

Oil Gas Denmark – Trade organisation for the upstream oil and gas industry

8th Danish Licensing Round Seminar – 23 August 2018

Managing Director Martin Peter Naesby

Oil Gas Denmark - Trade organisation for the Danish Oil & Gas Industry

Our aim is to enable **realization of the full potential** of the Danish North Sea:

- ✓ **globally competitive** for investments;
- ✓ **understanding and recognition** of the industry;
- ✓ **advocating** in Denmark, EU and internationally;
- ✓ **trusted voice.**

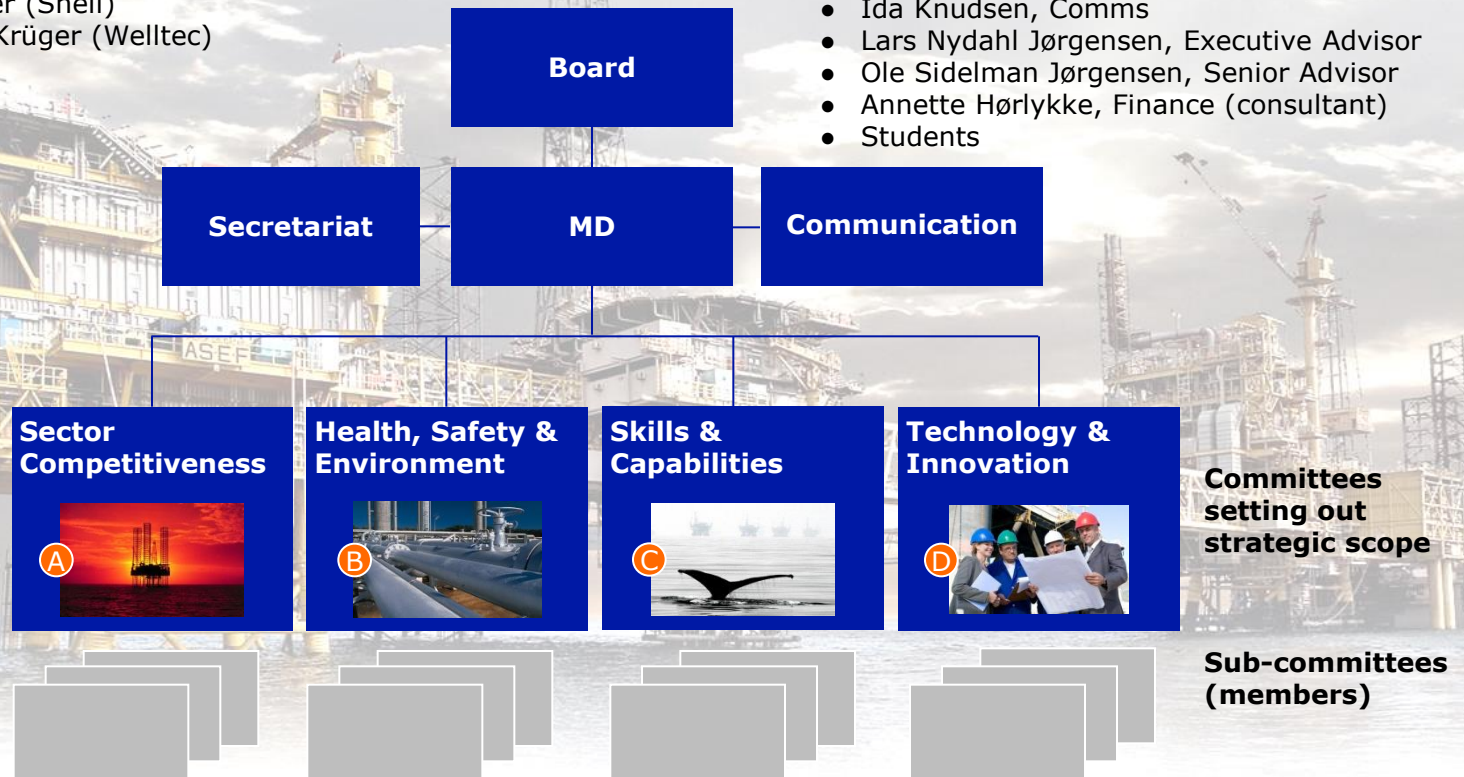
Oil Gas Denmark - Organisation

Board members (7 members)

