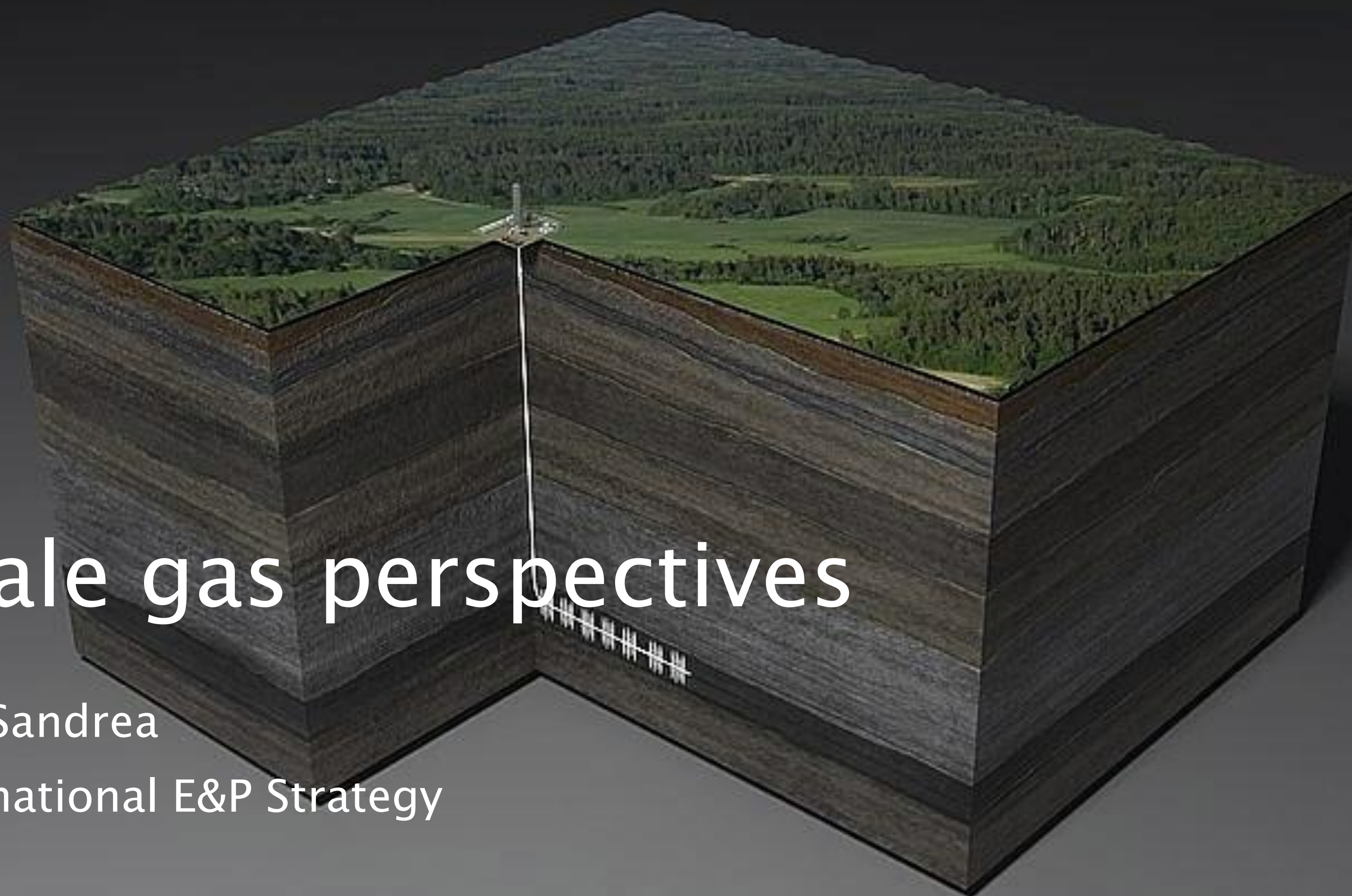


Shale gas perspectives

Ivan Sandrea
International E&P Strategy

Contents

- Macro dynamics and (new) unconventional gas players

- Europe overview

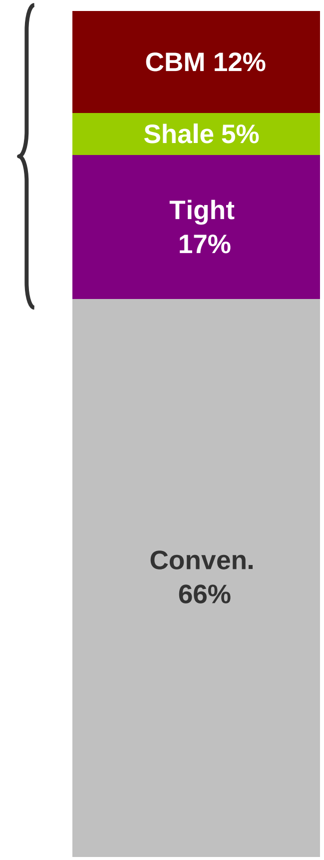
Global gas

New context…

- New long term perspective for USA gas industry (D,S,R), with global implications
- Non-OECD largest market; 3x OECD growth (power)
