



23rd WORLD GAS CONFERENCE

WOC1 Exploration & Production

SG 1.1 The World's Most Significant Gas Fields

Overview & Results of Vote

Djaouid Bencherif, Algeria



6 –9 June, Amsterdam





Outline

- Market impact
- Technological advances
- Sustainable development
- Future potential
- Conclusion





Market Impact

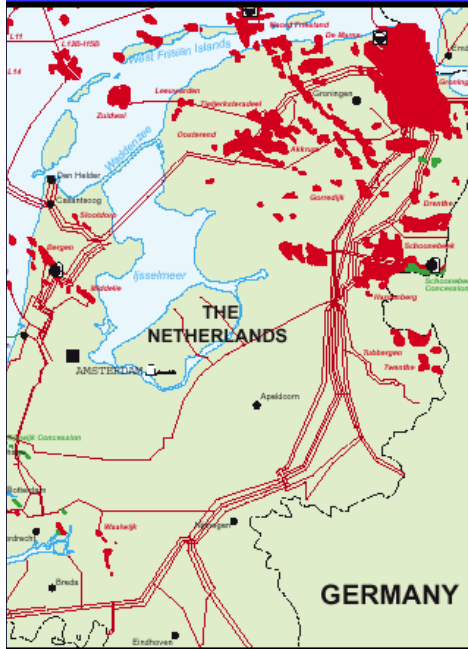




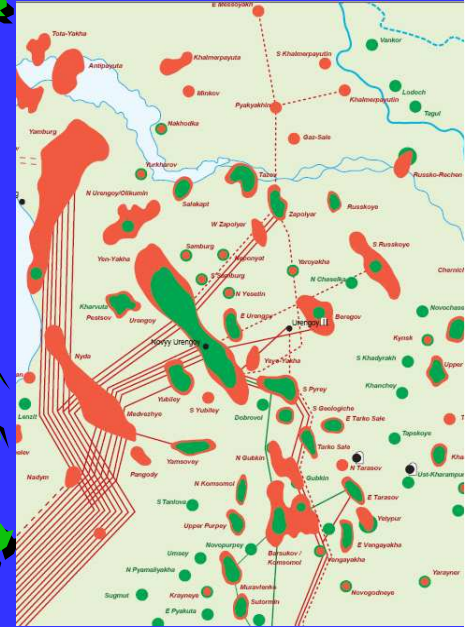
IGU - Working Committee 1

Market Impact

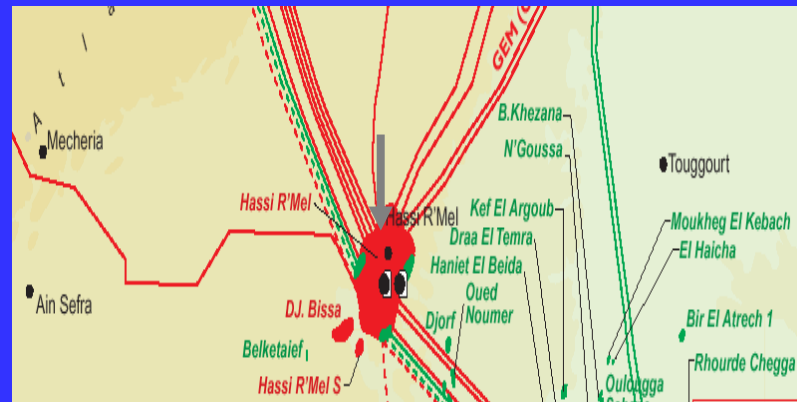
GRONINGEN



URENGOY



