



ØLJE- OG ENERGI DEPARTEMENTET

Ministry of Petroleum and Energy

The international challenge for the Norwegian Petroleum Cluster

**The Annual Conference on Internationalization,
Innovation and R&D in the Petroleum Sector.**

Stavanger, December 3 - 4, 2002.

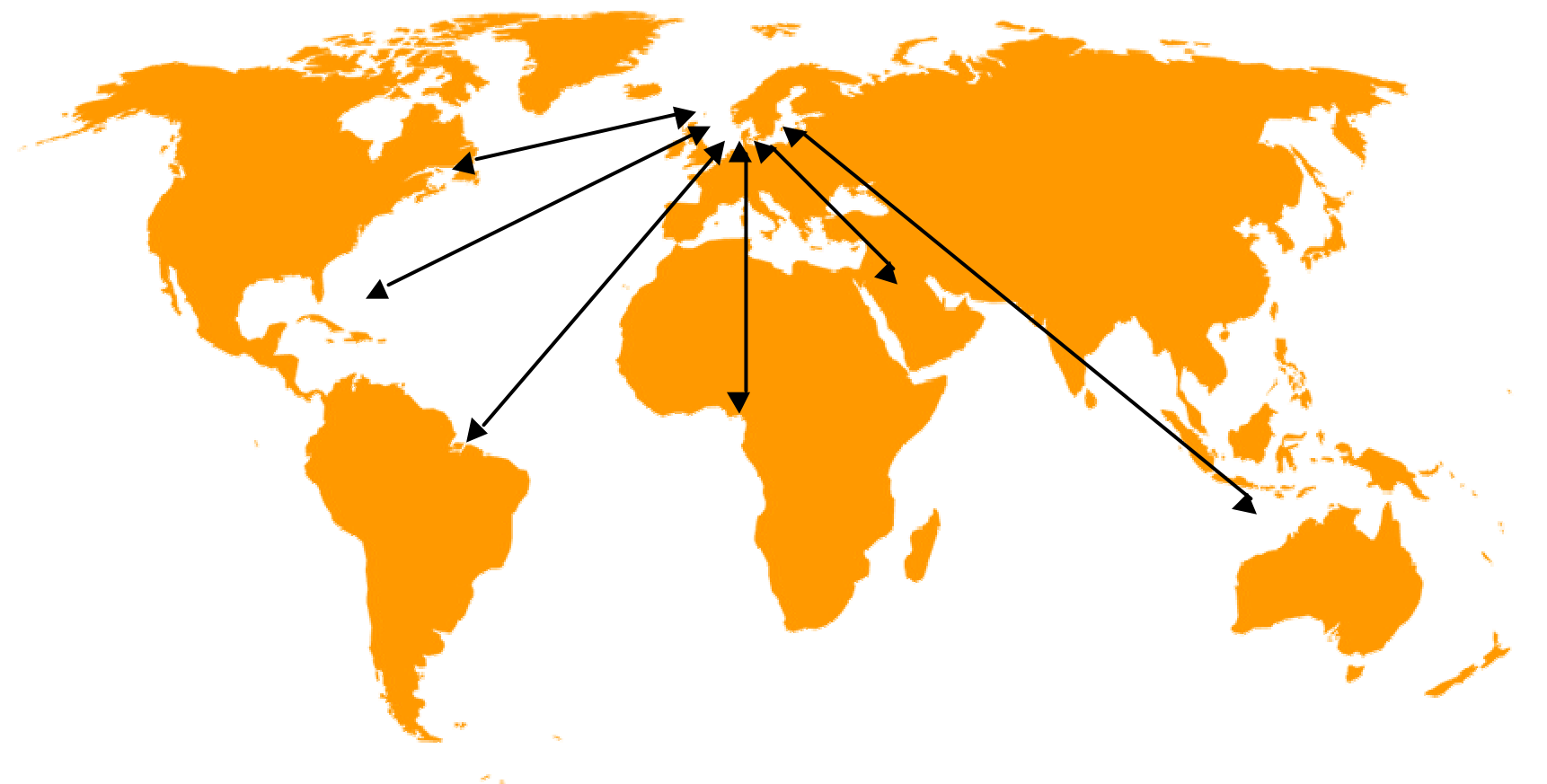
Einar Steensnæs, Minister of Petroleum and Energy



