



**The views of the International Association of Oil and Gas Producers (OGP) on
the European Commission's**

**GREEN PAPER
Towards a future Maritime Policy for the Union: A European vision for the
oceans and seas**

May 2007

PREFACE

*I must go down to the seas again, for the call of the running tide
Is a wild call and a clear call that may not be denied;*¹

OGP welcomes the opportunity to present its views on the Maritime Policy Green Paper.

OGP² is the unique body that represents before the EU institutions companies and associations engaged in the exploration and production of oil and natural gas in Europe. It participates in the Berlin Fossil Fuels Forum as well as the Madrid European Gas Regulator Forum and it is the prime interlocutor for energy policy, environmental and other issues related to this industry.

OGP Europe and its Brussels office are part of the International Association of Oil and Gas Producers whose membership spans the globe and accounts for more than half of the world's oil output and about one third of global gas production. From our London office, we foster cooperation in the area of health, safety and the environment, operations and engineering, and represent the industry before international organisations, such as the UN, IMO and the World Bank, as well as regional seas conventions, such as OSPAR, where we have observer status.

We have included some basic data on the oil and gas industry in the Annex to this document.

With more than 80% of European oil and gas production taking place offshore, OGP and its member companies clearly have a great interest in the Maritime Policy Green Paper. Despite an impressive and successful track record and a promising future the public is largely unaware of the fact that Europe is the 4th largest oil and gas producer in the world and of the significant contribution the industry is making to the European economy and society. We welcome the European Commission's effort in addressing

¹ Taken from *Sea Fever* by John Masfield.

² <http://www.ogp.org.uk/>

this and other issues in the debate on a Maritime Policy, and aim for the offshore oil and gas industry in Europe being recognised as:

- A wealth creating industry with an important future, making a notable contribution to EU energy supply;
- Environmentally responsible;
- Good neighbours next to other maritime sectors.

A future Maritime Policy for the EU needs to be consistent with the Commission's Strategic EU Energy Review (SEER) and be integrated in the discussion on "An Energy Policy for Europe". Oil and gas must be part of both. Whilst the Maritime Policy will focus on Europe, a coherent Energy Policy for Europe would be one that aims to stimulate investment, both in Europe and globally, to meet the requirements of a secure, sustainable and competitive energy market. The industry will invest in new reserves and responsible production provided access to potential acreage is ensured and business conditions are favourable. OGP would welcome EU support in creating such an environment inside and outside Europe. To seize the full potential of Europe's offshore oil and gas resources, a consistent, well-developed, and value-adding Maritime Policy should:

- Promote continued access to oil and gas resources;
- Encourage economically and environmentally viable legislation for operations;
- Avoid duplicating legislation;
- Ensure the co-ordination of EU policies affecting our industries.

Finally OGP wishes to acknowledge the special style of the Green Paper with its references to works of Shakespeare and Baudelaire. In our response we have therefore included references to the works of artists from a number of countries that produce offshore oil and gas.

For further information please contact:

Diederik Peereboom at OGP
Bd du Souverain 165
1160 Brussels
Tel: +32 2 566 9155
Email: Diederik.Peereboom@ogp.be

The OGP response is structured according to a number of the questions the European Commission has put forward in the Green Paper. For greater convenience, we have indicated the titles of the sections in the Green Paper as well as the questions relevant to OGP. In our response we have attempted to provide both some background on the nature of our industry as well as some suggestions for possible future EU initiatives.

1. INTRODUCTION

Should the EU have an integrated maritime policy?

We have closely followed the debate since the publication of the Green Paper and notice that the European Commission is particularly interested in the views of stakeholders on the question *What maritime policy for the EU?* In our view - policies - whether international, EU, national, regional or local - should add value to the respective challenge that each is designed to address (e.g. improve the marine environment; improve safety; improve competitiveness). Consequently OGP would welcome an EU Maritime Policy that is based on the consistent application of the following six principles:

- **Value added:** It should be based on sound evidence that an EU Maritime Policy will indeed 'add value' towards its stated aim of developing a thriving maritime economy, in an environmentally sustainable manner;
- **Cost-benefit analysis:** It should be based on a thorough cost-benefit analysis across all environmental, social and economic considerations;
- **Consistency:** It should be consistent with improving the existing framework of policies, initiatives and regulations (including *inter alia* security of energy supply, climate change, growth and jobs) thus avoiding duplication, contradiction and unintended consequences;
- **Risk-based:** It should be risk-based and focused on the reduction/elimination of 'harm' or 'unacceptable risk' i.e. addressing the most pressing threats in priority order of severity/urgency;
- **Subsidiarity:** Decisions should be taken at the appropriate level of government;
- **Stakeholder consultation:** All relevant stakeholders should be given the opportunity to contribute to the development and elaboration of an EU Maritime Policy.

The EU Maritime Policy should work to ensure these principles are consistently applied across all policies affecting the maritime sectors.

2. RETAINING EUROPE'S LEADERSHIP IN SUSTAINABLE MARITIME DEVELOPMENT

2.1. A Competitive Maritime Industry

How can the European offshore oil and gas sector remain competitive?

The track record of the industry to ensure continuous provision of oil and gas, within and to the EU, is impressive. Our ability to maintain these supply standards, in terms of investment and technology, is assured if the framework conditions are right.

Ensuring that consumers have ready access to oil and gas products in an attractive market at all times remains the core objective for our industry.