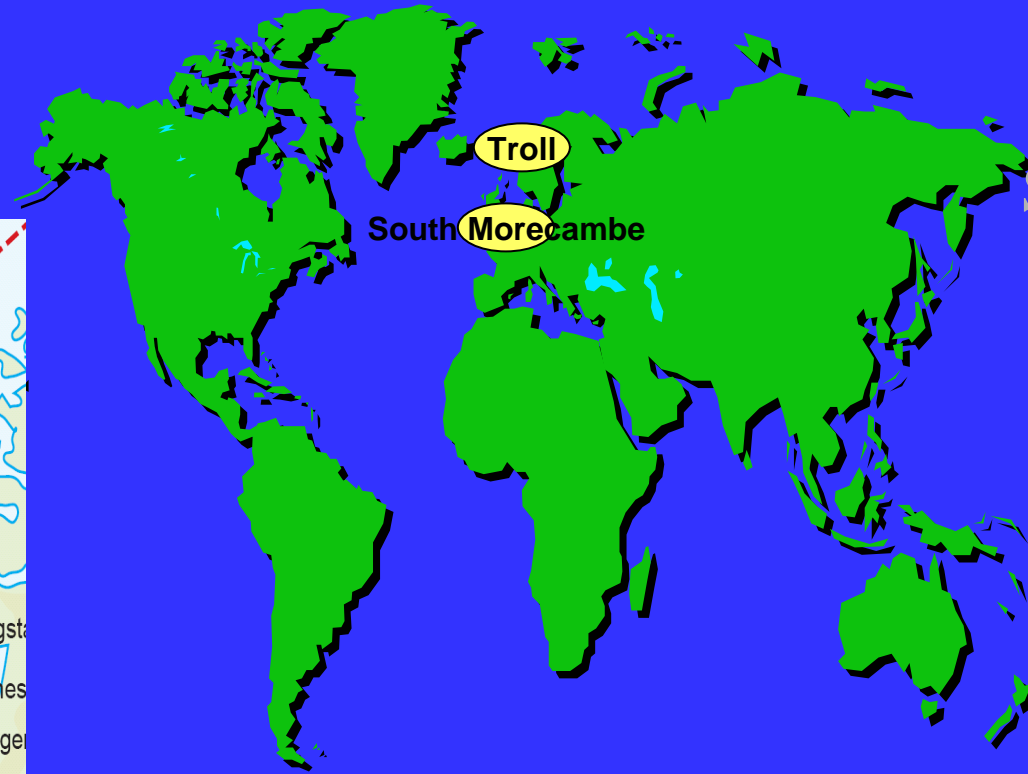
HASSI R'MEL





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Market Impact



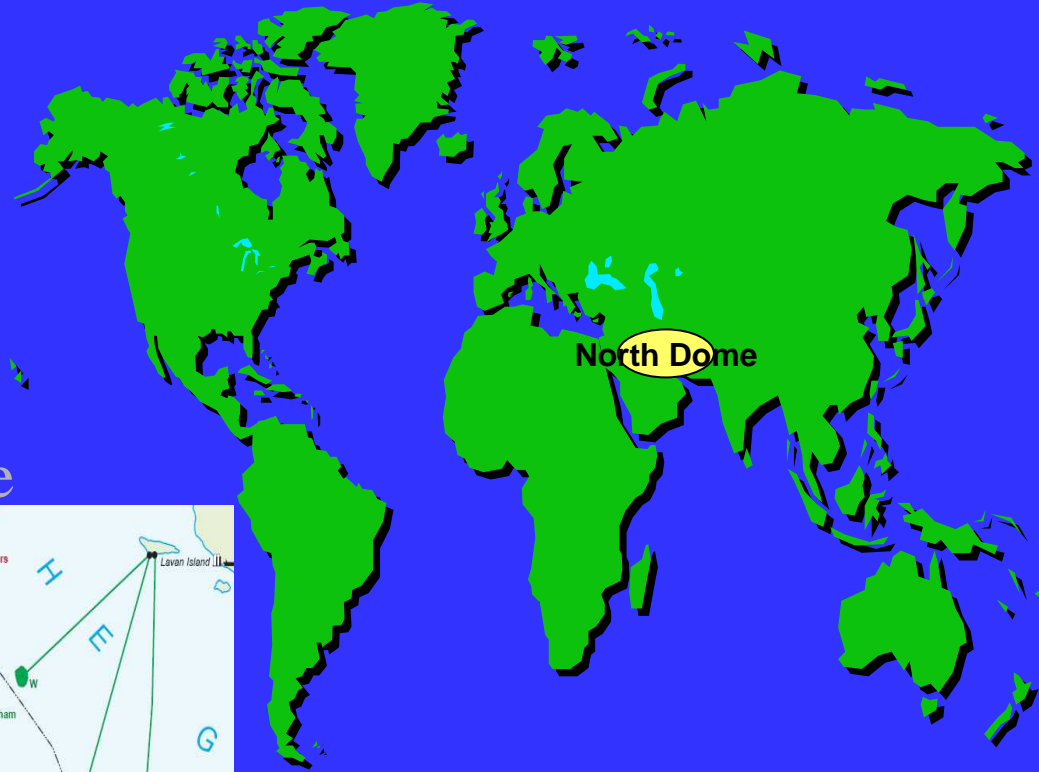
South Morecambe



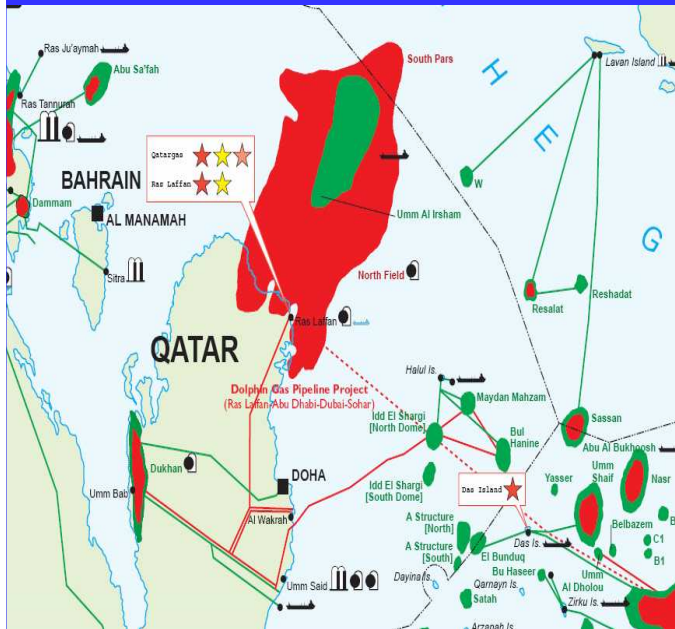