- Martin Rune Pedersen, Chairman (Total)
- Verner Andersen, Vice Chairman (Semco Maritime)
- Flemming Horn Nielsen (INEOS O&G DK)
- Anders Nymann (HESS)
- John Sørensen (Ramboll Energy)
- Lee Hodder (Shell)
- Christian Krüger (Welltec)

OGD sekretariat

- Martin Peter Næsby, Managing Director
- Esben Mortensen, Deputy Managing Director
- Ulla Lena, Director Communication
- Jesper Sjørvad, HSE Manager
- Dorthe Heedegaard, Office Manager
- Ida Knudsen, Comms
- Lars Nydahl Jørgensen, Executive Advisor
- Ole Sidelman Jørgensen, Senior Advisor
- Annette Hørlykke, Finance (consultant)
- Students



Our members

Oil companies, partners and license holders



Service and supplier companies



Source: OGD website

Key achievements

Ensuring a competitive oil and gas industry - highlights

- ✓ **North Sea Strategy** and **timely roll out** of initiatives;
- ✓ Presenting **tax/incentives scheme** supporting the **North Sea Agreement**;
- ✓ **Advocacy** on industry matters (e.g. Offshore Safety Directive implementation, Financial Security, Technical Capability, special purpose vessels, EU matters etc.);
- ✓ **Energy Agreement**;
- ✓ **Benchmarking** countries around the North Sea