European resources are essential for the future EU energy balance. When indigenous production of oil and gas is considered, it is important to take an European Economic Area (EEA) view that includes Norway. Current production from EU/EEA is the 4th largest in the world but the North Sea is becoming a mature and high cost basin.³ In addition to the North Sea the Adriatic, the Black Sea and the Mediterranean have offshore production, too. Despite the growing maturity of its fields, the offshore oil and gas sector continues to have an important future. Potential resources here are equivalent to up to 100 billion barrels of oil.⁴ This corresponds to more than 27 years' supply at current production rates. Gas prevails over oil and its production is predicted to be 1.9 billion barrels of oil equivalent (or 295 billion cubic metres) in 2010 and 1.5 billion barrels of oil equivalent (or 230 billion cubic metres) in 2030.⁵ Ensuring that the considerable remaining potential is fully exploited requires an enduringly competitive regulatory regime. Policy-makers should ensure that the regulatory framework both at EU and at national level is such that access to resources is provided - subject to appropriate environmental impact assessments - and investment is encouraged through a stable fiscal regime and cost-effective requirements for operations.

What mechanisms should be in place to ensure that new maritime development is sustainable?

In the development of new oil and gas resources the offshore oil and gas industry - one of the most regulated industries – has to comply with laws and regulations stemming from international, regional and national regimes. The London Convention and its Protocol are global instruments that regulate the disposal of material at sea. The European seas are governed by a number of regional agreements, many of which have been in place for more than 30 years. Of particular relevance to offshore oil and gas exploration and production are currently the OSPAR Convention on the protection of the Northeast Atlantic and the Barcelona Convention on the protection of the Mediterranean Sea.

The regional seas conventions set challenging regulations, amongst other things for the use and discharge of offshore chemicals, discharges of formation water extracted together with the hydrocarbons, and use and discharge of drilling fluids and cuttings. They also set strict rules for the use and discharge of production chemicals, which are enforced by the five North Sea countries with offshore oil and gas production⁶ and Italy. Moreover, the regional seas conventions provide ambitious short- and medium-term objectives as well as long-term strategies for the oil and gas industry. This way, the current laws and regulations ensure that new offshore oil and gas developments are carried out in an environmentally sustainable way.

³ See Annex

⁴ IEA World Energy Outlook 2006

⁵ Ibid.

⁶ Denmark, Germany, the Netherlands, Norway, the United Kingdom.

Moreover an international consortium of oil and gas companies has embarked on a major research effort in the form of the E&P Sound and Marine Life Programme⁷ with an annual budget of approximately EUR 6 million. Over the next three to five years, this programme will characterise the sound fields emanating from different industry activities, measure and model the propagation of these sounds in differing marine environments, describe and measure any effects this sound may have on marine animals, and develop, assess and improve mitigation measures. Far from being a uniquely oil industry effort, the programme is actively seeking partnerships with all entities worldwide that have common interests in its research topics.

The economic sustainability of both existing and new offshore oil and gas projects depends *inter alia* on a fair and stable tax regime and the regulatory environment. The oil and gas industry typically makes large investments in projects that can have a long life-span. Before making such important investment decisions, companies assess the relative attractiveness of one region to another; not only on the expected level of production but also on the long-term stability and predictability of the fiscal and regulatory regime. In other words, there is competition between different regions in the world for investment in oil and gas projects. A European policy aimed at seizing the full potential of its energy resources should ensure that the regulatory framework at national, regional (e.g. the well-functioning OSPAR system), and EU level is such that access to resources is provided - subject to appropriate environmental impact assessments - and investment is encouraged through cost-effective requirements for operations.

2.2. The Importance of the Marine Environment for the Sustainable Use of our Marine Resources

How can a maritime policy further the aims of the Marine Thematic Strategy?

The Maritime Policy may be able to complement, and assist in the development of, the aims of the Marine Strategy. While the Marine Strategy is the 'environmental pillar' of the Maritime Policy, the respective timetables of the two policies appear, at the time of writing, not to be synchronous. The Marine Strategy Directive looks likely to pass into law before the Maritime Policy leads to first concrete proposals. If the timetable of the Maritime Policy were aligned with the implementation plan of the Marine Strategy Directive, this would ensure consistency in an EU approach.

However, in the legislative phase of the Marine Strategy Directive (ongoing at the time of writing – April 2007) this is not the case. OGP supports the aim of the Marine Thematic Strategy to "protect and restore Europe's oceans and seas and ensure that human activities are carried out in a sustainable manner." We support in particular the recognition of the expert, well-established regional seas conventions, such as OSPAR, HELCOM, and the Barcelona Conventions as the appropriate mechanisms for the planning and execution of measures under an EU Marine Strategy 'framework'. This would provide the necessary cohesion across EU Member States whilst recognising the specific circumstances of the respective and varied 'ecosystems' in, *inter alia*, the North Sea / North-East Atlantic, Baltic Sea, and the

⁷ <http://www.soundandmarinelife.org/>

Mediterranean. This clearly means, for example, that ‘sectoral’ targets should not be part of the Marine Strategy Directive itself. The definition of “Good Environmental Status” should lay out exactly what the European Commission has proposed, namely “generic qualitative descriptors, detailed criteria and standards for recognition.” We believe that to ensure consistency it is paramount that the recognised regional seas conventions continue to decide whether, and, if so, which sectoral targets are appropriate.

2.3. Remaining at the Cutting Edge of Knowledge and Technology

*De Zee, de Zee klotst voort in eindelooze deining,
De Zee, waarin mijn Ziel zich-zelf weerspiegeld ziet,
De Zee is als mijn Ziel, in wezen en verschijning,
Zij is een levend Schoon en kent zichzelf niet.⁸*

How can a European Marine Related Research Strategy be developed to further deepen our knowledge and promote new technologies?