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An International Industry - One Market



Three Important Issues

- The international challenge for the Norwegian petroleum sector
- Socio-cultural understanding and business practices
- How to get from ideas to commercial products and services



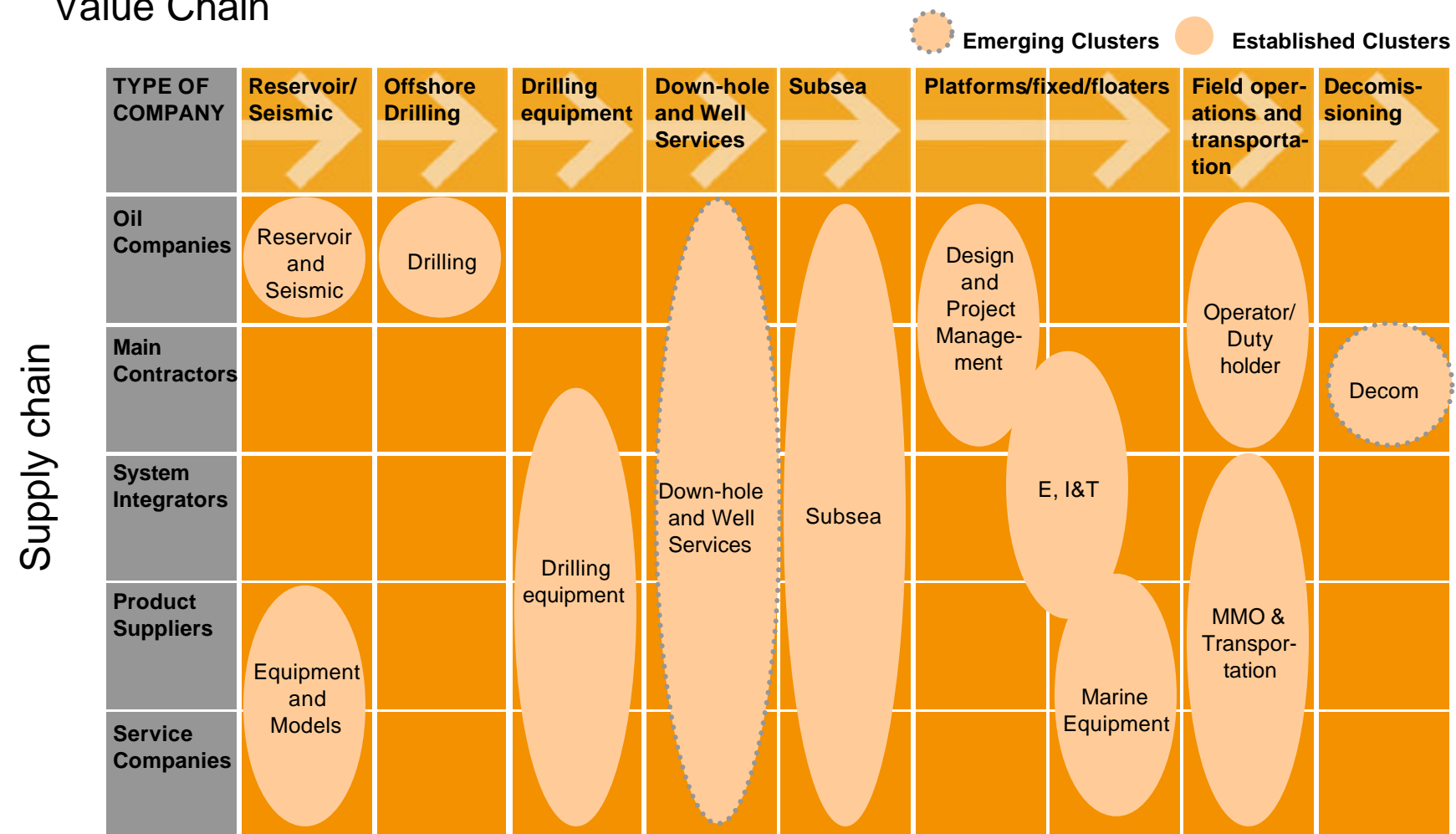


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Norwegian Oil & Gas "World-Class" Clusters