Key achievements

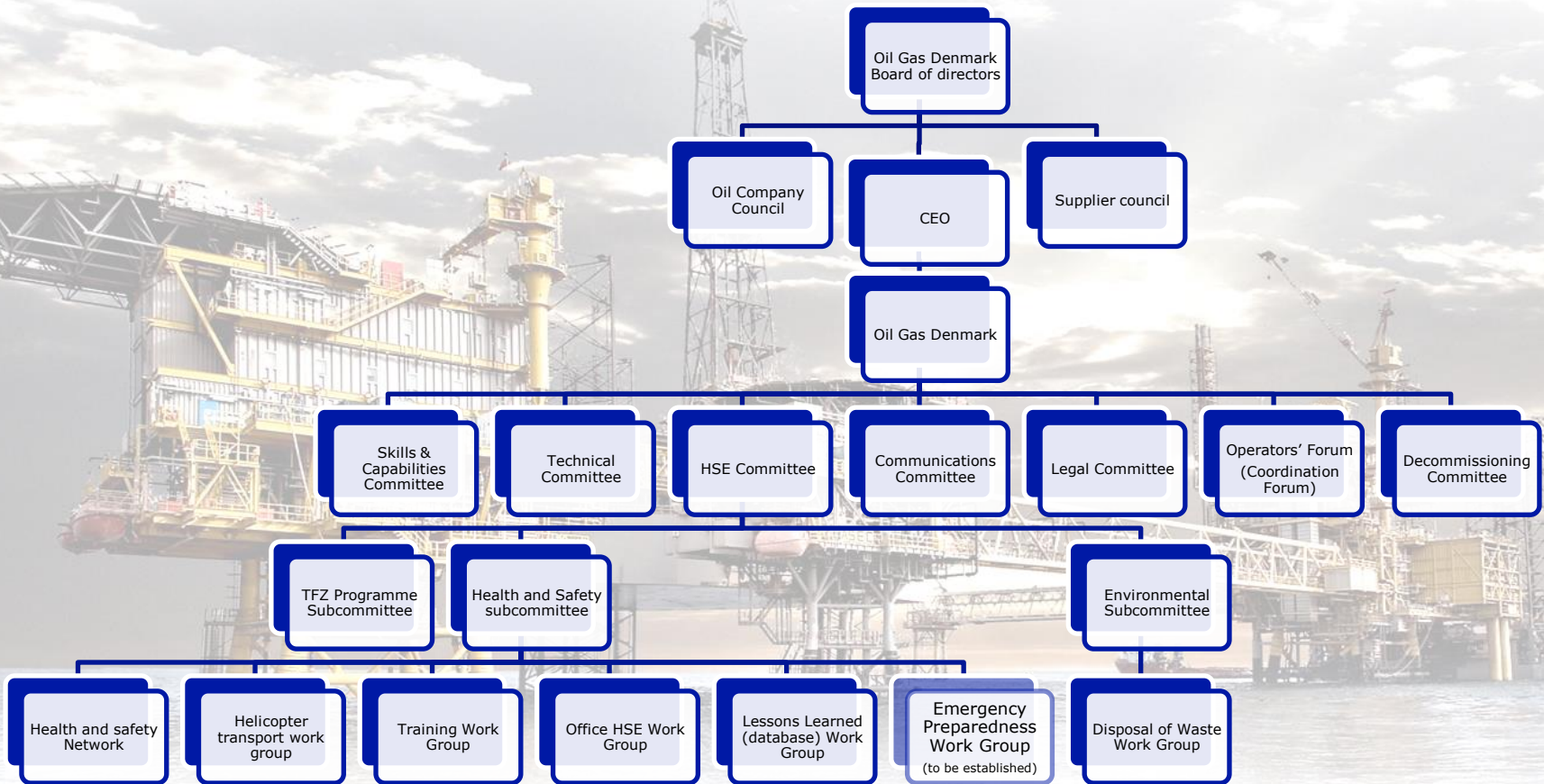
Health, Safety Environment

- ✓ **Safety collaboration** with focus on safety leadership in the industry;
- ✓ **Task Force Zero** as an international leading safety leadership conference;
- ✓ Growing recruiting base & **people pipeline**;
- ✓ Strengthening **existing labor pool**
- ✓ Yearly **Environmental Report**

Committees and networking opportunities

- ✓ **HSE Network** events quarterly basis;
- ✓ **Task Force Zero** in May;
- ✓ Annual **Safety Award** Dinner;
- ✓ **Annual General Meeting** and Dinner event;
- ✓ **Oil & Gas Summit** in October;
- ✓ Ad hoc **after work** events;
- ✓ Meet **industry experts** in committees, sub committees and work groups

OGD committee structure



Industry trends – a snap shot

- **Industry Consolidation / change of owner ship:**
 - DONG E&P acquired by INEOS E&P, business units established
 - Maersk Oil acquired by Total, Copenhagen regional headquarter
 - Hess share of Syd Arne no longer put up for sale
 - Bayerngas and Centrica joining forces
 - DEA and Wintershall joining forces
 - Other?

- **North Sea Strategy and North Sea Agreement, including Tyra development**
 - North Sea strategy from the DEA in collaboration with industry being rolled out – good progress
 - North Sea Agreement between the DK government and DUC, implemented
 - Tyra future plan approved by the authorities, implementation ongoing
 - Energy Agreement

- **Business environment**
 - Continued focus on safety and environment
 - Increase in oil price, sustainable development? Companies 'back in black'?
 - Oil companies – investments?
 - Supplier / service industry – investments?

On 29 June 2018 the Danish Government presented the “Energy Agreement”

“Continued exploitation of the oil and gas resources in the Danish North Sea

The green transition will require large investments for a number of years, which calls for ***sound public finances***. Investments in oil and gas extraction in the North Sea provide revenues to the state as well as activities supporting Danish economy; thereby these activities provide a basis for ***investments in the green transition***.

An agreement has been made with DUC of full recovery of the Tyra field in the North Sea. The agreement secures continuous economically viable activity of the area for many years to come and secures that we will be able to extract large resources, contributing as ***stabilizing factors in our energy system***.