- LNG expansion (too fast or too late?)
- Global gas price reforms (and dislocations) being worked out
- Rational CO2 bet (industry, consumers) vs oil

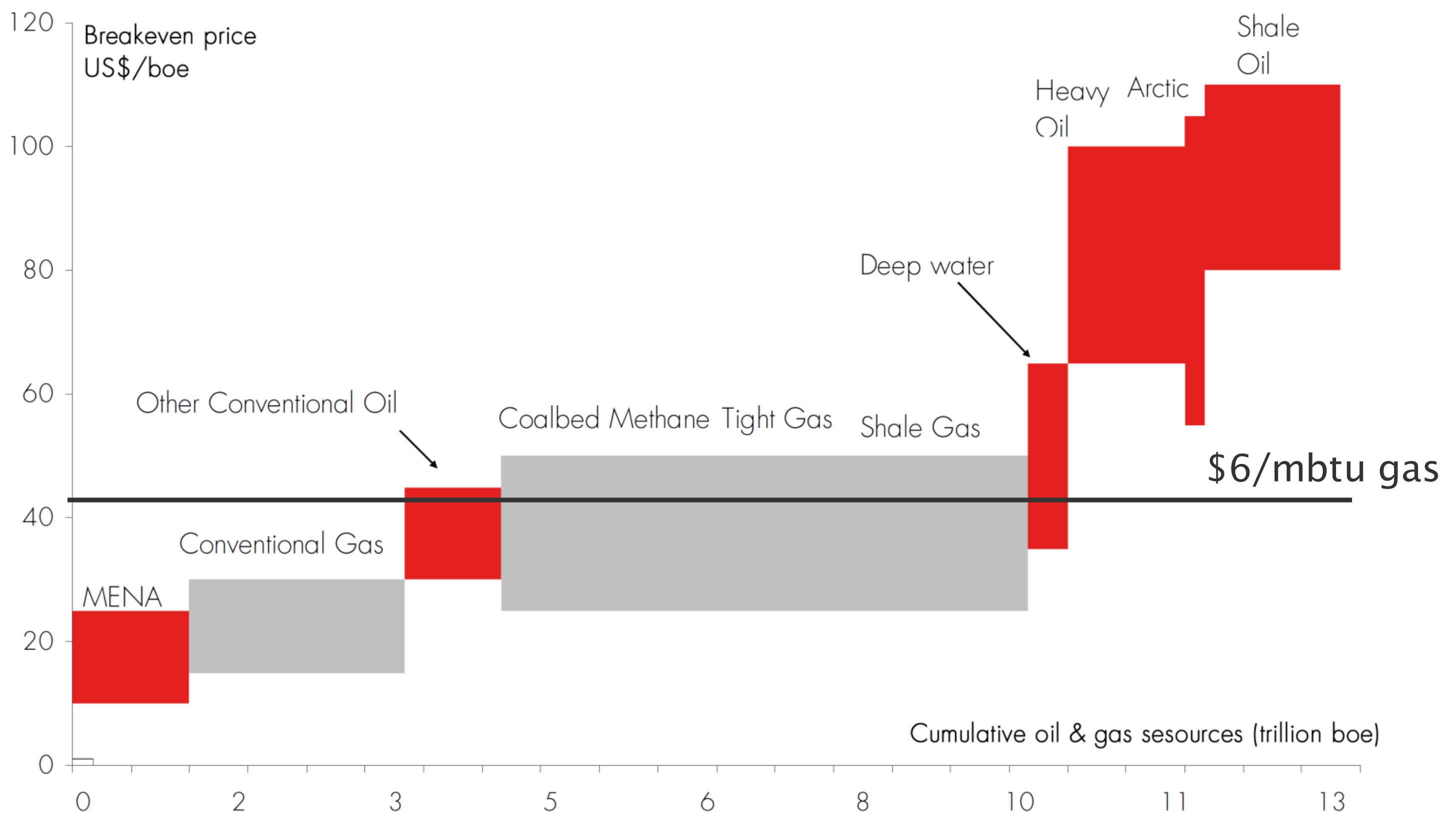
- Perceived challenges: future conventional gas production
- Perceived abundance: unconventional gas reserves (global)
  - Scale, Technology, Price
  - New approach

