



Offshore Oil and Gas Market

IMSF, Høvik 22.05.2012

Agenda

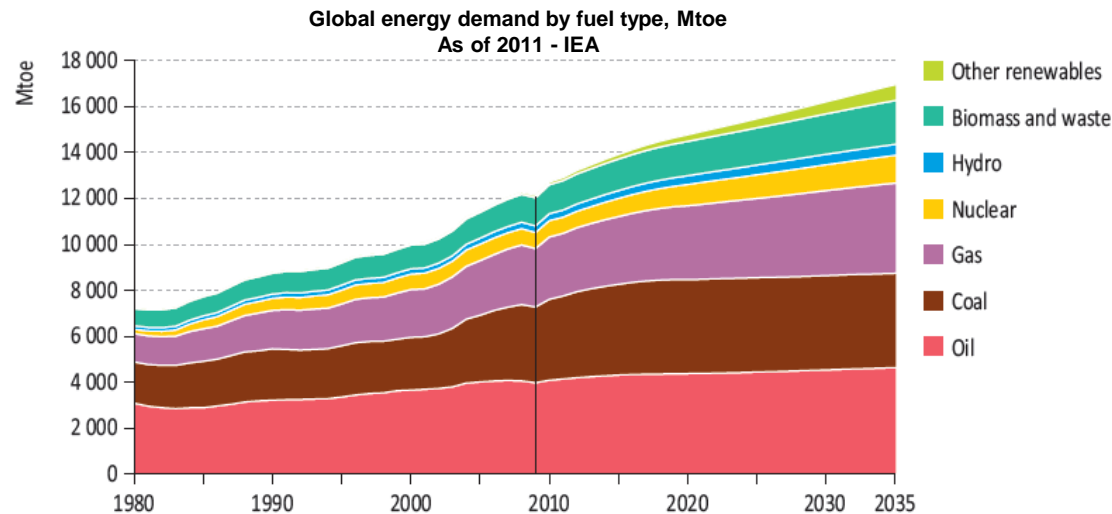
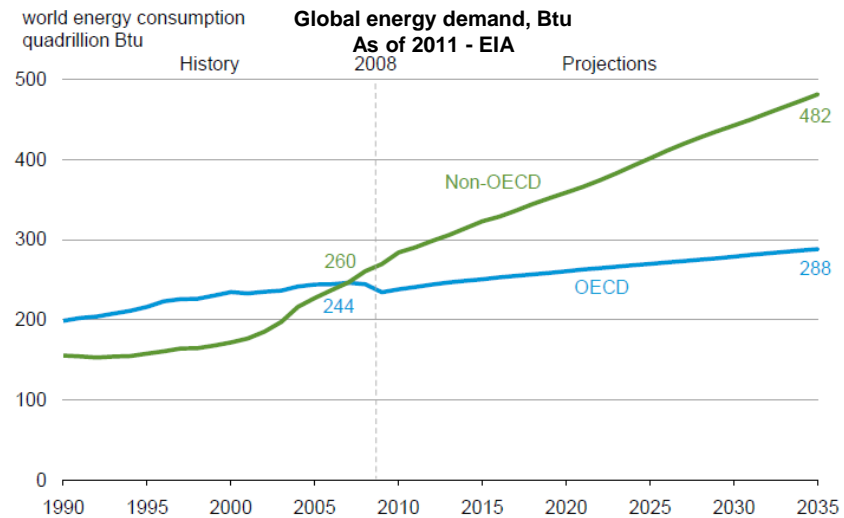
- Global demand and oil price
- Why go offshore?
- Key offshore regions
- Offshore fleet

Global Supply and Demand – growth is expected

- Long term growth is expected
 - IEA estimated energy demand growth by 40% by 2035

- Non-OECD countries drive the increase in energy demand
 - China and India will account for half of the growth by 2035.

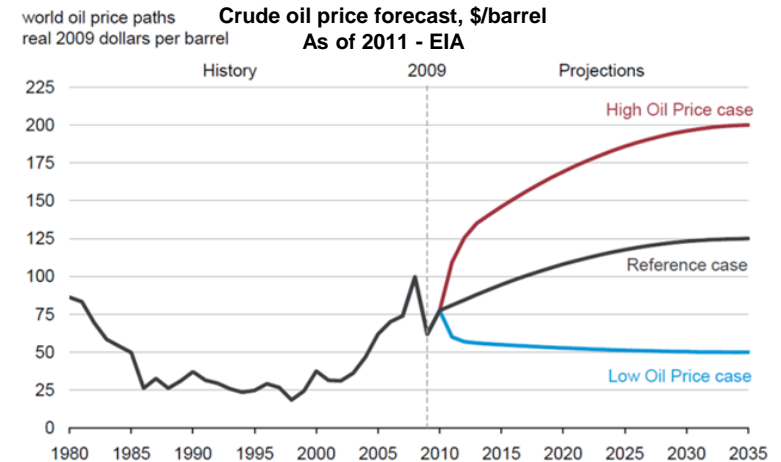
- Slow change in fuel mix.
 - Gas (31%) and non-fossil fuel (34%) will see highest growth by 2035.



