Global outlook for the oil and gas industry

21 April 2015

DENTONS

Richard Mallinson

Geopolitical Analyst

Energy Aspects

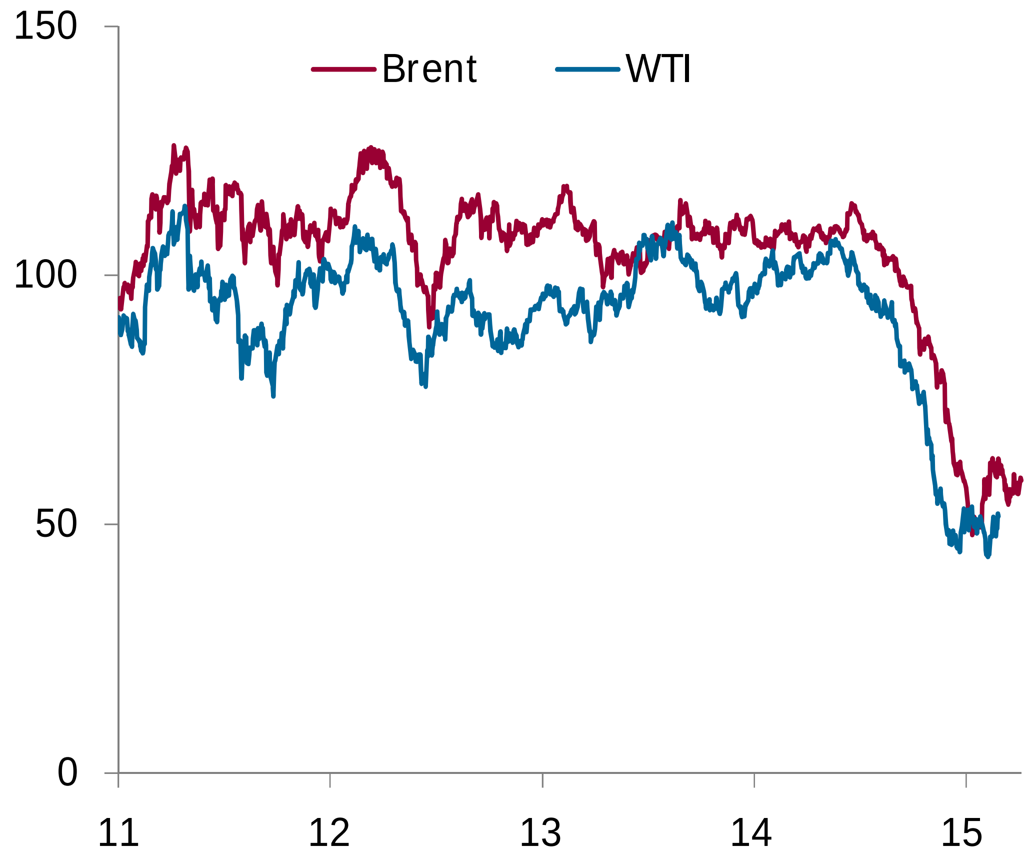
Oil and gas market outlook

Richard Mallinson, April 2015

Energy Aspects

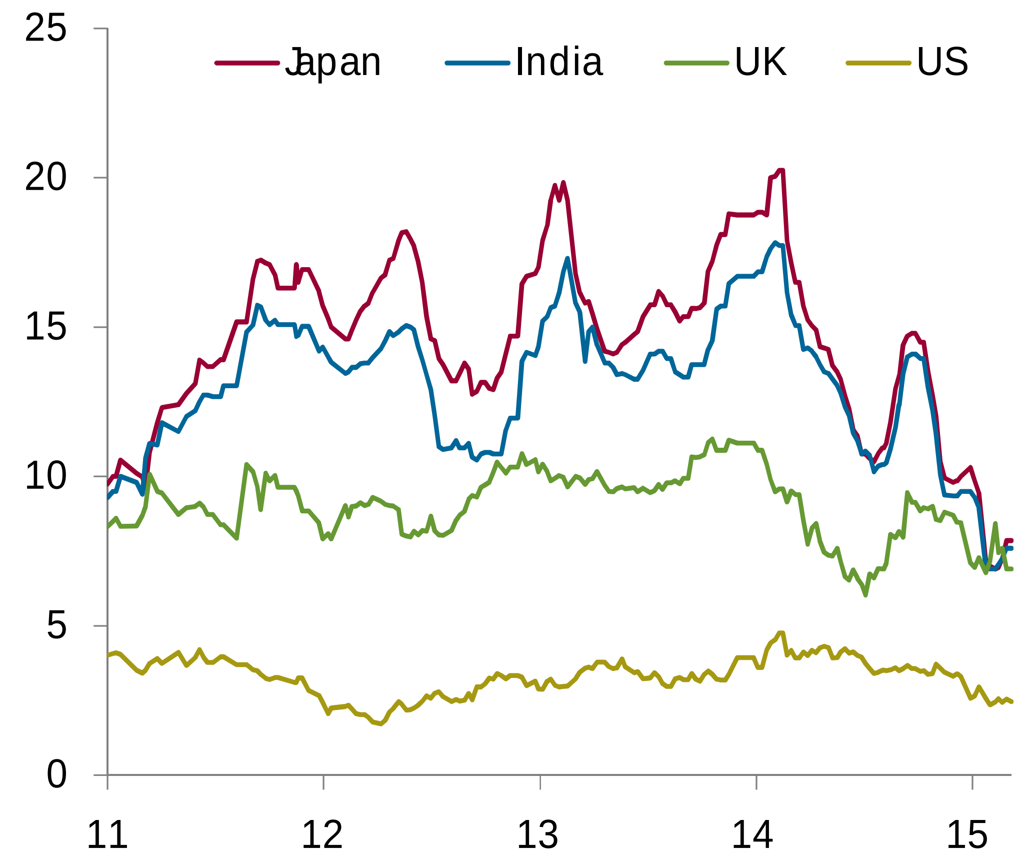
Oil and gas prices have fallen sharply

Crude oil prices
$/bbl



After rapidly falling by over 50% oil prices oil prices remain volatile in the $50s per barrel range

Global LNG Prices
$/mmbtu

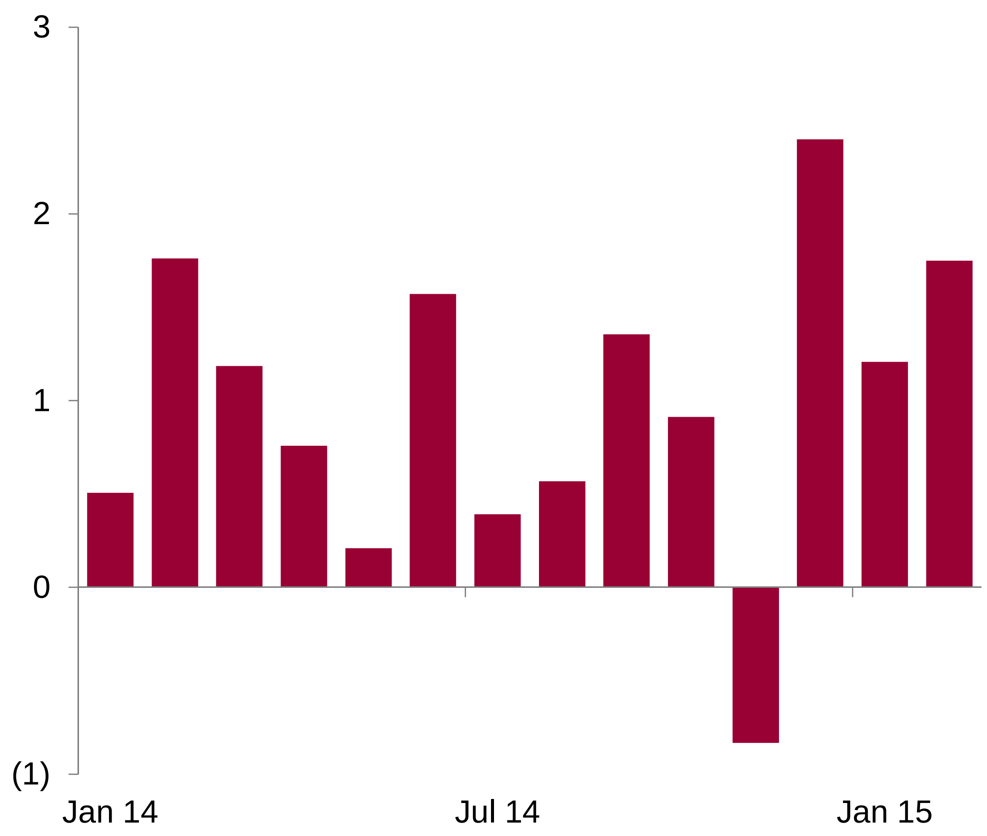


LNG prices have also dropped sharply and generally converged due to weak demand and rising supplies

