

# Global outlook for the oil and gas industry

21 April 2015

**Richard Mallinson**  
**Geopolitical Analyst**  
**Energy Aspects**

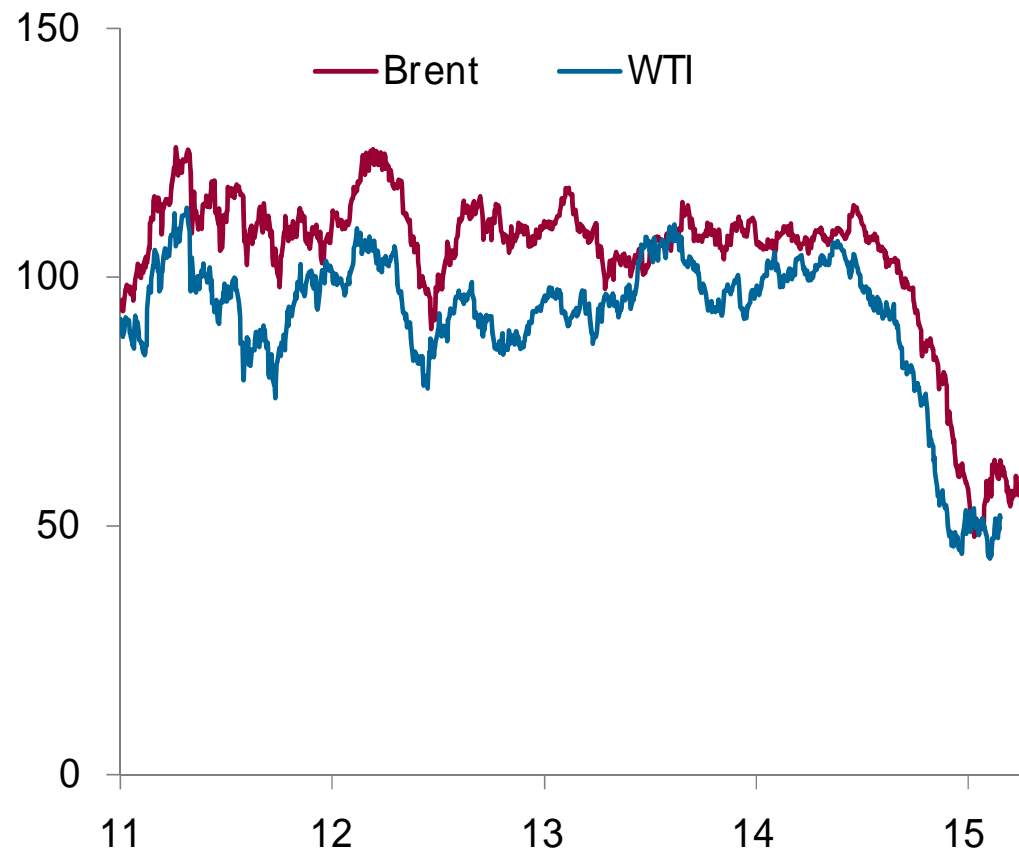


# *Oil and gas market outlook*

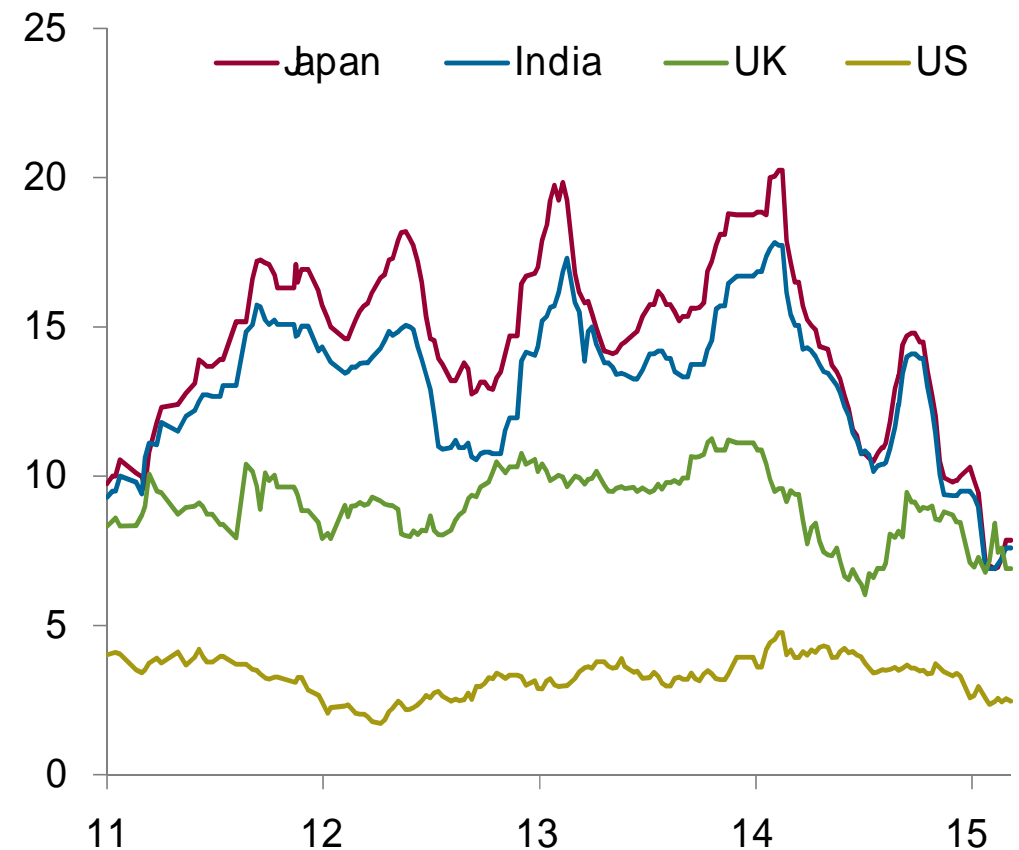
Richard Mallinson, April 2015

# Oil and gas prices have fallen sharply

Crude oil prices  
\$/bbl



Global LNG Prices  
\$/mmbtu



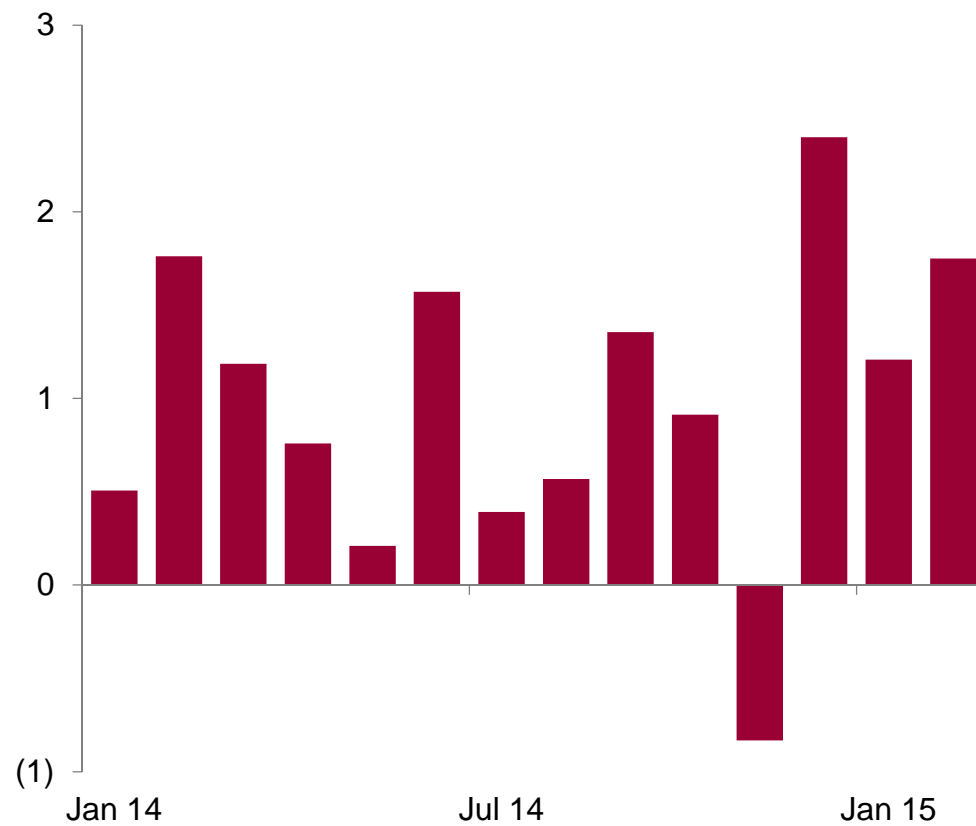
*After rapidly falling by over 50% oil prices remain volatile in the \$50s per barrel range*

