# Facts 2004

## The Norwegian petroleum sector

#### Ministry of Petroleum and Energy

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### **Foreword**

The oil and gas sector is Norway's largest industry by value creation, and has been a key driving force in Norwegian economic development for several decades. This sector and the revenues it generates have helped to ensure industrial growth, employment and development of the overall national infrastructure and welfare systems at a pace and scope which would otherwise have been impossible. And developments in the petroleum industry will remain crucial for the future progress of Norwegian society. As Minister of Petroleum and Energy, I am accordingly very concerned to ensure that the right frame conditions are in place for long-term management of our oil and gas resources.

While the petroleum sector has so far been characterised by growth, we can now see the beginning of a gradual reduction in the level of activity. This will have significant spin-offs for other industries and consequences for the Norwegian economy as a whole. Ensuring that profitable petroleum activities are pursued is accordingly very important in order to moderate the pace of decline. This publication provides a broad picture of Norway's petroleum activities, and covers most aspects of the industry. I hope that it can provide useful information on the sector both for those already familiar with this business and for users who know less about it.

Since petroleum production began on the Norwegian continental shelf (NCS) in 1971, we have produced a total of 3.8 bn standard cubic metres of oil equivalent (scm oe). That corresponds to just under 30 per cent of our original recoverable reserves. In other words, substantial oil and gas resources remain. The government's Report no 38 (2001-2002) to the Storting described a long-term scenario for the NCS in which estimates for recoverable reserves from the Norwegian Petroleum Directorate are recovered. I am very concerned to ensure that we achieve the long-term scenario, while taking account of environmental and safety considerations.

Norway's role as a major energy producer must be reconciled with our ambition to be a pioneer in the environmental area. This goal has characterised government policy towards the petroleum industry since our oil and gas production began. The strong focus on the environment means that we can now point to a positive trend in safeguarding environmental concerns on the NCS.

Production of oil and natural gas liquids averaged 3.3 mill barrels per day in 2003, while gas production for the year totalled 73.4 bn scm. Gas sales are expected to build up sharply from today's level to reach 120 bn scm in 2010. In December 2003, I received development plans for Ormen Lange in the Norwegian Sea and a new gas transport system to the UK. Ormen Lange is the largest gas discovery on the NCS after Troll. I regard this development and the planned transport system to the UK as very important contributions to activity on the NCS in the time to come, and these projects will have substantial national and regional effects.

Against the background of disappointing exploration results in immature areas of the Norwegian and North Seas during recent years, the government resolved to announce an extensive 18th licensing round in these parts of the NCS. It will give companies the access to immature acreage which is important for increasing exploration activity. The 18th round will be the fourth largest on the NCS, and perhaps the most extensive in immature areas since the first round in 1965. In announcing it, the government has been very concerned to balance the interests of the environment, fisheries, aquaculture and petroleum activities. As a result, it sets more extensive environmental and fisheries requirements than have been normal earlier.

The Lofoten-Barents Sea area of the NCS is very important both ecologically and for the fishing industry, while also being highly significant for future Norwegian petroleum operations. The Sem declaration issued by the government on taking office accordingly identified the need to look at year-round petroleum activities in the Lofoten-Barents Sea area. This ULB study aimed to present the key issues relating to the environmental, fisheries and social impact of year-round petroleum operations in these waters.

In light of the ULB findings, the government resolved in December that the Nordland VI area off Lofoten would not be opened for further petroleum activity. This issue will be considered anew when the overall management plan for the Barents Sea is published. At the same time, the government decided to permit continued year-round petroleum operations generally in the already- opened parts of Barents Sea South, with some exceptions. These exceptions are the coastal areas of Troms and Finnmark and the especially vulnerable areas of the polar front, the ice edge, Bear Island and the Tromsø Patch.