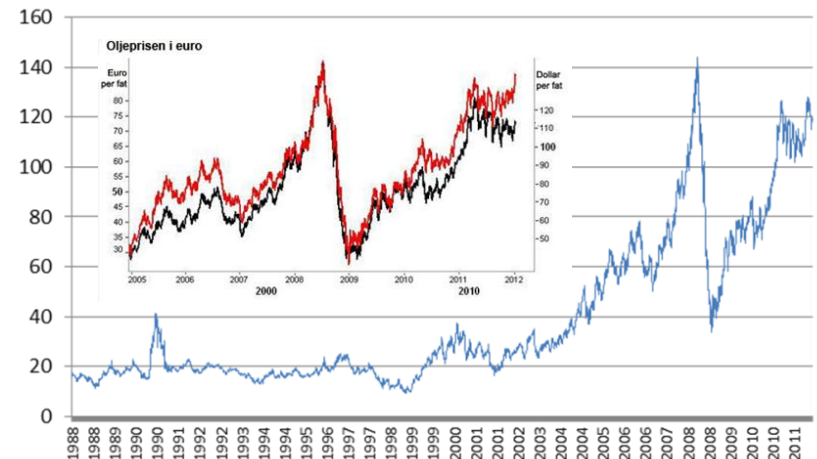
Source: eia, iea

Oil Price Development

- Volatile price last years and hard to predict for the future.
- OPEC communicates oil price at \$100/barrel
 - Has built up under high prices the last years
- OPEC spare capacity only 3,9-2,7 million barrels a day.
 - Most OPEC producers will have problems to ramp up production



Crude oil price, Europe Brent spot - dollars per barrel
As of 2012



Source: eia

Why going offshore?

High risk, but huge potential offshore

- Restricted access to new business opportunities in major producing countries
- Lack of new big discoveries in mature onshore oil and gas regions
- Low spare production capacity globally
- Offshore drilling and exploration is less sensitive to crude oil price fluctuations
- Since 2000 more than half of global reserves discovered was in offshore areas



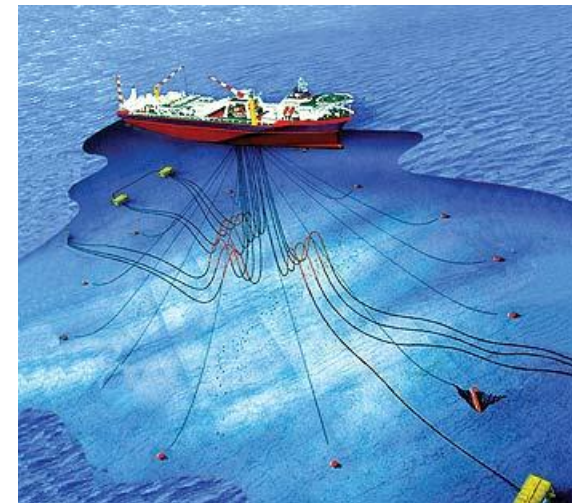
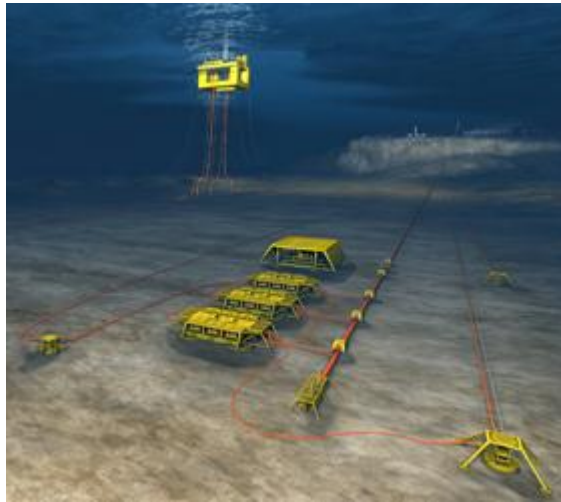
Offshore Trend – more complex

Global trend:

- Deeper water
- Harsher
- More remote

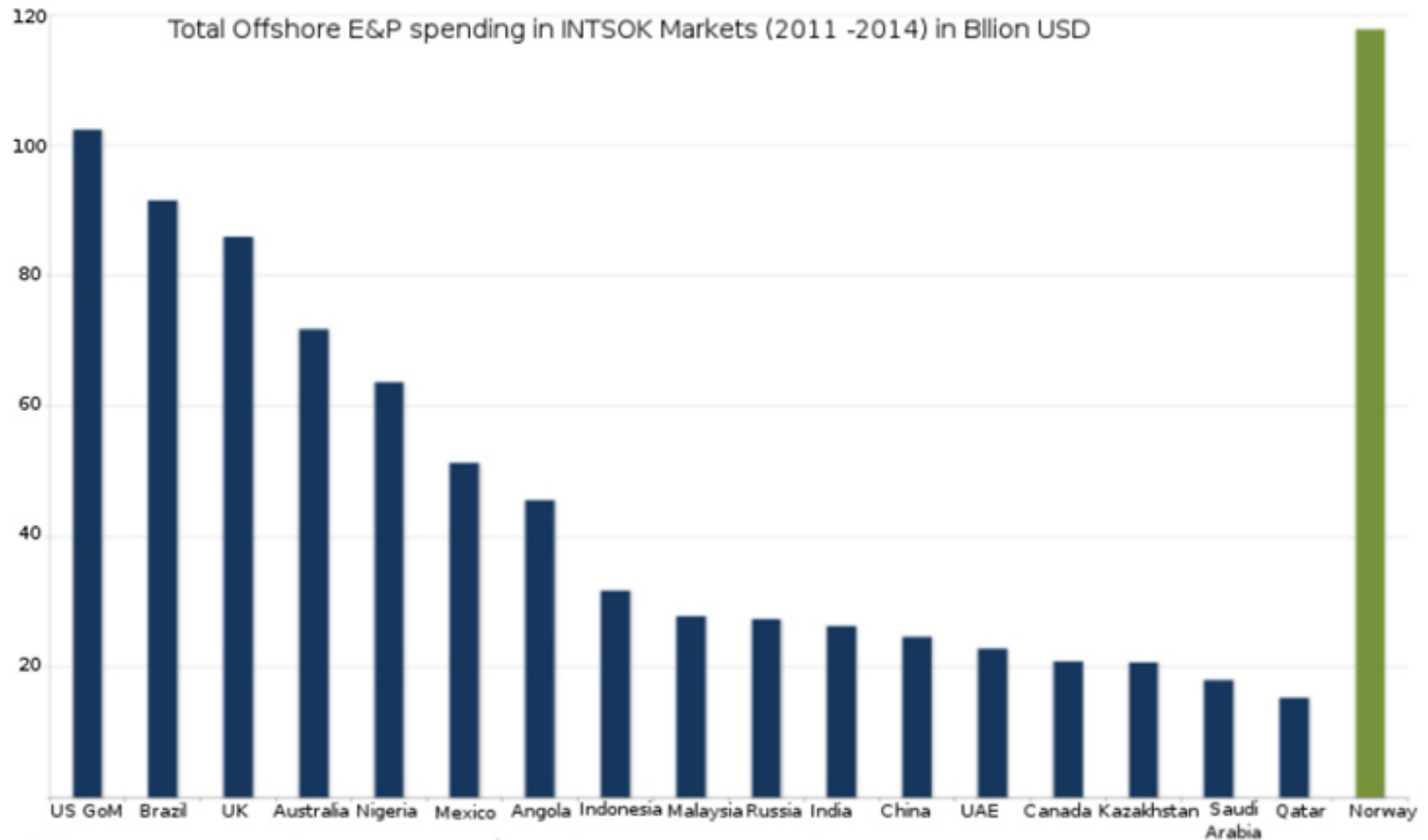
Solution:

- Larger & more specified units
- Larger crews & supplies
- Remote operations
- New technologies



Offshore Investments by Country

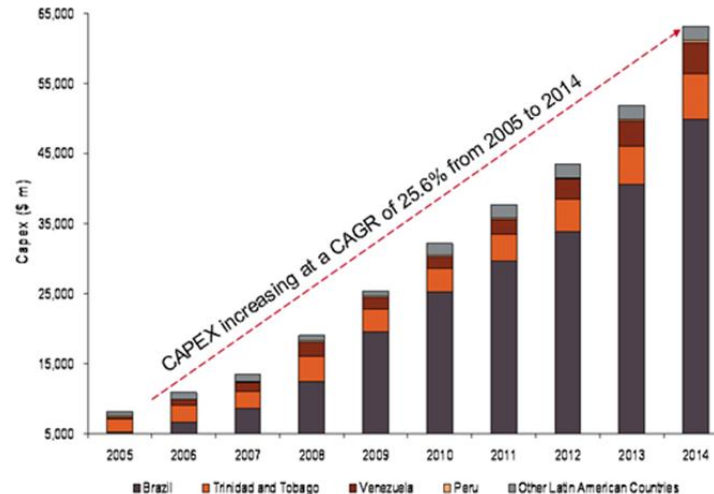
- Total investments of approximately \$ 300 billion in 2012.