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

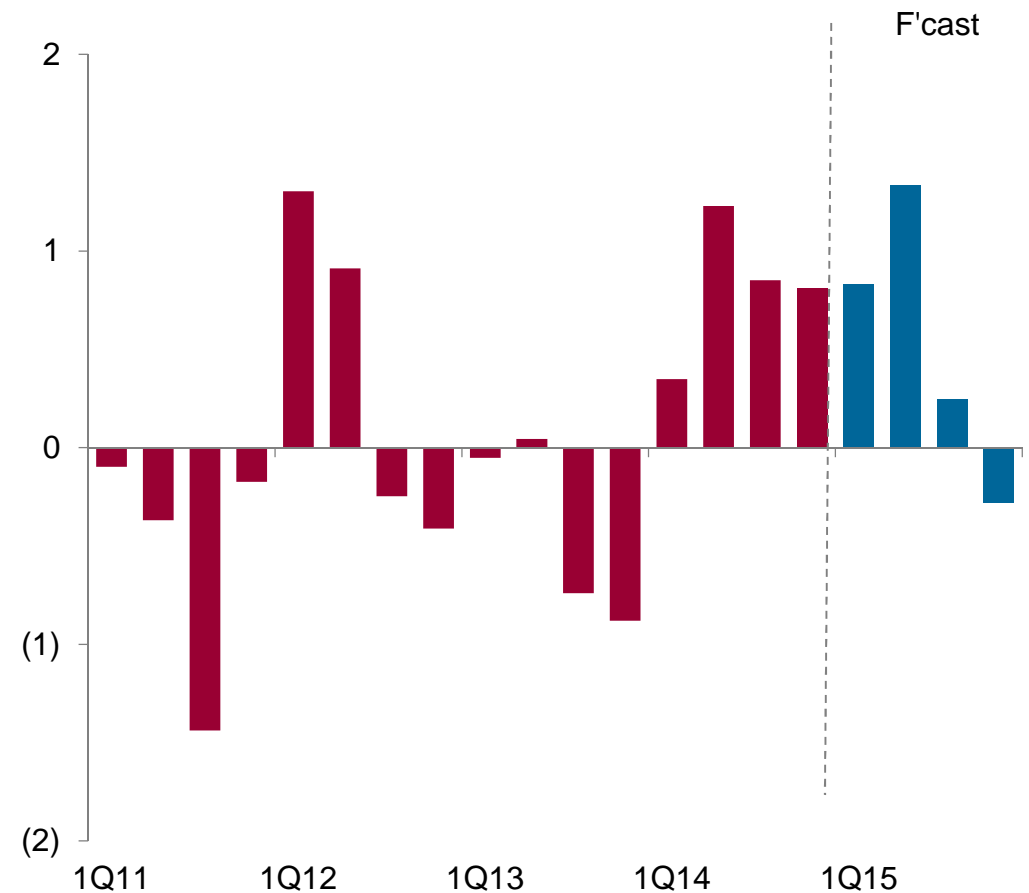
Source: Bloomberg, Energy Aspects

# The oil demand response is limiting stockbuilds

Global oil demand, y/y change  
Mb/d



Global implied stock changes  
Mb/d



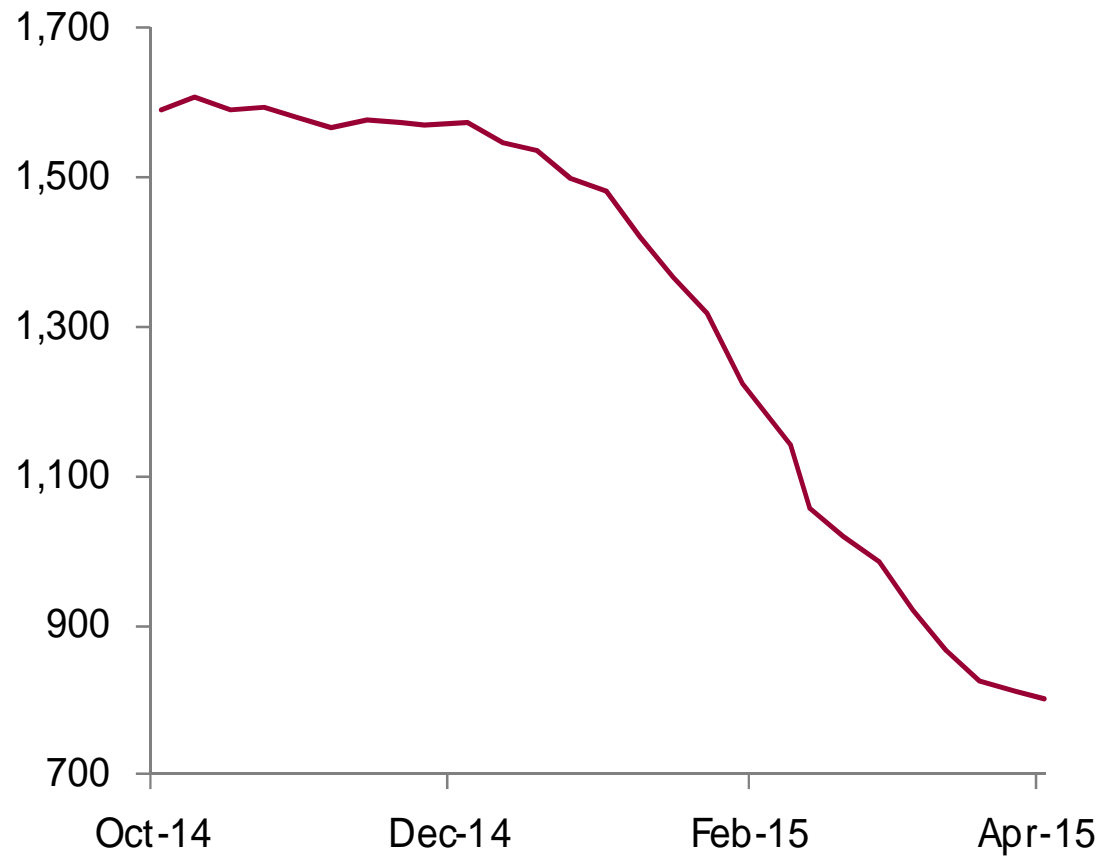
*Global oil demand growth has picked up tremendously in recent months – strength in Asia, the US and elsewhere*