The parties conclude that an ‘Agreement of the development of the North Sea of March 2017’ has been made, which is intended to provide greater security for the remaining resources in the North Sea to be extracted. ***Further to that, the parties agree that should some of the contracting parties wish to enter agreements in respect of further extraction and exploitation of the resources in the North Sea, they are free to do so.***”

Source: “Energiaftale” dated 29 June 2018, Ministry of Energy, Utilities and Climate (unofficial translation)

International Energy Agency (IEA)

Energy security

Security of supply is a priority of the Danish energy policy. Thanks to competent planning, timely investments and efficient maintenance, the supply of electricity, heating, gas and oil has been quite stable and without major interruptions in recent years.

Recommendations

The government of Denmark should:

- Take measures to alleviate the risk associated with the reconstruction of the Tyra field in 2019-22 to limit the negative impacts on the security of supply and wholesale gas prices.
- Proceed with the realisation of projects of common interest that help diversify natural gas supply, enhance the security of supply, and may have positive effects on the Danish infrastructure utilisation.
- Assess possible strategies for the future use of the natural gas system in light of developments in energy policy, technology and climate objectives.
- Promote competition in the retail natural gas market, evaluate the impact of regulated prices on natural gas price formation and consider further ownership unbundling.

Recommendations

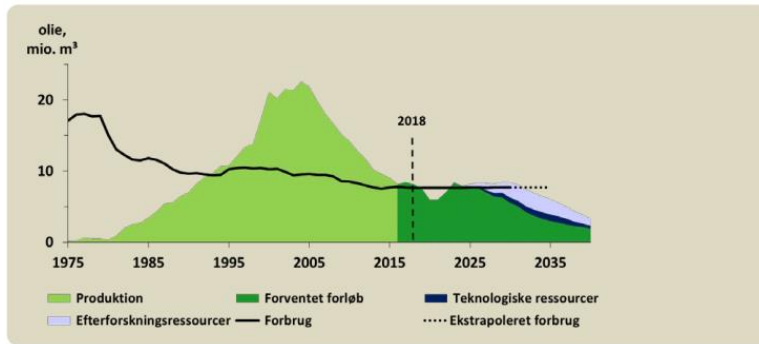
The government of Denmark should:

- Encourage upstream investments by carefully benchmarking the Danish terms and conditions for exploration and production with those of other countries around the North Sea, and adjust them where appropriate.
- Investigate, together with industry, the potential of economic carbon capture and storage for enhanced oil recovery.

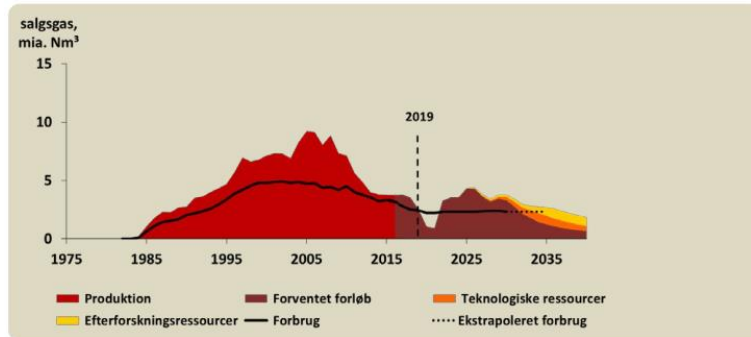


Source: IEA, link: <http://www.iea.org/publications/freepublications/publication/EnergyPoliciesofIEACountriesDenmark2017Review.pdf>

