NORWEGIAN PETROLEUM DIRECTORATE

Safeguarding excellence in Government petroleum resources management by improving information on exploration and production activities

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Per Blystad

Senior geologist

Norwegian Petroleum Directorate

Importance of Petroleum Sector in Norway

40 years of petroleum activity has created value of 5000 billion NO

(in 2005 NOK)

Macroeconomic indicators for the petroleum sector

The petroleum sector's share of GDP

The petroleum sector's share of state revenues

The petroleum sector's share of total investment

The petroleum sector's share of total exports

Source: Statistics Norway, Ministry of Fin

Status of the total recoverable petroleum resources as of 31.12.05.

Total 13 bill Sm³ o.e.

Distribution of the total resources
(bill Sm³ o.e.)

- Undiscovered resources
- Contingent resources in discoveries
- Possible measures for increased recovery
- Contingent resources in fields
- Reserves
- Sold and delivered

Petroleum Law,
Section 4-1, Prudent production

- Production of petroleum shall take place in such a manner **that as much as possible** of the petroleum in place in each individual petroleum deposit, or in several deposits in combination, **will be produced**. **The production shall take place in accordance with prudent technical and sound economic principles and in such a manner that waste of petroleum or reservoir energy is avoided**. The licensee shall carry out continuous evaluation of production strategy and technical solutions and shall take the necessary measures in order to achieve this.

Gas flaring –
waste of resources that could be used….

Produced, Reserves and Remaining quantities in oil fields on the NCS

Recovery factor – *prudent production indicator*

1 % increased recovery → 500 million bbl

The need for information in petroleum resource management

- Decisions require total resource volumes and forecasts
  - Coherency and consistency
  - Project status classification with forecast of production, cost and emissions
  - Recovery efficiency
  - Uncertainties

Classification in NPD

- Evolution
  - Learning from the best
  - Cooperation with oil companies
  - Improvement by responding to needs
- Project maturity status since 1991
  - Combining project status, production and financial indicators
  - One-dimensional system
- Active in UN AHGE since 2001
  - Provide experience
  - Case Studies

Conclusions

- We need information about the total resource base
- Decisions are based upon expected values, reporting should reflect this
- A project based classification combines volumes, financial indicators and decisions
- UNFC provides for better distinction of projects by use of economic and geological knowledge parameters
- UNFC will ease communication
- UNFC will help improving quality of information and data

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Thank you for your attention!

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http://www.npd.no/English/Frontpage.htm