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Market Impact



North Dome





Technological Advances





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Technical Advances

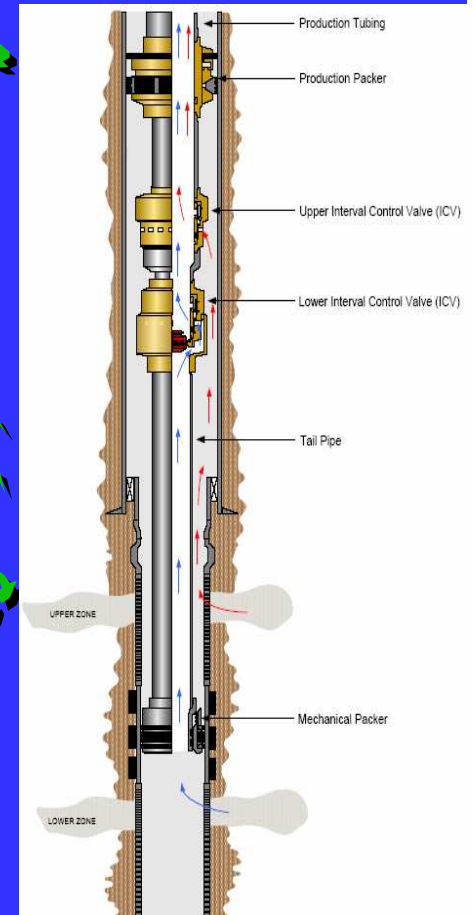
Deep Water



Troll A platform. (Photo: Dag Myrestrand/Bitmap) www.statoil.com



