

An industry for the future – Norway’s petroleum activities

1 Objective and summary

1.1 Objective

Norway’s petroleum resources belong to the Norwegian people, and they must be managed in a way that benefits the entire Norwegian society. This has been the foundation for the management of our petroleum resources for the past 50 years. The licensing legislation dating back to 1909 deals with regulation of hydropower, but it has also been relevant for the petroleum activities. The legislation stipulated the right of reversion (to the State), emphasised that the Norwegian people are the owners of the water resources, and that economic rent should fall to the greater community. These same principles have been followed in the administration of the petroleum resources.

About 50 years have passed since the possible existence of petroleum deposits on the Norwegian shelf became a topic of discussion. In 1963, Norway declared dominion over the continental shelf, giving the Norwegian state the right to explore for and exploit subsea petroleum deposits. Two years later, Norway, the United Kingdom and Denmark agreed to apply the “median line principle” to establish the maritime boundaries. In its consideration of White Paper No. 76 (1970 – 1971), *Exploration for and exploitation of subsea natural resources on the Norwegian continental shelf, etc.*, the Storting (Norwegian Parliament) endorsed what later became known as “the Ten Oil Commandments”. These “oil commandments” point out that petroleum policy must be comprehensive and that national management and control are important to ensure that management of the resources benefits the entire Norwegian society. A few years later in White Paper No. 25 (1973 – 1974), *Petroleum activity and its position in the Norwegian society*, the Bratteli Government set the objective that the petroleum resources should be used to develop a “qualitatively better society”. The development of Norwegian petroleum expertise, both in a management and a commercial context, were important secondary goals which led to the establishment of the Norwegian Petroleum Directorate (NPD) and Statoil. Together with the development of Norsk Hydro and Saga Petroleum, this made a significant contribution to building a Norwegian industrial environment around the petroleum industry. Shipyards, shipping companies, seismic companies, engineering firms, research and development communities were key components in this effort. Sound competition and diversity at all levels of the value chain have been important preconditions for good exploitation of resources on the Norwegian shelf. The Government will continue to facilitate this development.

Box 1.1 The 10 Oil Commandments

The 10 Oil Commandments are items in a declaration of principles underpinning Norwegian oil policy, submitted by the Standing Committee on Industry in a Storting White Paper dated 14 June 1971. These principles have subsequently been dubbed the 10 Oil Commandments, and represented a clarification of what was needed to make sure that the oil activities would “benefit the entire nation”:

1. That national supervision and control of all activity on the Norwegian continental shelf must be ensured.
2. That the petroleum discoveries must be exploited in a manner designed to ensure maximum independence for Norway in terms of reliance on others for supply of crude oil.
3. That new business activity must be developed, based on petroleum.

4. That the development of an oil industry must take place with necessary consideration for existing commercial activity, as well as protection of nature and the environment.
5. That flaring of exploitable gas on the Norwegian continental shelf must only be allowed in limited test periods.
6. That petroleum from the Norwegian continental shelf must, as a main rule, be landed in Norway, with the exception of special cases in which socio-political considerations warrant a different solution.
7. That the State involves itself at all reasonable levels, contributes to coordinating Norwegian interests within the Norwegian petroleum industry, and to developing an integrated Norwegian oil community with both national and international objectives.
8. That a state-owned oil company be established to safeguard the State's commercial interests, and to pursue expedient cooperation with domestic and foreign oil stakeholders.
9. That an activity plan must be adopted for the area north of the 62nd parallel which satisfies the unique socio-political factors associated with that part of the country.
10. That Norwegian petroleum discoveries could present new tasks to Norway's foreign policy.

Our management of the petroleum resources has been a success. The objective of achieving a qualitatively better society is a good description of some of the results of our petroleum activity. Today, the petroleum activity is Norway's largest industry measured in value creation, state revenues and export value. The petroleum industry currently employs approx. 43,000 people, while more than 200,000 jobs can be directly or indirectly linked to demand from the petroleum sector. Since the 1970s, the substantial revenues from the activity have helped build the Norwegian welfare society. The excess funds are managed in the Government Pension Fund – Global; whose market value has now surpassed NOK 3000 billion. According to the fiscal policy guidelines, the size of the Fund indicates annual revenues to the fiscal budget of more than NOK 120 billion.