A fundamental requirement for the government's proposal is that full safety and emergency response precautions are taken. In cooperation with other affected government agencies, I will impose strict standards for oil spill response in the Lofoten-Barents Sea area. Coexistence represents a central principle in Norwegian petroleum policy, and it is important to find solutions which ensure that different industries can use the same sea areas within the framework of sustainable development. The government has also specified as a condition for continued activity in the Barents Sea that nothing must be discharged to the sea during normal operation. This represents a significant tightening of requirements compared with other parts of the NCS.

Mature parts of the NCS continue to offer a substantial potential for proving new resources, part of which can be tied back to existing installations. Success in finding and developing these resources will require a substantial commitment and a willingness to think innovatively. Many fields in mature parts of the NCS are in a phase of declining production and rising unit costs. Efficiency improvements, changed modes of operation, technological developments and cross-licence cooperation are important factors in this context. I consider the realisation of these assets to be very important for maintaining Norway's position as a major oil and gas exporter, and a main challenge in achieving the long-term scenario for the NCS.

With the system of awards in pre-defined areas (APA), the government reorganised the allocation of licences in mature areas to stimulate more efficient exploration in this part of the NCS. Just before Christmas 2003, I awarded 19 production licences in mature areas of the North and Norwegian Seas under this system. I am very satisfied at the interest shown in this licensing round, where an exciting blend of established companies and new players contribute to increased offshore diversity and value creation.

At 31 December 2003, 48 fields were in production on the NCS – 42 in the North Sea and six in the Norwegian Sea. Production began in 2003 from Fram, Grane and Mikkel. Kristin, Kvitebjørn, Skirne and Snøhvit have approved plans for development and operation, but are being developed.

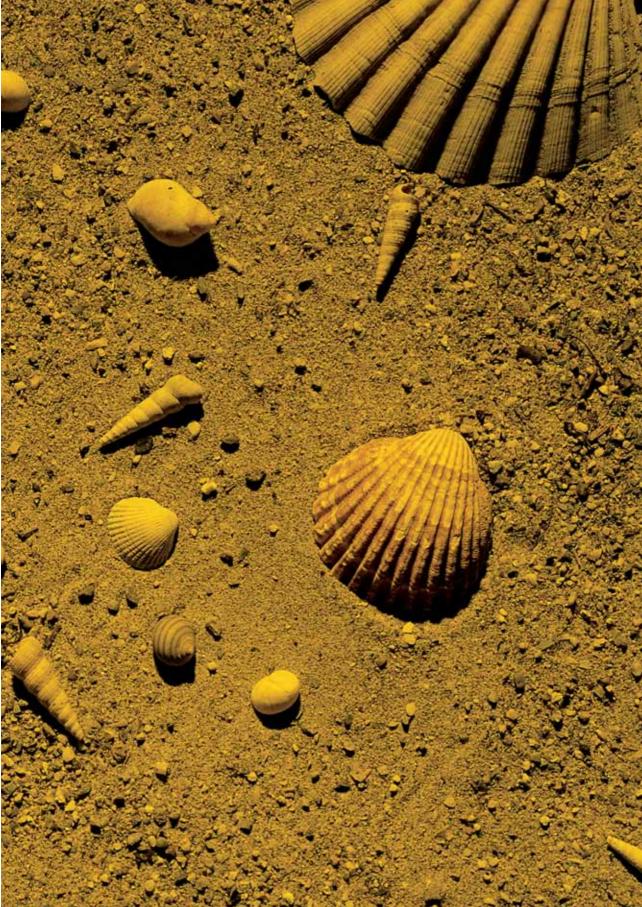
Forecasts indicate that remaining resources on the NCS could permit profitable production of oil for 50 years and gas for almost a century. I would emphasise that achieving such a positive development is very demanding, and that we will face many challenges on our way to this target. Key challenges include access to new acreage to ensure the necessary exploration activity, developing resources close to existing infrastructure and improving the recovery factor on producing fields.

The government is concerned to facilitate the achievement of the long-term scenario. This will accordingly be the key subject in this year's Report to the Storting on oil and gas activities.



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Minister of Petroleum and Energy



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