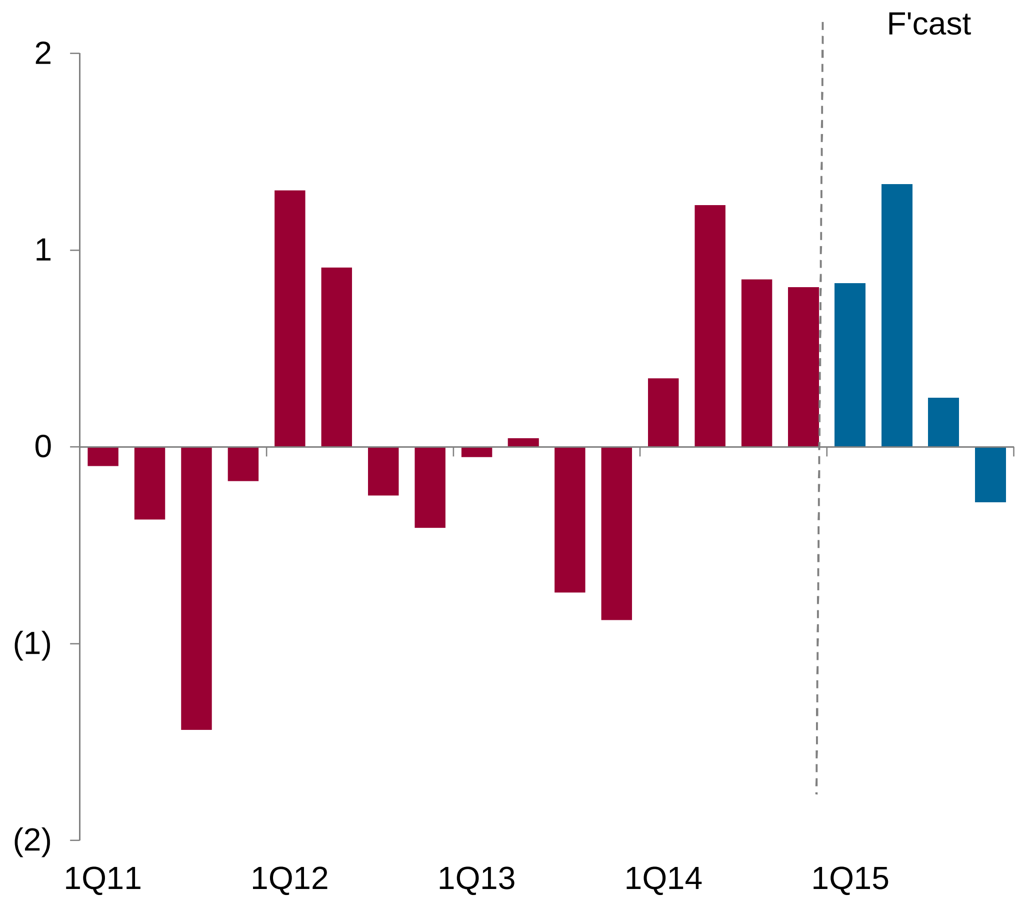
Source: Bloomberg, Energy Aspects

The oil demand response is limiting stockbuilds

Global oil demand, y/y change
Mb/d



Global implied stock changes
Mb/d



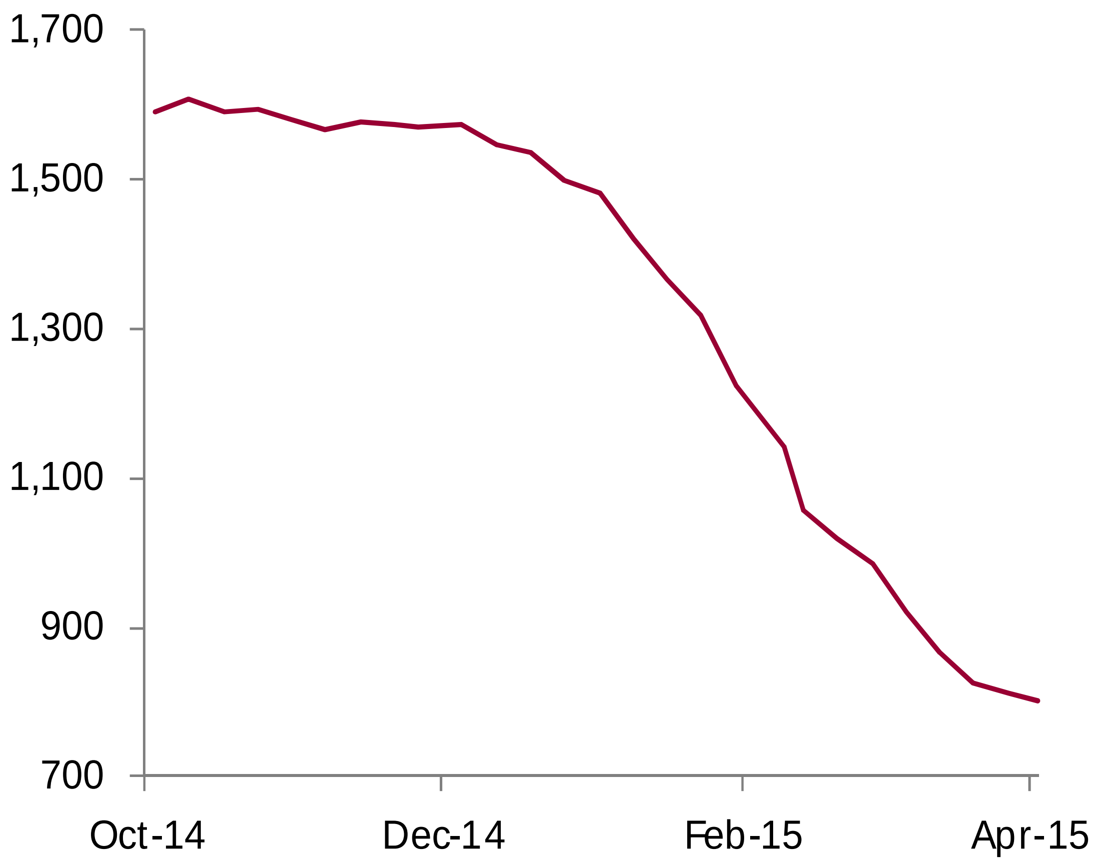
Global oil demand growth has picked up tremendously in recent months – strength in Asia, the US and elsewhere

Stocks are still building, but by much less than the market expected at the turn of the year

Source: Energy Aspects analysis

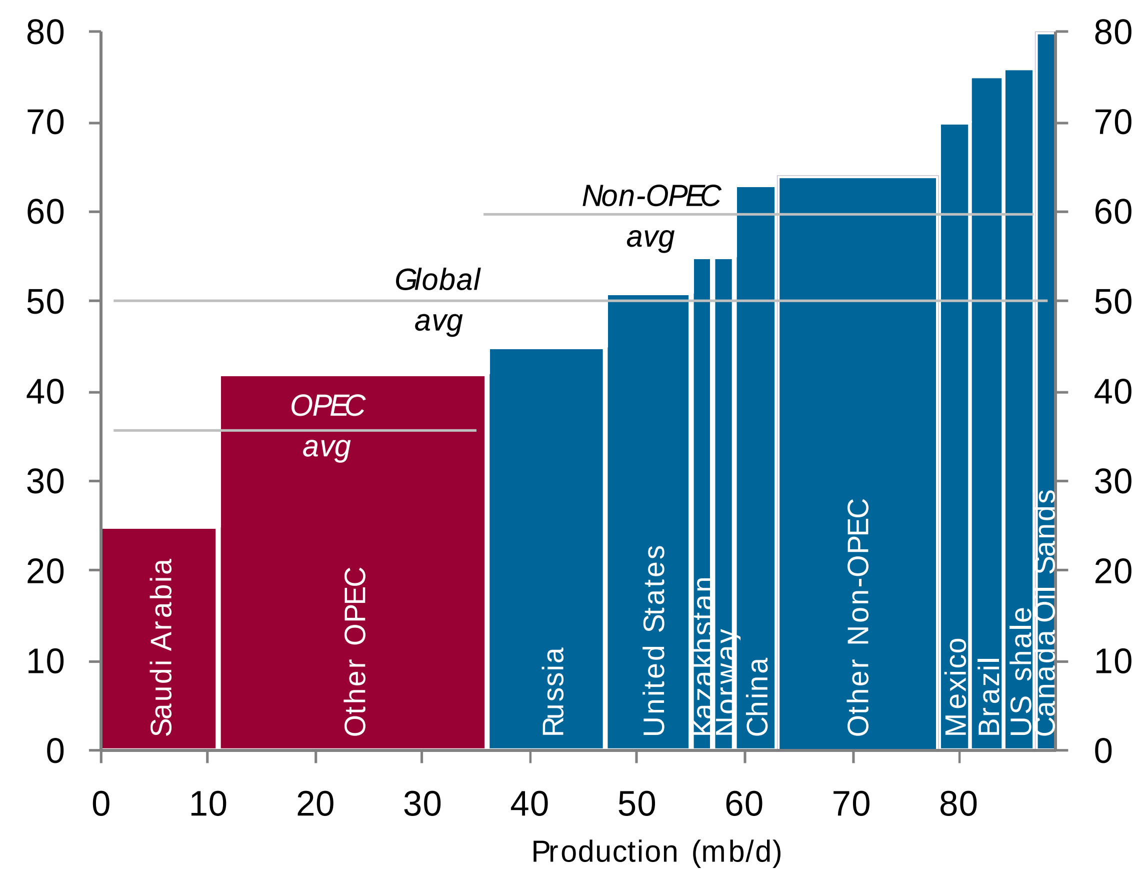
Oil and gas producers are responding to lower prices

US oil rig counts



Global cost curve (ex dividend or interest payments)

$ / barrel



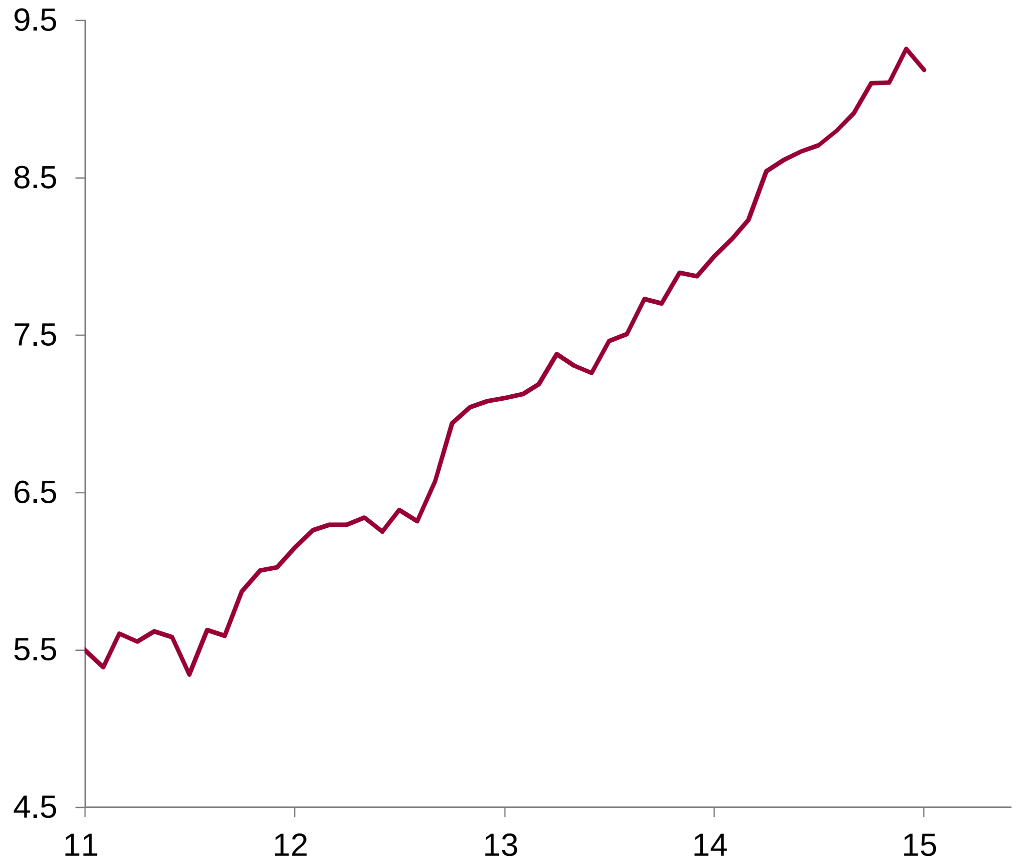
US rig numbers have fallen fast despite producer hedging, with even the best shale plays testing breakevens