The primary objective of the petroleum policy is to facilitate profitable production of oil and gas in a long-term perspective. The petroleum resources should also contribute to improving the quality of life in Norway in the years to come. To achieve this objective, our management must be comprehensive and based on knowledge and facts. Management of the resources must take place within a prudent framework as regards health, safety and the environment. The role of petroleum producer must be combined with an ambition to lead the field in environmental and climate policy. Petroleum activity carries a risk of major accidents. A necessary precondition for long-term development of the petroleum resources is that the industry manages this risk prudently. Continuous improvement in the fields of health, safety and environment must be pursued and reinforced.

The main features of our petroleum policy remain firm. It is important that we continue to build on our successful management of the resources. The main challenges we face in achieving this goal are improved recovery from fields, development of discoveries and proving undiscovered resources. In order to achieve this, it is important that we make adjustments in our use of policy instruments when this is indicated by developments in the industry and/or the resource base. The interplay between state, oil companies, supply industry and the research sector is an important part of Norwegian petroleum management.

Offshore petroleum activity, the demand it generates on the mainland and the state revenues it currently supplies are of great significance for the Norwegian economy. It is important to keep the overall picture in mind when discussing individual issues and specific cases within the industry. Names are important symbols. This is also the case for petroleum deposits. The names of many fields in Norway are taken from Norse mythology, with strong roots and steeped in national tradition. This is a tradition that should be continued. However, the strongest names from Norse mythology are already in use, which means that we should also consider new types of names. The names given to larger fields in new areas should reflect the industry's importance, both for specific regions and for the nation as a whole. The Ministry therefore plans to make adjustments in the naming of petroleum deposits, to ensure that they fit into a national context and history.

1.2 International framework

The prospects for both oil and gas markets in the years to come form the foundation for profitable production of Norway's petroleum resources, assuming that we maintain control over cost developments.

Reliable access to energy is a key factor in the development of the world economy, and is closely connected to national prosperity and development. Energy consumption allows us to free-up labour from low-productive manual work. Large parts of the world's population consume very little energy. 1.5 billion people are without access to electricity. Improved access to modern forms of energy is needed in order to lift these people out of poverty. The time currently spent gathering fuel can be used for other purposes. Light will facilitate better education. More resources can be used to produce, obtain and prepare food. The Government intends to work to achieve efficient and highly functional oil and gas markets, and to expand the energy dialogue between producer nations and consumer nations.

Fossil energy sources account for about 80 per cent of the world's energy supply, and are the main cause of greenhouse gas emissions and human-induced global warming. Wide-ranging changes in energy consumption are necessary if we are to avoid harmful climate change. Increased production of renewable energy, energy efficiency, replacing coal with gas and capture and storage of CO₂ are some of the most important measures that could lead to lower CO₂ emissions. Norway is, and has always been, a stable and predictable supplier of oil and gas. In today's world, this is a competitive advantage. Gas can unite the European objectives of secure energy supply and reduced emissions of greenhouse gases. If gas replaces coal in production of electricity in Europe, this measure alone will suffice to fulfil the region's CO₂ objectives for 2020. Gas also possesses certain qualities in power generation that facilitate the phase-in of renewable power generation, and can therefore contribute to further CO₂ reductions. Gas-fired power plants function well together with e.g. wind or solar power, as gas power can be produced quickly and efficiently during calm or overcast days. The Government therefore aims to intensify its work to ensure that the advantages of natural gas as compared with use of coal are taken into consideration when setting the framework for Europe's energy structure.

The ultimate goal of the Norwegian Government's climate policy is to contribute to curtailing the human-induced temperature increase to a maximum of two degrees, as compared with the pre-industrial level. A comprehensive change in the global energy system is required in order to reduce emissions so that the two-degree goal can be achieved.

The Government wants to combine Norway's role as a major energy producer with the ambition of being a world leader in environmental and climate policy, through continuing to exploit the petroleum resources while simultaneously pursuing efforts to streamline the activity on the continental shelf. The

activity on our continental shelf should also be best-in-class when it comes to energy-efficient production of oil and gas. The policy instruments applied in the sector facilitate implementation of measures and development of new and more efficient solutions.

