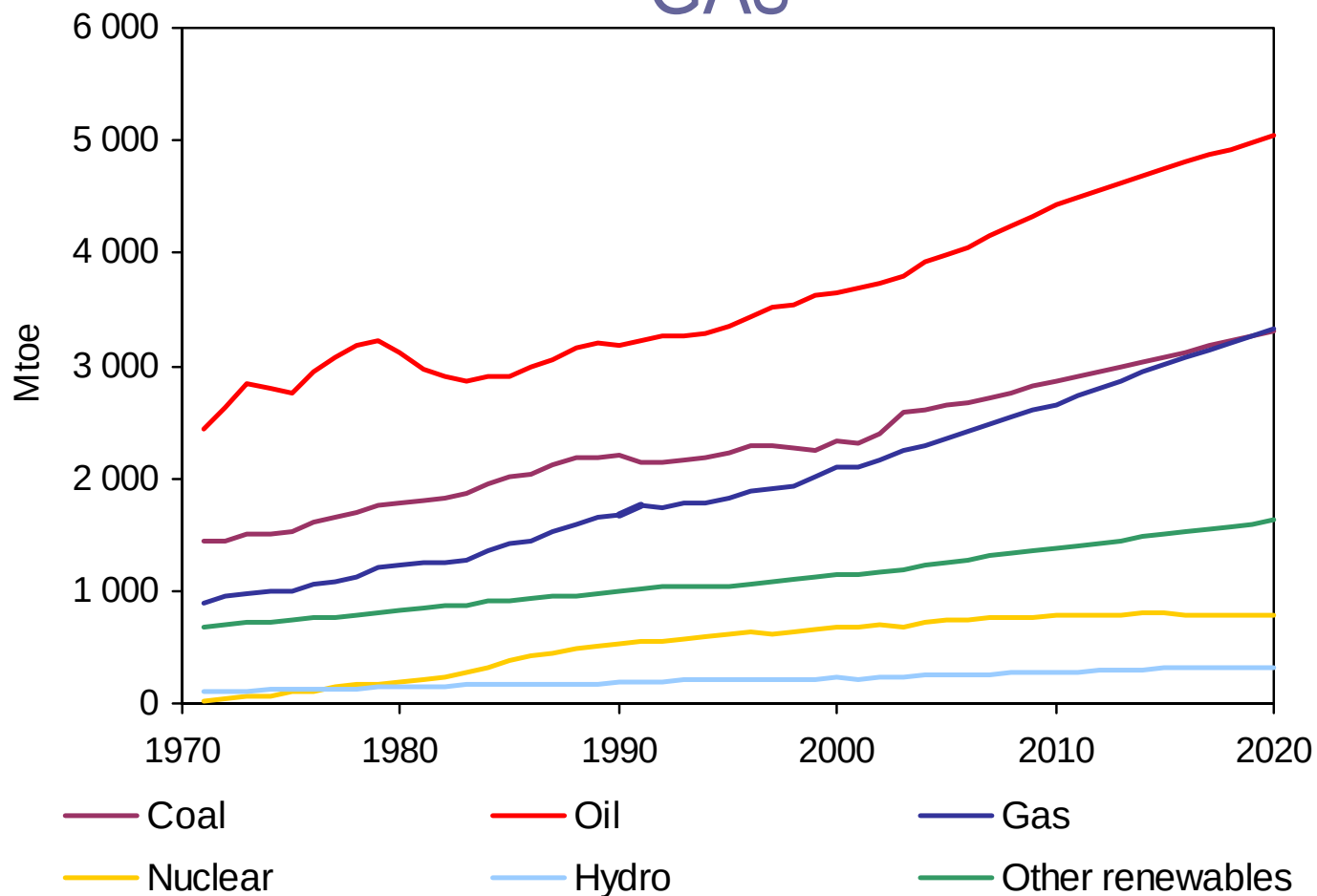


OPEC Non-Quota (mb/d)