Prices are still below far the levels needed to justify new investments in many parts of the world

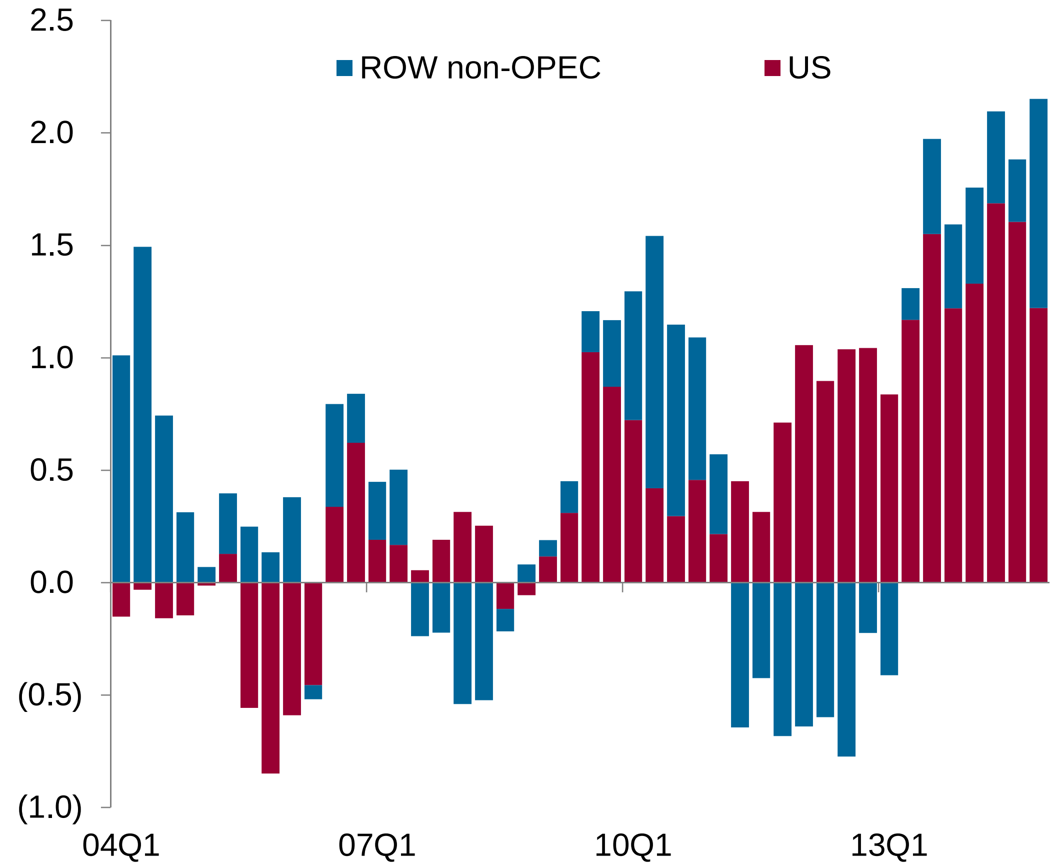
Source: Baker Hughes, Company Reports, Energy Aspects analysis

But non-OPEC supplies will only slow gradually

US crude production
Mb/d



Rest of World non-OPEC supplies, y/y change
Mb/d



US output, which will be the first to respond to lower prices, has not reacted yet as there are time lags

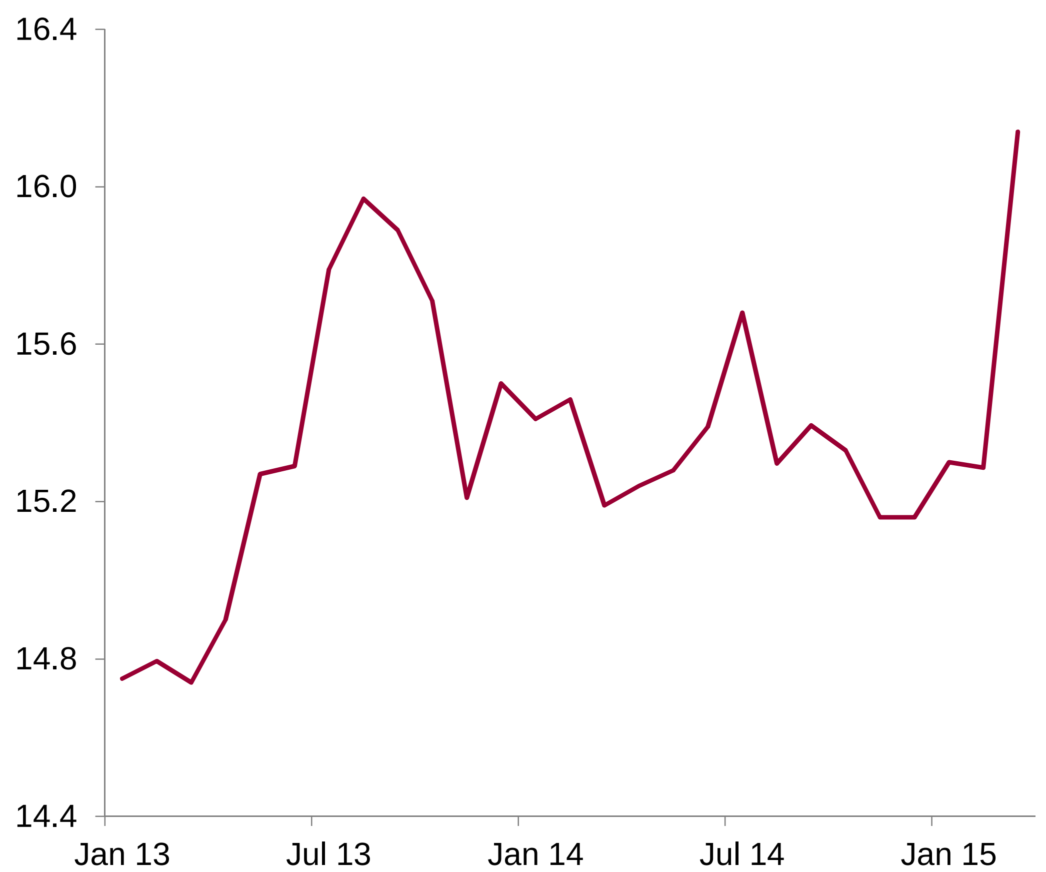
Record investment driven by high prices temporarily reversed the declines across non-OPEC supplies outside the US

Source: EIA, Energy Aspects analysis

For now a two-tier OPEC will not cut output

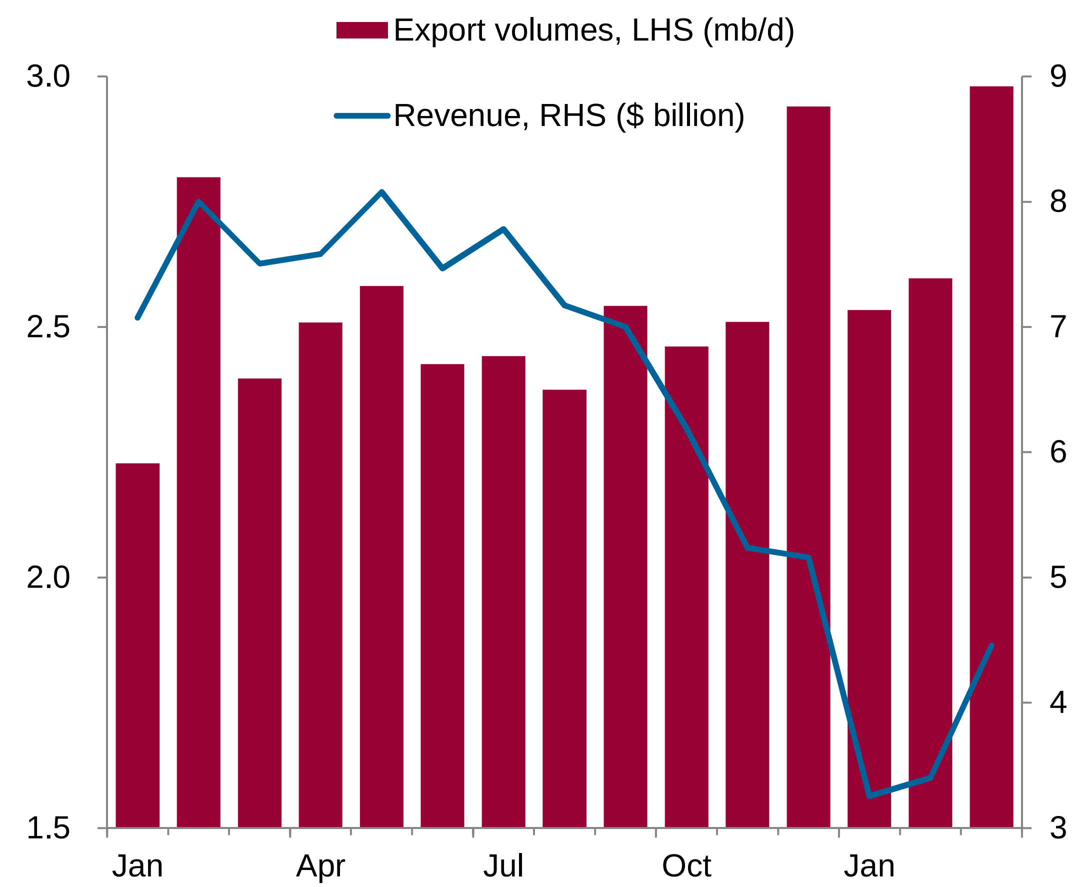
GCC crude production

Mb/d



GCC countries have raised output as refinery demand has soared and they have lowered OSPs to gain competitiveness