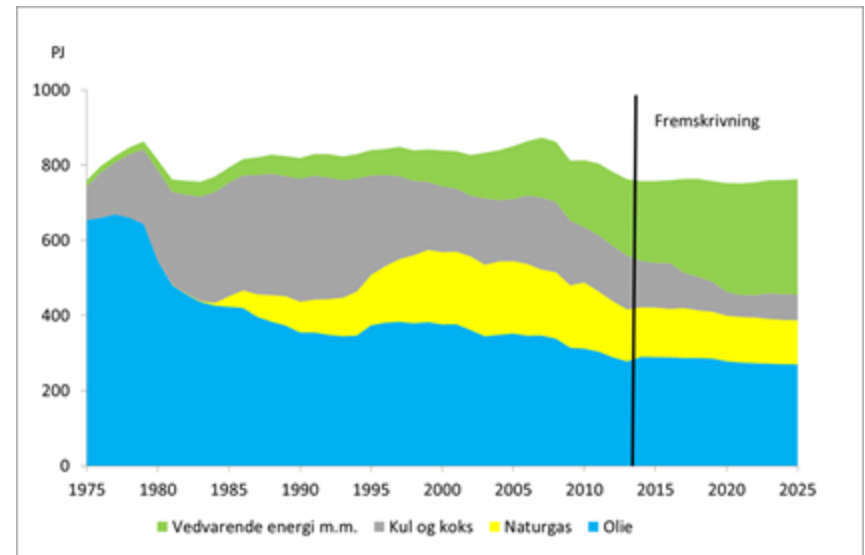
Danmark will need oil and gas in the journey towards a fossil independent society



FIGUR 2: Produktion og langsiget prognose for olie



FIGUR 3: Produktion og langsiget prognose for salgsgas



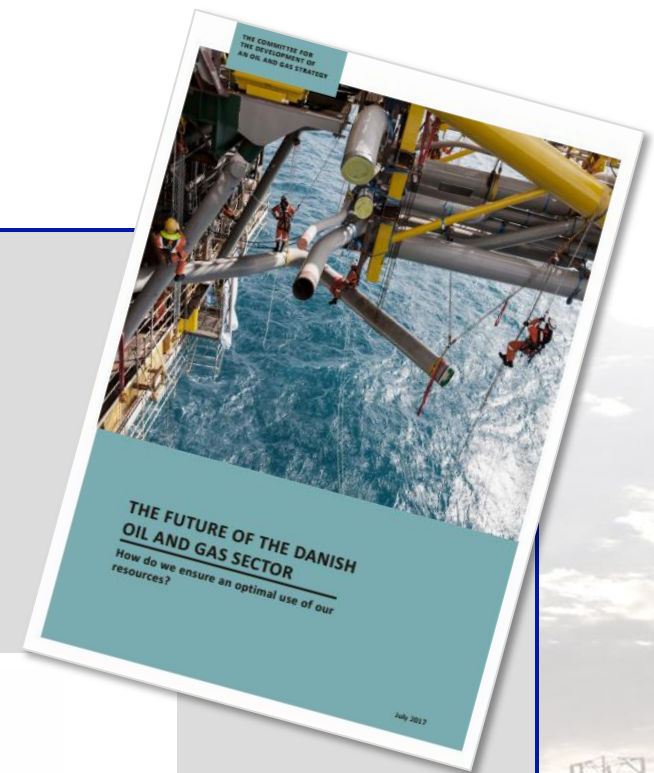
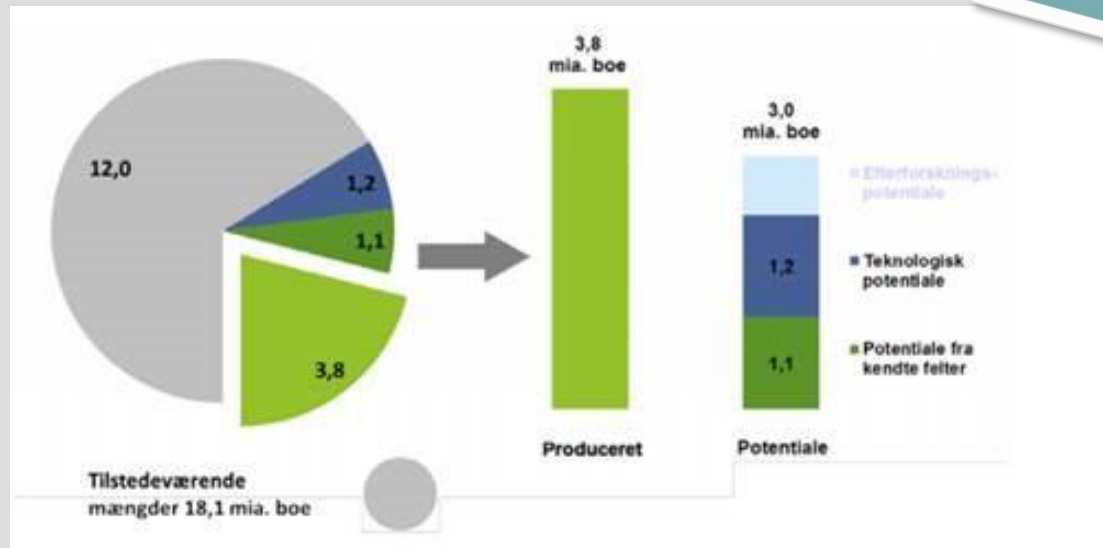
Source: DEA