1.3 An industry for the future

The oil and gas activity is in a different phase than was the case ten years ago. Production of oil has declined, while gas production has increased. The cost level is substantially higher. Technological development has continued. The opened areas have become more mature, producing fields are aging, and exploration activity has shown a definite increase. Considerably more upstream companies are involved in the activities, and the player scenario has widened. Expectations regarding future oil and gas prices are optimistic.

A key precondition for further developing the petroleum resources is that we have a resource base to exploit. During the past 40 years, we have extracted around 40 per cent of the expected recoverable resources. We have produced a larger percentage of oil than of gas. Sixty per cent of our resources remain in the subsurface. In addition come parts of the previously disputed area to the west of the demarcation line in the Barents Sea and the areas around the island of Jan Mayen. The Government places great emphasis on the upside potential when considering exploration of our least-mapped areas.

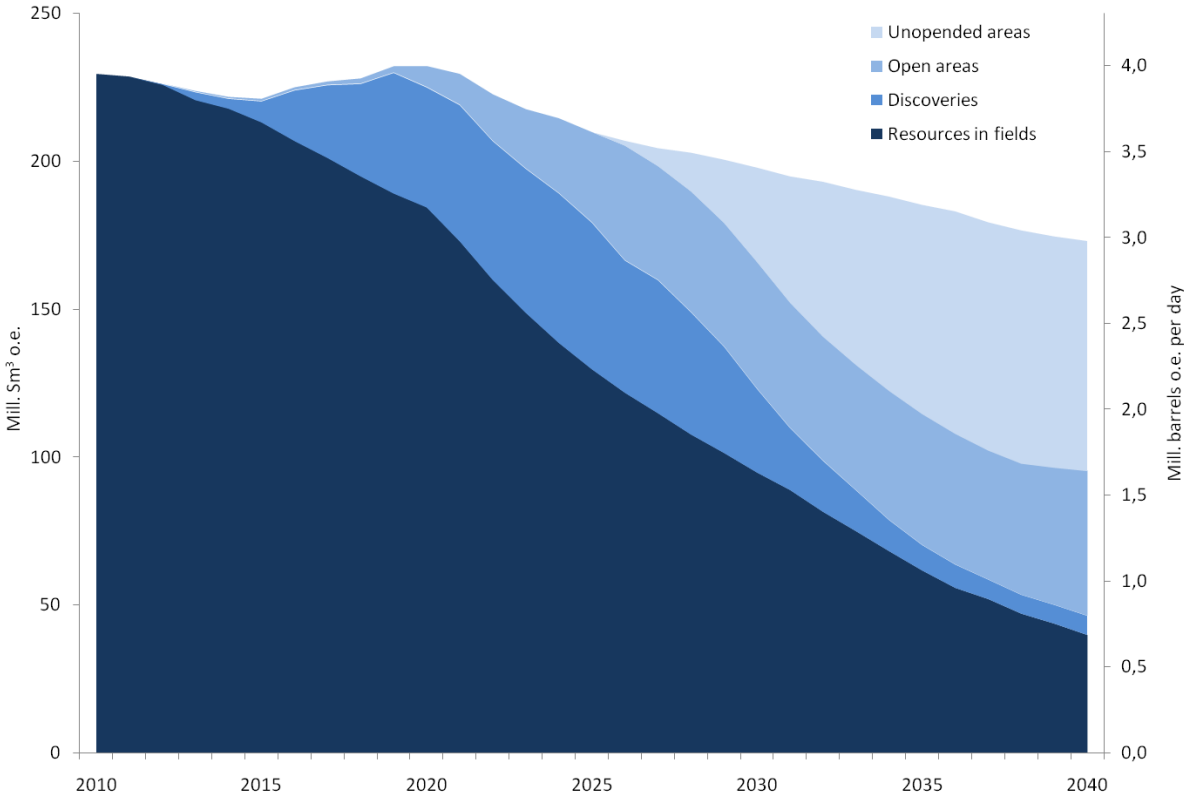


Figure 1.1 Potential production scenario with a broad commitment on the Norwegian Continental Shelf

Source: Ministry of Petroleum and Energy and Norwegian Petroleum Directorate

A practical way of categorising the remaining resources is listed below, cf. Figure 1.1:

- resources in fields

- resources in discoveries
- unproven resources in opened areas
- unproven resources in unopened areas

We can maintain production from the sector at a very high level for decades to come, through a deliberate and simultaneous commitment throughout this value chain. The potential production scenario illustrated in Figure 1.1 are higher than the authorities' expectations with a continuation of current policies. This is because the scenarios embrace additional possibilities that lie in fields, discoveries and exploration. The estimate falls well within the NPD's range of uncertainty for estimated remaining recoverable resources on the Norwegian shelf.