Iraq crude exports and revenues

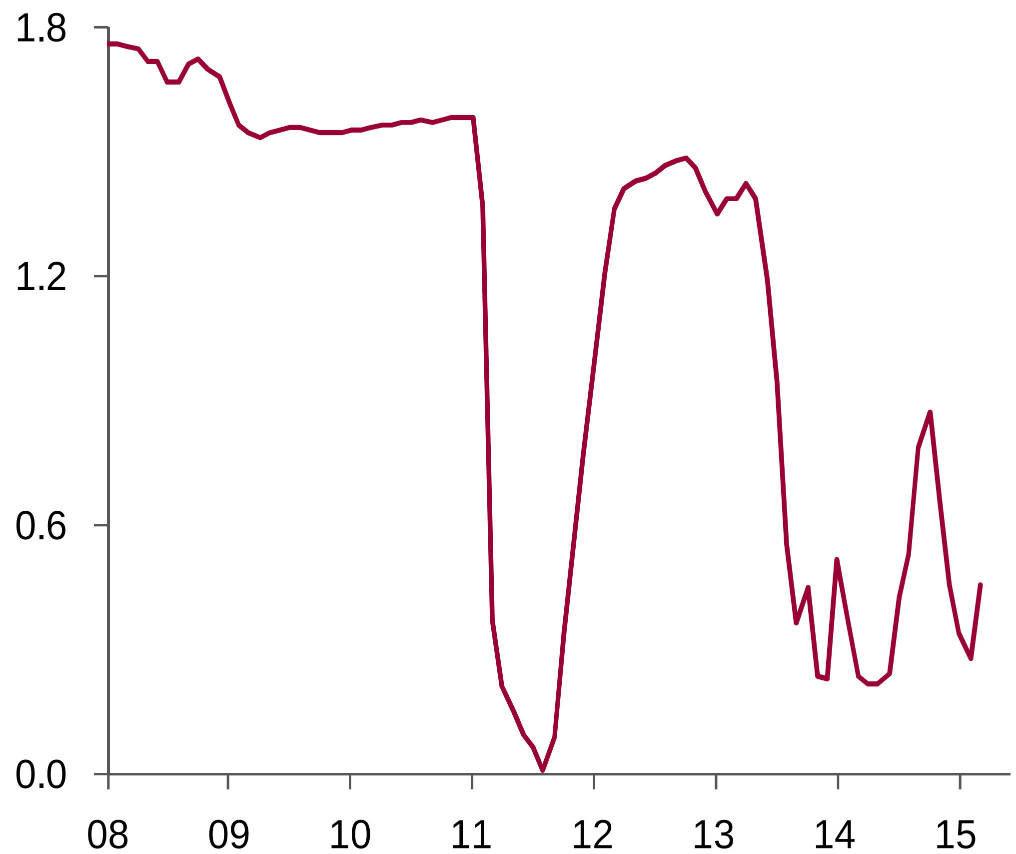


While cash-strapped members such as Iraq have seen their revenues collapse, leaving no option but to maximise output

Source: EIA, IEA, Reuters, Bloomberg, Platts, Iraq Ministry of Oil, Energy Aspects analysis

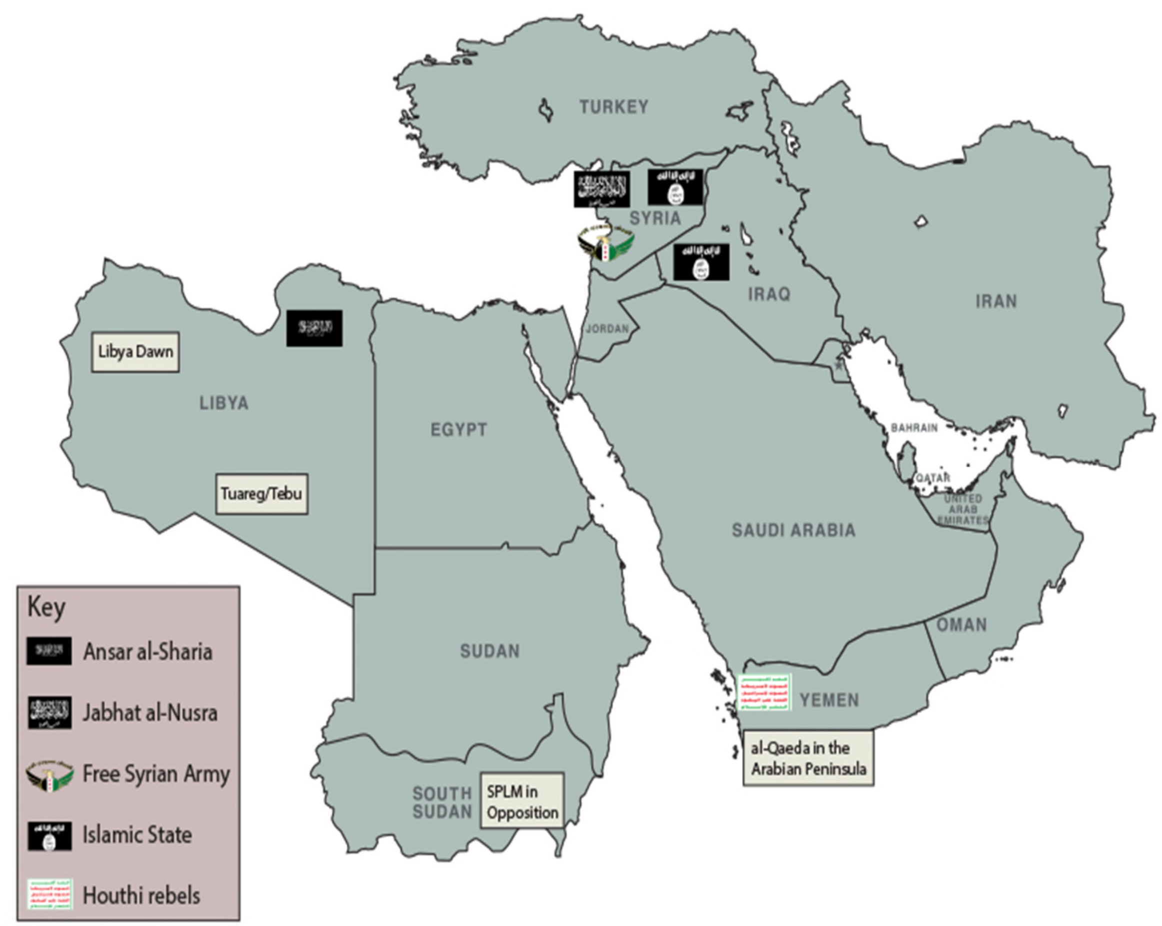
While lower prices add to existing geopolitical issues

Libyan oil production
Mb/d



Lower revenues fuel the political and security issues that are already disrupting output in countries such as Libya

Active militant groups in MENA



Rising number of militant groups are spreading across the MENA region, limiting energy investments