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

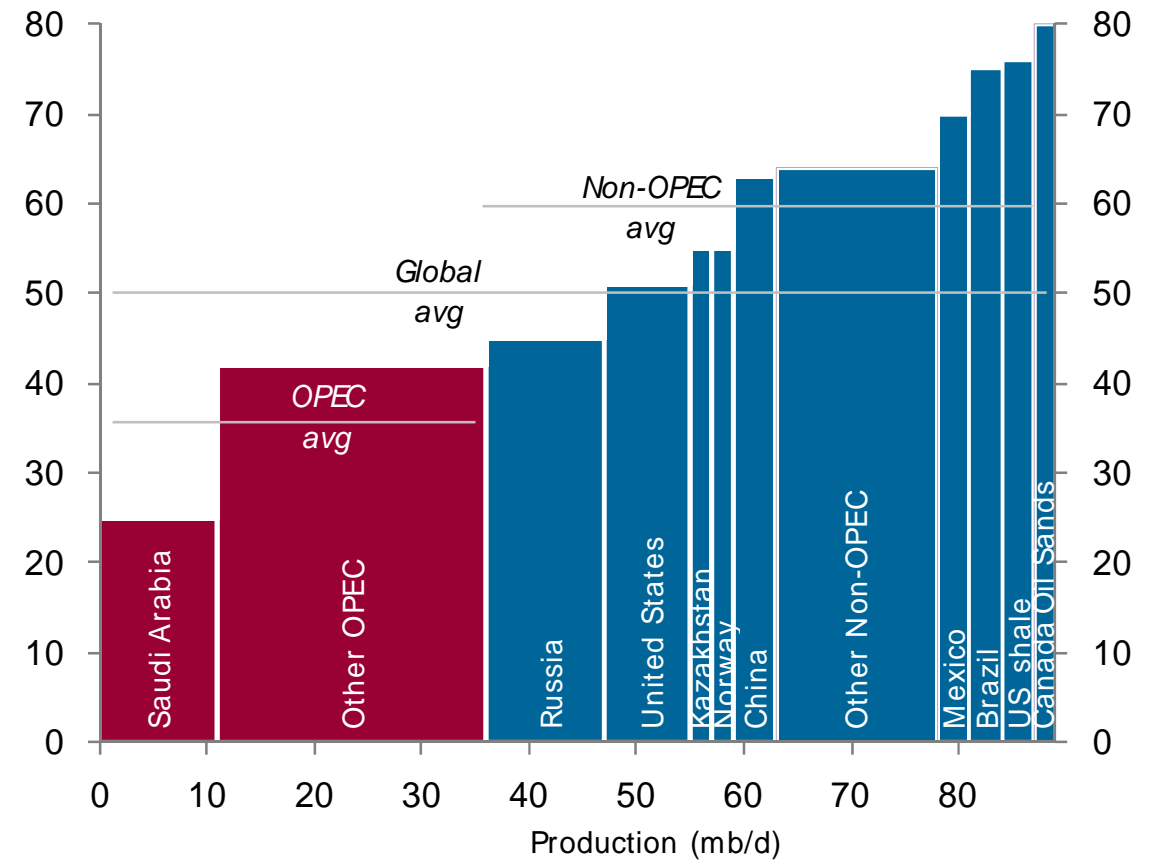
Source: Energy Aspects analysis

# Oil and gas producers are responding to lower prices

## US oil rig counts



## Global cost curve (ex dividend or interest payments) \$/ barrel



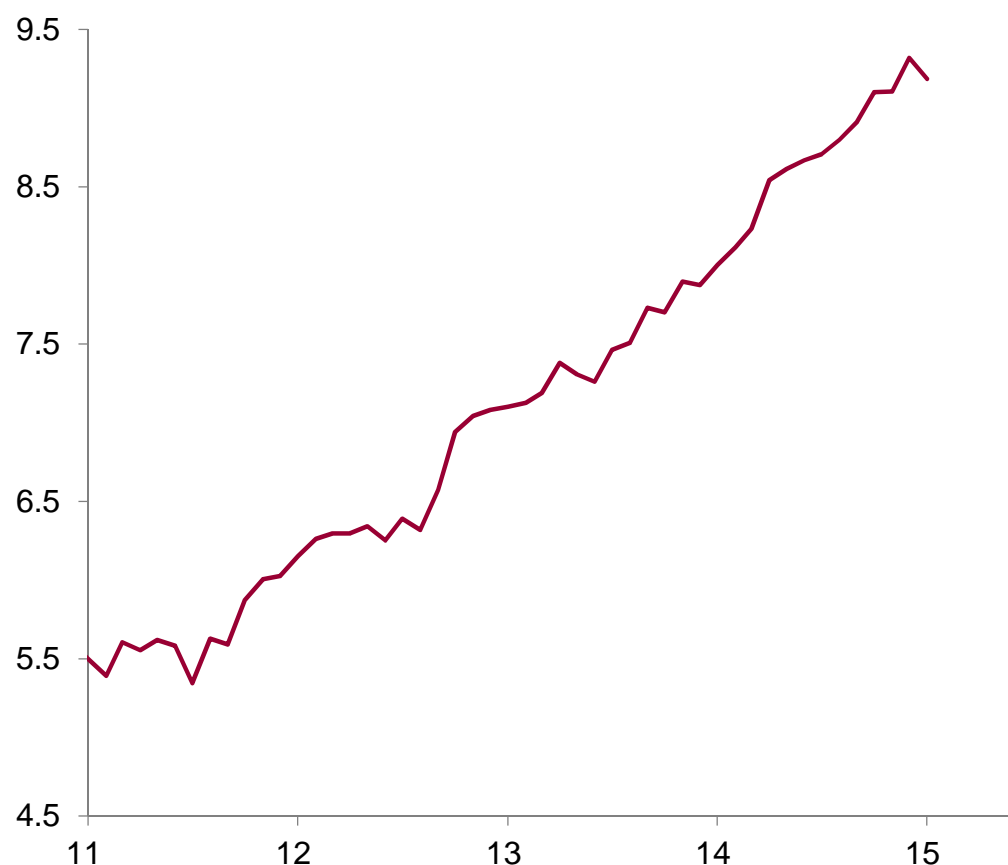
*US rig numbers have fallen fast despite producer hedging, with even the best shale plays testing breakevens*

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

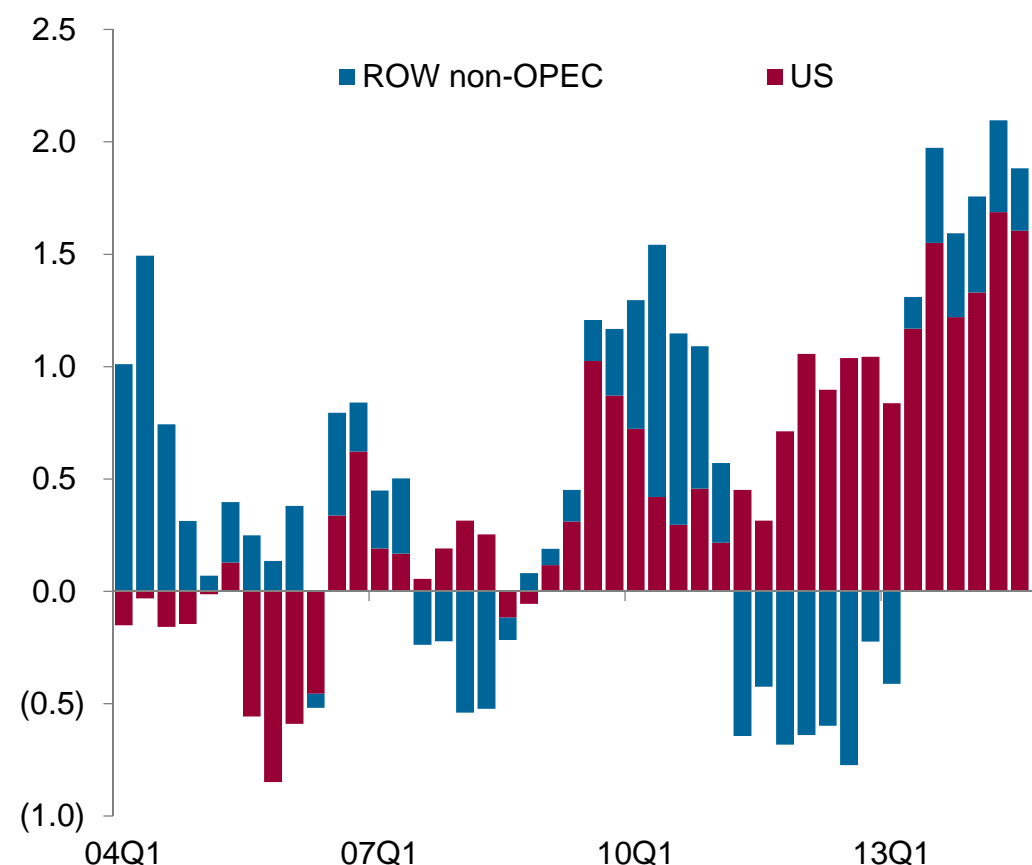
Source: Baker Hughes, Company Reports, Energy Aspects analysis

# 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*

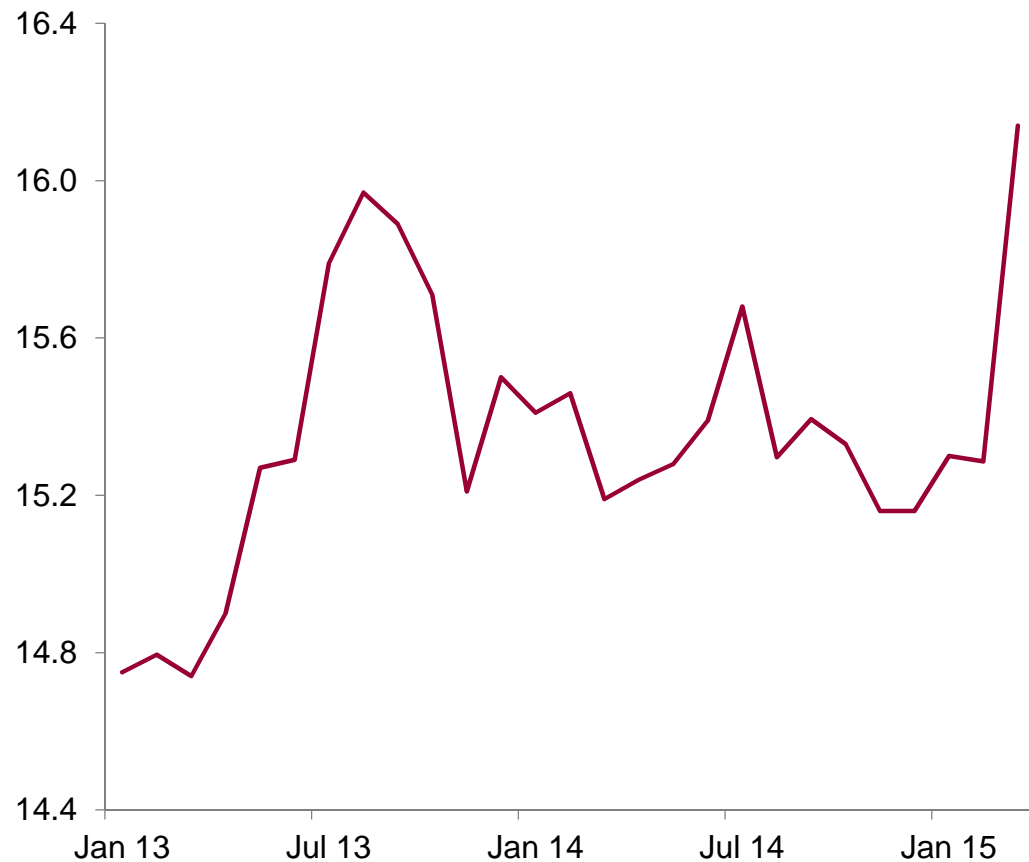
*Record investment driven by high prices temporarily reversed the declines across non-OPEC supplies outside the US*