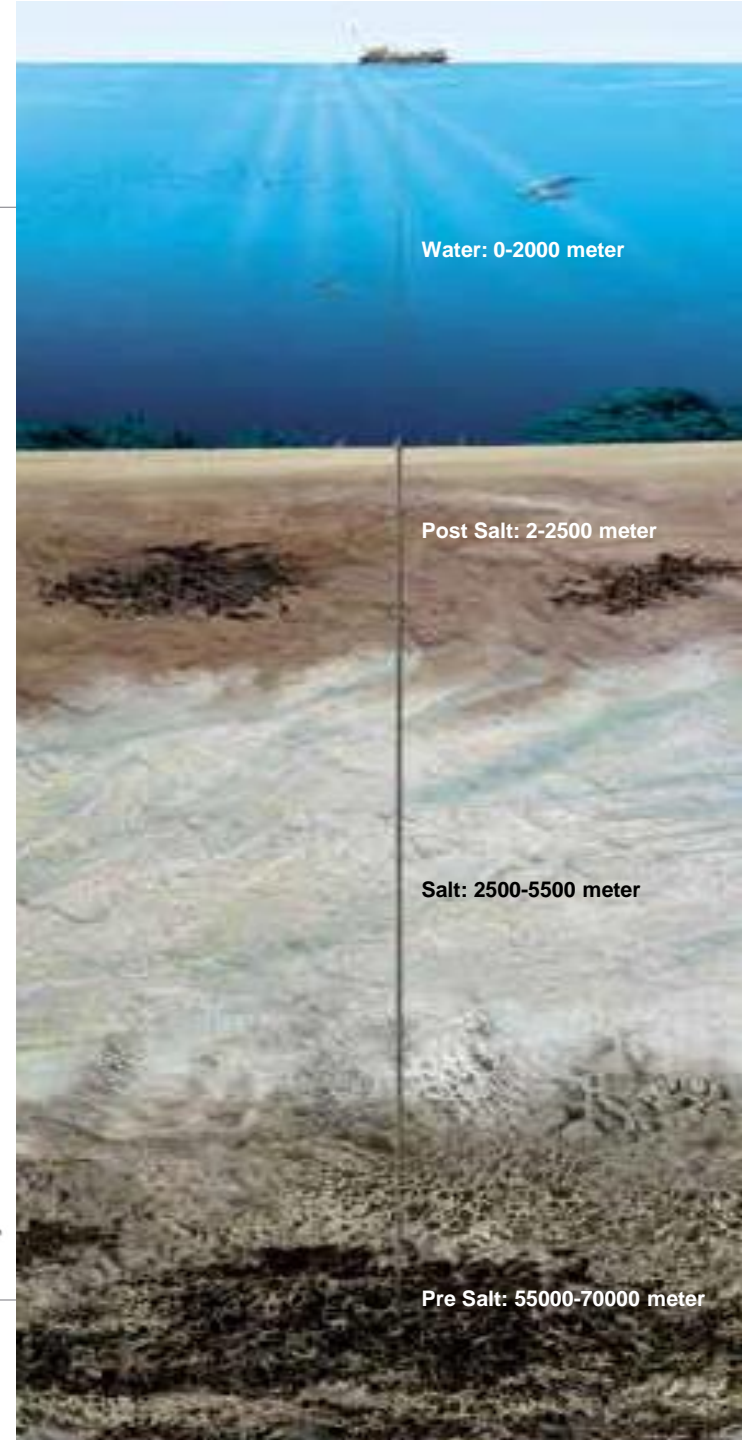
Source: INTSOK

Brazil – huge exporter in a few years

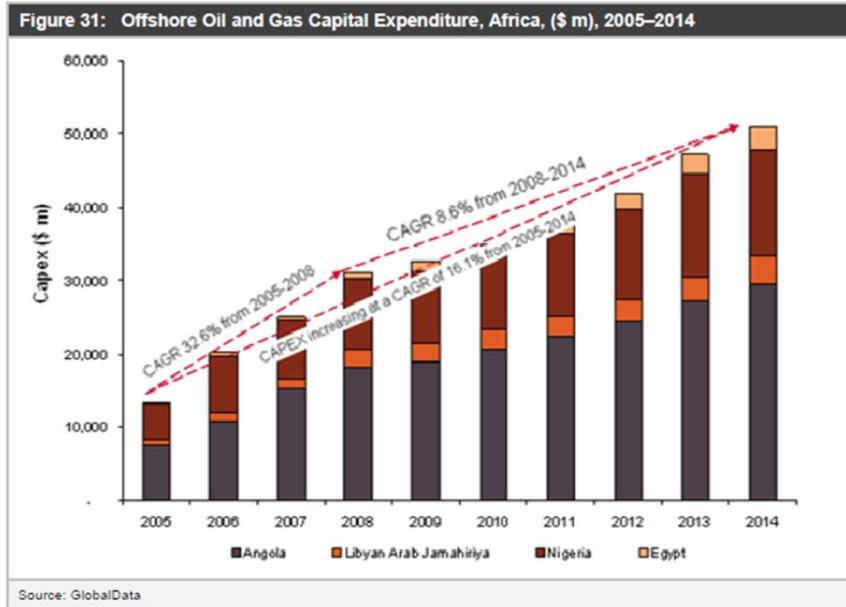
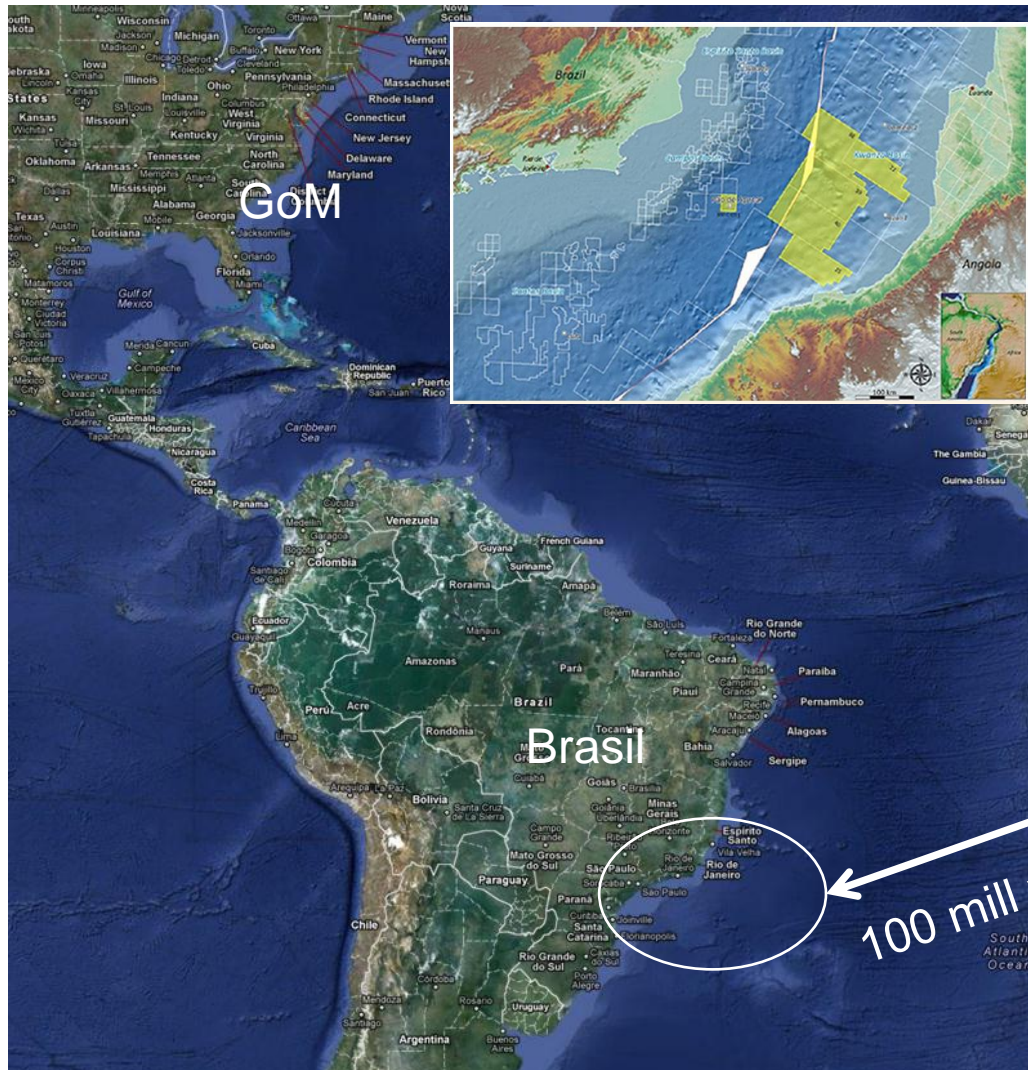
- First pre-salt discovery in 2008
- Huge technical challenges
- High focus on price
- Not harsh, but deep
- Huge ambitions, its expected:
 - 1000 wells
 - 500 supply vessels
 - 28 drill ships
 - 30-50 FPSOs