Source: EIA, IEA, Reuters, Bloomberg, Platts, Energy Aspects analysis

DENTONS

Andrew Moorfield
Managing Director
Head of EMEA Energy
Scotiabank Europe plc

DENTONS

Mike Borrell

Senior Vice President Europe and Central Asia

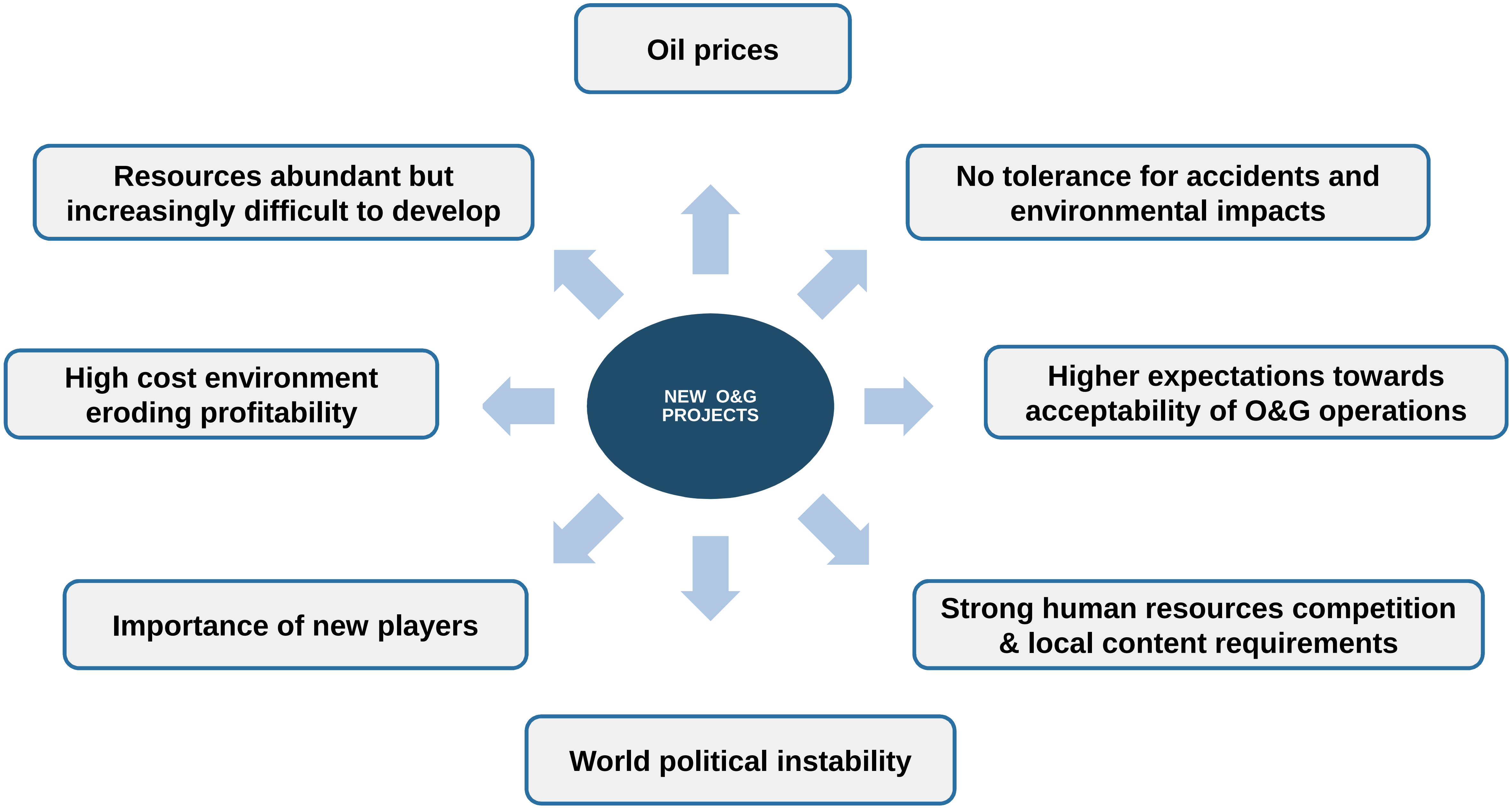
Total

BIG CHALLENGES FACING NEW OIL & GAS DEVELOPMENTS

Michael Borrell, Senior VP Europe and Central Asia, Total

Tuesday, 21st April 2015, Global Energy Sumit 2015, London

OUR ENVIRONMENT

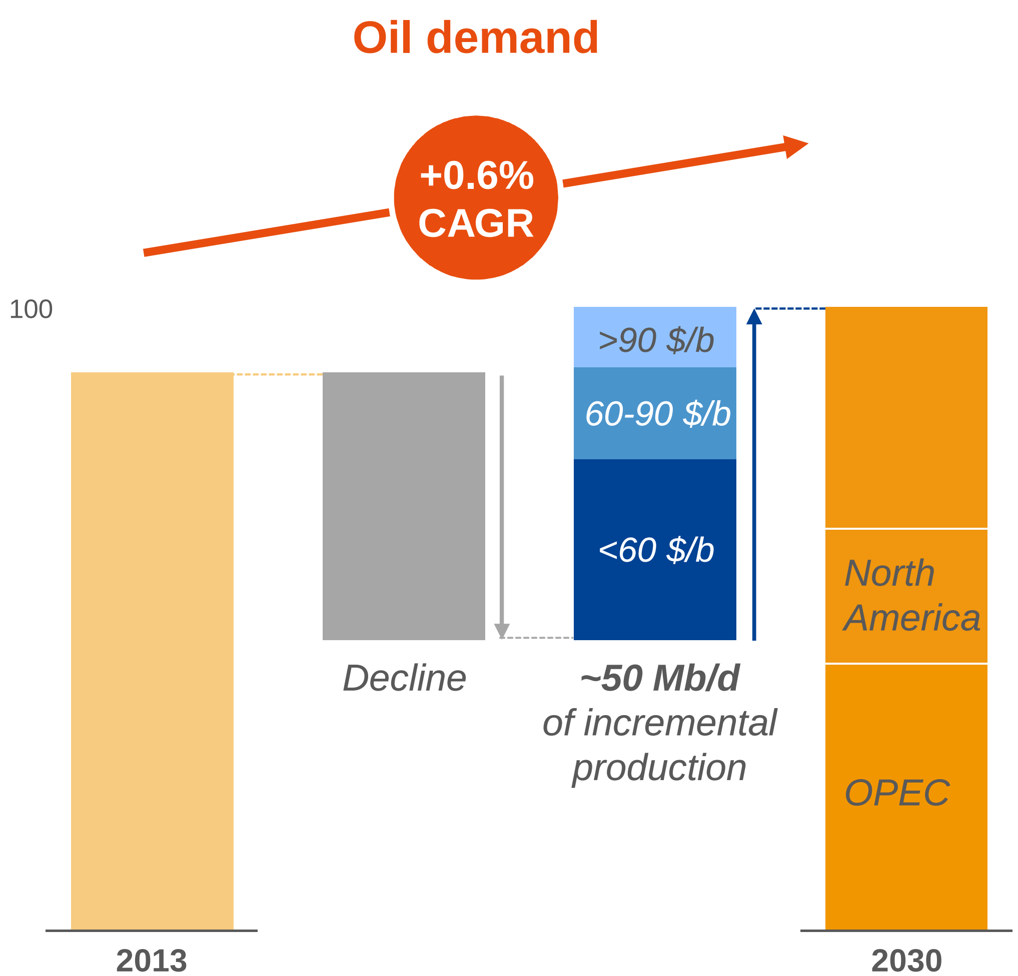


The oil and gas environment is rapidly changing

TOTAL

REQUIRED FUTURE PRODUCTION

Oil supply-demand
Mb/d



Demand growth and **decline rate** driving the need for ~50 Mb/d new production by 2030

Marginal supply requires **high tech**, continuous **innovation** and significant **investment**

~20% of new volumes require **>90 $/b** in today's cost environment

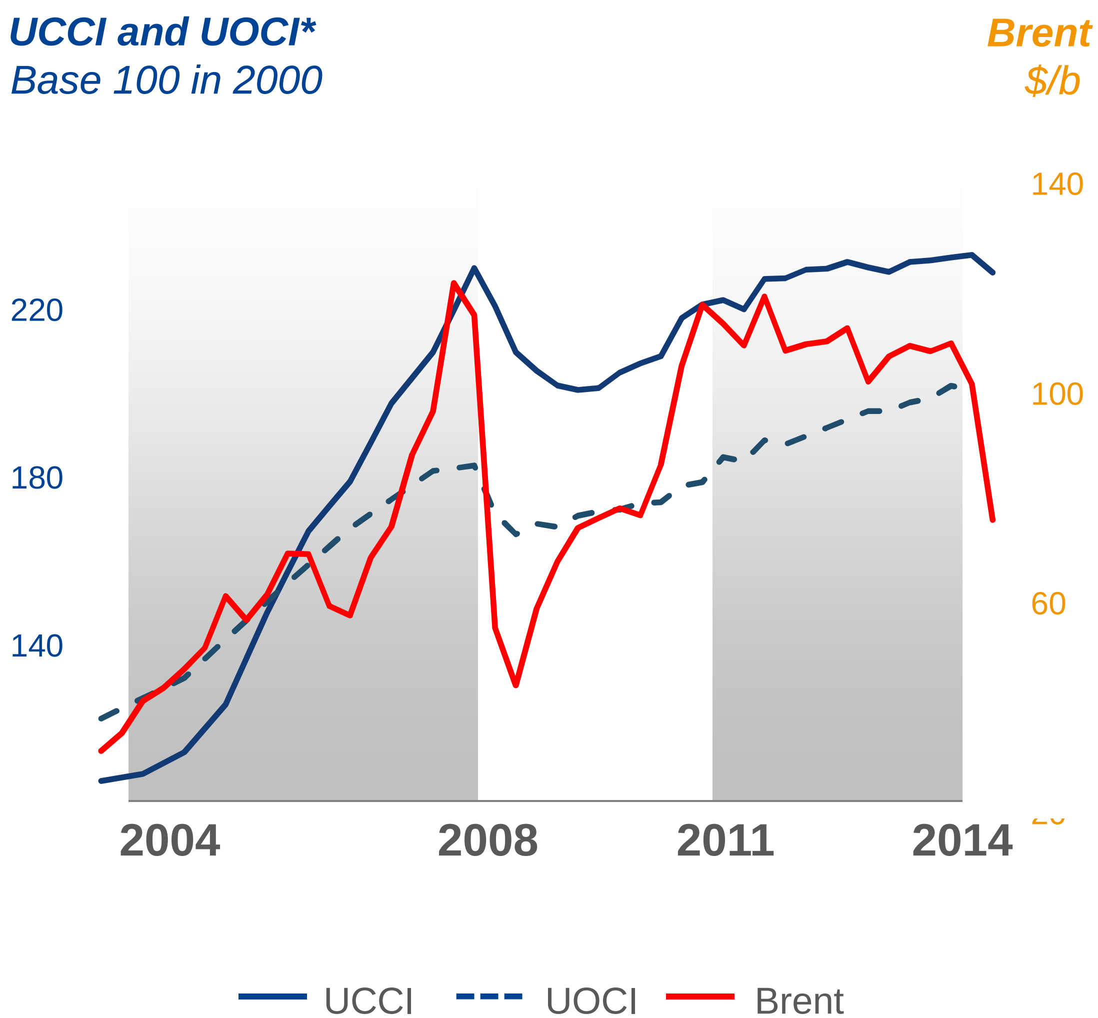
CLOV

CLOV

Resources will be increasingly difficult to develop

COST INFLATION

Rising costs



** IHS CERA Upstream Capital Cost Index and Upstream Operating Cost Index*

Cost inflation over the past decade has been dramatically impacting O&G companies **profitability.**

Reducing costs is a priority for Total, which has launched a major initiative at Group level.

Objectives are to **control CAPEX**, **decrease OPEX** and maintain among the lowest technical costs in the profession

… while **not compromising on safety**.

These efforts will shape the way future developments are conceived:

- Development **in sequence**
- No gold plated approach / "**good enough**" design
- **Innovation** used as a key driver for lowering costs

Cost have reached unsustainable levels, even at 100$/b

ACCEPTABILITY

Enhancing partnerships

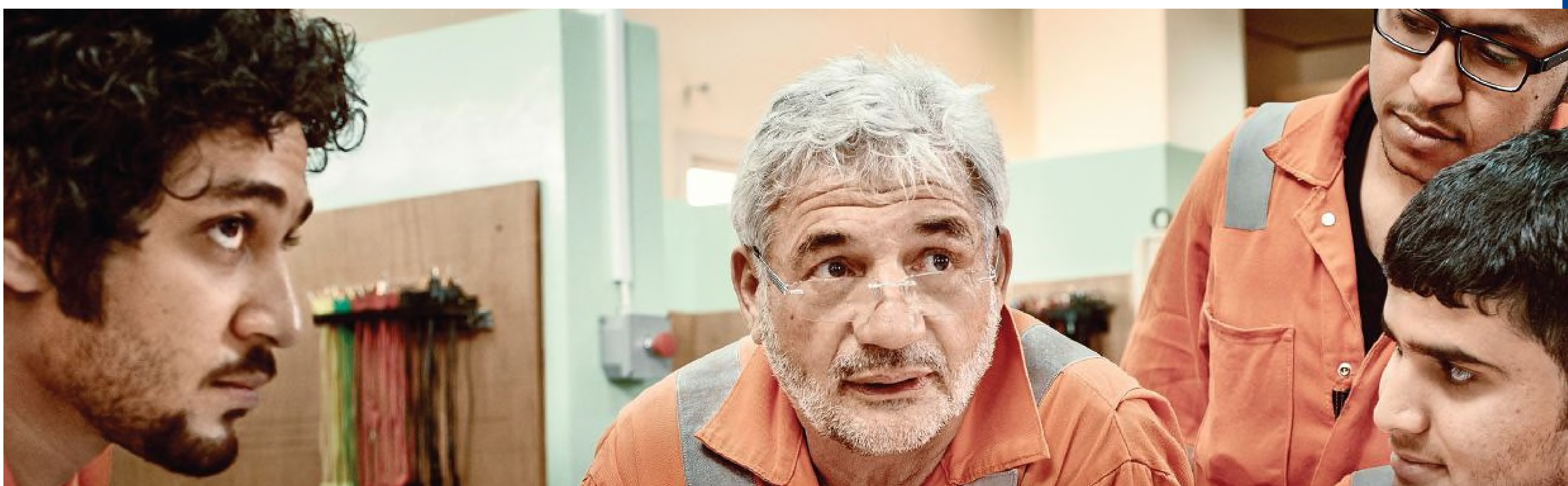
- Increased collaboration
- Better alignment
- Relations based on mutual trust and knowledge

Creating and sharing "in-country value"

- Revisit "local content" approach
- Education and training
- Contribute to the social and economic development

Improving environmental performance

- Promote gas, limit GHG emissions and reduce flaring
- Develop new energies (solar)
- Improve energy efficiency