A steady activity level must be maintained in order to achieve the goal of long-term management and value creation from the petroleum resources. Welfare and employment will follow the activity. This can best be facilitated through a parallel and active commitment in three areas:

- Increase recovery from existing fields and development of commercial discoveries.
- Continue active exploration of opened acreage, both in mature and frontier areas.
- Implement the opening processes for Jan Mayen and the part of the previously disputed area to the west of the demarcation line in the Barents Sea South, which can provide a basis for new economic activity in Northern Norway.

New solutions and measures on existing fields will yield value creation, welfare and employment in the short and medium term. New discoveries in mature areas will also contribute in the short and medium term perspective. New discoveries in less mature areas will contribute to achieving our goals in the medium-term perspective. Relatively speaking, it takes a long time from an area is opened until activity in the area starts to make an actual contribution.

These differences in the time perspectives for when the various measures will have an impact on value creation, welfare and employment mean that we must initiate parallel processes in all areas in order to facilitate an activity level that is as stable as possible. This White Paper presents a plan designed to facilitate such a development.

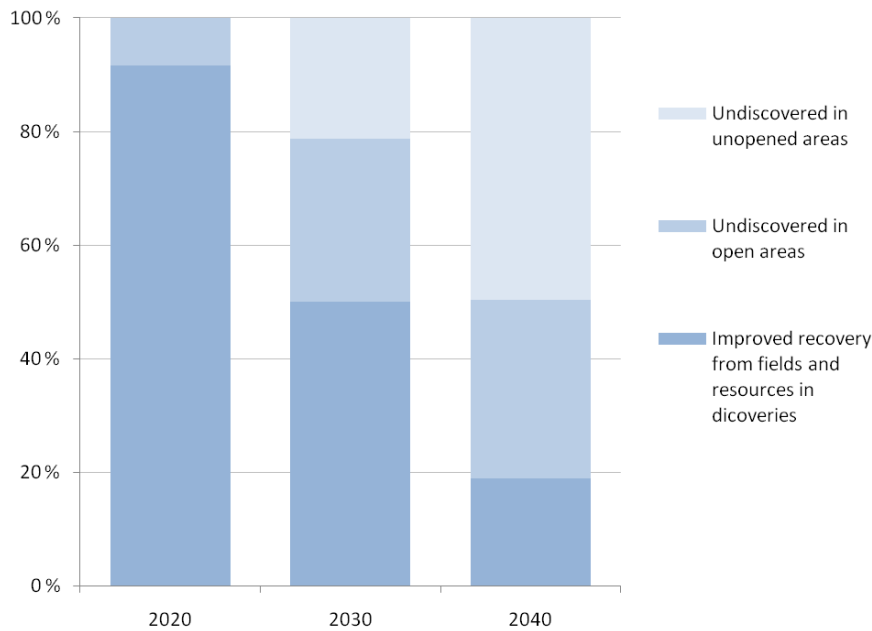


Figure 1.2 Percentage of production from various categories

Source: Norwegian Petroleum Directorate

The petroleum industry is an industry for the future. The plan for long-term management and value creation from the petroleum resources presented in this White Paper will facilitate the existence of the petroleum industry as a key activity in Norway for decades to come. The Government's petroleum policy is therefore based on a generational perspective.

A good example of this is the development of Ekofisk – the first field ever developed on the Norwegian shelf, which has been producing for 40 years. In the spring of 2011, the licensees submitted a new plan for further development of the area. Another NOK 65 billion will be invested in the fields in this region, under this plan alone. This will enable another 40 years of oil production from this very important part of the Norwegian shelf. Another example is the new oil discovery in the Barents Sea – Skrugard. Based on current knowledge, this discovery will set the stage for further development activity in the north, also after Goliat starts producing. The discovery marks the opening of a new oil province that can yield additional resource growth.