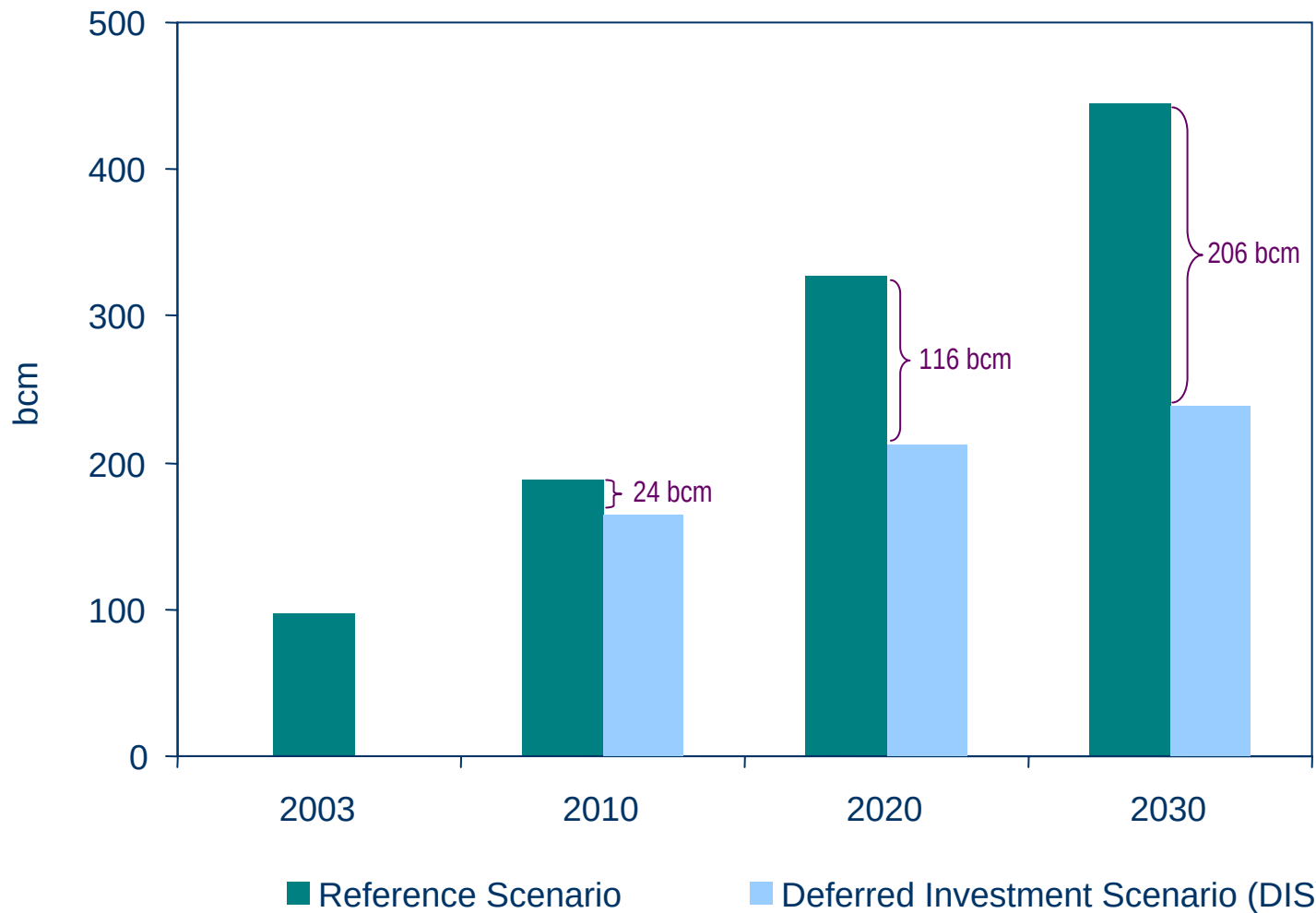


World Primary Energy Demand

GAS

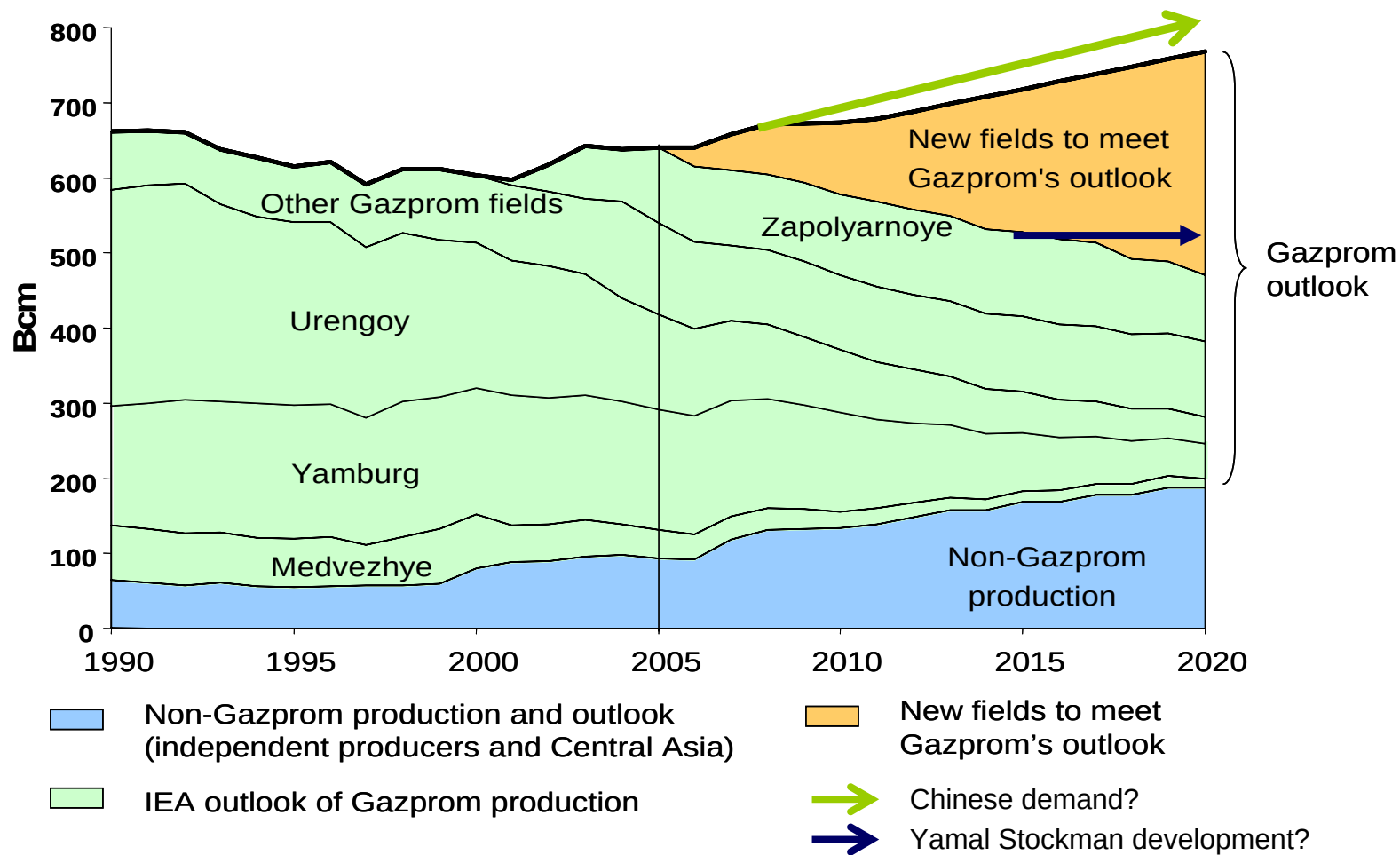