Source: Global Data



Angola – “probably the most promising area on earth”



Source: Global Data, Statoil

Norwegian Continental Shelf – high investments

- Production down, but investments up
- New technology maintain production
- Production rate:50%,
 - Globally:35%



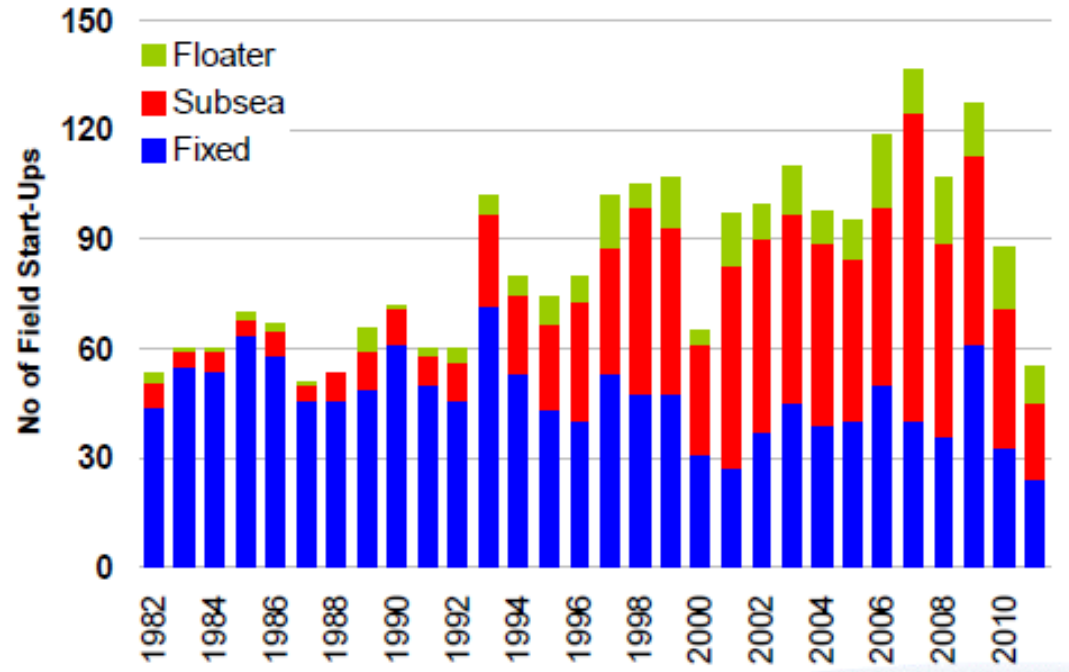
Gulftide at Ekofisk 1971



Ekofisk 2012 -

Field start-ups by type – change in concept selection

- Fixed: shallow water
- Subsea: marginal fields with established infra structure
- Floater: deep water fields