Value Chain



Source: Intsok

Three Challenges

- The Market Challenge
- The Technology Challenge
- The Customer Challenge



The Market Challenge

→ The market challenge seen from a Norwegian point of view

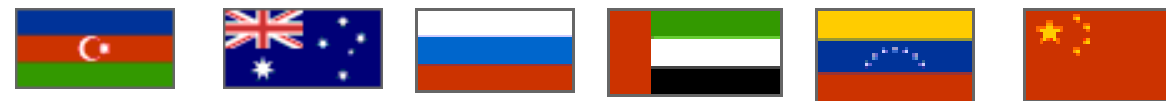
1. Mature markets



2. Developing markets



3. Markets under observation

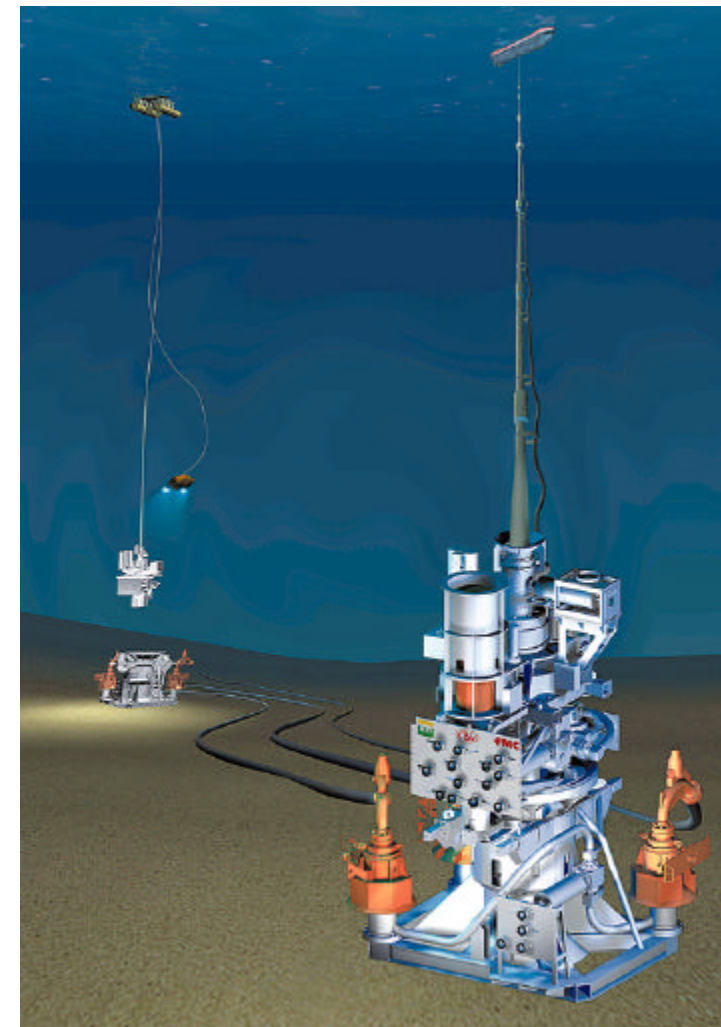


The Technology Challenge

→ The technology challenge

Technology is the single most important factor for the Norwegian oil and gas industry in order to:

- reduce costs
- strengthening international competitiveness, and
- facing future challenges!