World Ultimately Remaining Natural Gas Reserves



Global hydrocarbons: a new economic order

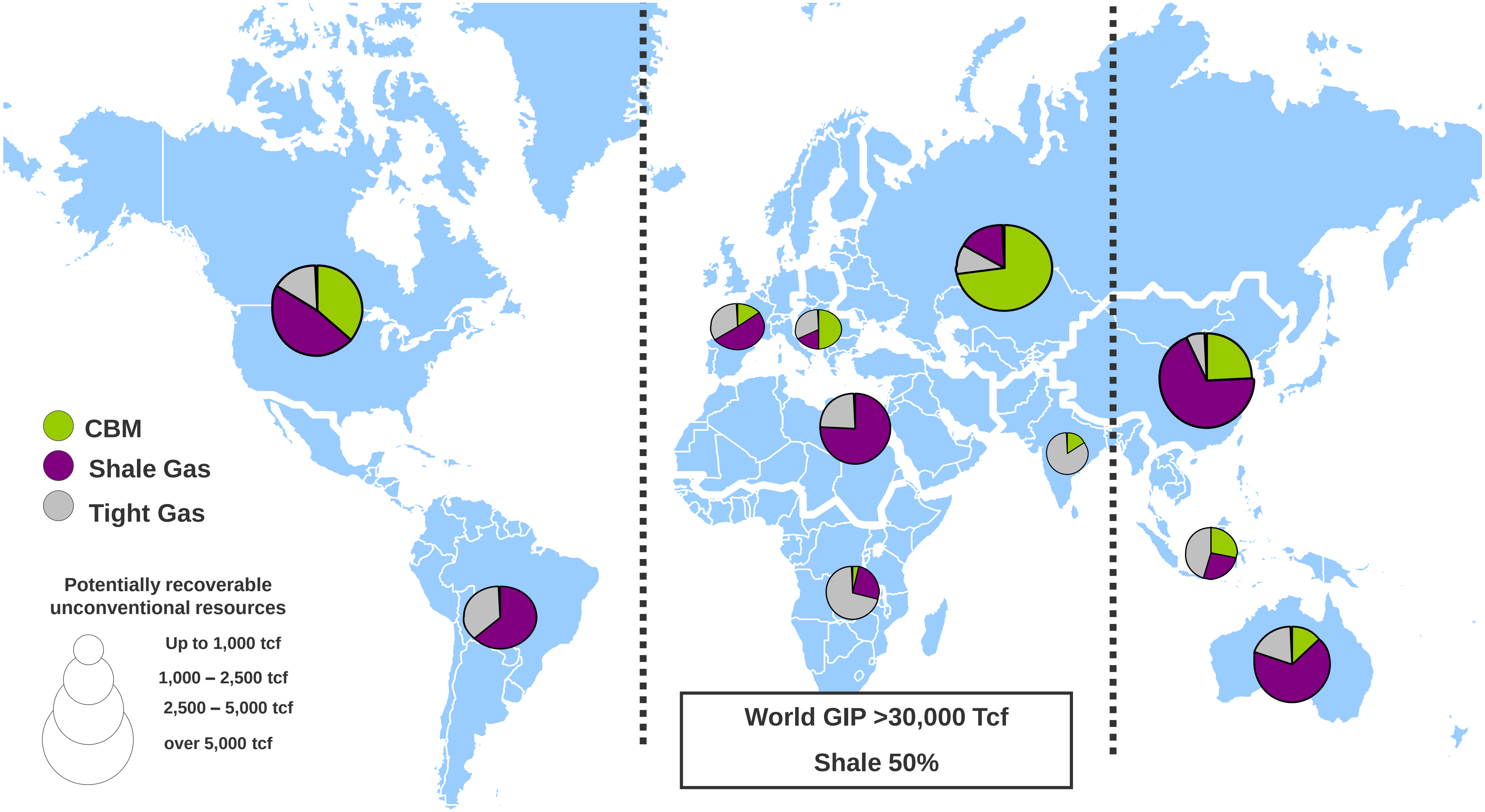
Unconventional gas resources have become cost competitive