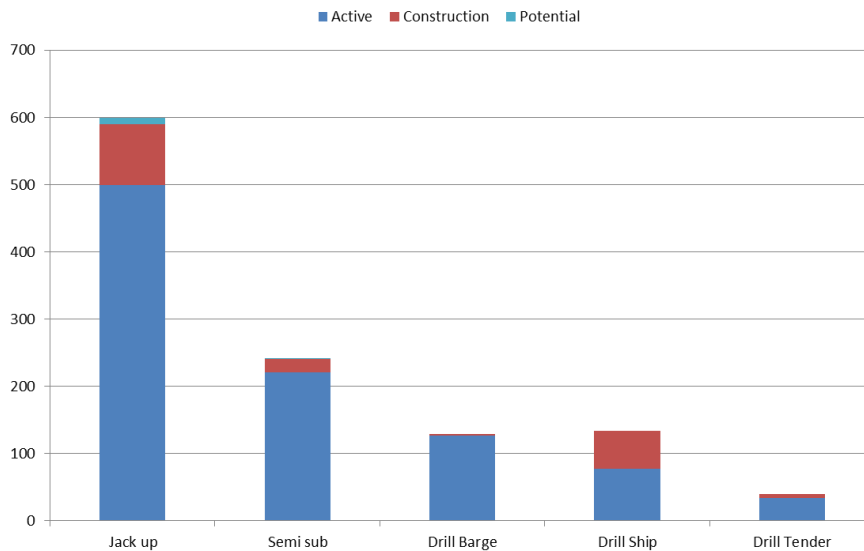


Source: Clarkson

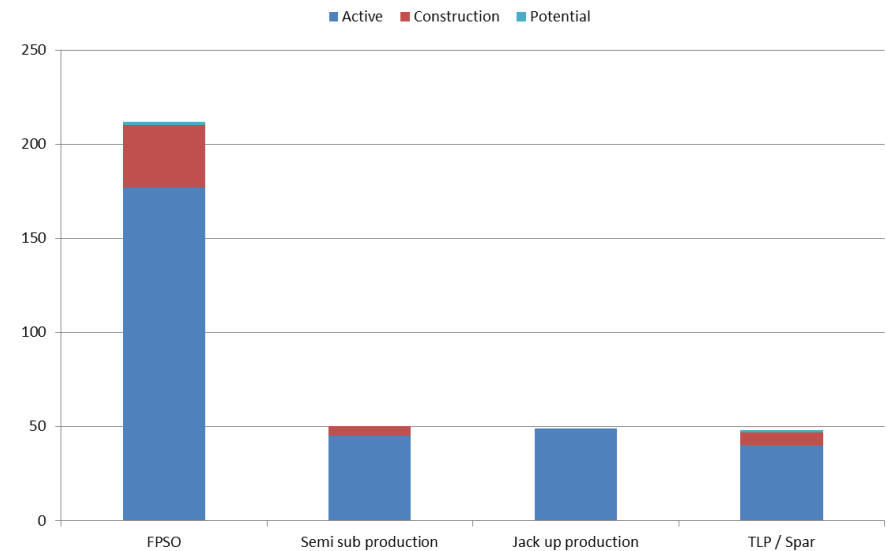
Drilling and Production units by type

- More than 90 new orders in 2011, 55 expected in 2012
- Activity is expected to slow up
- First “option/ first refusal” for a drillship was rejected some months ago
- Jack ups and drill ships are the drivers
- The value of the drill ship orderbook are half of the MODU orderbook.
- 24 new contracts in 2011, 33 in 2012
- Positive perspective in the medium and long term
- Slippage by Petrobras orders has to be expected

Mobile drilling units by type and status, number of units
As of May 2012 - Clarkson



Mobile production units by type and status, number of units
As of May 2012 - Clarkson



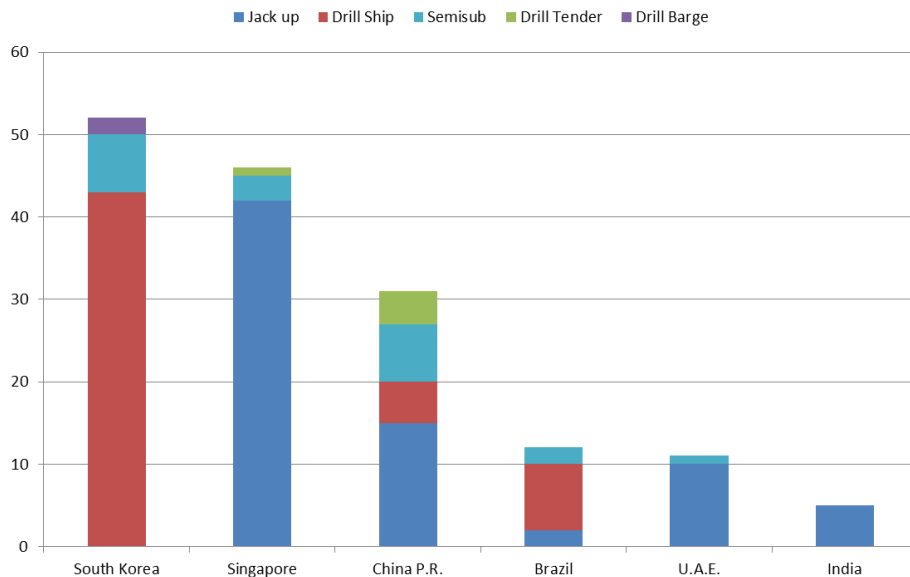
Source: Clarkson

Drilling and Production by builder country

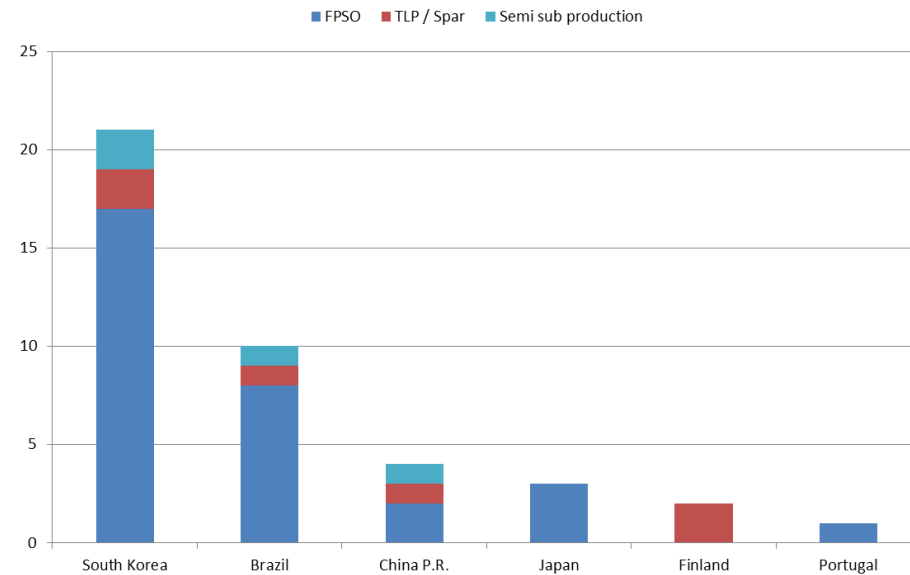
- South Korea builds the largest number of production units and has the most complex one
- China grows fast, want the complex units
 - Delivers the first out of five drillship in 2012

- South Korea builds the most
- High uncertainty around the Brazilian FPSOs

Top six builders of mobile drilling units, number of units
As of May 2012 - Clarkson