The Norwegian coastal and maritime areas are important to a number of commercial activities, such as the petroleum activities, fisheries, shipping and tourism. Increased activity and more users demand good coordination so that different industries can co-exist. A number of measures have been implemented to ensure the best possible coordination between the petroleum activity and the fisheries, and good interaction must remain in focus in the years to come. Therefore, the Government will continue to work to promote good coordination between the fisheries and the petroleum industry by restricting exploration and drilling activity based on knowledge obtained through comprehensive management plans. The resources and expertise of the fishery industry will also be applied in oil spill preparedness.

1.4 Measures

1.4.1 Recovering proven resources

Contributing to high value creation from fields and discoveries is an important task for both the Ministry and the NPD. Substantial parts of the available resources are devoted to this long-term work. Many more

fields in production, aging fields and infrastructure, cost developments, a wider player scenario and the large number of smaller discoveries made since 2000 have led to a change in these challenges.

In 2010, the Ministry appointed a panel of experts to study measures that could contribute to increased resource exploitation from existing fields. A number of the panel's suggestions relate to aspects dealing with the relationships between the players in the industry. The Ministry has assigned the task of evaluating these proposals to the industry itself, through KonKraft, and this work is well underway. This White Paper discusses the proposals made by the panel in relation to the authorities' framework conditions.

The Government will implement the following measures to increase recovery from proven resources:

- In connection with processing of new developments:
 - Introduce a practice whereby plans for development and operation (PDOs) are submitted earlier in projects with more rapid progress.
 - Ensure that installation of fixed rigs is considered by the licensees in connection with relevant new developments.
 - Contribute to coordination of developments and fields when this is the best solution from a resource management point of view.
 - Require evaluation of power from land as an energy solution for new fields and in connection with major modifications of existing fields, including an evaluation of relevant lifetime. Follow up to ensure that operators of new field developments in the petroleum sector apply for connection to the grid in cases where power from land is a relevant alternative. Statnett will facilitate future power consumption, e.g. major and specific increases in power consumption in the petroleum sector, if this is profitable from a socio-economic perspective.
- Amend the Petroleum Regulations so that licensees cannot lease production facilities from associated companies.
- Intensify the follow-up of late phase fields. Require new production plans for late phase fields, where this is deemed appropriate. Consider the need for additional reinforcement of the regulations to ensure adequate focus on increasing recovery and good resource management.
- Approve applications for further extension of licence periods for a production licence with the same ownership structure if the application substantiates better exploitation of the resources, unless special factors indicate otherwise. For some licences, special factors such as low state involvement and/or significant remaining reserves may indicate that the SDFI percentage should be increased, or that other terms should be renegotiated in connection with an extension of the production licence.
- Place greater emphasis on majority shares when determining voting rules when new production licences are awarded.
- Work to achieve a better flow of vessels involved in the petroleum activities in the North Atlantic, including appointing an expert group to illuminate and identify obstacles that lead to restrictions in the rig capacity on the Norwegian shelf, and propose measures that can improve the flow of vessels involved in drilling activities on the Norwegian shelf. The expert group must assume a

safety level at least equivalent to the current level. Encourage the licensees on the Norwegian shelf to establish rig cooperation schemes, where rigs are contracted on a long-term basis.

- Together with key players on the Norwegian shelf, work to achieve greater efforts towards piloting new technology. Consider establishment of a research centre in the field of improved recovery, based on an open competition.

Through more than 40 years of activity on the continental shelf, a number of facilities have been established and many pipelines have been laid for transport of gas and oil. Regulating the use of this infrastructure is an important part of good resource management. An important consideration is to ensure that the maximum profit from a development is extracted on the fields themselves – and that it does not fall to the infrastructure owners. To achieve this objective, the Government will:

- Regulate access to and tariffs in the gas transport system to ensure equal access to the system for any party with gas transport needs.
- Establish an expert panel to resolve disputes in individual cases where there is disagreement concerning access to the transport system.
- Strengthen the existing Gassled user forum to ensure that the users' viewpoints are heard as regards how the system is developed and operated.
- Amend the regulation relating to third party use of facilities with the objective of more efficient use of resources and that maximum profit is extracted on the new fields.

Measures to contribute to spin-off effects are described in Section 1.4.5.