Source: EIA, Energy Aspects analysis

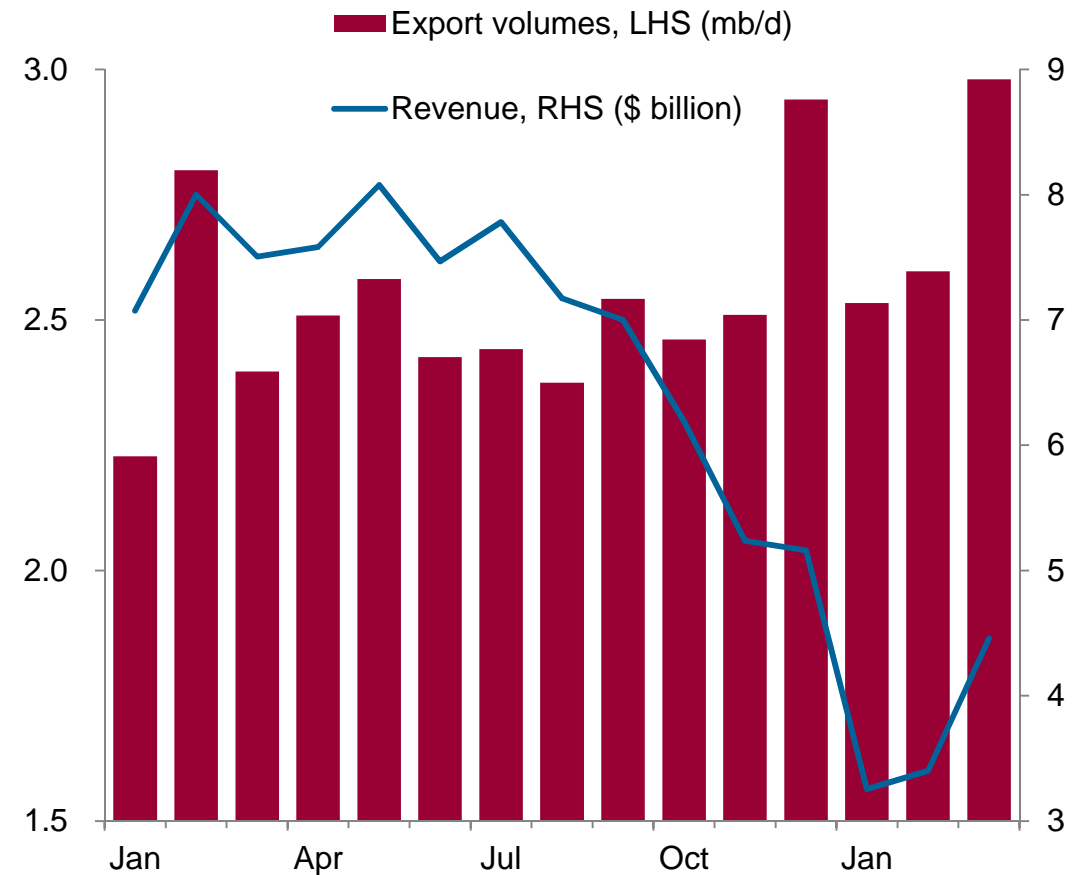
# For now a two-tier OPEC will not cut output

## GCC crude production

Mb/d



## Iraq crude exports and revenues



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

*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



Active militant groups in MENA



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

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

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

## DISCLAIMER

---

This publication has been prepared by Energy Aspects Ltd ('Energy Aspects'). It is provided to our clients for information purposes only, and Energy Aspects makes no express or implied warranties as to the merchantability or fitness for a particular purpose or use with respect to any data included in this publication

Prices shown are indicative and Energy Aspects is not offering to buy or sell or soliciting offers to buy or sell any financial instrument

Without limiting any of the foregoing and to the extent permitted by law, in no event shall Energy Aspects, nor any of their respective officers, directors, or employees have any liability for (a) any special, punitive, indirect, or consequential damages; or (b) any lost profits, lost revenue, loss of anticipated savings or loss of opportunity or other financial loss, even if notified of the possibility of such damages, arising from any use of this publication or its contents

Other than disclosures relating to Energy Aspects, the information contained in this publication has been obtained from sources that Energy Aspects believes to be reliable, but Energy Aspects does not represent or warrant that it is accurate or complete. Energy Aspects is not responsible for, and makes no warranties whatsoever as to, the content of any third-party web site accessed via a hyperlink in this publication and such information is not incorporated by reference

The views in this publication are those of the author(s) and are subject to change, and Energy Aspects has no obligation to update its opinions or the information in this publication. The analyst recommendations in this publication reflect solely and exclusively those of the author(s), and such opinions were prepared independently of any other interests, including those of Energy Aspects and/or its affiliates. This publication does not constitute personal investment advice or take into account the individual financial circumstances or objectives of the clients who receive it. The securities discussed herein may not be suitable for all investors. Energy Aspects recommends that investors independently evaluate each issuer, security or instrument discussed herein and consult any independent advisors they believe necessary. The value of and income from any investment may fluctuate from day to day as a result of changes in relevant economic markets (including changes in market liquidity). The information herein is not intended to predict actual results, which may differ substantially from those reflected. Past performance is not necessarily indicative of future results

This communication is directed at, and therefore should only be relied upon by, persons who have professional experience in matters relating to investments

**© Copyright Energy Aspects Ltd (2015). All rights reserved.**

*No part of this publication may be reproduced in any manner without the prior written permission of Energy Aspects*

The Dentons logo consists of the word 'DENTONS' in white uppercase letters inside a purple arrow-shaped background pointing to the right.

DENTONS

**Andrew Moorfield**  
**Managing Director**  
**Head of EMEA Energy**  
**Scotiabank Europe plc**



**Mike Borrell**  
**Senior Vice President Europe**  
**and Central Asia**  
**Total**

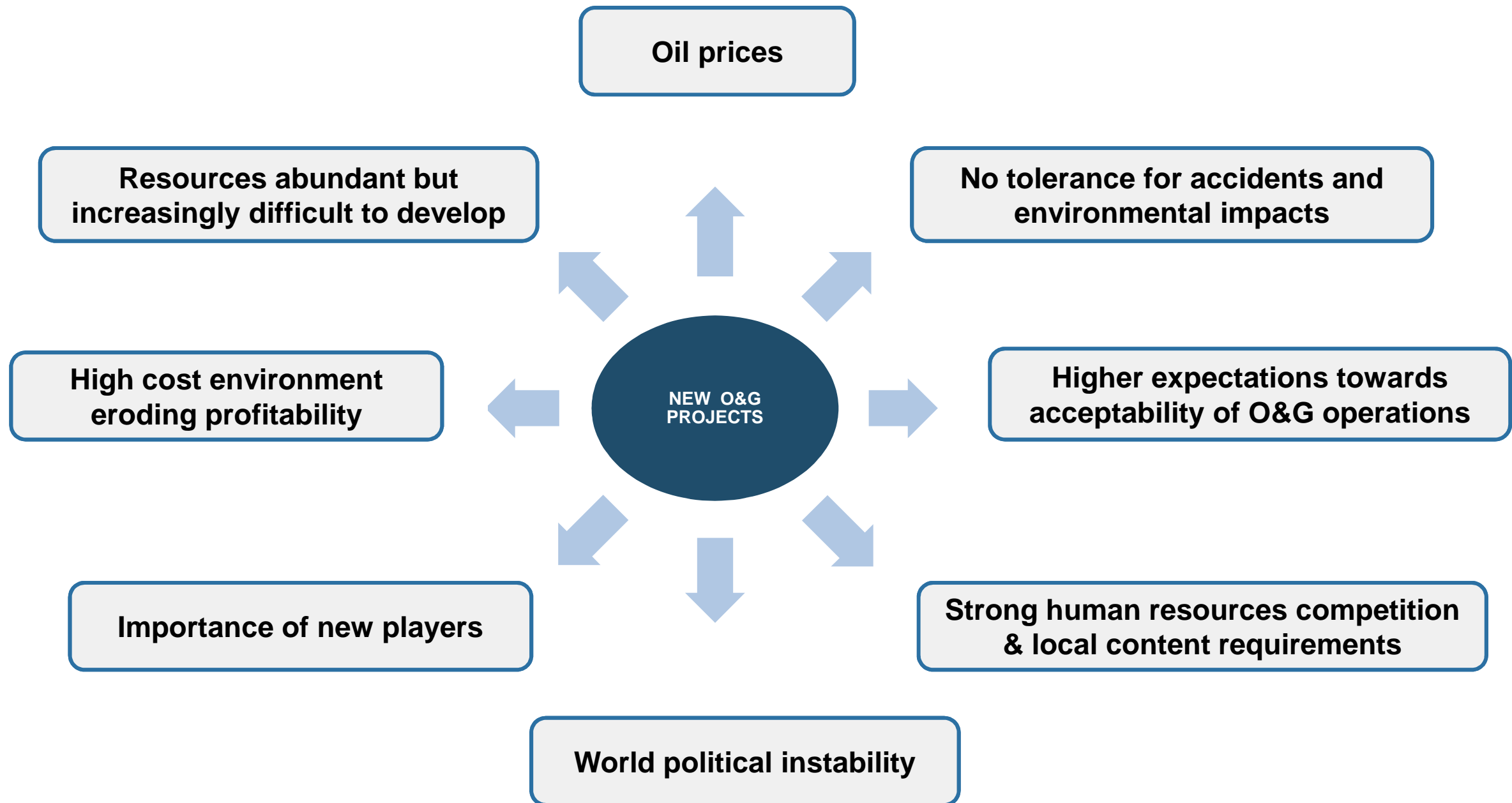


**TOTAL**  
COMMITTED TO BETTER ENERGY

# BIG CHALLENGES FACING NEW OIL & GAS DEVELOPMENTS

Michael Borrell, Senior VP Europe and Central Asia, Total  
Tuesday, 21st April 2015, Global Energy Summit 2015, London