MENA Net Natural Gas Exports



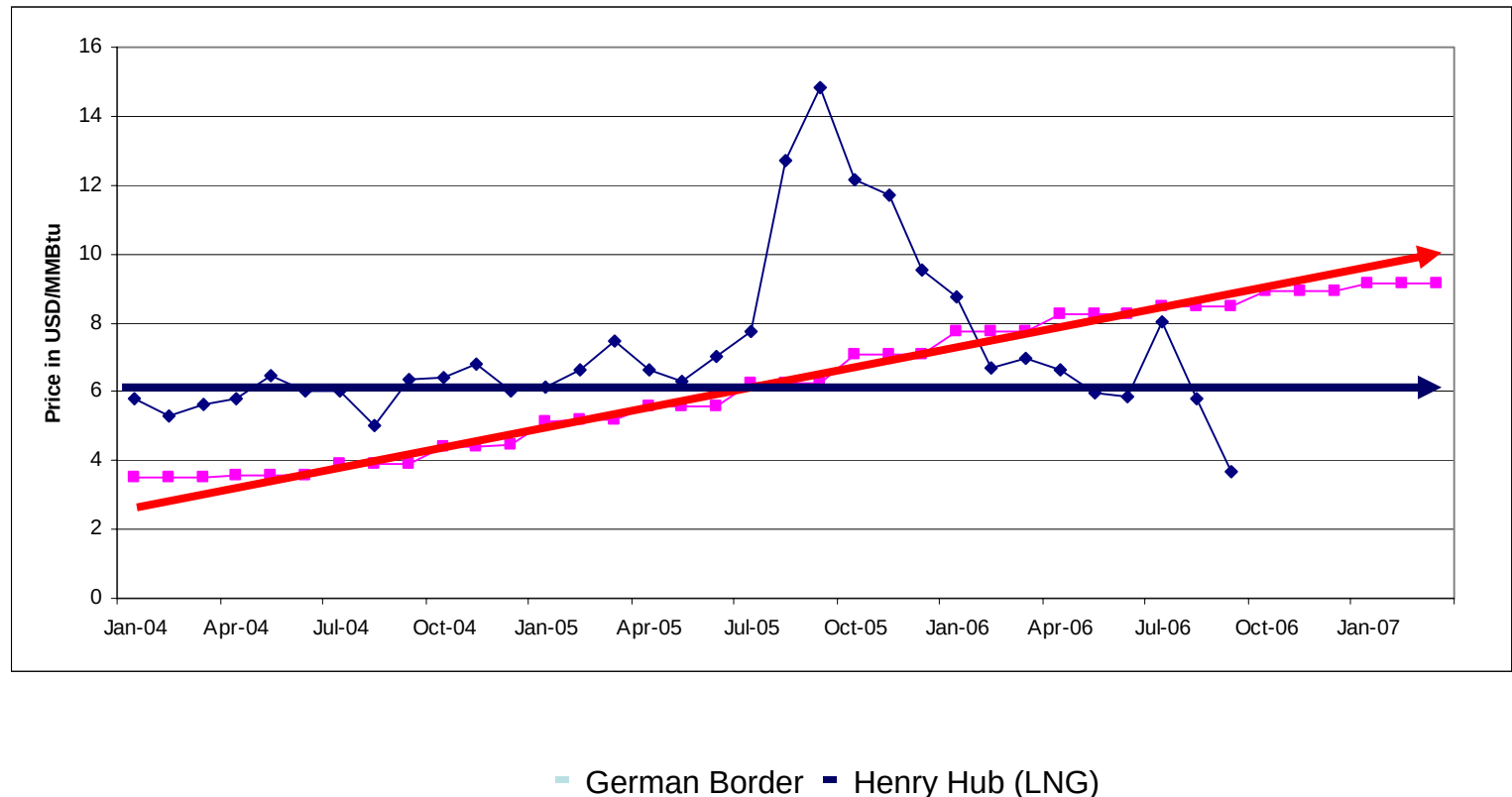
MENA gas exports are much lower in the Deferred Investment Scenario