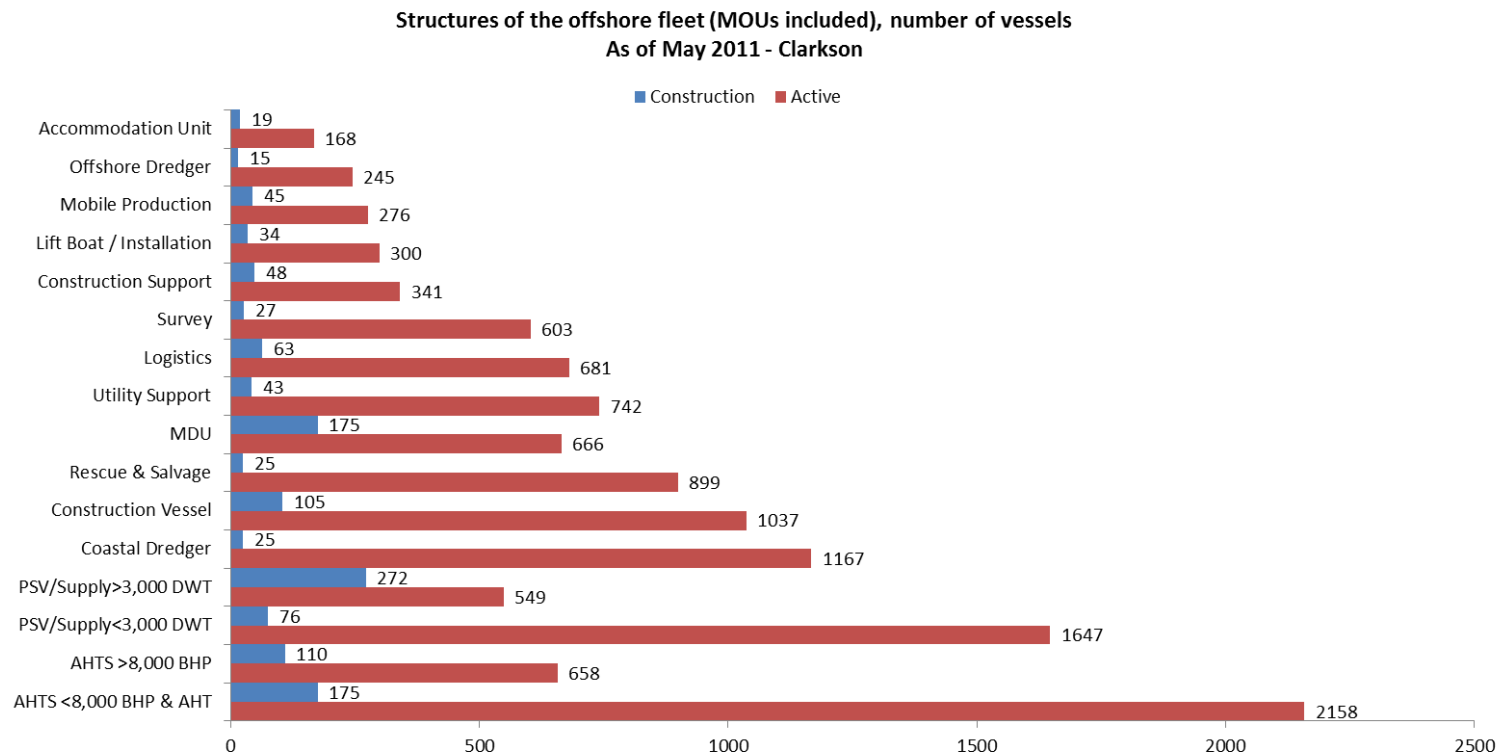
Top six builders of mobile production units, number of units
As of May 2012 - Clarkson



Source: Clarkson

Offshore fleet by type and orderbook.

- Orderbook is not as high as in 2008, but still remains historically large
- High number of AHTS and PSV/ Supply, together it is more than half of the orderbook
- MOPU and MPDU dominates in terms of the investments