# OUR ENVIRONMENT



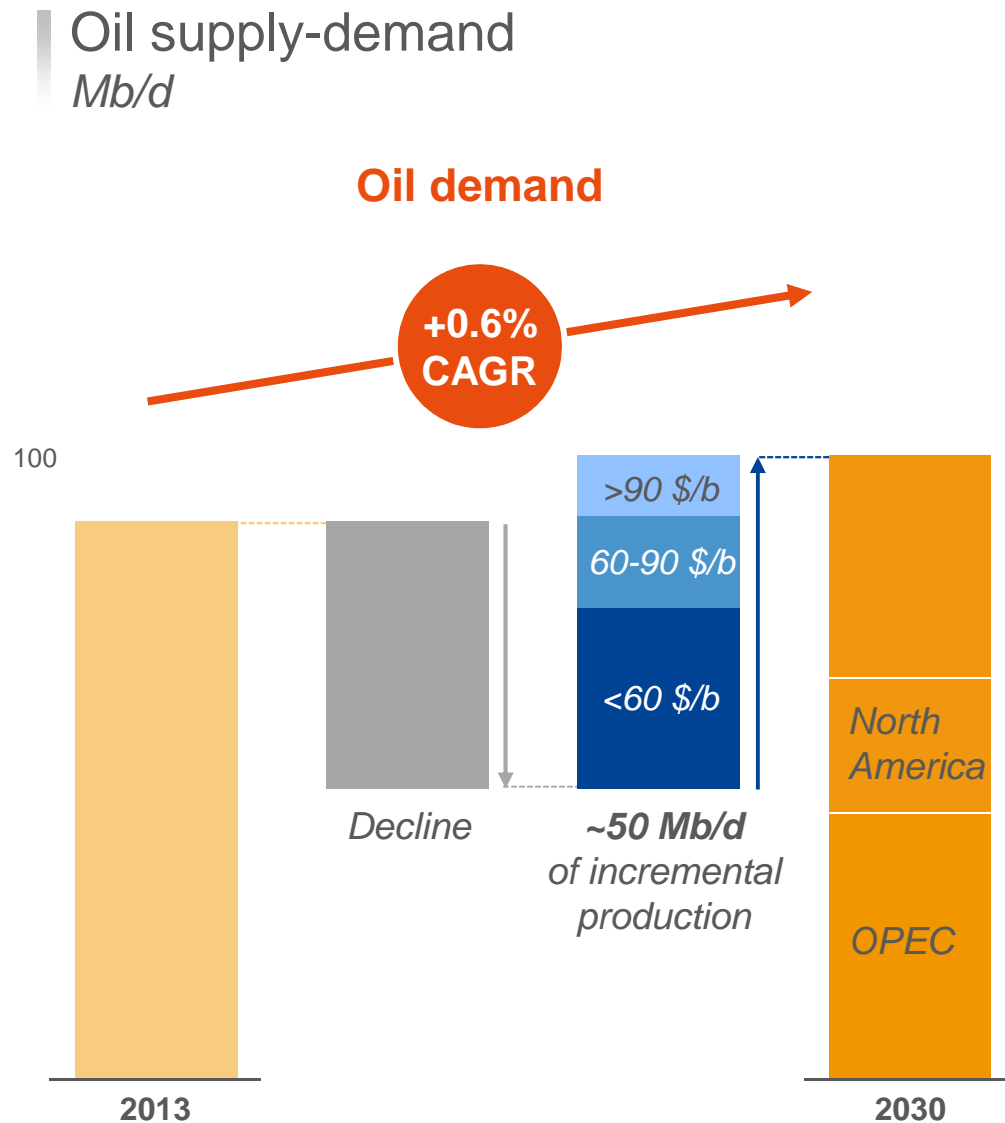
**The oil and gas environment is rapidly changing**