Continuous research and development by industry, often with universities and other research organisations, has enabled the industry to meet increasing technical challenges and rising demand for oil and gas. One of the key challenges that OGP members will continue to address is developing improved technologies to find and produce oil and gas as efficiently as possible, with a minimum of discharges and emissions, whilst also developing ways to use fossil fuels more intelligently through decarbonisation and CO₂ management. Future business opportunities will be found for companies within the areas of mature fields by significantly increasing recovery rates, by developing deep and ultra deep water resources, tight natural gas and other non-conventional reservoirs, and by exploring the technological and economic potential of hydrogen as an energy carrier. For European industry to maintain a competitive edge, investments in hydrocarbon R&D will continue to be needed. Oil and gas technology “made in Europe” is literally fuelling the economic and social development of Europe, whilst also providing the raw materials and feedstock to associated industries, such as petrochemicals and pharmaceuticals. In light of current concerns over climate change, OGP members welcome the consideration of climate-friendly fossil fuel technology research for the 7th Framework Programme. The Programme should benefit academic research, thereby attracting young people to sciences and engineering, which is a major challenge today. We also look forward to the development and implementation of the European Strategic Energy Technology Plan.

⁸ Taken from *Van de Zee* by Willem Kloos.

Unofficial translation from Dutch:

The Sea's

The Sea, the Sea sloshes in an endless swell,
The Sea, in which my Soul sees its own reflection,
The Sea is like my Soul, in being and appearance,
She is a living Beauty and does not know herself.

In what ways should stakeholders be involved?

OGP attaches great importance to stakeholder consultation and values the opportunity provided by the European Commission to make its views known. The ongoing consultation process has been commendable. We hope the European Commission will maintain this level of openness.

2.4. Innovation under Changing Circumstances

What further steps should the EU take to mitigate and adapt to climate change in the marine environment?

Mitigating climate change can only be tackled effectively in a worldwide effort with the participation of all major emitters. OGP welcomes the EU leadership in securing global support. As lead times in oil and gas production are up to 15-20 years and up to 10 years for large CO₂ reduction projects, long-term clarity about the post-2012 regime is vital. The same long-term perspective is necessary for the EU emissions trading scheme in order to improve effectiveness.

One of the new technologies that can and, in fact, is already being developed is carbon dioxide capture and storage (CCS), which the European Commission mentions in the Green Paper. OGP members believe that a portfolio of options is needed to manage the risk of global climate change. Carbon dioxide capture and geological storage is an important option that can result in large reductions in emissions of carbon dioxide. Research is ongoing and will have to continue to gain an ever better understanding of the behaviour of carbon dioxide in geological storage sites.

The European indigenous potential for geological storage of carbon dioxide is very large. Furthermore, carbon dioxide can partially be utilised for improved recovery of indigenous hydrocarbons. At this stage, however, CCS is not economically viable.

Apart from R&D and large-scale demonstration projects, there is a need for legal certainty for the private sector. This relates in particular to existing international, regional and national law, since carbon dioxide storage was not considered when such laws were adopted and compatibility is uncertain. Recently the parties to the London Protocol have agreed an amendment that will allow the storage of carbon dioxide in geological structures below the seabed. OGP welcomes this development and encourages the parties to the OSPAR Convention to follow the same road by modifying the convention in a similar way.

At the EU level, several OGP members have been participating in the Zero Emissions Power Plant Technology Platform. Recently the European Commission has announced its intention to come forward with a proposal for an EU regulatory framework for CCS in 2007. OGP looks forward to this and stands ready to assist the European Commission in the preparation of the proposal, which should lay down general rules on the basis of which Member States can permit individual projects. OGP member companies have experience both with the capture and storage of CO₂, and some companies are studying the feasibility of future power plants with CCS. In order to help overcome the current economic barriers for CCS projects, rules are

needed to ensure that the the storage of carbon dioxide is credited under the EU emissions trading scheme and the Clean Development Mechanism of the Kyoto Protocol. Close coordination with regulatory developments in other relevant fora, such as the UNFCCC, IPCC, London Protocol, and OSPAR Convention, is important.

2.5. Developing Europe's Maritime Skills and Expanding Sustainable Maritime Employment

*Si tu veux construire un bateau,
ne rassemble pas des hommes,
pour aller chercher du bois,
préparer des outils,
répartir les tâches,
alléger le travail,
mais enseigne aux gens
la nostalgie de l'infini de la mer.⁹*

How can the decline in the number of Europeans entering certain maritime professions be reversed and the safety and attractiveness of jobs ensured?

OGP is of the opinion that maintaining the oil and gas sector as an attractive employer is first and foremost the responsibility of the industry. Individual oil and gas companies employ a variety of means to raise the awareness of students, graduates, post-graduates and professionals about the attractiveness of a career in the industry. For example, by undertaking university visits, participating in job and career fairs, and offering trainee- and apprenticeships, companies can demonstrate that the oil industry combines adventure and technological achievements. Oil and gas companies offer employees competitive salary packages and a healthy and safe working environment. National governments, possibly encouraged by the European Commission, could play a role by encouraging students to study science subjects in schools and universities.

2.7. The Regulatory Framework

How could the regulatory framework for the maritime economy be improved to avoid unintended and contradictory impacts on maritime goals?