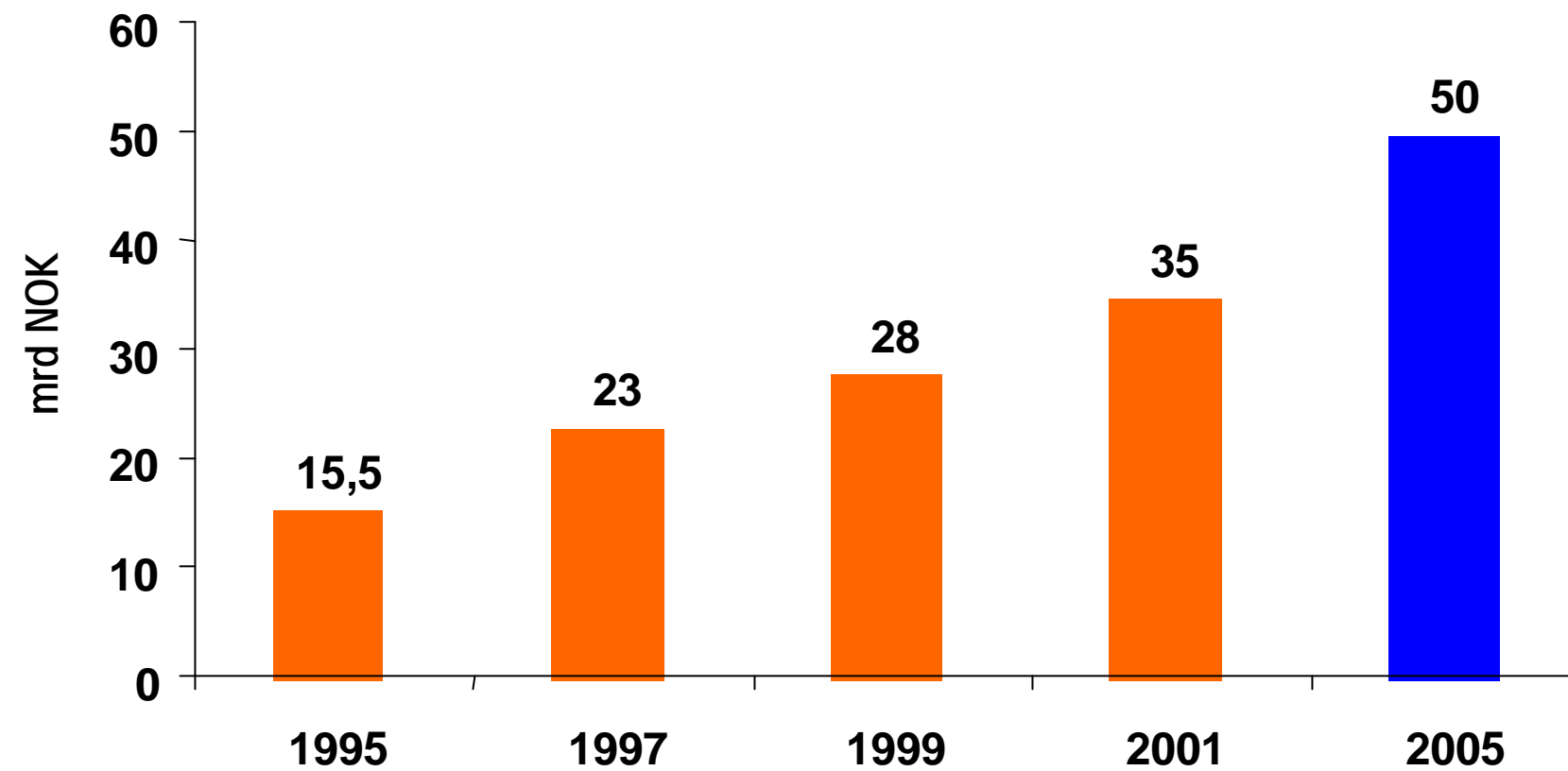
Source: FMC



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International Sales by Norwegian Oil & Gas Suppliers*