Expectations for "in-country value" will have to be optimized

IMPACT ON NEW E&P DEVELOPMENTS

Capital discipline

- Strict selection criteria for launching new projects
- Competition for capital allocation

Focus on profitability

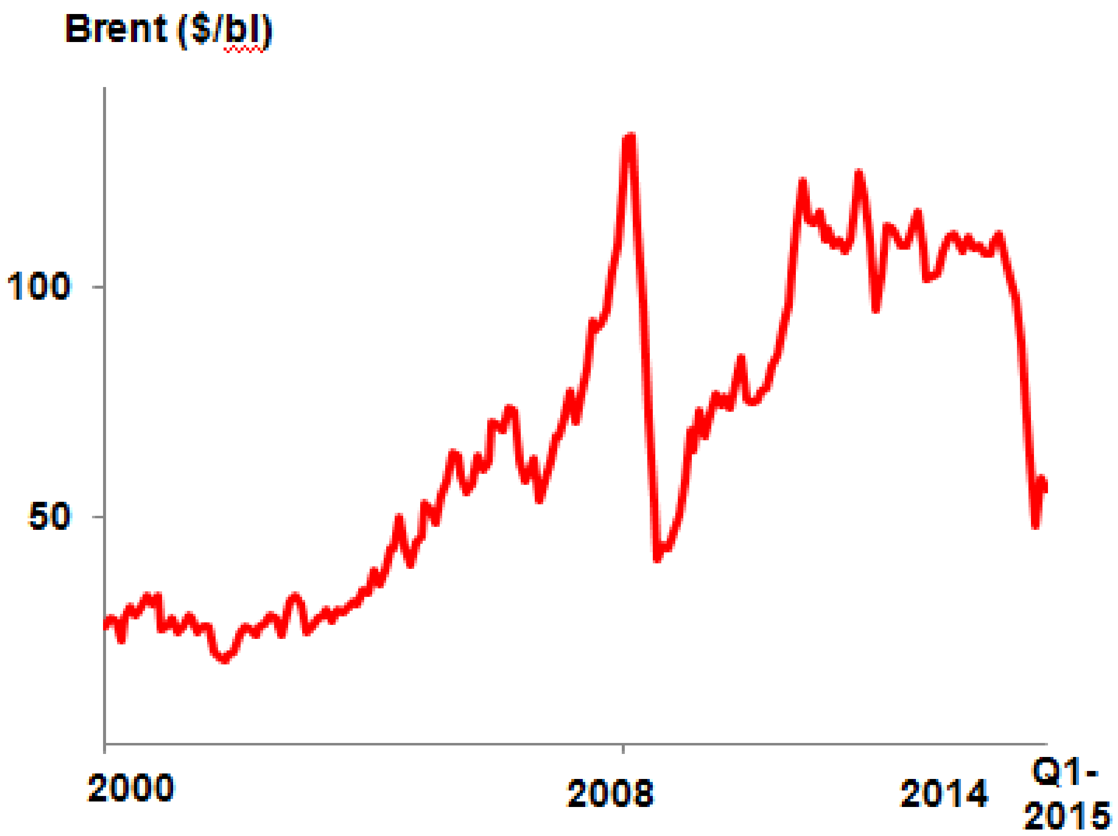
- Seek improvement in fiscal terms with host countries
- Work with suppliers in order to simplify design , aim at standardization, renegotiate contracts

Portfolio management

- Review of asset portfolio, including assets at development stage
- Pursue opportunities to rationalize

The least profitable projects will be either postponed or cancelled

CONCLUSION



Future E&P development are facing

… structural challenges

… and pressure from the present-day environment

The O&G industry has to react, without over-reacting

TOTAL
COMMITTED TO BETTER ENERGY

Thank you for your attention

Rob Cross
Senior Vice President
Natural Gas Europe
Statoil

DENTONS

Statoil

The Future of Natural Gas in Europe

Robert Cross, SVP, Natural Gas Europe, Statoil

The power market is facing large challenges

- Diverging national policies are distorting markets
- Use of coal is jeopardising decarbonation efforts
- Renewable subsidies are increasing the costs for end customers
- Uncertain economics for flexible plants are threatening energy security

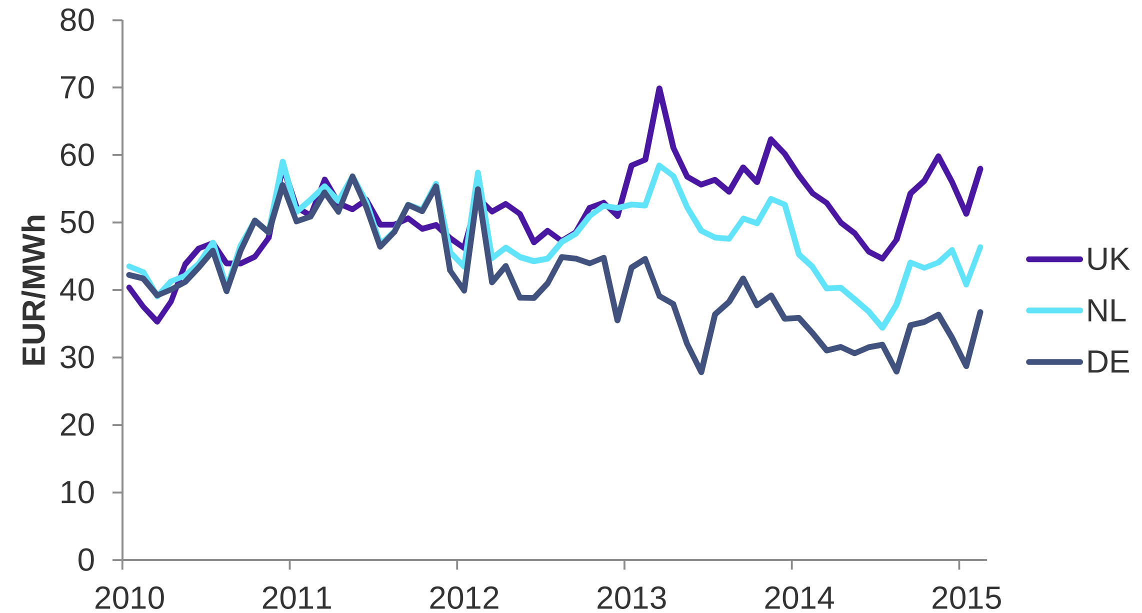
European policies are strongly diverging...

UK	Germany	Poland	Italy	France
Gas	Gas	Gas	Gas	Gas
Coal	Coal	Coal	Coal	Coal
Nuclear	Nuclear	Nuclear	Nuclear	Nuclear
Renewables	Renewables	Renewables	Renewables	Renewables
Shale gas	Shale gas	Shale gas	Shale gas	Shale gas

KEY	Very Hostile	Hostile	Neutral/ Mixed	Mild support	Strong support

Source: Lambert Energy Advisory

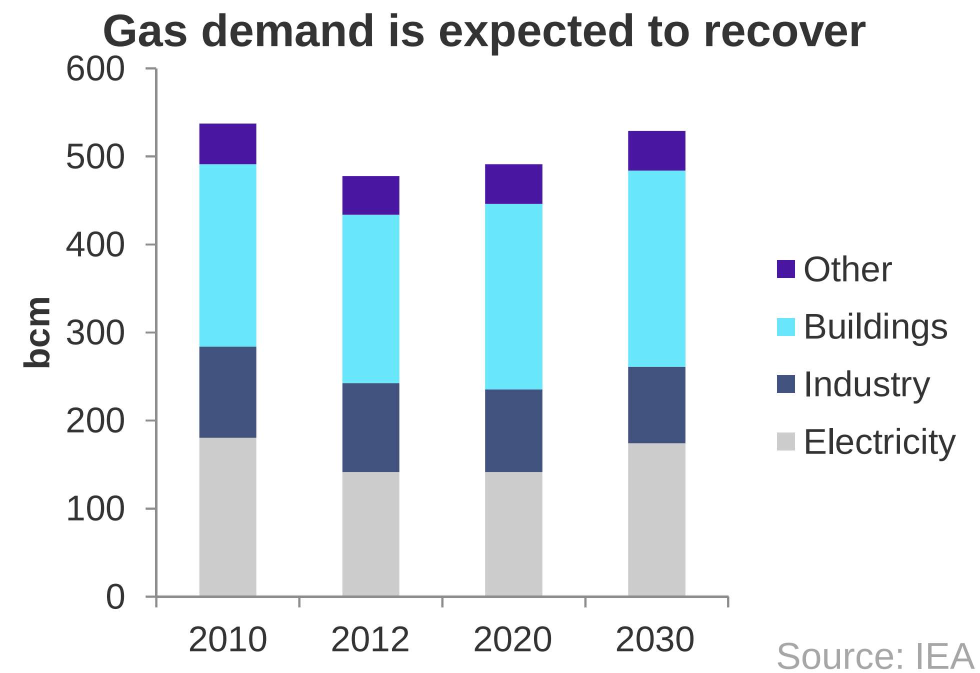
...leading to distortions and diverging wholesale prices



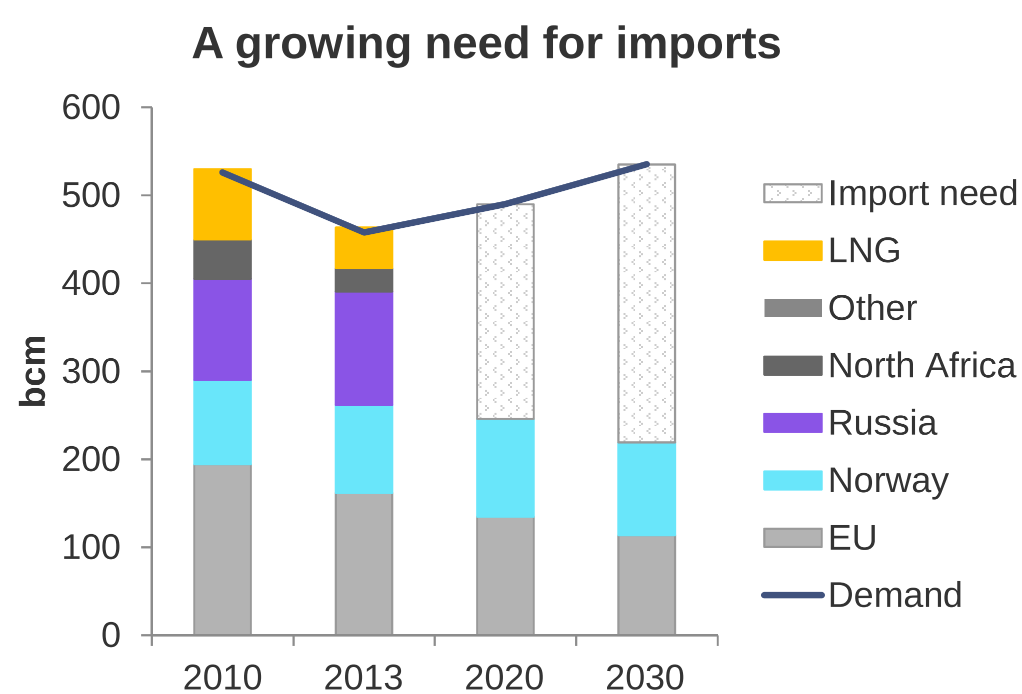
Sources: *APX, N2EX, Epexspot, Statoil Analysis*