# REQUIRED FUTURE PRODUCTION

**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



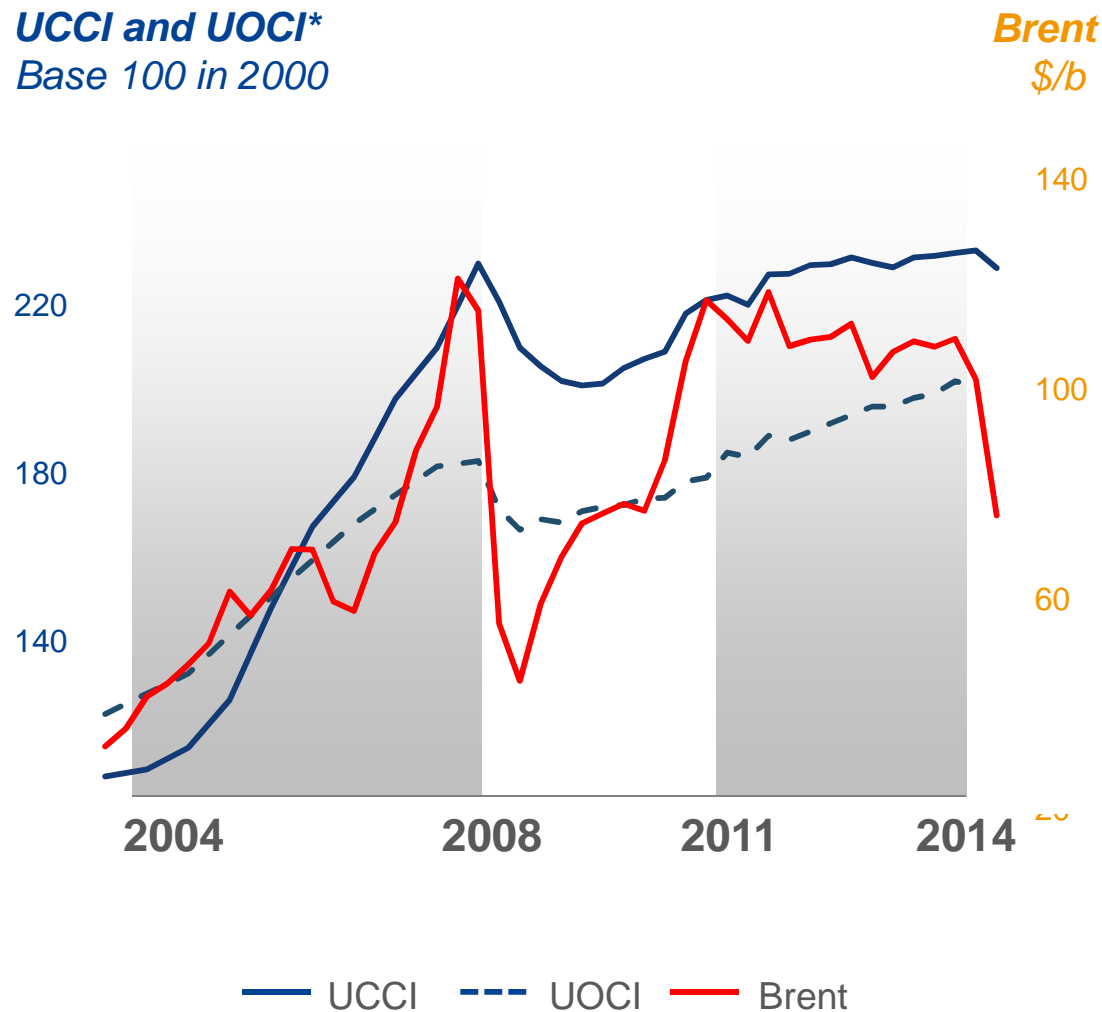
CLOV

**Resources will be increasingly difficult to develop**

# COST INFLATION

Rising costs

**UCCI and UOCI\***  
Base 100 in 2000



\* 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

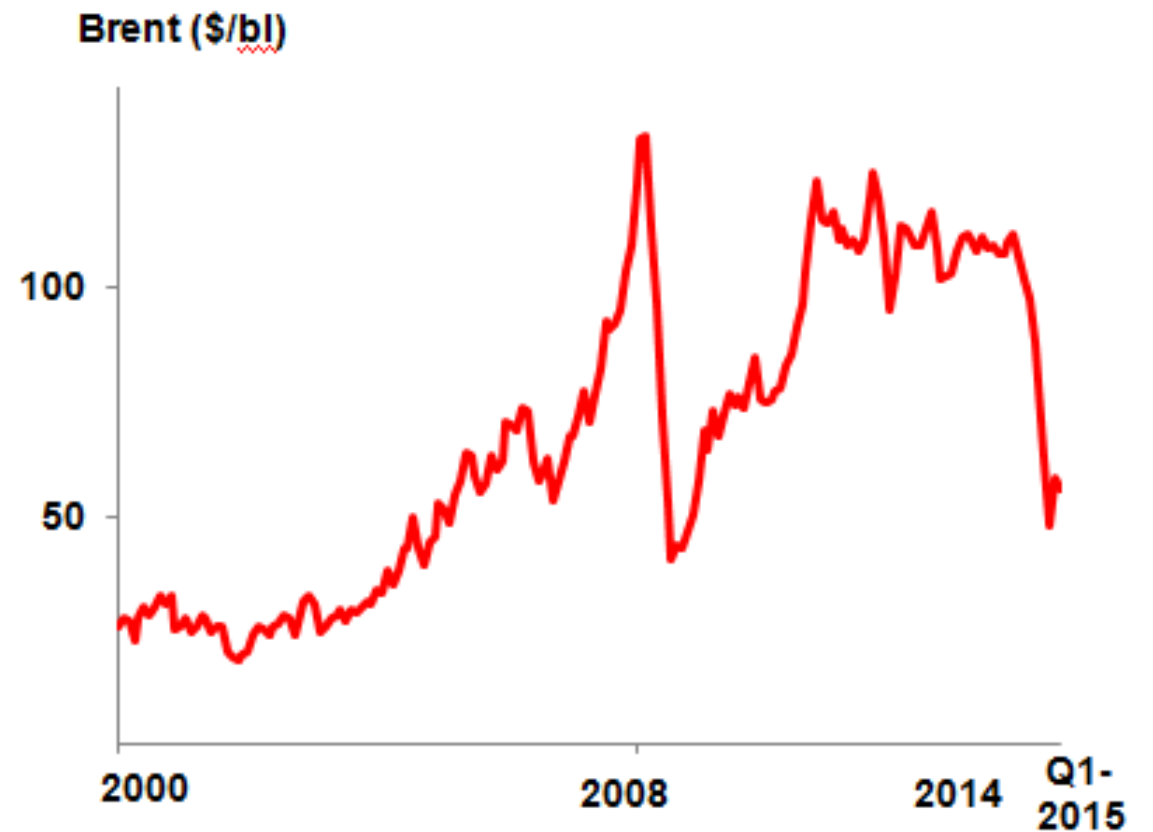
## Portfolio management

- 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**

# 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...

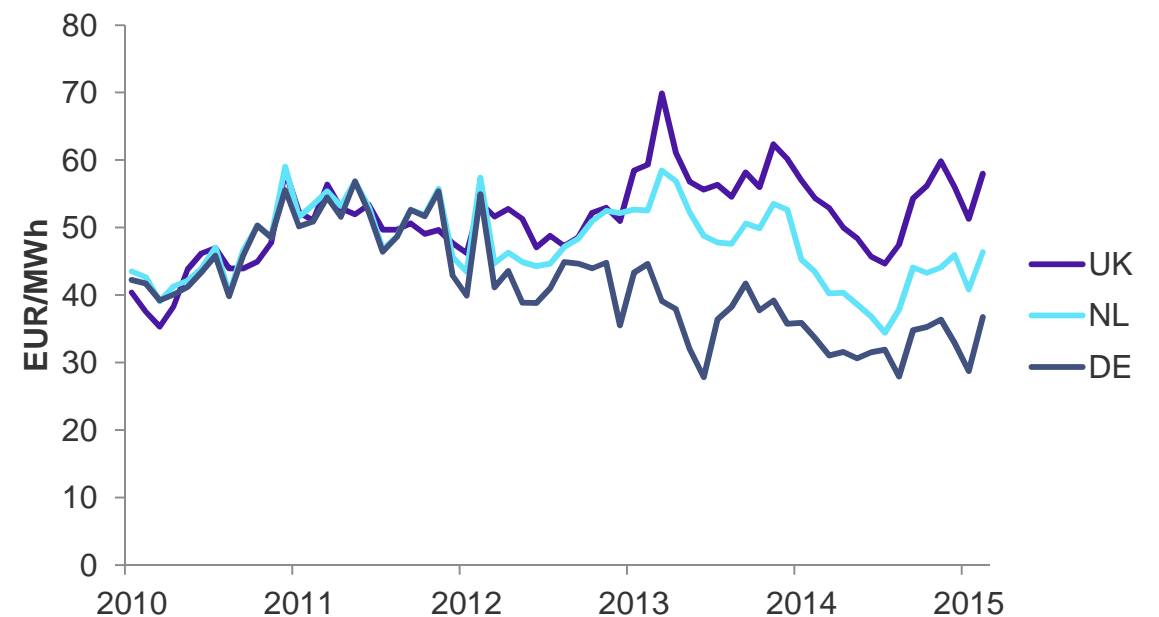
UK	Germany	Poland	Italy	France
Gas	Gas	Gas	Gas	Gas
Coal	Coal	Coal	Coal	Coal
Nuclear	Nuclear	Nuclear	Nuclear	Nuclear
Renewables	Renewables	Renewables	Renewables	Renewables
Shale gas	Shale gas	Shale gas	Shale gas	Shale gas

KEY	Very Hostile	Hostile	Neutral/Mixed	Mild support	Strong support
-----	--------------	---------	---------------	--------------	----------------

Source: Lambert Energy Advisory

## ...leading to distortions and diverging wholesale prices

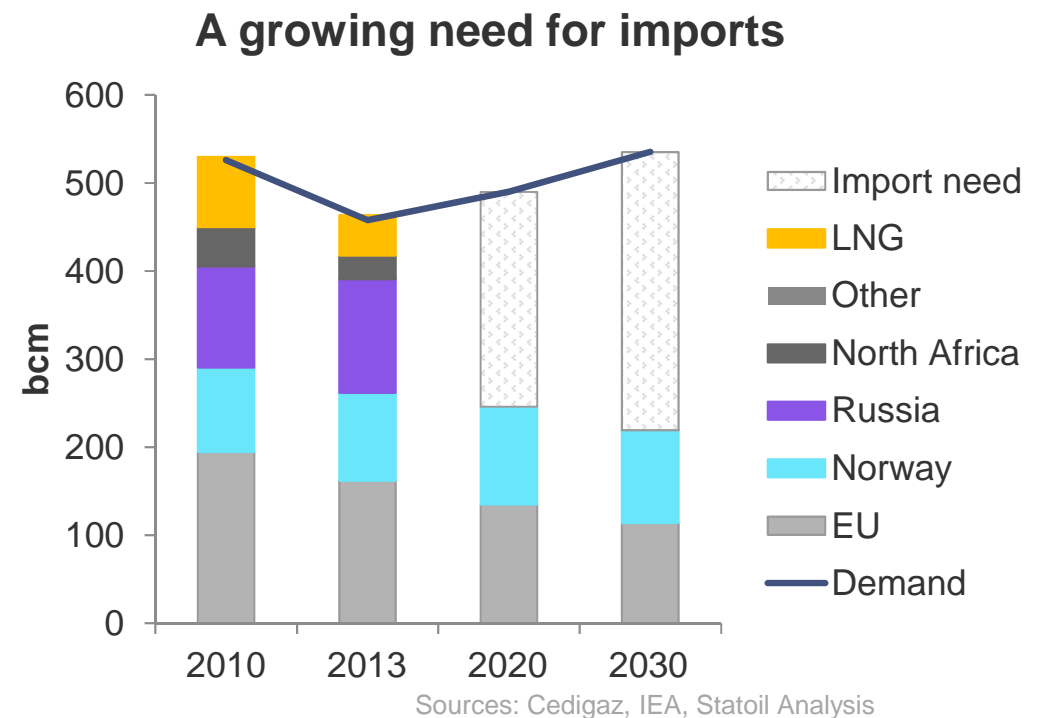
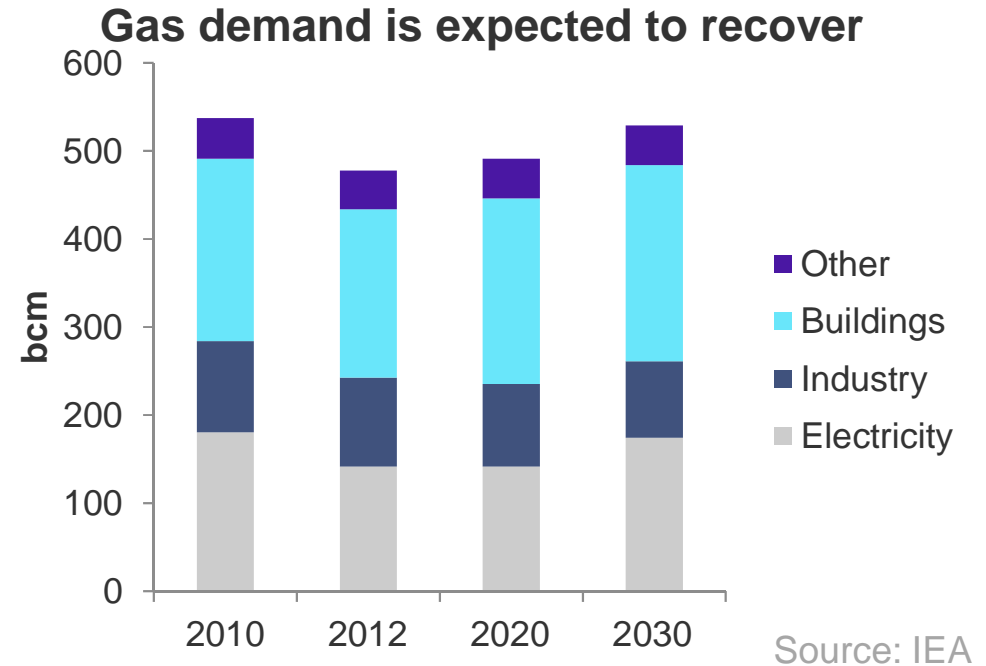