1.4.2 Find more in open areas

The objective of our exploration policy is to make the new discoveries necessary to ensure a steady level of activity, the highest possible value creation and state revenues over the medium and long-term perspective. This can best be achieved through an efficient and timely exploration of the Norwegian shelf. Areas of the Norwegian shelf opened for petroleum activity include large parts of the North Sea, the Norwegian Sea and the southern part of the Barents Sea. Significant volumes of undiscovered resources are still expected in the opened areas, which can provide a basis for activity for many years to come. Activity has already been underway for many years in large sections of the Norwegian shelf. These areas are characterised by known geology and well-developed infrastructure, and are referred to as mature areas.

Other parts of the shelf are characterised by less knowledge about the geology, greater technical challenges and a lack of infrastructure. Such areas are called frontier areas. Two equally stashed licensing round processes have been established to achieve expedient exploration of both mature and frontier areas: the awards in predefined areas (APA) for mature areas and the numbered licensing rounds for frontier areas.

To ensure efficient exploration and development of discoveries, changes were made in the petroleum policy ten years ago to bring in players with strong focus on the more mature areas of the Norwegian shelf. Today's player scenario is well-balanced, and consists of companies that focus on new, large and more financially risky projects alongside companies that focus on smaller projects with lower economic risk.

The Government wants to maintain exploration activity and will award production licences in mature and frontier areas so as to curb the decline in petroleum production. The following framework will be established for exploration policy in the years to come:

- In areas with an established management plan, apply the environmental and fishery conditions from the relevant management plan to new production licences. No additional environmental or fishery requirements will be stipulated for petroleum activities in the area.
- Within the framework of the management plans, use professional petroleum assessments as a basis for determining which areas will be part of the APA area, and which areas are announced through the numbered licensing rounds.
- Carry out the APA scheme as an annual licensing round for all mature areas on the Norwegian shelf to contribute to maintaining activity and production.
- Carry out numbered licensing rounds on the Norwegian shelf, usually every other year, as a contribution to maintaining activity and production.
- Introduce a public consultation process in connection with APA rounds. For areas with management plans, only input relating to significant new information after adoption of the relevant management plan will be solicited.
- Carry out a public consultation process in connection with announcement of acreage in numbered licensing rounds. For areas with management plans, only input relating to significant new information after adoption of the relevant management plan will be solicited.
- Publish the work programs from and including the 21st licensing round and in APA licences to ensure transparency in the petroleum activities and equal treatment in the licensing rounds.
- Facilitate the establishment of competent new companies on the Norwegian shelf, including actively seeking out interesting oil companies to inform them about business opportunities on the Norwegian shelf.
- Prevent idle licences by following up the activity in mature areas and using the area fee to achieve good area management.

1.4.3 Management of unopened areas

Over the past 40 years, the Norwegian continental shelf has been mapped in a step-by-step exploration process. This means that we currently possess the best knowledge about the geology in the opened areas, but also that the opportunity of making major new discoveries is greatest in the less-explored sections of the Norwegian shelf. The last time a new area was opened for petroleum activity was in 1994. The last major discovery on the Norwegian shelf so far, Ormen Lange, was made in this area in 1997.

In the numbered licensing rounds conducted today, all of the acreage has been available for nomination by interested companies in several rounds. The most attractive parts of this area are, in part, already thoroughly explored. Opening new areas is necessary in order to make significant new discoveries and to maintain significant petroleum production, value creation, investment, employment and state revenues in the years after 2020. Therefore, the Government will:

- Conduct an opening process in the sea area around Jan Mayen, including environmental and resource mapping, acquisition of seismic data and shallow drilling. Safeguard Norwegian interests in the cooperation area with Iceland.

- Carry out knowledge acquisition regarding the effects of petroleum activity in the unopened parts of Nordland IV, V, VI, VII and Troms II. The knowledge acquired will be used in a potential impact assessment for the petroleum activity, and used as a basis for the next revision of the management plan. Enhance knowledge about the petroleum resources in the unopened parts of Nordland IV and V through seismic surveys and other geological data acquisitions under the direction of the Norwegian Petroleum Directorate and in dialogue with the fishery industry and fishery authorities. Release data sets with relevant seismic data from Nordland VI, VII and Troms II for sale.
- When the agreement with Russia on maritime boundaries and cooperation in the Barents Sea and the Arctic Ocean enters into effect, initiate an impact assessment under the Petroleum Act with a view towards awarding production licences and data acquisition in the previously disputed area west of the demarcation line in the Barents Sea South.
- Facilitate new petroleum activity in the area from 35 – 50 km from the baseline along the coast from Troms II to the border with Russia and in Eggakanten by including these areas in future licensing rounds.
- Consider the future need for new knowledge about petroleum resources in Skagerrak.