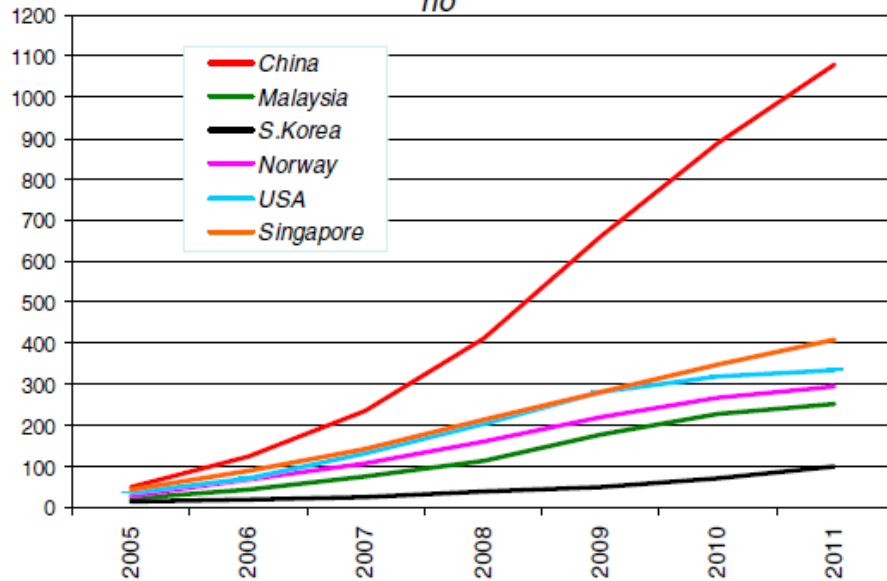


Source: Clarkson

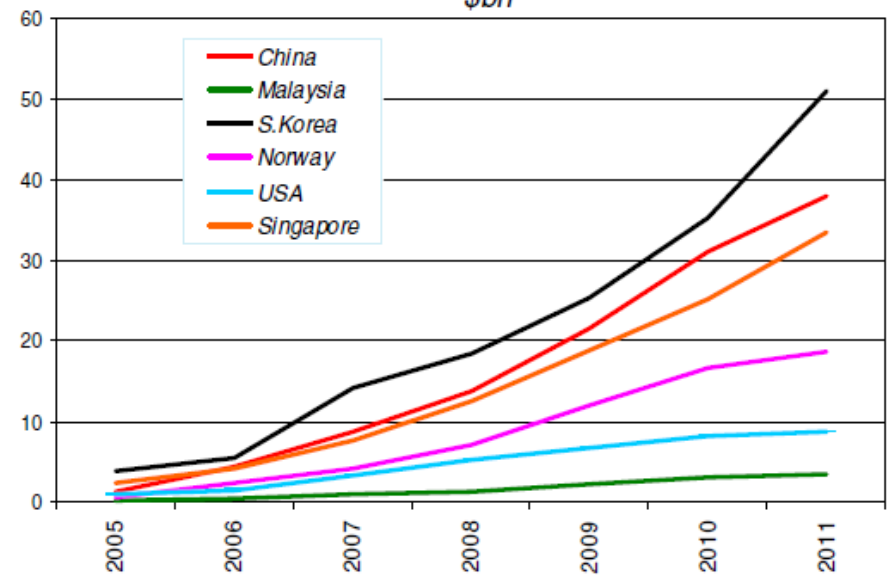
Builder countries by number of vessels and value

- Asia Pacific is still the key region
- China 30% of the orderbook in number of vessels
- Korea has 30% of the value

Cumulative Builder Country Deliveries since 2005 -
no



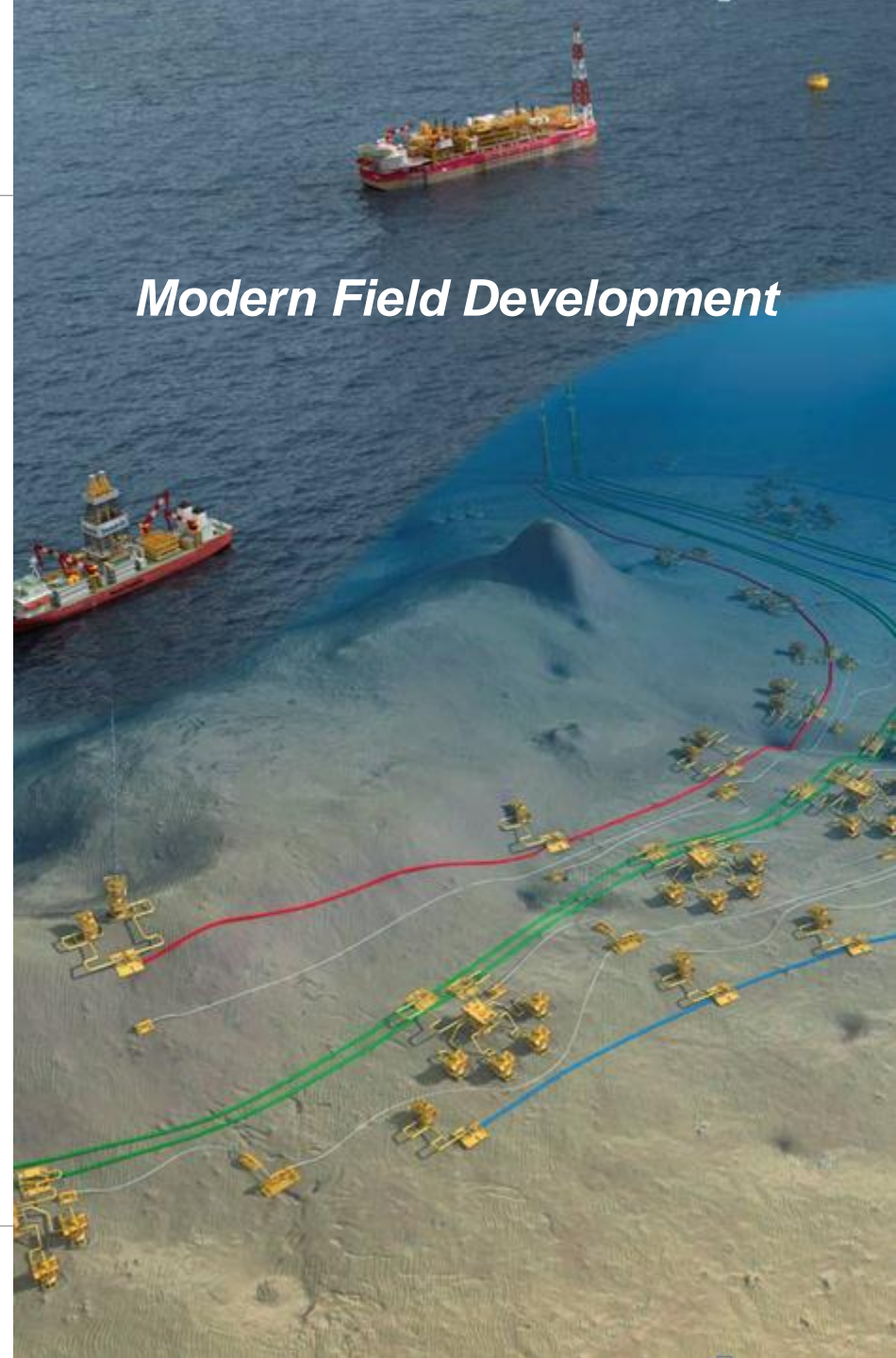
Cumulative Builder Country Deliveries since 2005 -
\$bn



Source: Clarkson

Conclusion

- High offshore activity level and the future looks bright
- Offshore gets deeper, harsher and more remote
- Floating production and subsea will see growth
- Some key areas:
 - Brazil
 - Africa
 - GoM
 - Caspian
 - Asia Pacific



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