Russian Gas Supply Outlook



To do lists get longer and more costly to implement with fewer helping hands

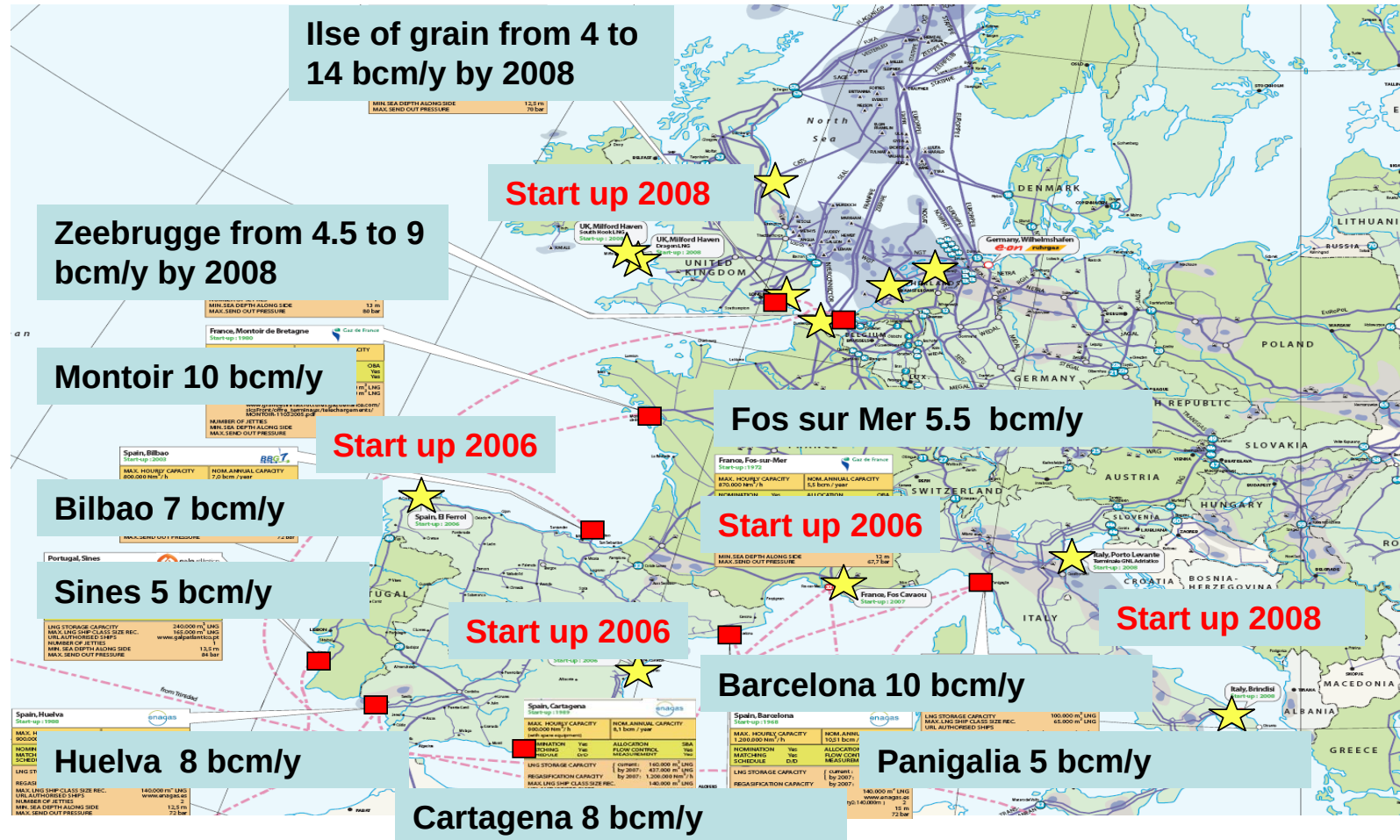
Price histories of several markets



Long term price trends at German border steady but rising
short term price trends at Henry Hub volatile yet low