The consistent application of the six principles outlined in our answer to the first question would help to reduce the risk of the development of policies and legislation that may have unintended or contradictory effects. OGP would like to point out that, unlike other maritime sectors, the oil and gas sector operates both onshore and offshore. It is important that policies and regulations ensure coherence between offshore and onshore activities. In particular, before drafting new regulation its added value should be made clear. Furthermore, new policy should be consistent with existing policies and regulation at the level of the regional seas conventions, the EU and the Member States. New policy should at the same time allow decisions to be

⁹ Taken from *Terres des Hommes* by Antoine de Saint-Exupéry

taken at the appropriate level and respect the principle of subsidiarity. For the oil and gas industry this means *inter alia* that regulation should contribute to the stated EU objective of ensuring a secure supply of energy. Equally it means that no regulation is developed that could run counter to achieving this objective. Duplication or contradiction of environmental law and policies, e.g. through OSPAR and the Marine Strategy Directive, could unnecessarily increase the burden for industry. Active involvement of stakeholders can contribute to identifying potential inconsistencies, duplication, and unintended effects. OGP continues to be available for dialogue with policy-makers to assist in the development of quality regulation.

To what extent can economic incentives, self-regulation and corporate social responsibility complement government regulation?

The oil and gas industry has developed voluntary agreements with government, intra-sector voluntary agreements or codes of practice, and cooperative inter-industry voluntary agreements aimed at ensuring efficient operation and maintenance, improving performance, and eliminating unnecessary costs. These initiatives have proved to be effective in delivering results, thereby adding value and boosting the competitiveness of the offshore oil and gas cluster. This cluster is composed of operators, suppliers and contractors.

For several years, the offshore oil and gas industry has taken steps to develop and maintain good working relations with other users of the maritime environment. Such inter-industry cooperation has particularly focused on the fishing industry, which routinely collaborates with the oil and gas industry. The prime concern of the two sectors is to enhance the safety of fishermen and oil and gas workers at sea. To date, several initiatives involving the two industries have been implemented. To ensure that safety is maximised, one such scheme involves electronic data mapping of oil and gas related infrastructure, and subsequent dissemination of these data to fishing trawlers. This process provides an example of self regulation making statute regulation unnecessary. Another example is the collaboration of the offshore oil and gas and fishing industries in the implementation of fisheries compensation funds in the UK and Norway. These funds provide a means for skippers to obtain redress upon damage or loss incurred as a result of fishing gear being physically entangled upon ocean floor oil and gas related debris that is un-attributable to any one company.

Mutual collaboration and cooperation in addressing common issues between the two industries often lead to positive inter-industry business relations. In fact, the fishing industry regularly involves itself in offshore oil and gas operations by performing guard vessel duties and in the issuing of sea-bed certificates in conjunction with the government regulator. Both are valuable sources of additional income for fishing crews over the course of many years.

A second maritime partner with which the oil and gas industry works closely is the shipping sector. Industry regularly utilises supply vessels, standby vessels and laying-barges as an integral part of oil and gas operations. This requires close day-to-day working relations. The two industries cooperate at an international level *via* the production of common guidelines and best practice notes on operations management and other safety issues at sea; one example of such a body is the "Marine Safety

Forum". This provides oil and gas operators, shippers and regulators with a successful tool for cooperative self-regulation.

The safety of its operations is very important to the industry and there are continuing efforts to improve performance. Exchanging best practice and establishing industry guidelines play an important role. With its members operating around the world in many different terrains, OGP has access to a wealth of technical knowledge and experience. OGP collates and distils this valuable knowledge for the industry to use as guidelines for good practice by individual members. Our overall aim is to ensure a consistent approach to training, management and best practice throughout the world. Many of our guidelines have been recognised and used by international authorities and safety bodies.

Oil and gas companies continue to be active in developing voluntary arrangements, which have proven to be valuable in making substantial safety and operational improvements. One example is that the industry is currently looking into the possibility of standardising the safety requirements for crane drivers at offshore oil and gas operation in the North Sea. The industry goes beyond the requirements of international regulations if these are inadequate. This was the case with the SOLAS regulations for the design of life boats. It was discovered that many life boats on the Norwegian Continental Shelf were not fit for purpose, despite SOLAS compliance. This led to some platforms being closed while life boats were upgraded and other measures taken. The industry recommends to national authorities to modify the SOLAS regulations and would otherwise consider developing and validating its own standards.

4. PROVIDING THE TOOLS TO MANAGE OUR RELATIONS WITH THE OCEANS

4.1. Data at the Service of Multiple Activities

Intet er så rommelig som havet, intet så tålmodig. På sin brede rygg bærer det lik en elefant de små puslinger som bebor jorden; og i sitt store kjølige dyp eier det plass for all verdens jammer. Det er ikke sant at havet er troløst; for det har aldri lovet noe; uten krav, uten forpliktelse, fritt, rent og uforfalsket banker det store hjerte - det siste sunne i en syk verden.

Og mens puslinger stirrer utover, synger havet sine gamle sanger. Mange forstår det slett ikke, men aldri forstår to det på samme måte. For havet har et særskilt ord til hver især som stiller seg ansikt til ansikt med det.¹⁰

¹⁰ Taken from *Garmann og Worse* by Alexander Lange Kielland.

Unofficial translation from Norwegian:

Garmann and Worse

Nothing is as spacious as the ocean, nothing so patient. On its broad back it carries like an elephant all the weakling residents in the world; and in its big cool depth covering all the lamentation in the world. It is not true that the ocean is faithless; since it has never promised something; without requirements, without obligations, free, clean and genuine its big heart beats - the only healthy one in a sick world.

And while the weaklings stare across, the ocean sings its old songs. Many do not at all understand, but two will never have the same understanding. Because the ocean has a special word for each and one who gets face to face with it.

**On what lines should a European Atlas of the Seas be developed?
How can a European Marine Observatory and Data Network be set up,
maintained and financed on a sustainable basis?**

OGP encourages the European Commission to create a common network out of the many existing observatory and data networks.¹¹ On the basis of an assessment of available data, the European Commission in cooperation with the Member States and interested parties could identify information gaps and develop an action plan within the EU Research Framework Programme on how to fill these gaps.