Sources: APX, N2EX, Epexspot, Statoil Analysis



# 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

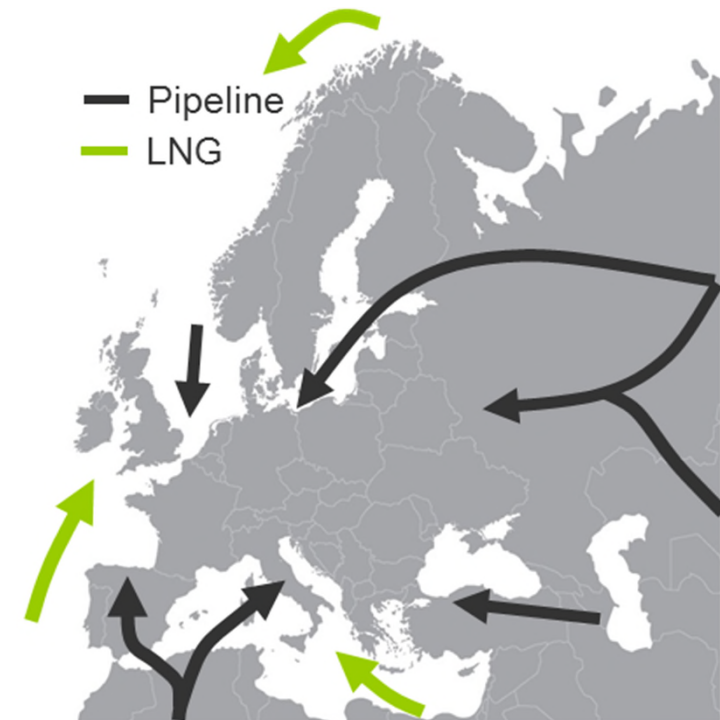




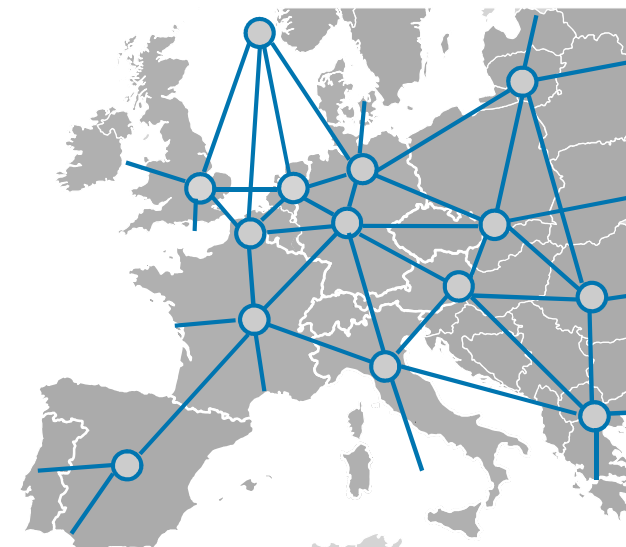
# What does a successful gas market look like?

- 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**



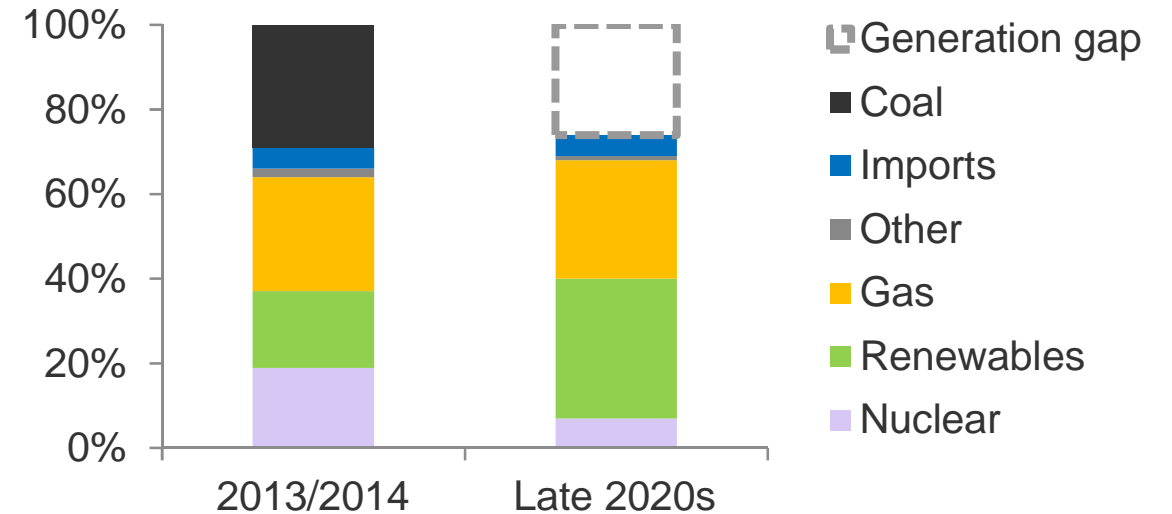
**An integrated market across Europe**



# Gas vs coal - realities are about to sink in

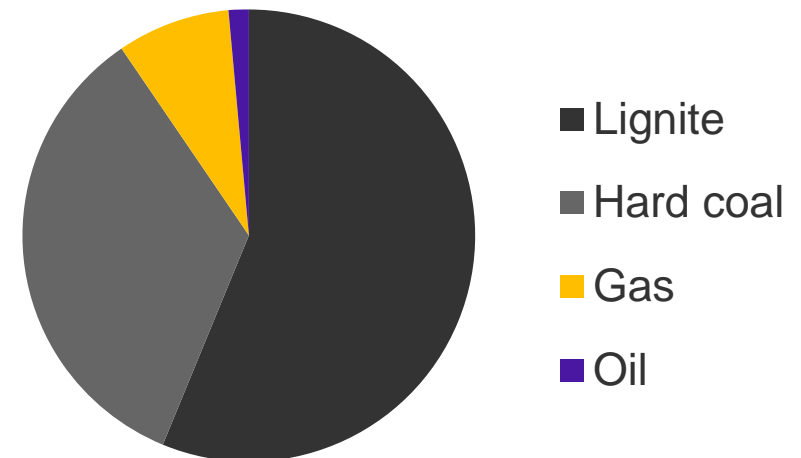
- The UK
  - Party leaders are unanimous on emission reductions
  - Joint pledge to “end the use of unabated coal for power generation”
- Germany
  - Growing acknowledgement that emissions targets cannot be reached with current policies
  - Policy-makers are evaluating possibilities for reducing coal