*) Export and sales

Source: SNF 2002 / Intsok



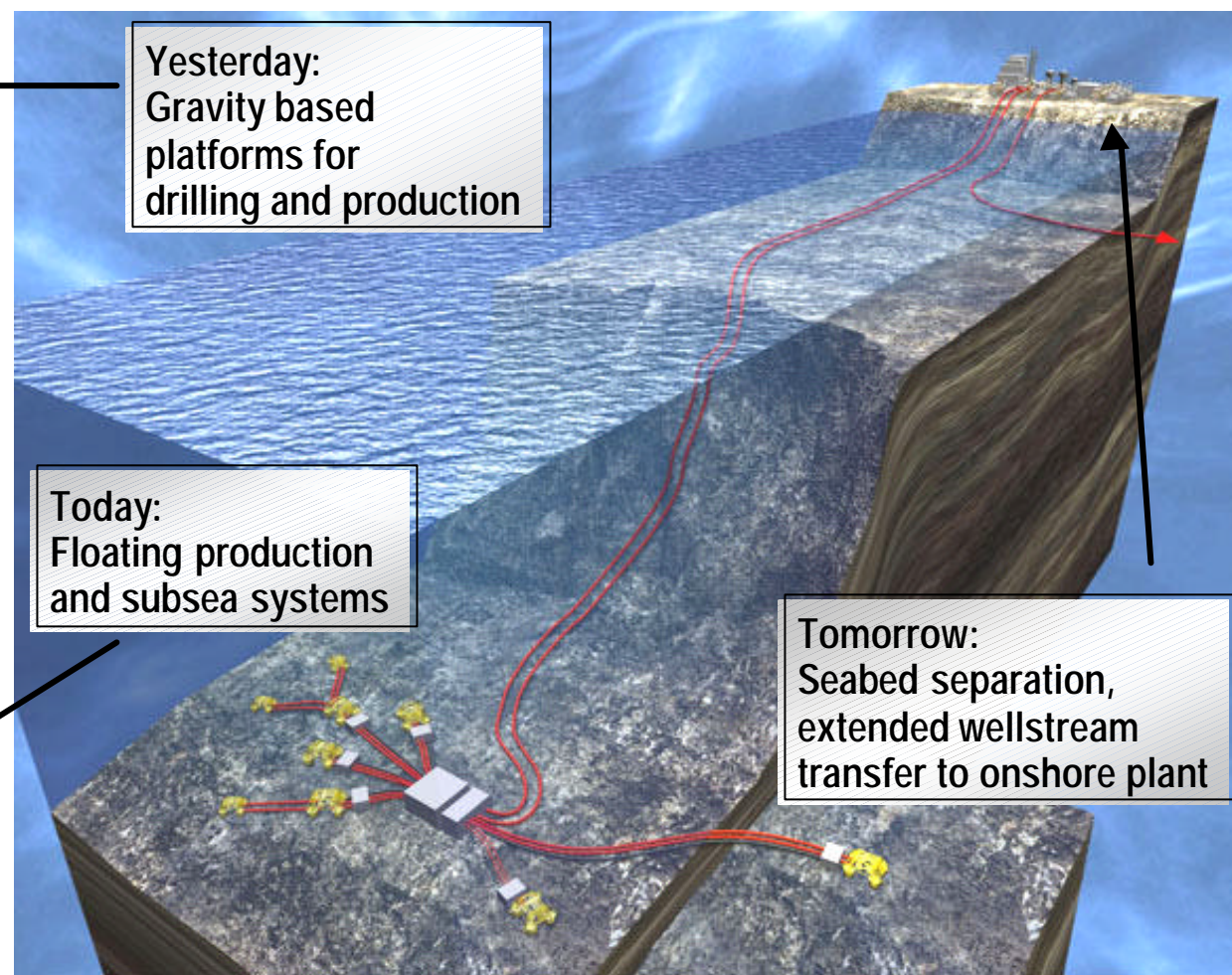
Technological Leaps



Yesterday:
Gravity based
platforms for
drilling and production



Today:
Floating production
and subsea systems



Tomorrow:
Seabed separation,
extended wellstream
transfer to onshore plant



OG21 - National Technology Strategy

5 Focus Areas

- Environment
- Increased Recovery
- Deep Water
- Small Fields
- Gas Value Chain

9 Technology Targets

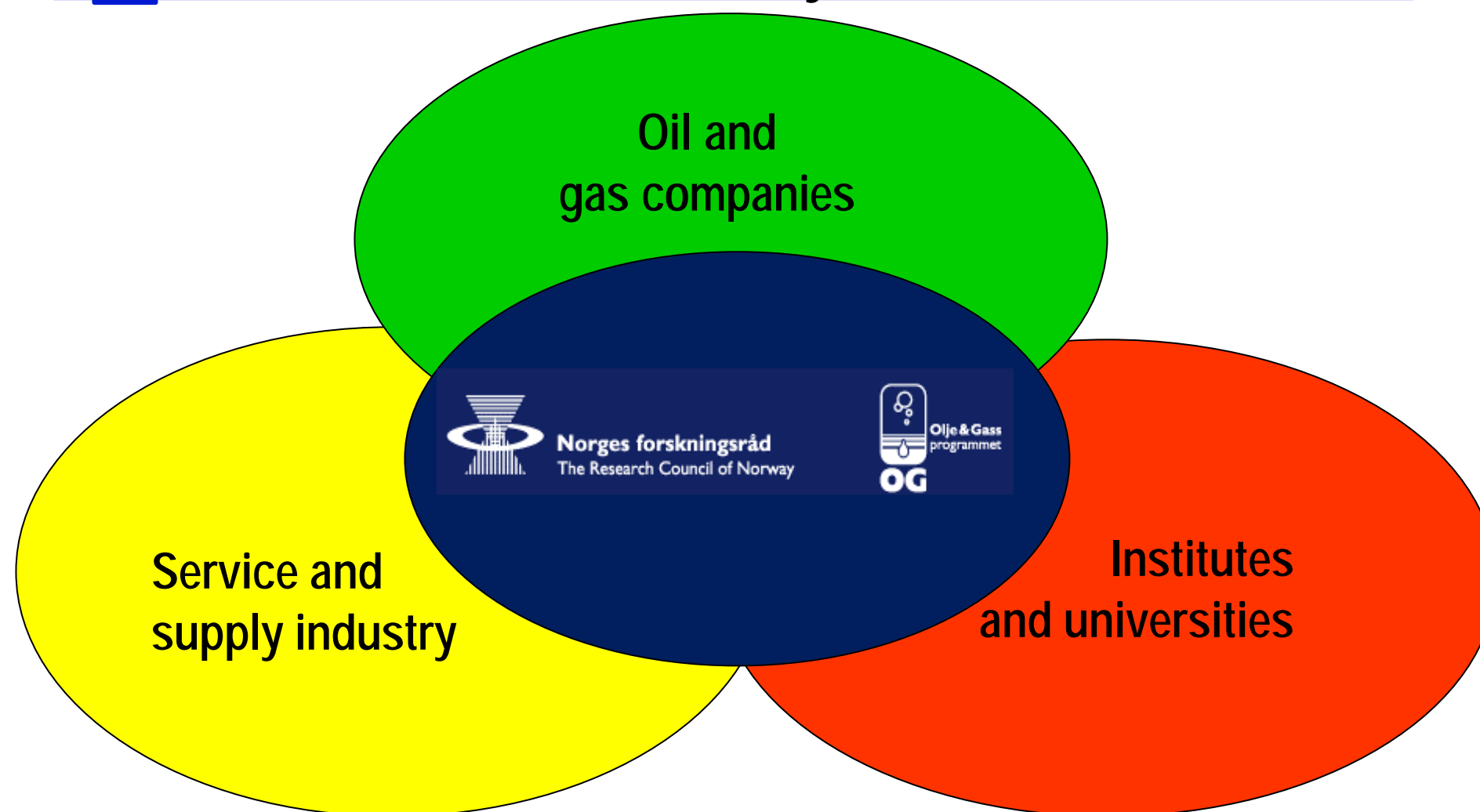
- Zero harmful discharge to sea
- 30% red. emissions to the atmosphere
- Stimulated recovery
- Cost effective drilling
- Real time reservoir management
- Deep water floating technology
- Long range transport of well stream
- Seabed and downhole processing
- Competitive gas production and offtake



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The Research Council of Norway



The Customer Challenge

→ The Customer Challenge

- National oil and gas companies
- Governmental organizations
- Local suppliers
- International oil and gas companies
- International contractors
- Major construction yards



Source: Hydro

Corporate Social Responsibility

The Norwegian government supports Statoil, Norsk Hydro and the Norwegian supply industry when they engage in business abroad.

We do expect them to take political, social and environmental issues into account when doing so.



Source: Statoil

Conclusion

"... an excellent foundation for supplying
the
international market with Norwegian
competence and technology on a
competitive basis"