The North Sea Strategy

Three main elements:

- potential
- barriers
- recommendations

Main conclusion:



Source: DEA – strategy report

Recommendations:



Optimization of recovery of oil and gas from the North Sea

GOAL:
INCREASE POTENTIAL

GOAL:
REDUCING BARRIERS TO FULFILLING THE
POTENTIAL OF OIL AND GAS

FACILITATING INVESTMENTS

1

Facilitating an efficient and attractive exploration environment

Recommendation A:

- Regular quantification of resources
- More frequent licensing rounds
- Promoting the Danish area
- Increased accessibility of data
- Dialogue between seismic industry and stakeholders

2

Facilitating the use and development of new technology

Recommendation B and C:

- Focusing on new technologies with the greatest potential
- Facilitating field testing
- Increased cooperation between the industry and research institutions
- The possibility of further involvement by the industry in the research center at DTU

3

Optimized maintenance, renewal and use of Infrastructure

Recommendation D:

- Optimizing the design and use of infrastructure by area, among other things by expanding cooperation to ensure transparency
- Increased clarity on the conditions for access for third parties

4

Reduction of cost

Recommendation E, F, G and H:

- Simplification and standardization of solutions for marginal projects
- A common approach to removal of facilities
- Joint conduction of activities
- Mapping and information on the regulation on mobile and fixed offshore facilities