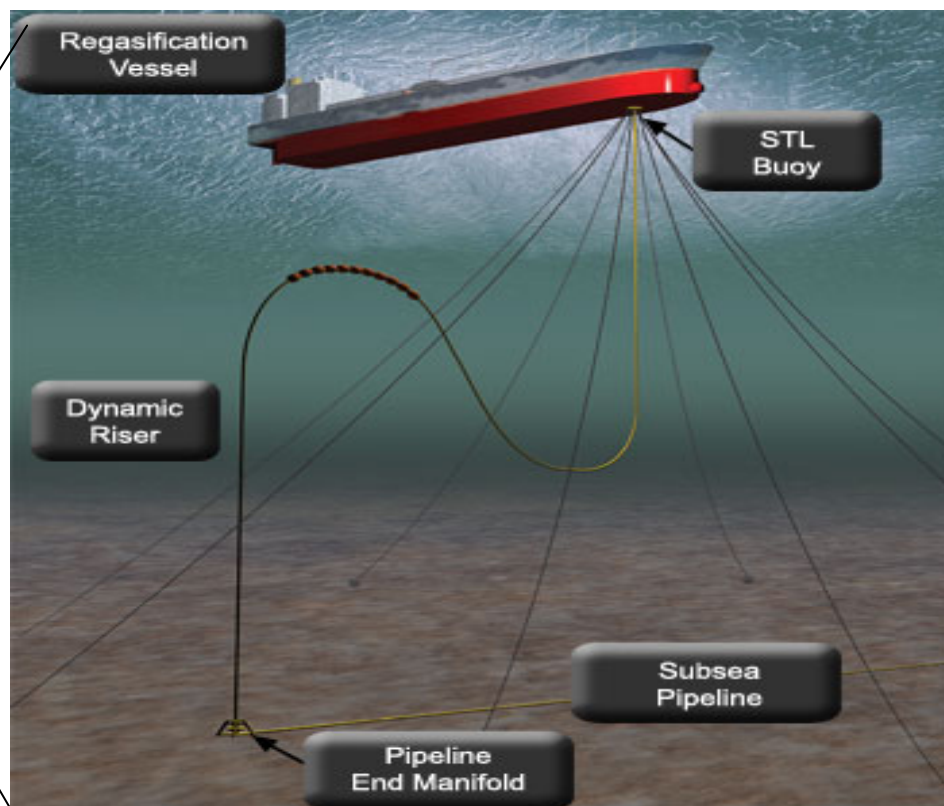


European Exposure to Piped Gas Kick Starts LNG



2006 has exposed new risks that require 'good faith' and more government initiative to resolve and timely mobilise gas sector investments

New UK LNG supply in 8 Months



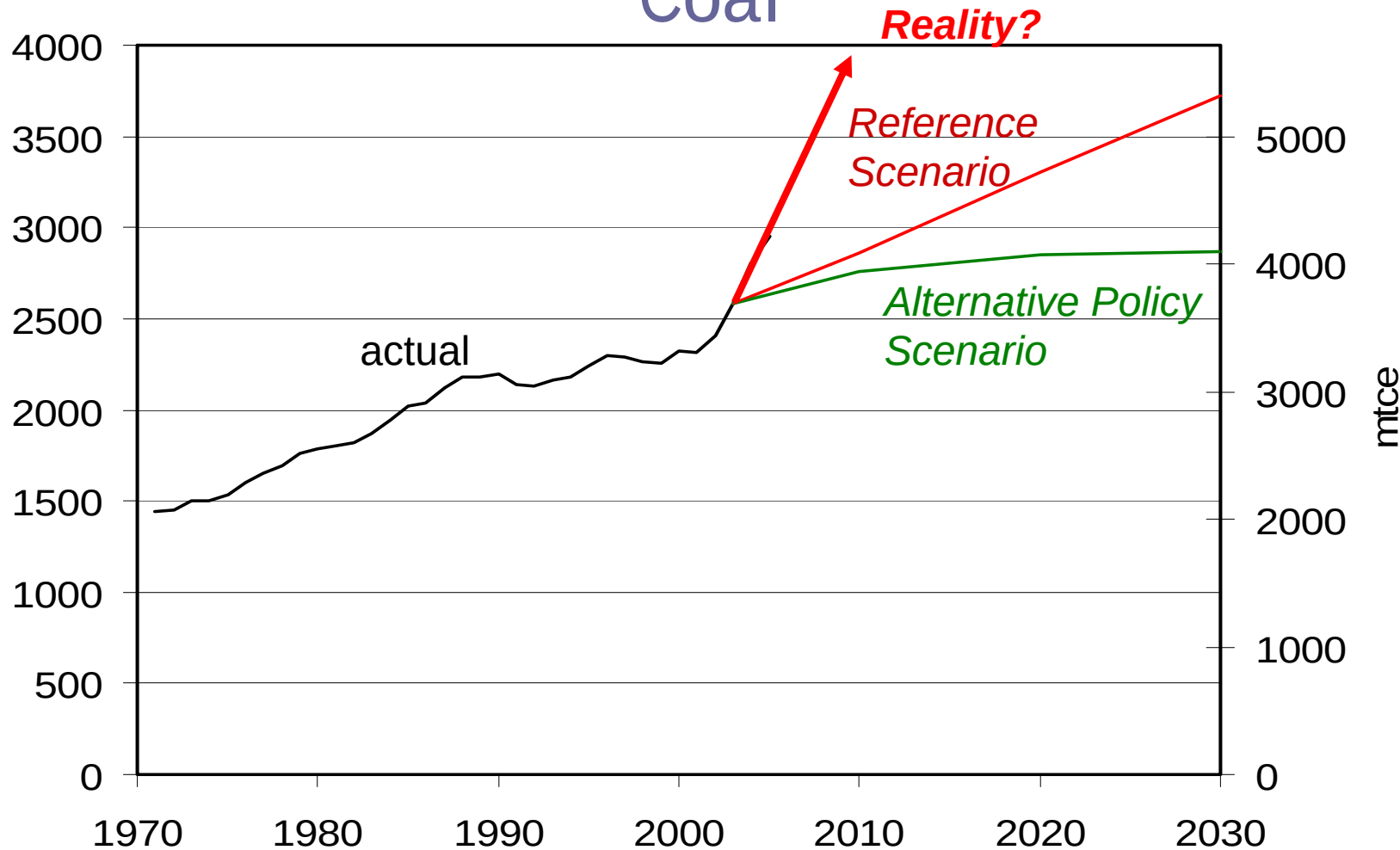
2003 Blackout Case Studies:

Italy- Switzerland



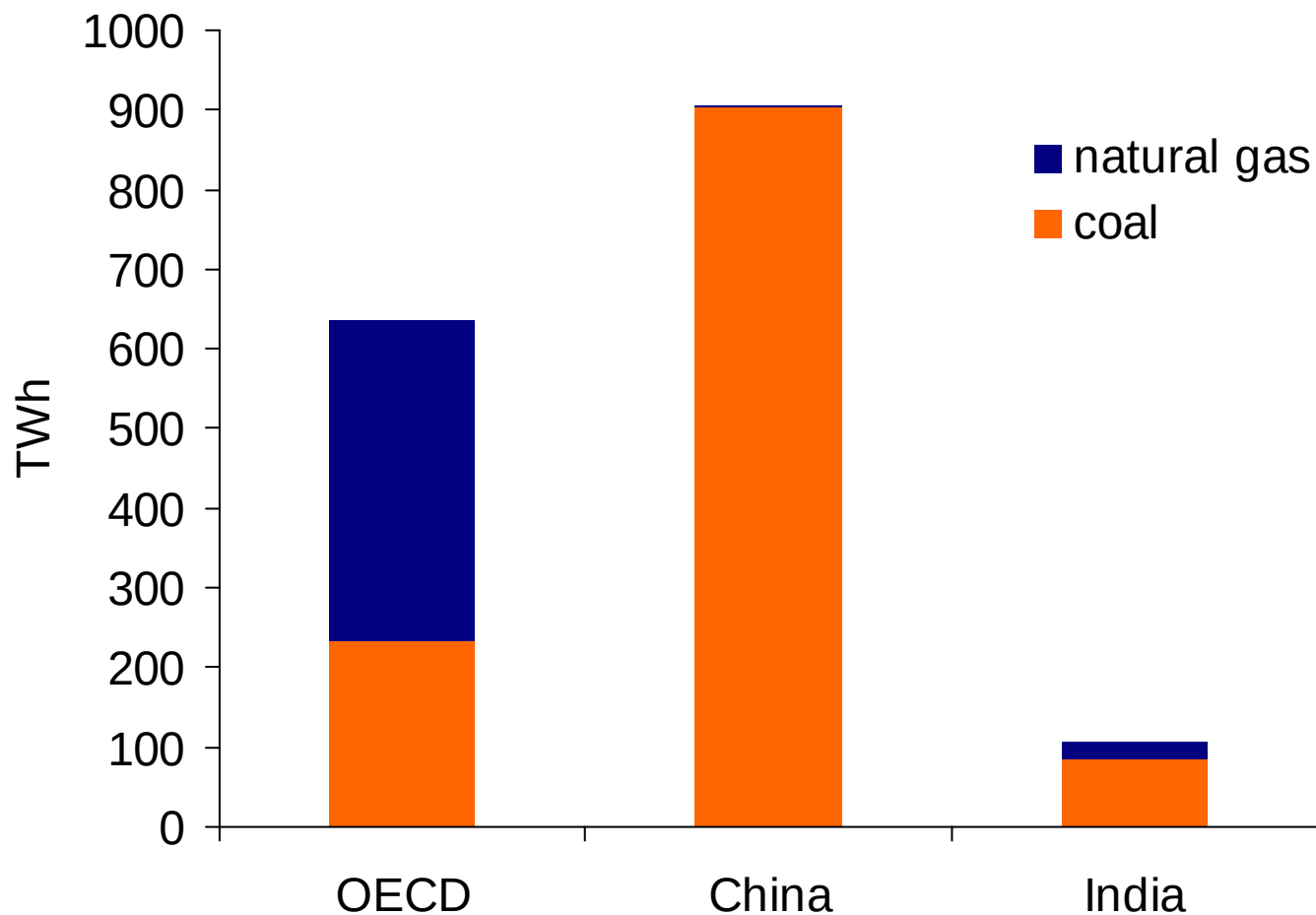
Consequences of under investment impairs security