Information about sea level, waves, currents, sea temperature, conductivity, air temperature, air pressure and wind is very important for the offshore oil and gas industry. Such metocean data provide the industry with the information and knowledge needed to design and engineer future offshore installations, such as production platforms and pipelines. The data also give greater insight into assessing workability conditions and a good way to plan diving operations and pipeline installations. In some cases, this information can even help forecast storms and heavy weather conditions that might require facility evacuations or other safety measures. For years, information gathered on offshore oil and gas facilities has been made available to scientists on an informal basis. Now the process has become official, with the recent launch of System of Industry Metocean data for the Offshore and Research Communities, SIMORC¹².

An initiative of OGP, SIMORC brings together a wide variety of metocean data and makes them available to the scientific community through a dedicated internet data service. Supported by the European Commission, SIMORC was officially inaugurated at OGP's London office in March 2007.

SIMORC data come from upstream operations the world over. Within Europe, SIMORC covers the North Sea, the Mediterranean, the Caspian, and the Norwegian Sea. Looking further afield, SIMORC also collects data from the North Western Atlantic Shelf, the Gulf of Mexico, offshore Brazil, the China Sea, and the waters of Australasia, the Middle East and West Africa.

¹¹ The Netherlands:

http://www.sodm.nl/index_eng.html

<http://dinoLks01.nitg.tno.nl/dinoLks/NLOGPortal.jsp>

http://www.tno.nl/bouw_en_ondergrond/markten/nitg_geological_survey/

United Kingdom:

<http://www.ukdeal.co.uk>

<http://www.ukho.gov.uk/>

<http://www.bgs.ac.uk/>

<http://www.offshore-sea.org.uk/site/>

Norway:

<http://www.olf.no>

<http://www.dnv.no>

<http://www.sft.no>

OSPAR:

<http://www.ospar.org>

¹² <http://www.simorc.com/>

SIMORC's web service consists of an index metadatabase and a database of actual data sets. Both are accessible via the internet. While the index metadatabase is in the public domain, access to and use of data sets is restricted to scientific users, oil and gas companies and other registered third parties. At the time of its launch, SIMORC already encompassed more than 600 data sets from several major oil and gas companies. This coverage is steadily increasing. SIMORC came about through collaboration between IOC-IODE (UNESCO), major ocean data management specialists MARIS (NL) and BODC (UK) and OGP, with co-funding by the European Commission, which will last until the end of 2007. Thereafter, MARIS and BODC will run SIMORC in an arrangement with OGP.

The offshore oil and gas industry also requires accurate data on the seabed for the construction and installation of offshore platforms and pipelines. This includes data on sea-bed topography, sub-sea-bed obstructions, sea-bed depth, geological sub-seabed profiles as well as sea-bed geotechnical conditions. For the mapping of the sea-bed in relation to offshore oil and gas operations, companies work together with surveying companies, universities and research institutes. In oil and gas producing countries such as the Netherlands, Norway and the United Kingdom these data are held by ministries, agencies and/or geological surveys.

Sea-bed data are available for the most interesting areas for oil and gas production. Depending on the country there are less data and information available for other areas. The United Kingdom Continental Shelf (UKCS), for example, has been mapped bathymetrically for the purposes of general navigation. In contrast, only a small proportion has been mapped for the purposes of habitat identification. There is, however, an ongoing EU-funded programme called "Mapping European Seabed Habitats ([MESH](#))", which aims to produce seabed habitat maps for Northwest Europe. Furthermore the UK Joint Nature Conservation Committee has recently completed [UKSeaMap](#), which provides a map of 'marine landscapes' on the UKCS. The Department of Trade and Industry is carrying out a systematic mapping exercise as part of the UK obligation under the Strategic Environmental Assessment Directive; for the seas around the UK there is a comprehensive set of data covering, *inter alia*, prehistoric and maritime archaeology, plankton ecology, benthos, cephalopods, distribution of fish, marine mammals, shellfish, seabirds, contaminant status and geology. In Norway, the [Mareano](#) programme, a multidisciplinary marine mapping and documentation programme, aims to provide the foundation for ecosystem based sustainable management of the Norwegian coastal and sea areas. The programme is intended to fill existing data gaps, starting off in the north of Norway and possibly covering the Norwegian Continental Shelf in the Norwegian Sea and the North Sea in the years to come.

Information on the seabed that is useful for the offshore oil and gas industry includes information on seabed morphology, chemistry and biology, seabed topography, seabed depth and geological sub-seabed profile as well as seabed geotechnical conditions. Moreover, as OSPAR and the EU move towards the establishment of Marine Protected Areas and Marine Special Areas of Conservation, habitat and biological data are needed.

In the framework of the Maritime Policy the European Commission may be able to network all available data in Europe on the European seas in order to provide a comprehensive overview. Such an overview would also highlight existing data and

information gaps. The Maritime Policy could lend financial support to the coordination of sea-related research activities and its subsequent dissemination through a European Data Network.

Should a comprehensive network of existing and future vessel tracking system be developed for the coastal waters of the EU?