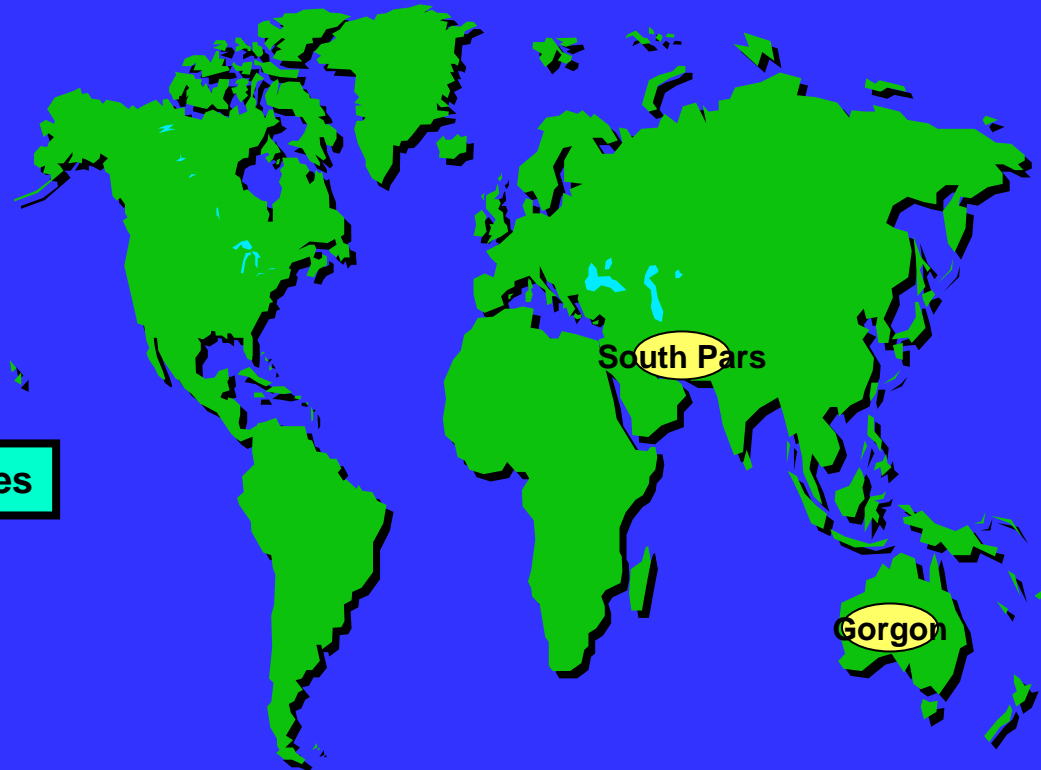
Intelligent wells



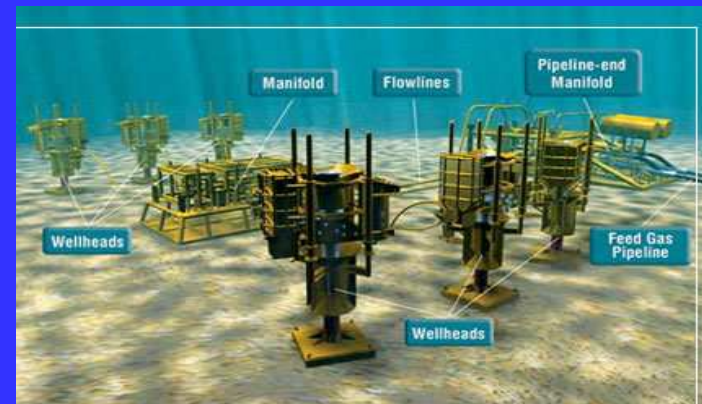


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Technical Advances



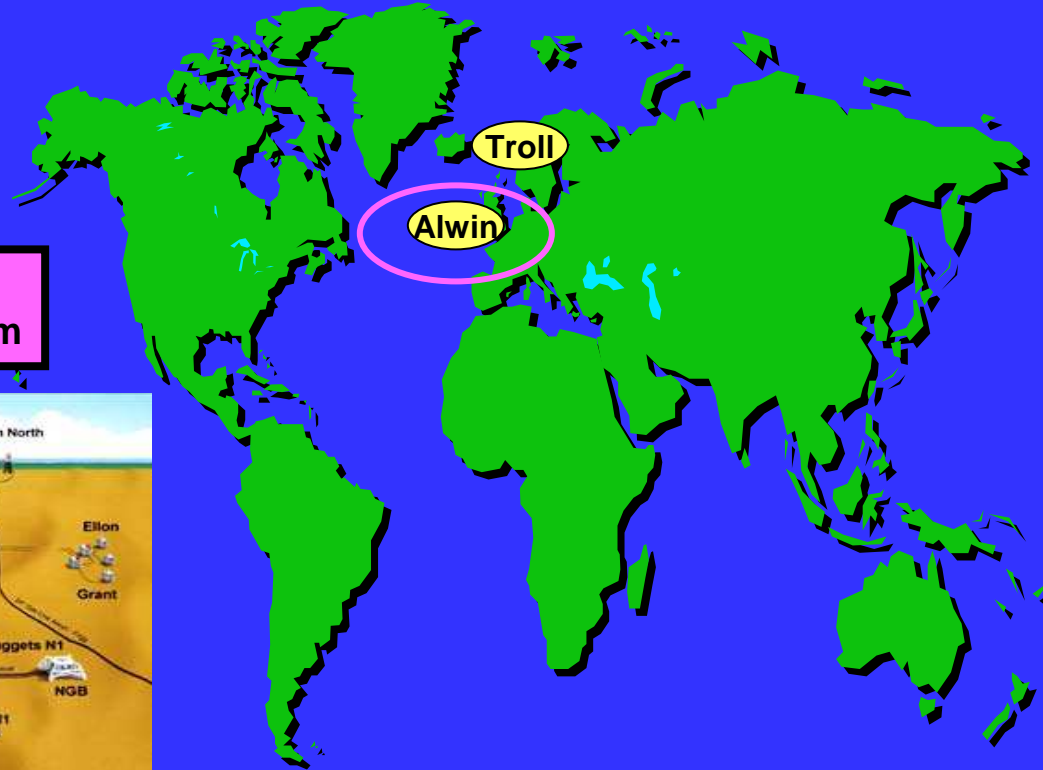