Statoil

Global unconventional gas potential

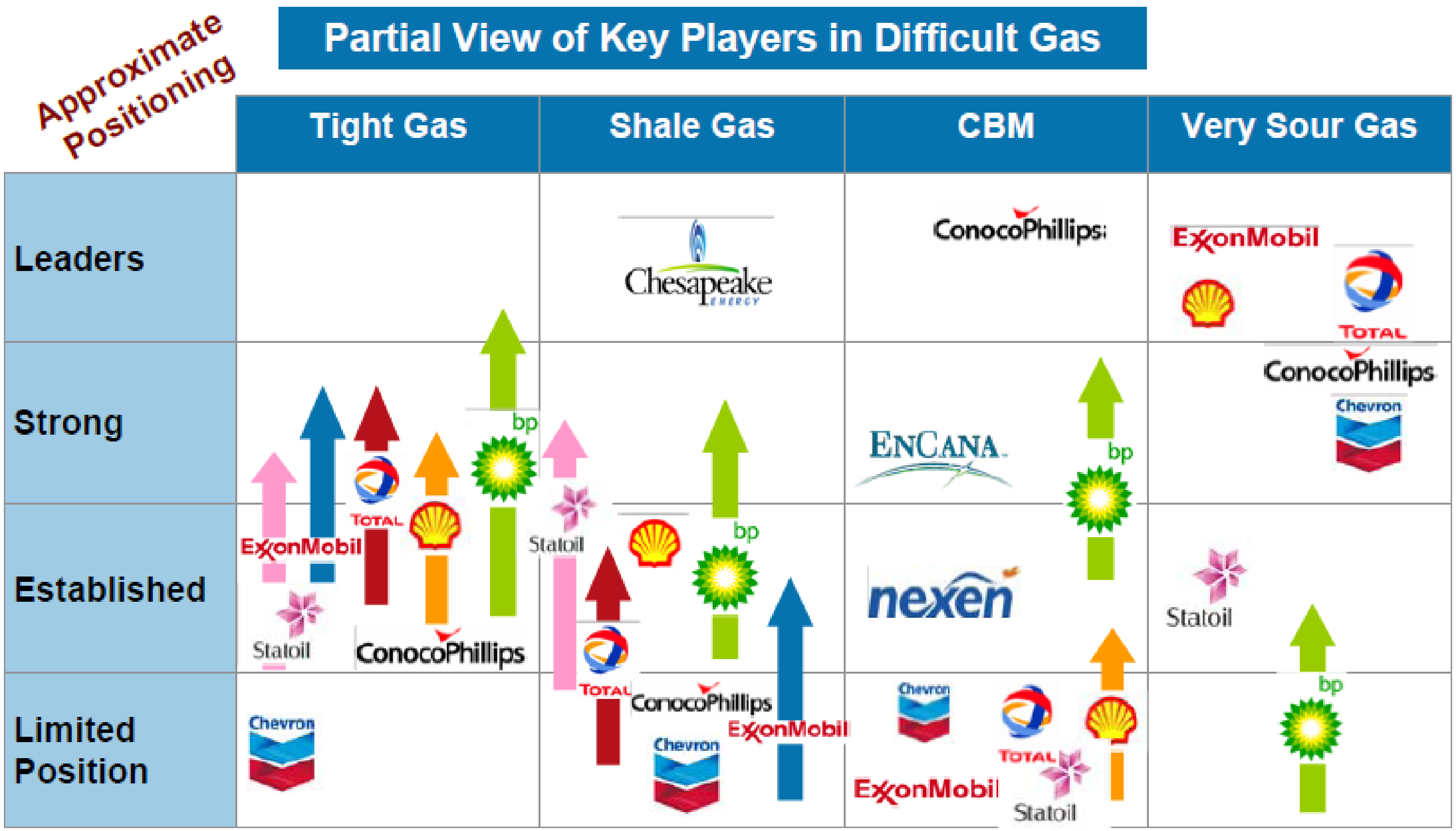
Outside NA, Au, still based on little information