*Naar jeg, O Gud paa Havet er
Og Bølge-ryggen gjennemskiær,
Da kand jeg mig erindre,
At i mig selv der er et Hav
Ræt ved min dybe Hierte-grav
Hvor sterke Storme tindre¹³*

The compilation of electronically mapped oil and gas infrastructure information and subsequent dissemination of these data to fishing trawlers are an important part of avoiding physical interference between fishing and oil and gas operations. A particular concern is that of the snagging hazard presented when fishing vessels trawl over areas of the sea-bed which contains oil and gas infrastructure, especially in deep water areas of the North Sea where infrastructure is often less protected than in shallow water areas. This infrastructure may include pipelines, wells (suspended prior to decommissioning) and decommissioned installations (oil and gas production wells which are no longer operational). To mitigate this hazard, fishing vessels in Denmark, the Netherlands, Norway and the United Kingdom are provided with detailed coordinates of all new activities and suspended wells. In the Netherlands suspended wells are either protected with a buoy or a protective dome, which can be over trawled.

In the United Kingdom these data are also used by a separate safety device, "Fishsafe", which is a stand-alone tamperproof alarm system, designed to warn fishermen when their vessel is in the proximity of an infrastructure hazard. The introduction of an updated version, Fishsafe II, that is intended to include data from other parts of the North Sea (outside the UKCS), is in an early stage of development. The initiative is held in high regard by the UK fishing industry. However, the information is often not used to its full potential by the fishing fleets of other EU member countries, which frequently trawl in UK waters. In the development of a future Maritime Policy the EU has the opportunity to build upon the success of the scheme in the UK sector by encouraging: i) the extension of the Fishsafe II safety device to other EU maritime regions in which interaction between fishing vessels and oil and gas infrastructure constitutes a hazard, and ii) increased use of the system by the fishing fleets of other EU Member States that trawl in these areas. In short, the

¹³ Taken from *Hierte-Suk* by Thomas Kingo (1634-1703).

Unofficial translation from Danish:

Heartfelt

When on the sea O God I sail
And plough the salt-waves' crest and dale
Then in my thoughts I may recall,
That in my own self lies a sea
In this heart's deeps of privacy
Where squalls make violent seas

promotion of this system and the extension of its use across the trawler fishing fleets of other EU Member States, where appropriate, would provide a valuable opportunity to enhance safety precautions in European waters, ultimately proving beneficial to both the fishing and offshore oil and gas industries. In addition to enhancing safety, such a system would also aid in avoiding potentially disruptive interference to offshore oil and gas operations. In the framework of the Maritime Policy, the European Commission may be able to assist in achieving more widespread implementation of this important project in those regions in which it is applicable.

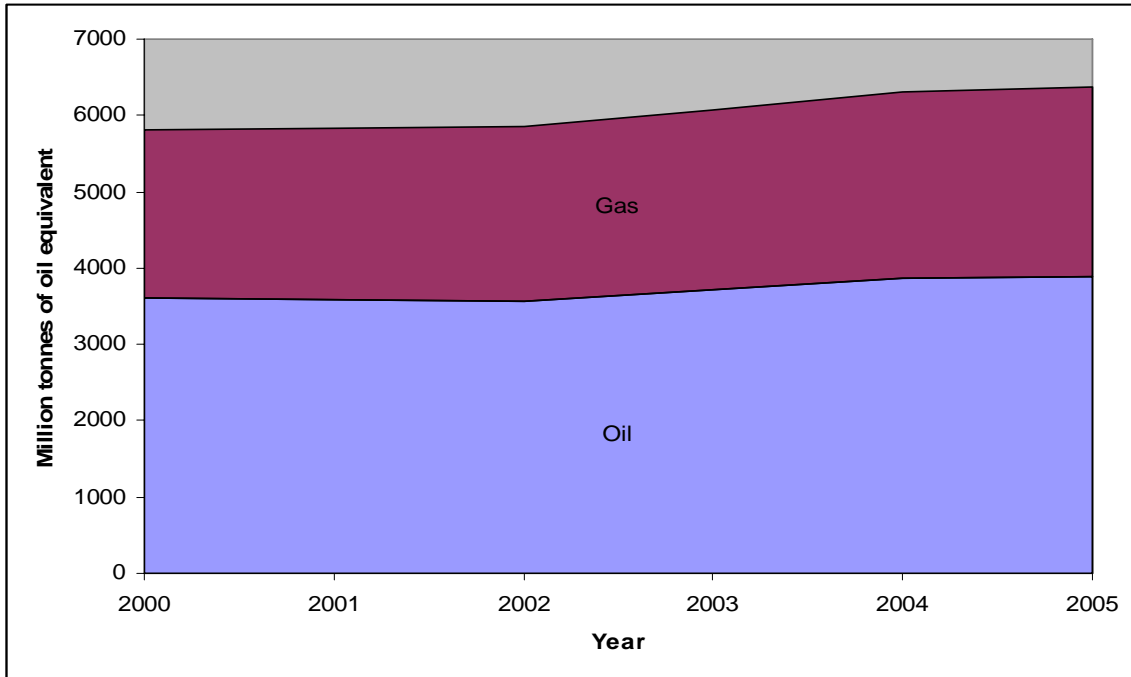
The International Maritime Organisation has introduced an Automatic Identification System (AIS), a safety tool to reduce the probability and impact of maritime incidents and accidents. The system has been mandatory since the beginning of 2005 for ships of 300 gross tonnage or more. Ships equipped with AIS transmit information about their identity, position, course, speed, ship particulars and cargo, which can be picked up by receiver stations. Currently most of the Dutch continental shelf is covered by receiver stations allowing Coastguard but also ships and oil and gas platforms to monitor nearby shipping traffic and call ships by their names when they appear to be on a collision course. During the past number of years, fishing vessels have regularly collided with oil and gas producing platforms, resulting in significant damage to both the fishing vessels and the platforms. As an early warning tool AIS has been valuable in helping to reduce collisions of fishing vessels with platforms, thereby enhancing safety at sea. It is encouraging that the European Commission has taken the initiative to make AIS mandatory also for fishing vessels with an overall length of 15 meters or more.