Multiphase Pipelines





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Technical Advances



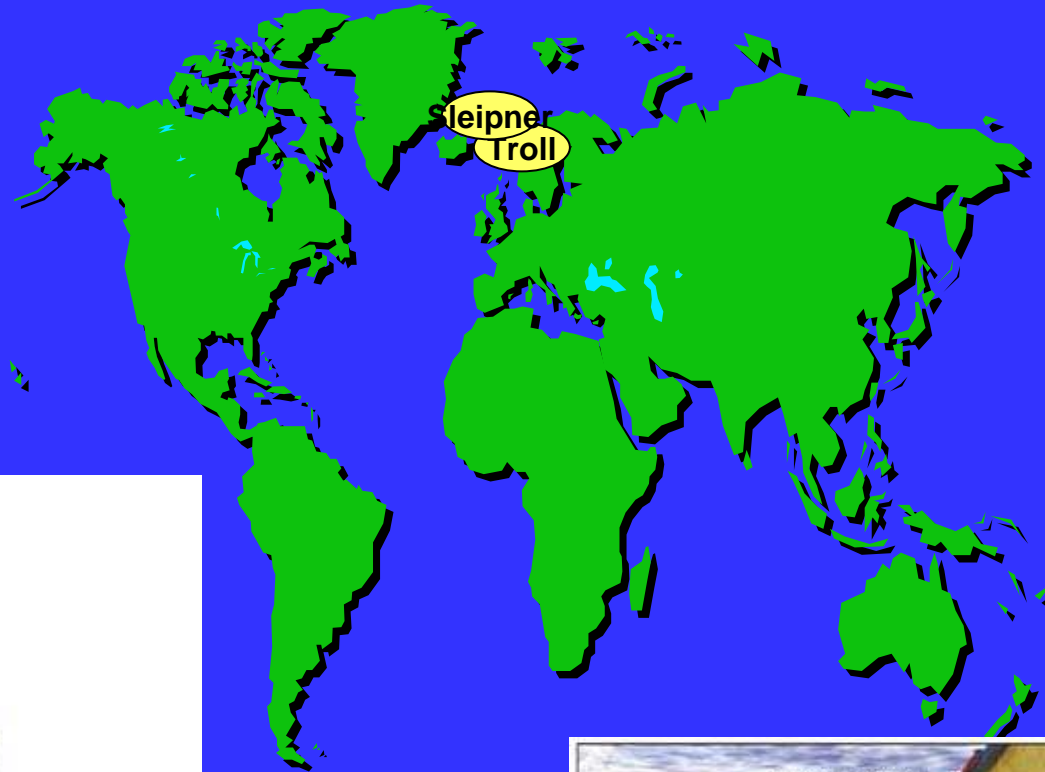
gas gathering and transportation system



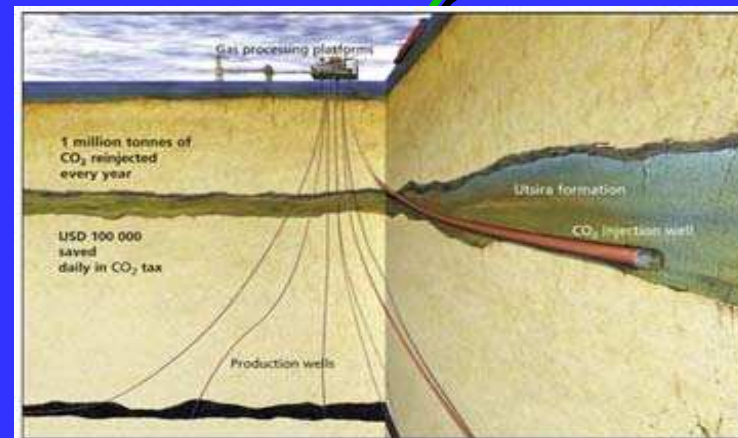
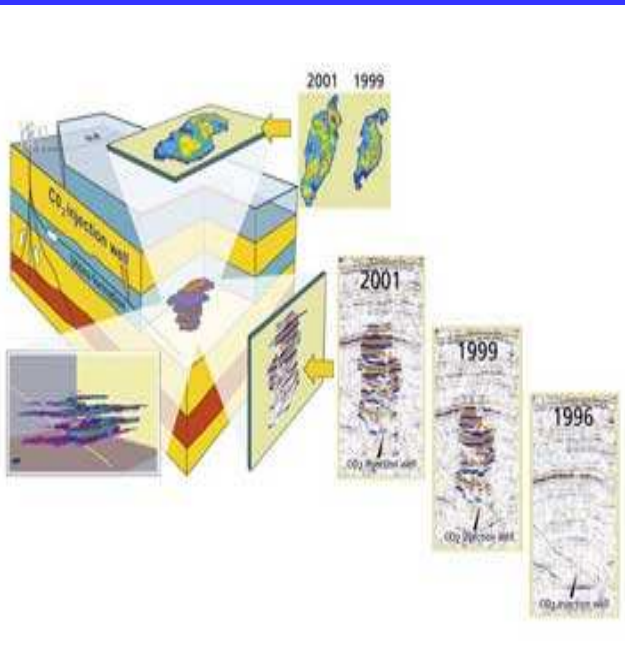