Source: NPC 2007

Statoil

International majors into something new…



Source: CRA

Global screening for shale gas taking place

Subsurface
- size, thickness
- TOC, mature
- frack barriers, etc

Well cost
- depth
- pressure, temp
- stratigraphy

Market
- price
- size
- customers

Country
- fiscal terms
- water mgt
- HSE, etc

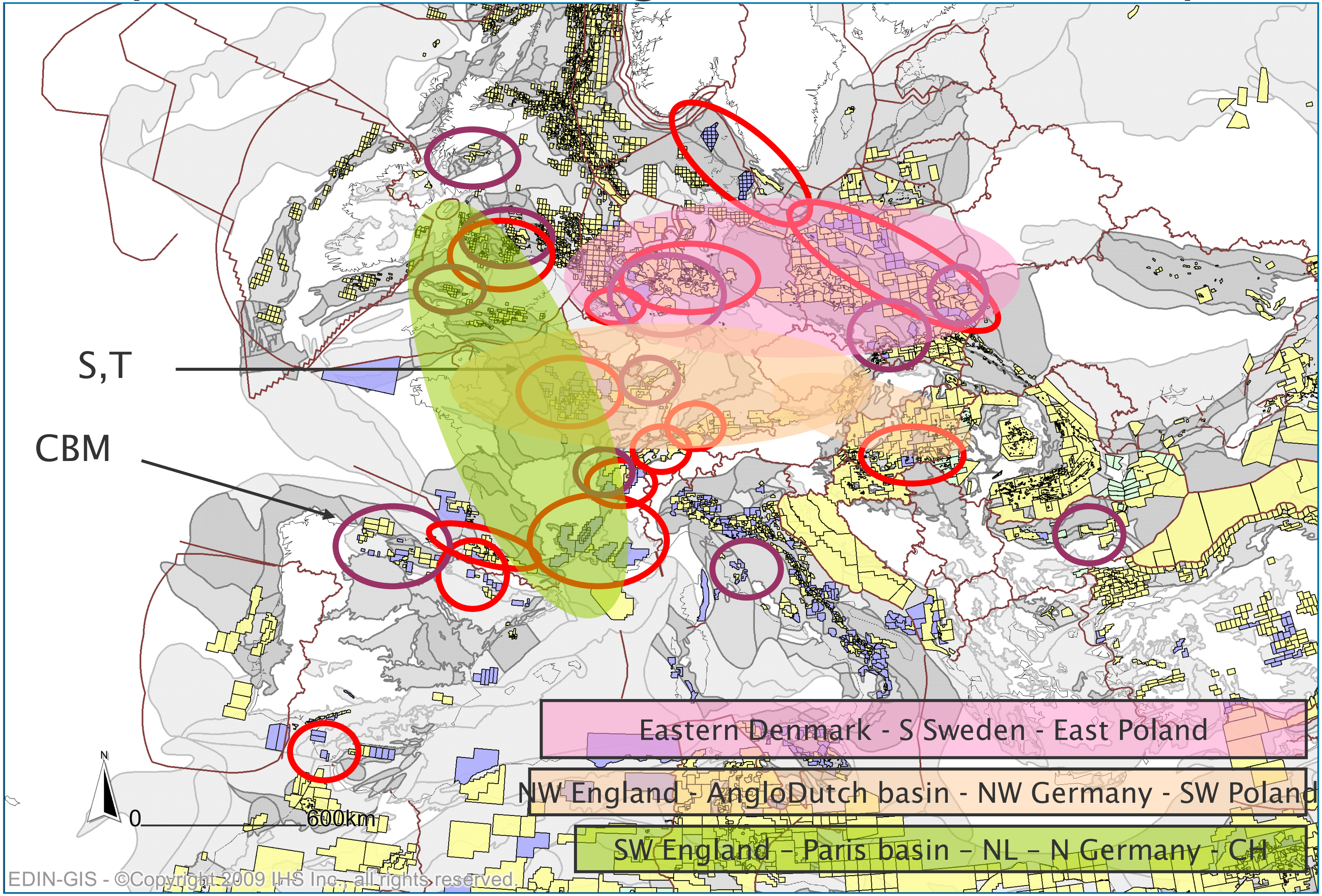
From 400 basins down to 50-20…

Source: Statoil

Europe unconventional gas

- Basins and potential resources estimates
- Acreage grab and players
- Current assessment

Europe: unconventional gas basins and activity



Source: Statoil

Statoil

Unconventional gas business models

	USA	Europe
Early moves and land grabs	✓	✓
Experimentation and growth	✓	
Core development	✓	
Exploitation and optimisation	✓	

The long view

- Tax breaks
- Technology and approach
- Increasing profitability
- Lack of restrictive regulations
- Competitive service industry

- The unconventional gas resource is big and is well located. Potential outside NA clearly exists and will be materialized in select cases
- No single shale gas deposit shows (yet) the potential of some NA shale's, but there are some fairly big ones out there
- Outside NA, the industry is in experimental and land grabbing mode. Could take 10+ years to get to something of scale in the key regions (China, India, Australia, …Europe)…but the timing could well turn out to be shorter!

Source: Statoil

There is no shortage of resources, only a temporary shortage of human imagination.

Thank you

Contact Florence Geny for further information

Ivan Sandrea
www.statoil.com