Norway has an advanced radar and warning system for sea traffic close to offshore installations. With 48 radars, 18 VHF stations (for communication) and 9 AIS base stations (for identifying vessels), the Norwegian Vessel Traffic System is the biggest in the world. The surveillance area covers approximately 80% of the Norwegian continental shelf where there are oil and gas operations.

The comprehensive networking of existing vessel tracking systems can contribute to preventing or limiting vessels colliding with oil and gas infrastructure, thereby enhancing the safety of all involved.

ANNEX
Basic Data on the Oil and Gas Industry

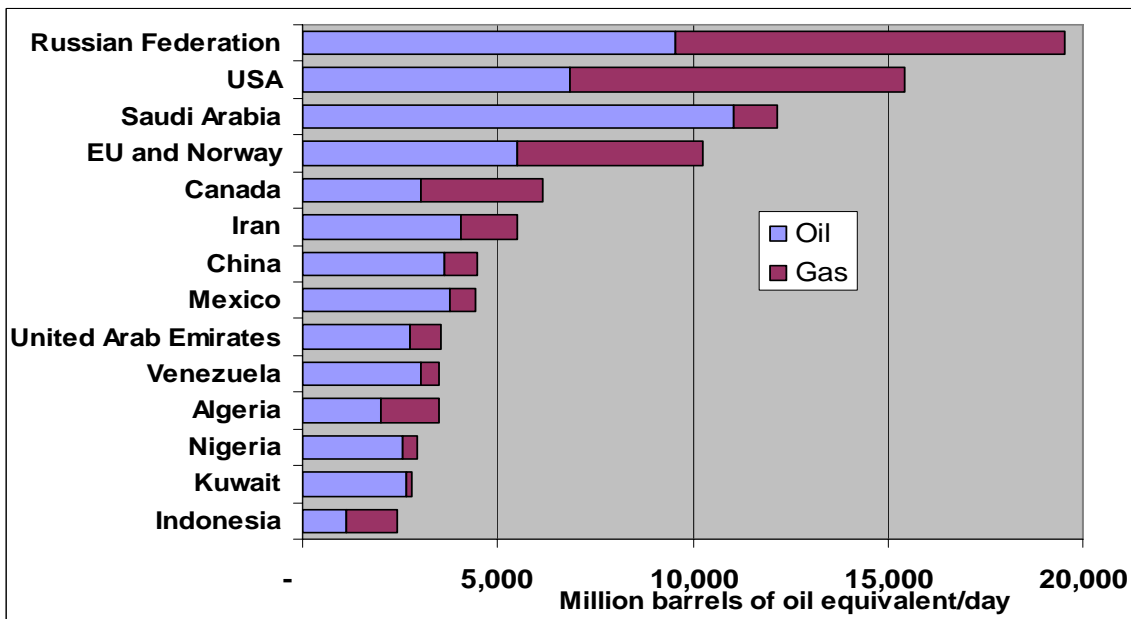
GLOBAL OIL AND GAS PRODUCTION 2000-2005



Source: BP Statistical Review 2006

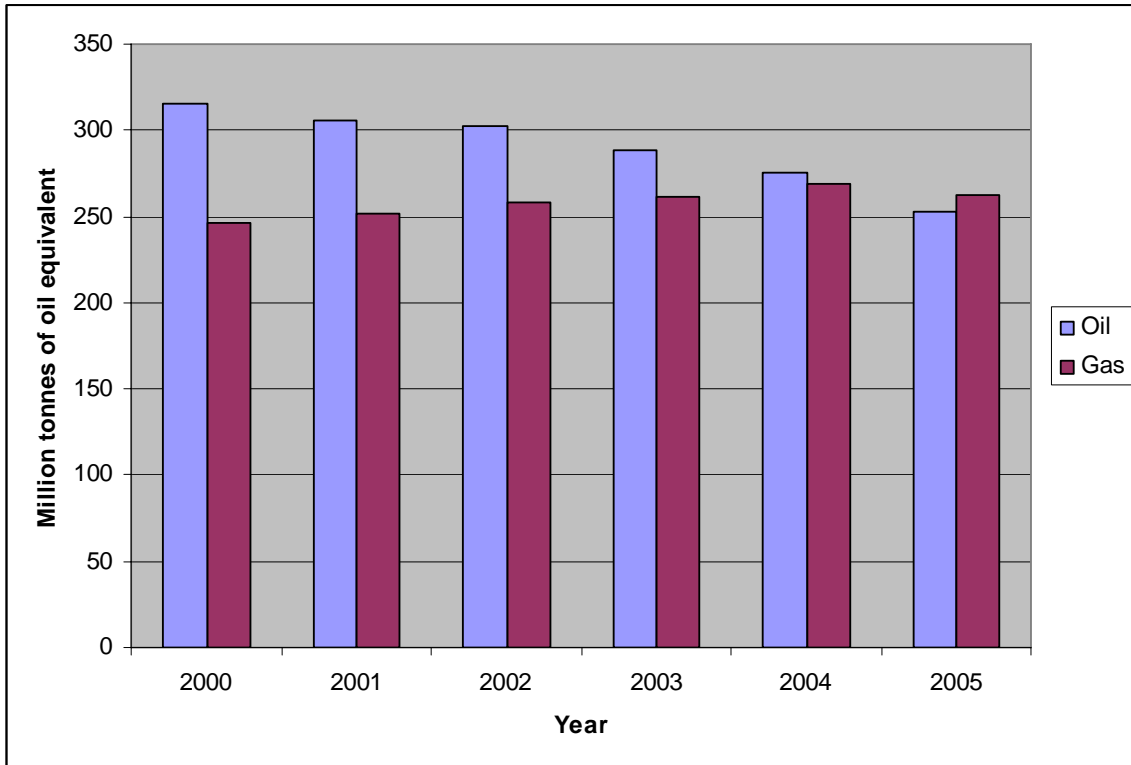
OGP member companies account for more than 50% of the world's oil output and about 30% of global gas production.