1.4.4 Employment, spin-off effects and research

An important pillar of Norwegian petroleum policy is to exploit the petroleum industry's expertise in order to achieve the highest possible value creation and ensure a qualitatively better society. The resource input on the Norwegian shelf is extremely high, and this will likely continue in the next few years. The activity level in the petroleum activity over time depends on how much of the remaining resources are exploited. A commitment to existing fields, to new, profitable field developments and exploration will provide a basis for a high and stable activity level in the future as well. In a time perspective beyond 2020, access to new exploration acreage will be essential to maintaining the activity level.

New discoveries provide a basis for new developments and associated spin-off effects. The greatest potential for making major new discoveries is in the sea areas outside Northern Norway. Through expanded activity in opened areas and through mapping and opening of new acreage, we will facilitate new activity and spin-off effects in the north. The Snøhvit, Goliat and Skarv developments illustrate that the petroleum activities provide significant value creation and employment, both locally and regionally.

Through profitable exploitation of the resource potential on the Norwegian shelf, the oil and gas industry will also lay the foundation for considerable activity in the mainland economy for decades to come, with associated jobs and positive ripple effects in large parts of the country. Exploiting the resource potential will contribute to research activity and building expertise. Research and development are important for achieving improved resource recovery, and for ensuring the industry's international competitiveness. The industry is, and must be, a driving force in research and development. The authorities play an important role as facilitator, and public funds are needed in certain key areas where the industry's efforts fall short.

In order to maintain an effective petroleum industry in Norway over time, the Government will facilitate profitable production of oil and gas in a long-term perspective. The Government will also:

- Work to reinforce the oil and gas industry's international market access, and to ensure that the industry can compete on equal terms with its competitors. Together with INTSOK, contribute to

Norwegian-based enterprises winning assignments and contracts, also outside the Norwegian shelf.

- Conduct an active dialogue with Russia on energy issues. Facilitate partnerships between Russian and Norwegian companies, including through INTSOK and Innovation Norway. Stimulate increased cooperation with Russia as a result of the agreement on maritime boundaries and cooperation in the Barents Sea and the Arctic Sea.
- Facilitate increased industrial application of gas in Norway, including contributing to an industrial arena as a meeting place for industrial players and oil companies.
- Ensure good terms for petroleum research.
 - Prioritise research in improved recovery from existing fields on the Norwegian shelf, including considering establishment of a research centre for improved recovery.
 - Consider establishing a research centre to address challenges faced by the petroleum industry in arctic regions.
 - Continue the work to qualify and test new technology.
- Contribute to strengthen recruiting to science and technology subjects in schools and higher education to ensure access to qualified labour for the petroleum sector.

1.4.5 Opportunities in the north

The High North is the Government's most important strategic commitment area in foreign policy. The Government wants to contribute to positive development in the northernmost areas. The prime objective of the Government's policy is to ensure peace and stability in the region. Another objective is to ensure sustainable and environmentally responsible exploitation of resources for the future. As part of this effort, the Ministry will consider establishing a research centre addressing the challenges the petroleum industry faces in arctic areas.

The Government wants, and intends to facilitate, a situation where profitable offshore activity also provides spin-off effects on the mainland. The Ministry will gradually increase capacity at the NPD's office in Harstad from the current situation in May 2011. This will take place in step with the general growth in the industry. New discoveries provide the basis for new developments and associated possible spin-off effects. The sea areas outside Northern Norway are the most interesting in terms of making large new discoveries. These areas have figured prominently in the most recent numbered licensing rounds.

Business and industry in Northern Norway must have the opportunity to participate as competitive suppliers to the petroleum activity in the region. Although the starting point for Northern Norwegian petroleum activity is quite different from the situation in the North Sea 40 years ago, the same fundamental drivers for development are in place.