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Technical Advances



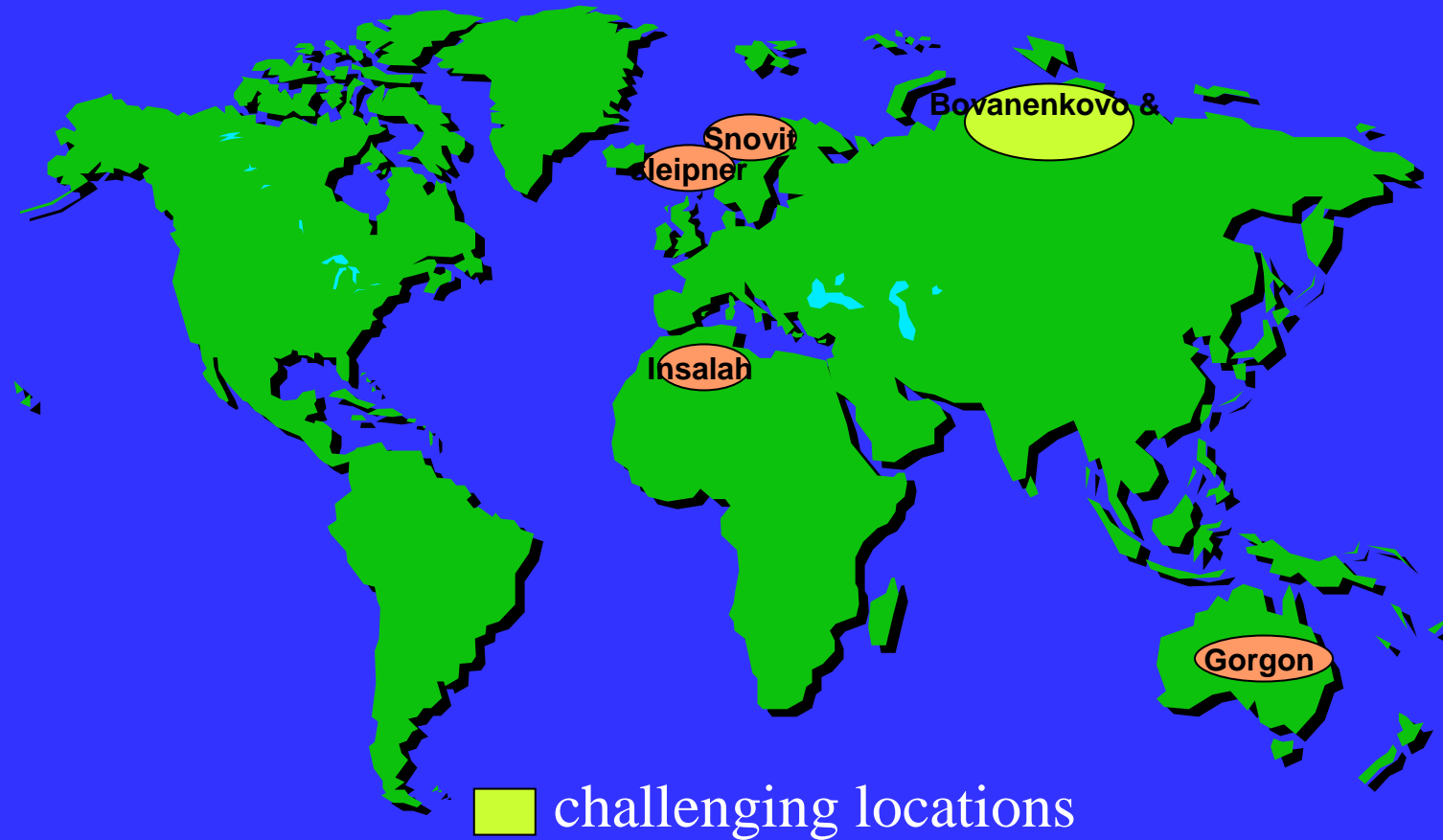
4D seismic





Sustainable development





- challenging locations
- CO2 sequestration





Future Potential







- Difficulties exploiting deep and unconventional reservoirs and the challenges raised are pushing the limits of gas industry higher and stimulate innovation of the operators to develop new technologies and tools.
- The state of the art technology to explore deepwater prospects encouraged some countries to explore off shore fields. Several fields were discovered in the latest 90's and production is planned in the coming years. Over 50% of all major discoveries in 2004 were made in water depths greater than 200 m, 13 finds were made in water depths greater than 1000 m.





➤ **Necessity is the mother of invention:**

The challenges raised by difficult reservoirs are pushing the gas industry to innovate and to develop new technologies and tools.

➤ **Technology is exploring new horizons:**

Deepwater exploration is expanding in new areas:

- ❑ Over 50% of all major discoveries in 2004 were made in water depths greater than 200 m
- ❑ Thirteen finds were made in water depths greater than 1000 m.





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Which are the most significant
gas fields in the world?