World Primary Energy Demand Coal

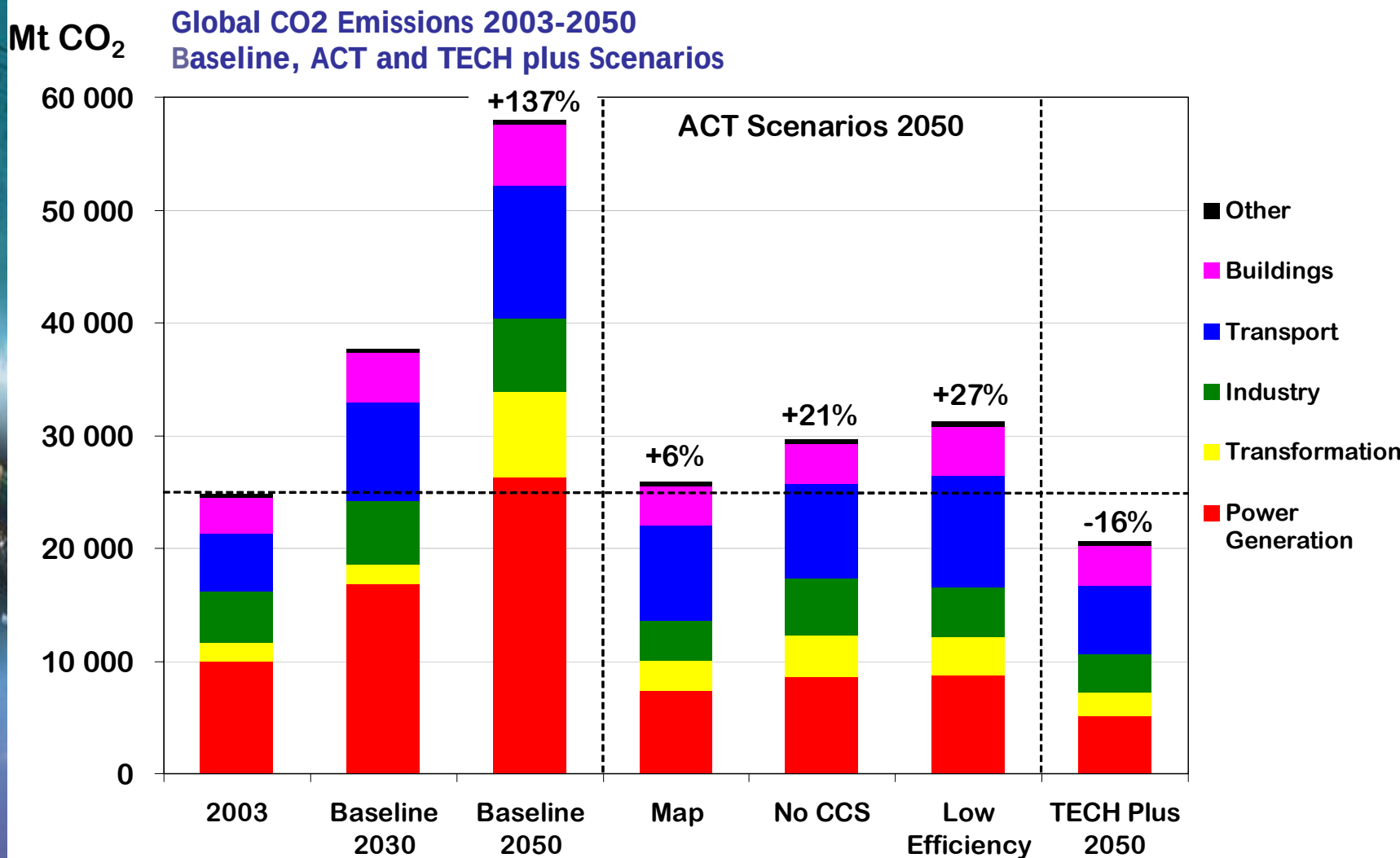


High Oil & Gas prices have prompted a phenomenal coal response
Without clean coal and other technologies this is not sustainable