A strong gas market is needed to ensure security

- Europe needs to attract new imports to replace falling domestic production
- Large investments are needed in gas supply and infrastructure
- European policy-makers are downplaying future role of gas, creating uncertainty for investors



Source: IEA



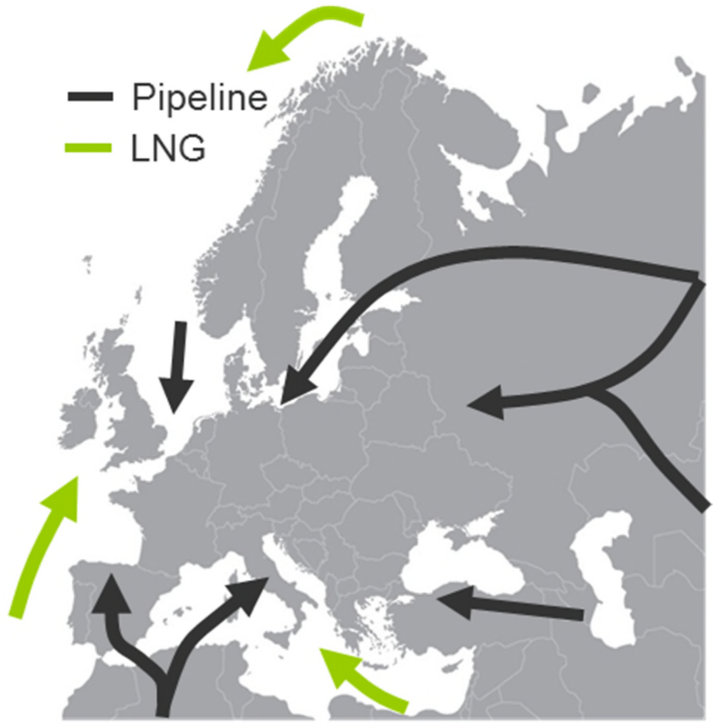
Sources: Cedigaz, IEA, Statoil Analysis

Statoil

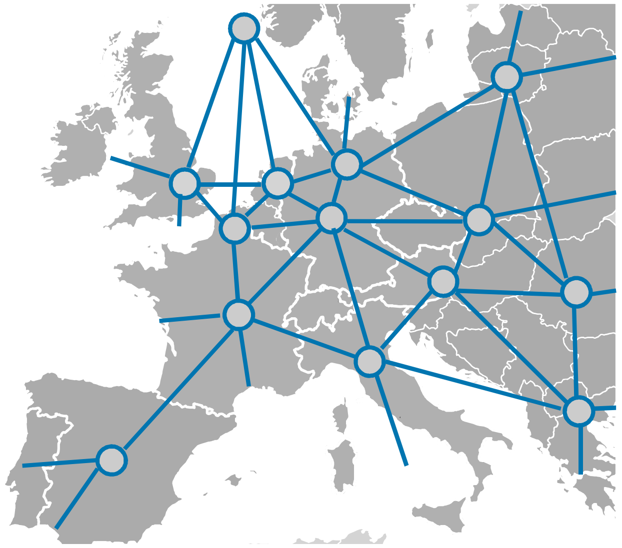
What does a successful gas market look like?

- Gas remains backbone of heating and industry, and provides Europe with flexible power
- A diversity of import routes, high interconnectivity and liquid hubs in all regions
- A competitive and attractive market with incentives for developing Europe's own gas resources
- A market that is reinforced by strong energy partnerships

A diversity of import routes



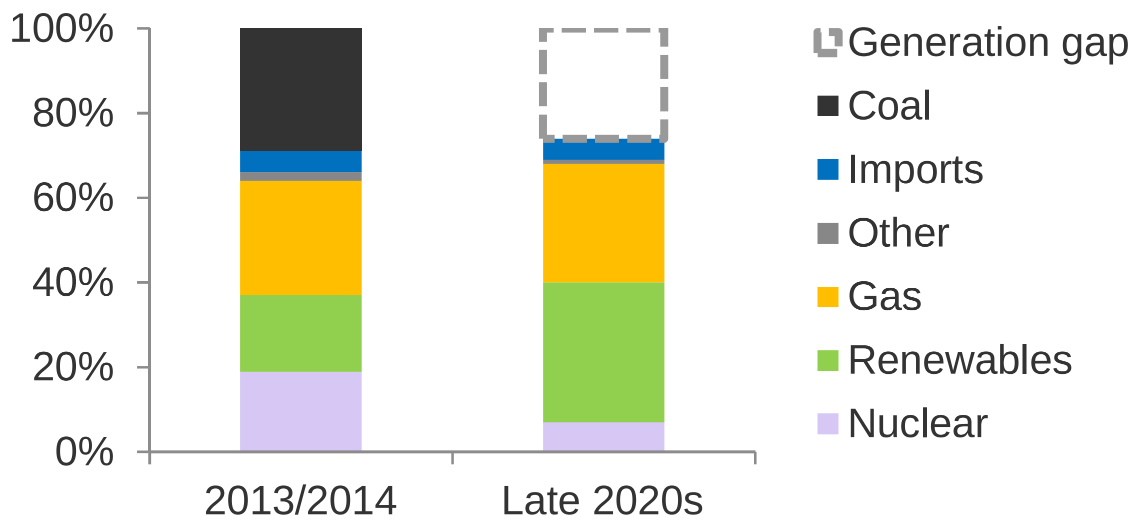
An integrated market across Europe



Gas vs coal - realities are about to sink in

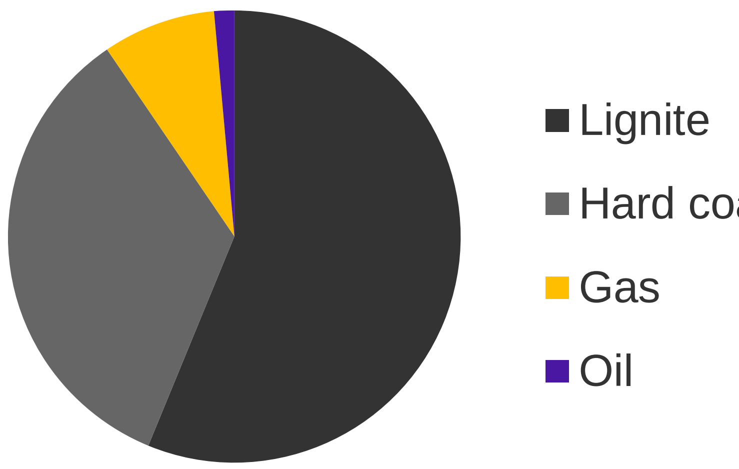
- The UK
  - Party leaders are unanimous on emission reductions
  - Joint pledge to "end the use of unabated coal for power generation"
- Germany
  - Growing acknowledgement that emissions targets cannot be reached with current policies
  - Policy-makers are evaluating possibilities for reducing coal

UK power mix:
Coal phaseout gives opportunity for gas



Source: Lambert Energy Advisory

Source of German power sector emissions 2014



Sources: AG Energiebilanzen 2014, Statoil analysis

Concluding remarks

- Europe continues to face challenges in balancing its energy priorities
- A well-functioning internal market is key
- Growing support for gas as a part of the solution
- A stable and predictable framework is essential