RESULTS OF VOTE





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❖ Market Impact

Groningen

52.7 %

❖ Technological Advances

Troll

57.5 %

❖ Sustainable Development

In Salah

34.7 %

❖ Future Potential

North Dome

40.5 %





Thank you



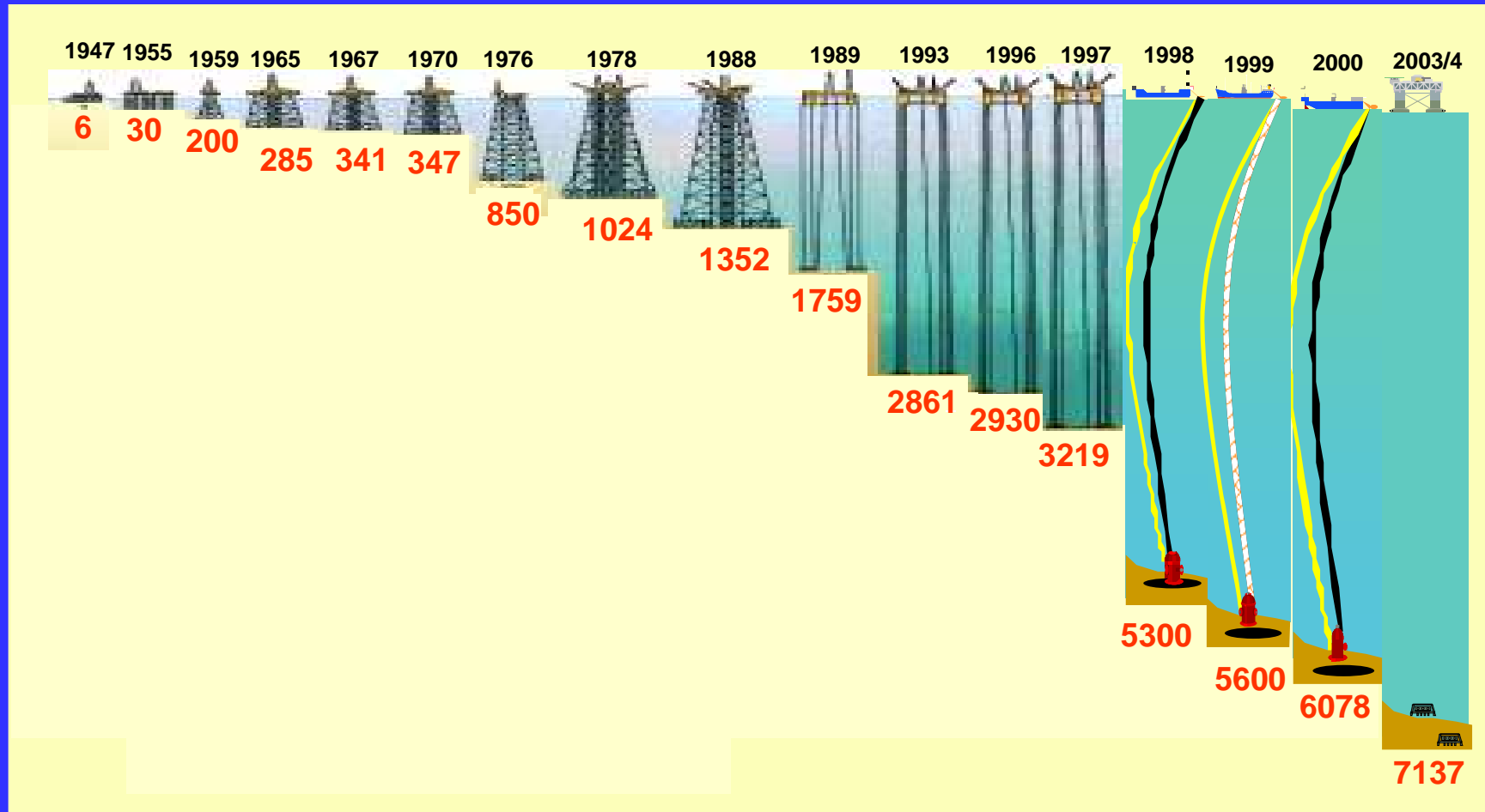


Back up slides





Access (eg Deepwater)







Market impact definition

Production from the field has led to the development of a large downstream gas market or has enabled gas to become the leading fuel in a particular region. The effect of the field on the local economy or the market structure can also be considered





Technical advances definition

Difficulties faced to develop the reservoir required the application of new techniques, equipment or processes that have subsequently been applied in other upstream projects or are expected to be further developed for future gas production





Sustainable development definition

This covers a wide range of issues including exploitation of natural gas found in ecologically sensitive or environmentally challenging locations, through to issues arising from the production and treatment of acid gas to satisfy economic and environmental imperatives.





Future potential definition

This is a forward-looking measure in which large remaining reserves or production levels that could be sustained for several decades to come are indicators of high potential, as are major possibilities for developing new production or enhancing existing production or increasing recoverable reserves by a very substantial amount