**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

**Simon Wynn**  
**Executive Director**  
**Upstream Natural Resources**  
**Willis Limited**

**WILLIS NATURAL RESOURCES**

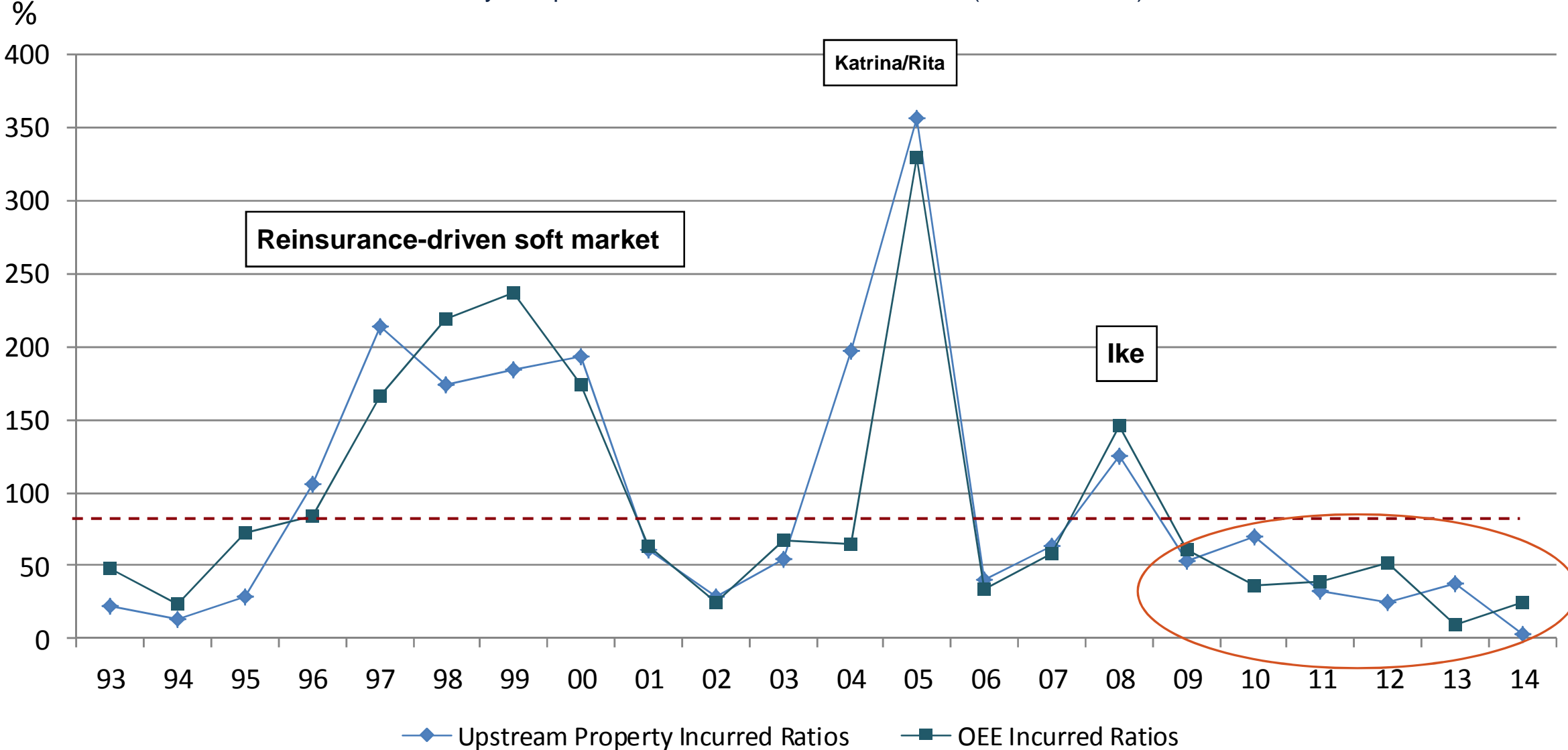
**DENTONS GLOBAL ENERGY  
SUMMIT 2015**

**April 2015**

**Willis**

# 2014 LOOKS GOOD FOR THE MARKET

Lloyd's Upstream Incurred Ratios 1993 – 2014 (as at Q4 2014)



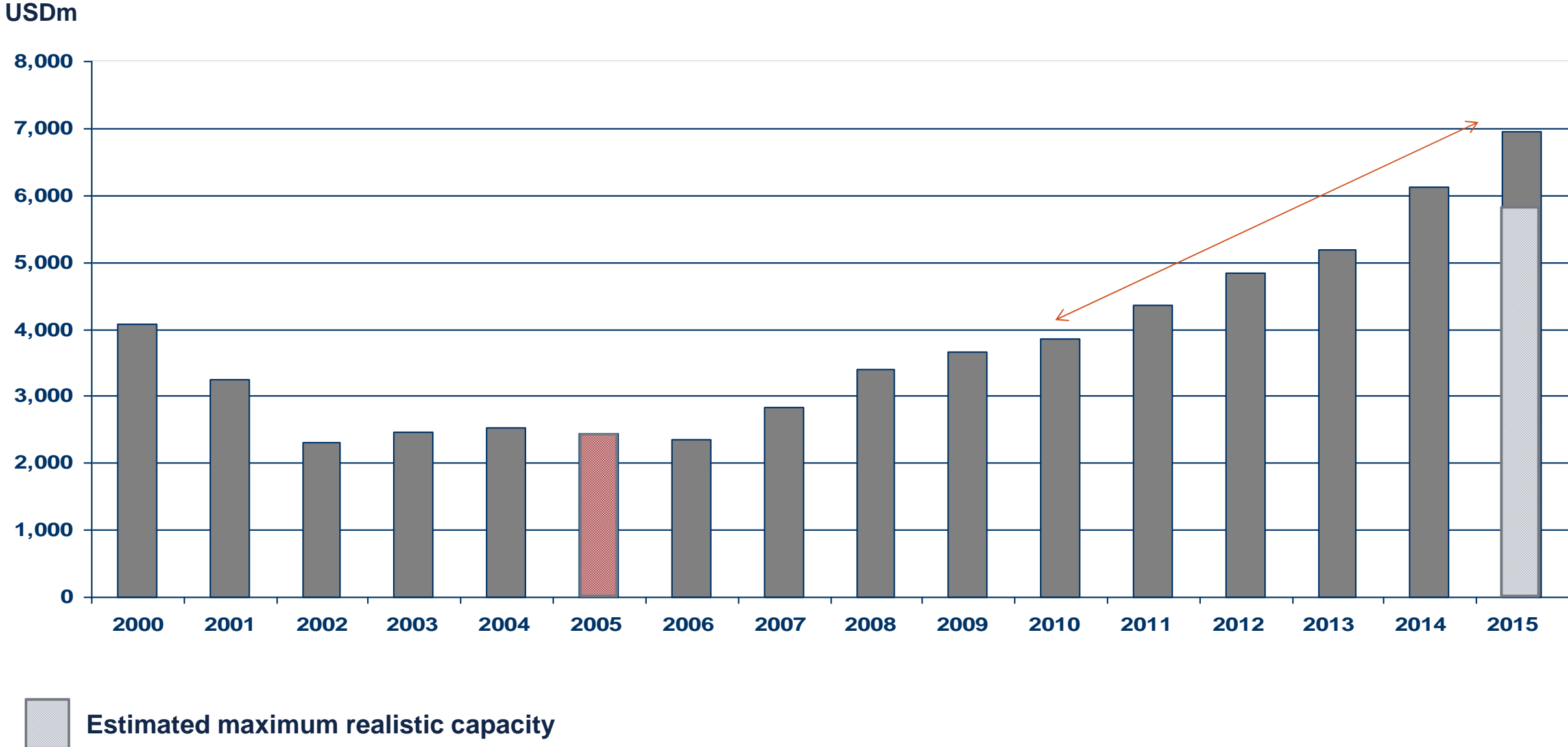
Generally accepted level at which the energy portfolios remain profitable

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

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

# ANOTHER RELENTLESS RISE IN CAPACITY

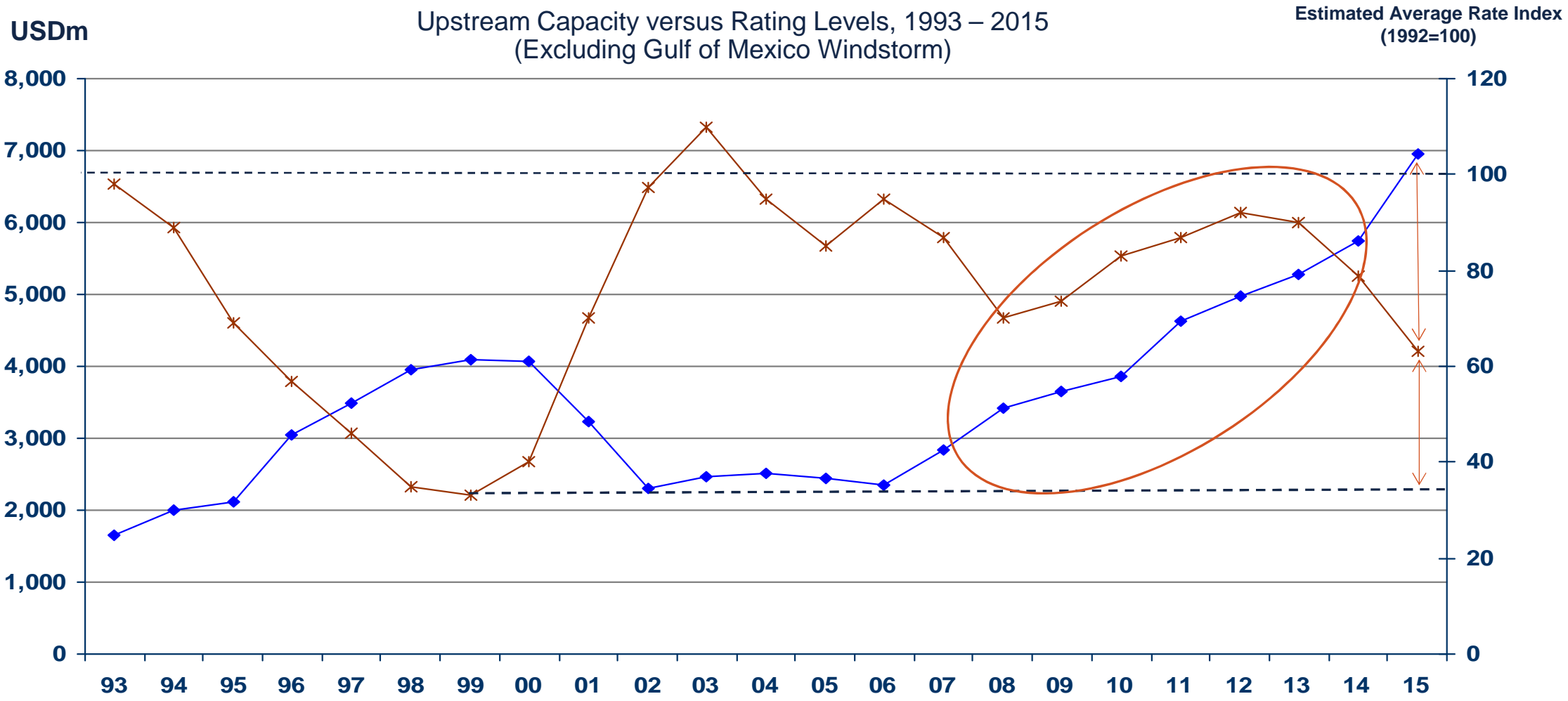
Upstream Operating insurer capacities 2000-2015 (excluding Gulf of Mexico Windstorm)



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



◆ Upstream Capacities \* Average Composite Percentage of 1992 rates

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**

**Willis**

# Global outlook for the oil and gas industry

21 April 2015