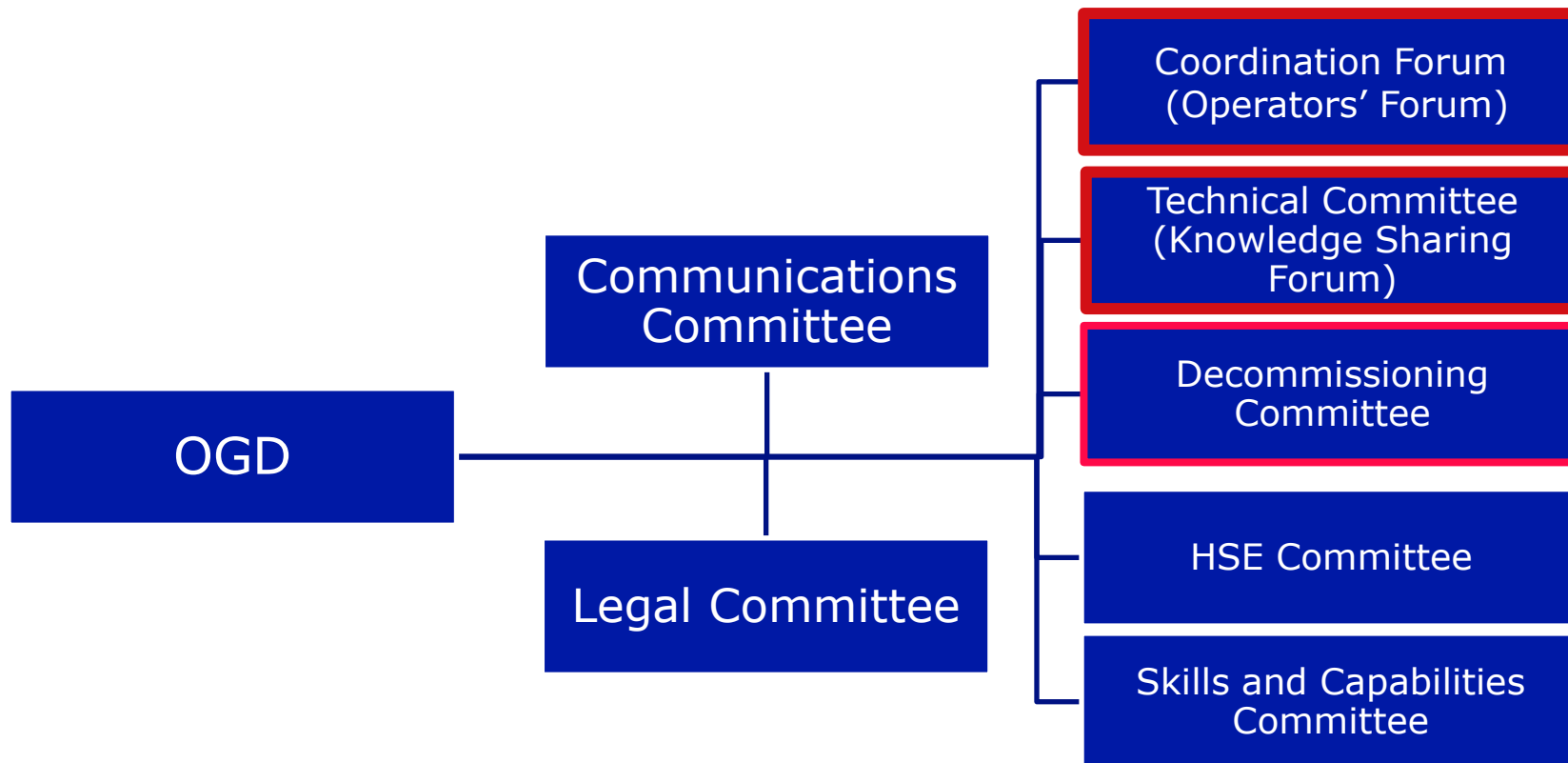
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Securing a qualified work force in the future

Recommendation I, J, K and L

- Increased cooperation between the oil and gas industry and relevant educational institutions
- Greater focus on technical and scientific educations
- Better knowledge of the oil and gas industry
- Focus on attracting international workers

Three new OGD Bodies



The focus for Oil Gas Denmark

- **Agenda:** Danish **self-sufficiency** with oil and gas until the fossil fuel independency - but also *advocate the following:*
 - In recognition of the climate challenge and the increasing demand for energy, focus must be on **CO2 emission** rather than on the production of oil and gas
 - We need to focus on 1) **energy efficiency** 2) **substitution** of high emission sources with low emission energy sources when possible (e.g. from coal to gas) 3) **carbon capture** and 4) **green technologies**

Danish Self-Sufficiency 2050

– a position of strength for Denmark

Economic growth:

DKK 238 billion in taxes for welfare
35,000 workplaces

Energy security:

Danish energy/security of supply in the green transition
National security

Sources: Damvad Analytics: "Scenarier for velstandseffekten af udviklingen i Nordsøen".
Damvad Analytics: "Olie- og gassektorens samfundsøkonomiske betydning".



➤ **Next step**

- 8th Licensing Round
 - Financial Security requirements etc. finalised
 - Kick off meeting at DEA 23 August
 - Brancheforum being considered

- Roll out of North Sea Strategy ongoing
 - Technical Committee being set up
 - Operators' Forum being set up
 - Decom Committee being set up

- Political support – Energy Agreement
- Ban on onshore exploration, inner waters
- European gas market? Nordstream 2, Baltic Pipe
- Current issues



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Further information

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Thank you! Please visit our web site www.oilgasdenmark.dk