The Government will facilitate additional new discoveries off the coast of Northern Norway by pursuing an active licensing policy. The Government will include the area from 35 – 50 km from the baseline along the coast from Troms II to the Russian border and Eggakanten in future licensing rounds. Furthermore, the Government will initiate impact assessments and data acquisition in the previously disputed area west of the demarcation line in the Barents Sea South when the agreement with Russia takes effect. The Government will carry out acquisition of knowledge in the northeastern Norwegian Sea.

One of the Government's objectives is for the development of new discoveries to create the greatest possible values for society, which can also form the basis for profitable local and regional spin-off effects. This applies to discoveries on the entire shelf. The key precondition for achieving spin-off effects is further development of profitable activity. When developing discoveries, identifying socio-economically sound development and operations solutions is important. Experience from developments such as Skarv, Ormen Lange, Snøhvit and Goliat shows that major new developments yield significant local and regional spin-off effects, regardless of development solution. The dialogue and interaction between local and regional authorities and business and industry are important when drawing up plans for development and operation. The guidelines for preparing development plans (PDO/PIO guide) state the authorities' expectations for developments in terms of local and regional spin-off effects.

The Government will pursue the following policy in connection with new developments:

- Ensure that new discoveries create maximum values for the society, and facilitate positive local and regional spin-off effects.
- Ensure early contact between operator and local/regional business and industry, and relevant authorities.
- Set demands requiring study of socio-economic factors in connection with plans for development and operation, including regional and local spin-off effects.
- Facilitate qualification of relevant local/regional suppliers in the development and operations phase.
- Facilitate establishment of tender processes in connection with new developments that allow participation by companies in the region where the development will take place.
- Ensure an efficient base and operations structure, which also contributes to local and regional business and expertise development.
- Operators of new independent developments must conduct an analysis of regional and local spin-off effects of the development within two years after the field comes on stream.

1.4.6 Revenues to the state

The resources on the Norwegian shelf belong to the greater community and are a significant contribution in financing the welfare society. The additional profit in the industry is the main reason that the State takes a significant percentage of the income from the petroleum activities on the Norwegian shelf through taxes, fees and the SDFI scheme.

Petoro manages the SDFI interests on behalf of the Norwegian state. As part of the State's joint ownership strategy, Statoil ASA handles marketing of the State's petroleum together with the company's own resources. The Ministry has defined the following main tasks for Petoro:

- Safeguarding the State's direct participating interest in those partnerships where the State participates at any given time.
- Monitoring Statoil's marketing of the petroleum produced from the State's direct participating interests, in line with Statoil's marketing instructions.
- Financial management, including keeping accounts, for the State's direct financial interests.

The Government will pursue the following policy for the State's Direct Financial Interest:

- Ensure maximum value creation through efficient management of the SDFI portfolio.
- Reinforce Petoro's expertise in the follow-up of mature fields.
- Retain participating interests in new production licences awarded.

1.4.7 The external environment, emergency preparedness and safety

Since the very beginning, considerations for other industries and safeguarding the external environment have formed an integral part in the management of the petroleum activities. Over a period of 40 years, an extensive policy instrument scheme has been developed to safeguard the interests of other industries and the external environment throughout all phases of the activities – from the opening of new areas, via the award of licences, exploration, development and operation and up to cessation of a field. As a result, the Norwegian shelf is a world leader when it comes to safeguarding these considerations in offshore petroleum activity. The Government will further develop stringent requirements for safety and protection of the external environment, also for late-phase fields.



Figure 1.3 Oceanic Vega, representing a new generation of Norwegian-built seismic vessels.

Source: Eidesvik

The responsibility for managing the petroleum sector is shared between several ministries and directorates. The Ministry of Labour is responsible for health, working environment and safety. These factors will be assessed in more detail in an upcoming Storting white paper on working environment, working conditions and safety in Norwegian working life. The Ministry of Fisheries and Coastal Affairs is responsible for the State's preparedness for acute pollution, and for coordinating private, municipal and State players in a national preparedness system. The Ministry of the Environment and the Norwegian Climate and Pollution Agency are responsible for regulating emissions to air and discharges to sea through emission/discharge permits, as well as for stipulating requirements for emergency preparedness

against acute pollution in the petroleum activities. In an upcoming White Paper on Norwegian climate policy, the Ministry of the Environment will present a broad review of the status and objectives of this policy. The main focus of this Petroleum White Paper is on the Ministry of Petroleum and Energy's area of responsibility.