Growth in fossil electricity generation 2000 to 2005

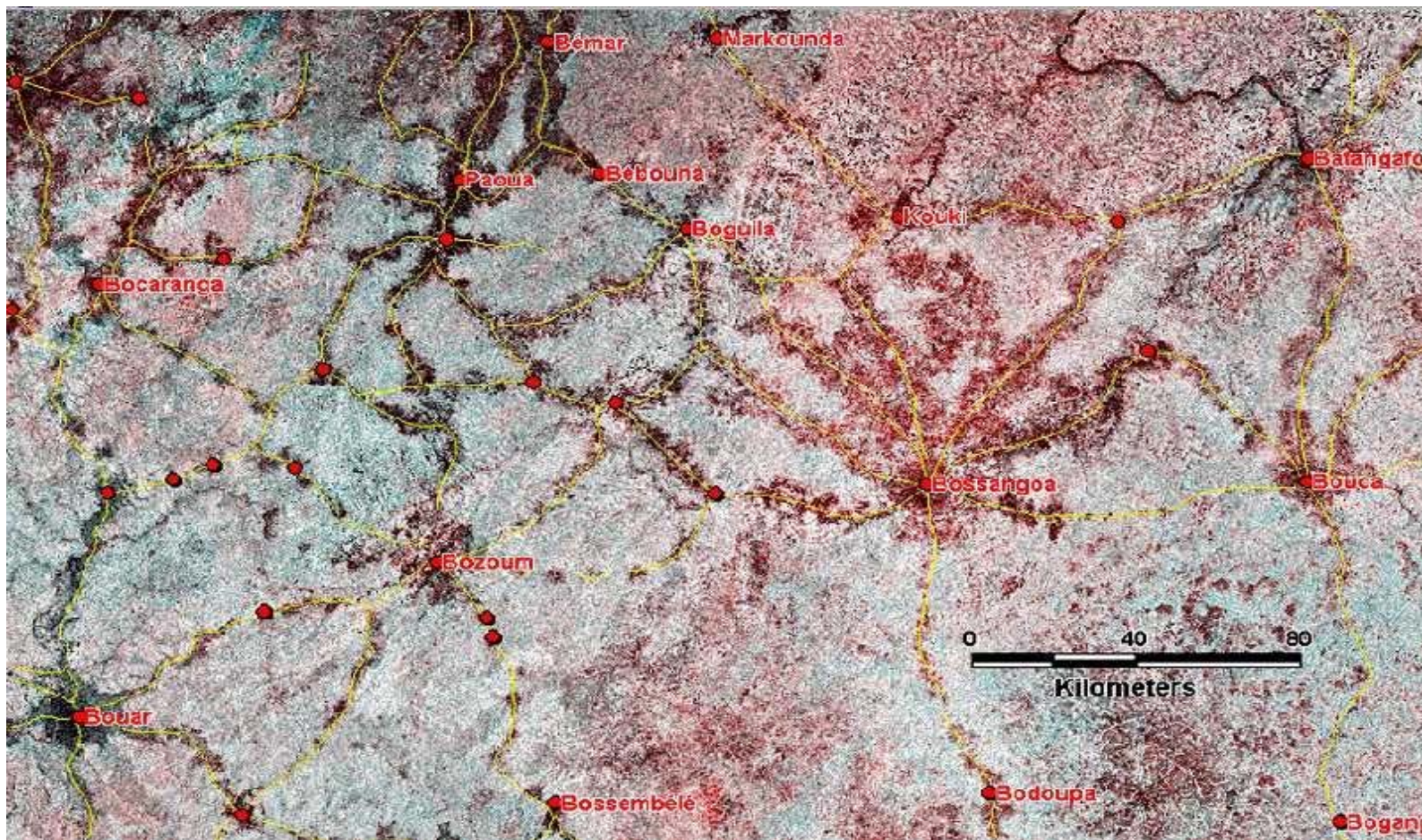


Emissions can be Controlled



The unmeasured impact of High Prices

The "Charcoal Web" in Central African Republic



WEO-2002, NASDA and Radar Technologies France

Non OECD Energy Subsidies amount to 250 billion dollars a year
More than 3 times total OECD overseas development assistance spent in 2004

Key Responses...

Dialogue

Clear, candid, constructive and open...

Flexibility

Good governance & level playing field cooperation between NOC & IOC's
Arbitrage between sea bound (LNG) and land bound (pipeline) gas trade

Diversity

Access to new upstream sources to enhance overall sector performance
Emphasis on flexible (storage) and reliable energy trade (transport) systems

Technology

Bio fuels and other technologies in transport and power sector (Nuclear, clean coal technologies and carbon sequestration)

Demand side measures

Energy efficiency and demand restraint