DENTONS

Simon Wynn
Executive Director
Upstream Natural Resources
Willis Limited

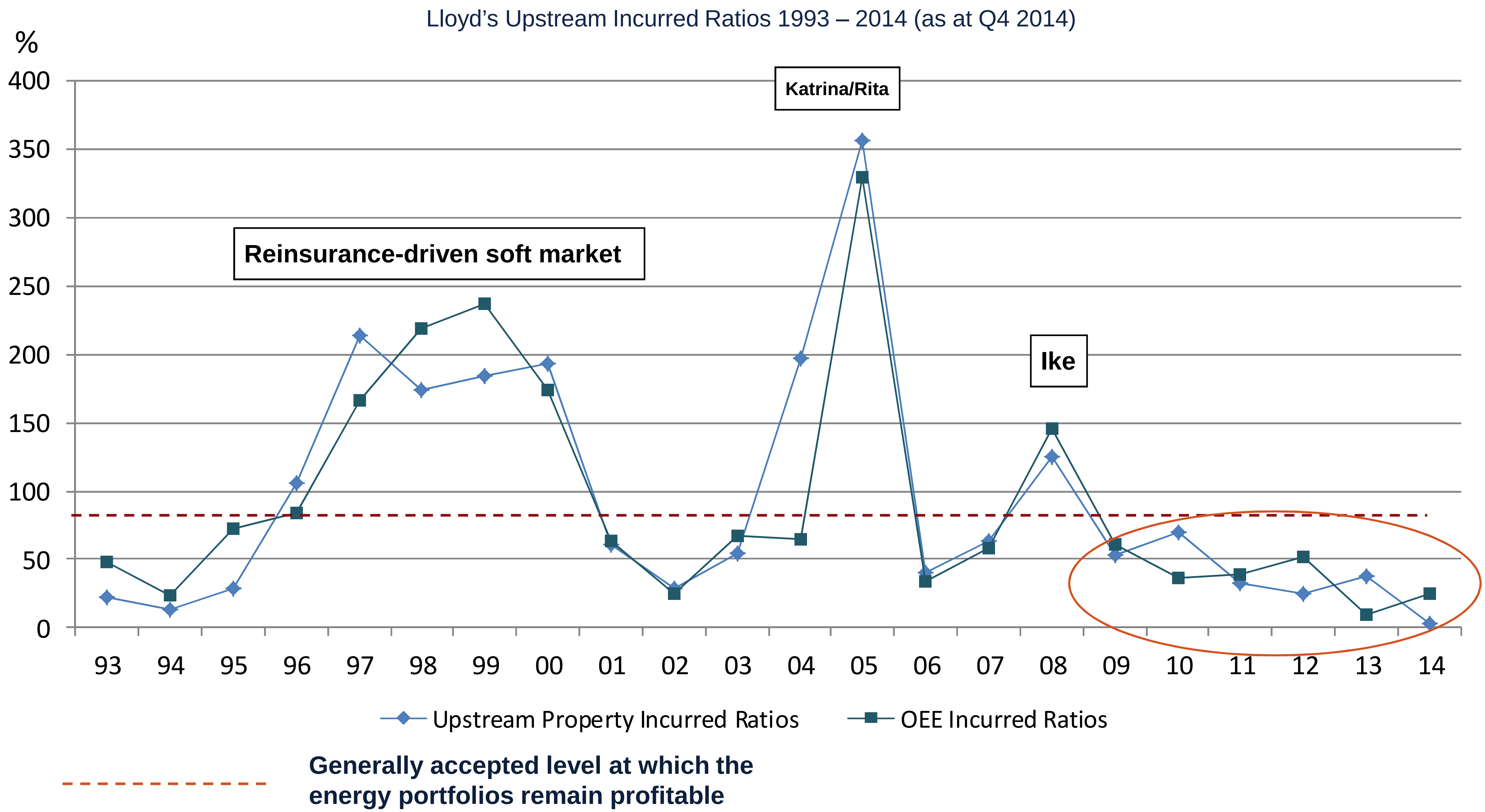
WILLIS NATURAL RESOURCES

DENTONS GLOBAL ENERGY SUMMIT 2015

April 2015

Willis

2014 LOOKS GOOD FOR THE MARKET

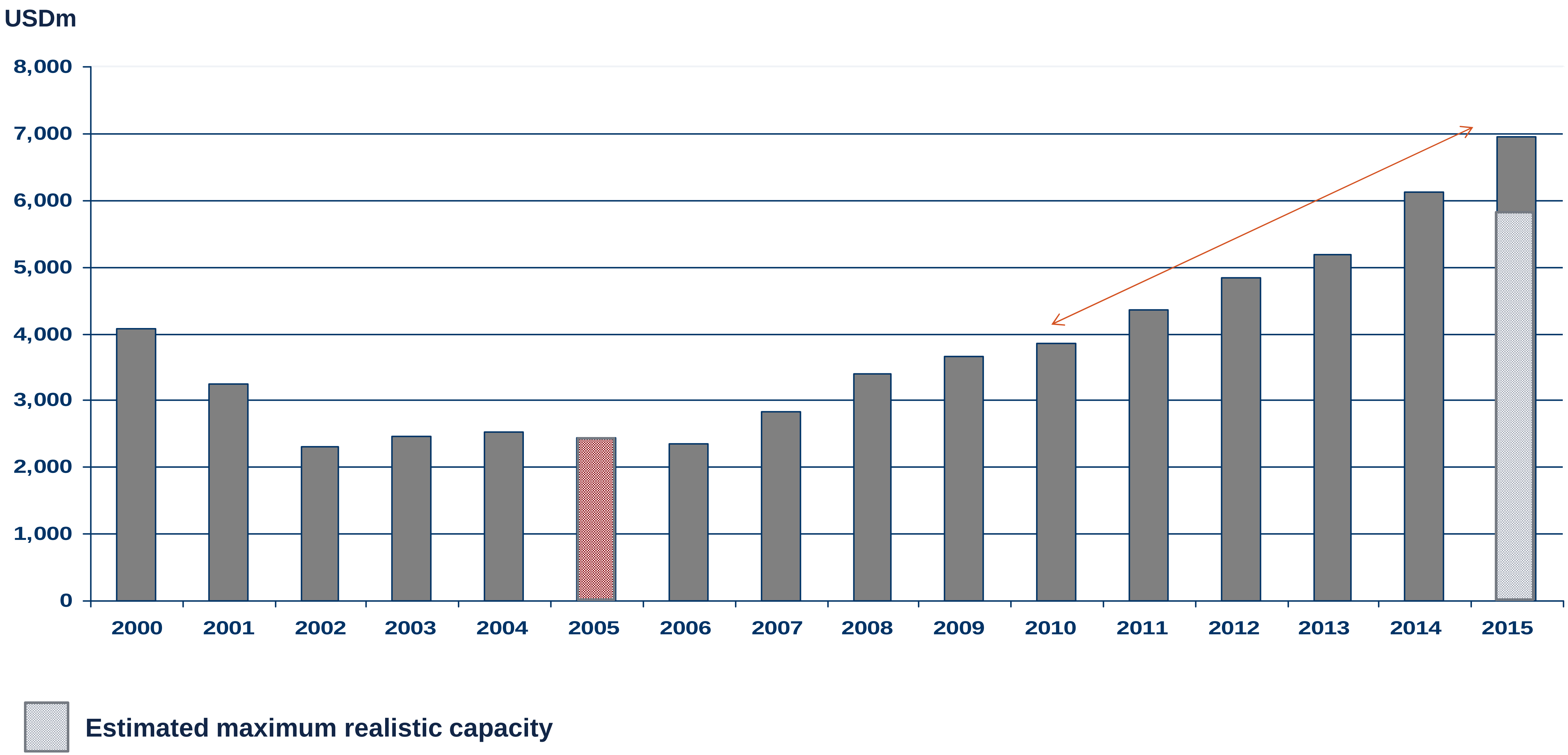


Source: Lloyd's
NB - "Upstream Property" – combination of ET/EC/EM/EN Audit Codes
- "OEE" – combination of EW, EY and EZ Audit Codes

Lloyd's Upstream portfolio generally makes money when there are no Gulf of Mexico Windstorm losses, and 2014 was no exception

ANOTHER RELENTLESS RISE IN CAPACITY

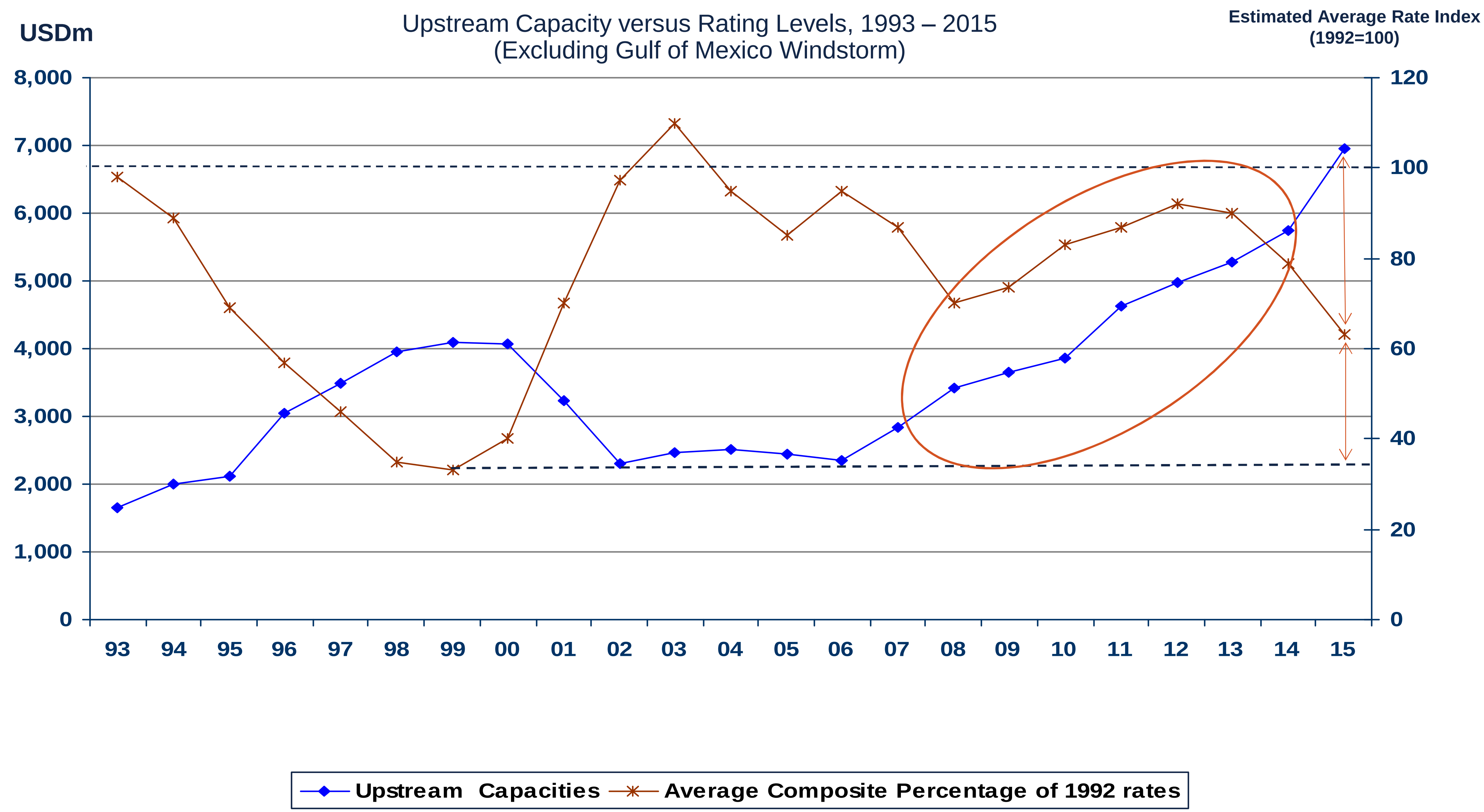
Upstream Operating insurer capacities 2000-2015 (excluding Gulf of Mexico Windstorm)



The amount of capacity now in play in the Upstream market bears little relation to the amount available only five years ago

Source: Willis

THE OUTLOOK FOR 2015



The rate of capacity increase has accelerated since last year – as has the rate of overall market softening. But in comparative terms, Upstream rates have still some way to go before reaching the historically low levels of the late 1990s.

Source: Willis

IN SUMMARY…

- Generally a profitable year:
  - Another Gulf of Mexico windstorm season come and gone
  - Little or no sign of truly catastrophic losses
  - Upstream has had an outstanding year, not a bad one for other sectors either
- Capacities at record highs:
  - No sign of significant alternative capital havens
  - Minimal to negative interest rates
  - Biggest capacity increases:
    - Upstream USD6.9 billion
- Widened leadership choices and competition:
  - Following markets now offering lead lines to secure market share
  - Existing leaders under increased pressure

BUT…

THE COLLAPSE IN THE OIL PRICE.

Oil price collapse produces:

- Cutbacks in Exploration and Production Activity
- Increased mergers and acquisitions within the energy industry (BG/Shell)
- Reduced risk management budgets

No wonder….

PREMIUM POOLS ARE ABOUT TO MELT…

WILLIS NATURAL RESOURCES

THANK YOU

April 2015

DENTONS

Global outlook for the oil and gas industry

21 April 2015