GLOBAL OIL AND GAS PRODUCTION BY REGION



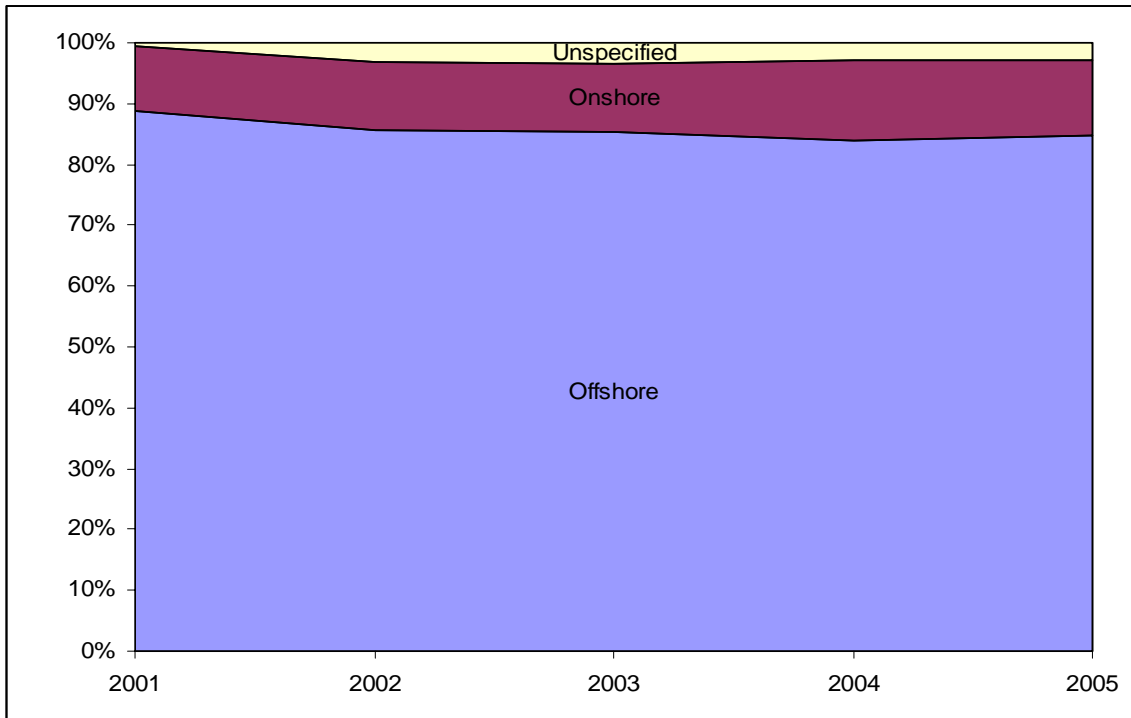
Source: BP Statistical Review 2006

TOTAL EUROPEAN OGP PRODUCTION 2000-2005



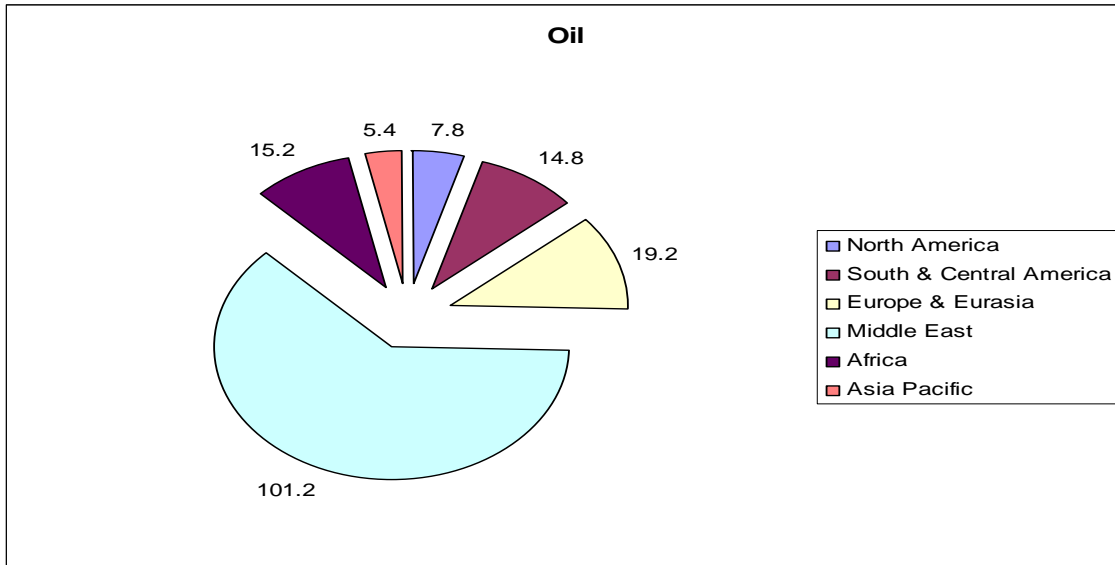
Source: OGP, 2006

TOTAL EUROPEAN OGP PRODUCTION – ONSHORE/OFFSHORE



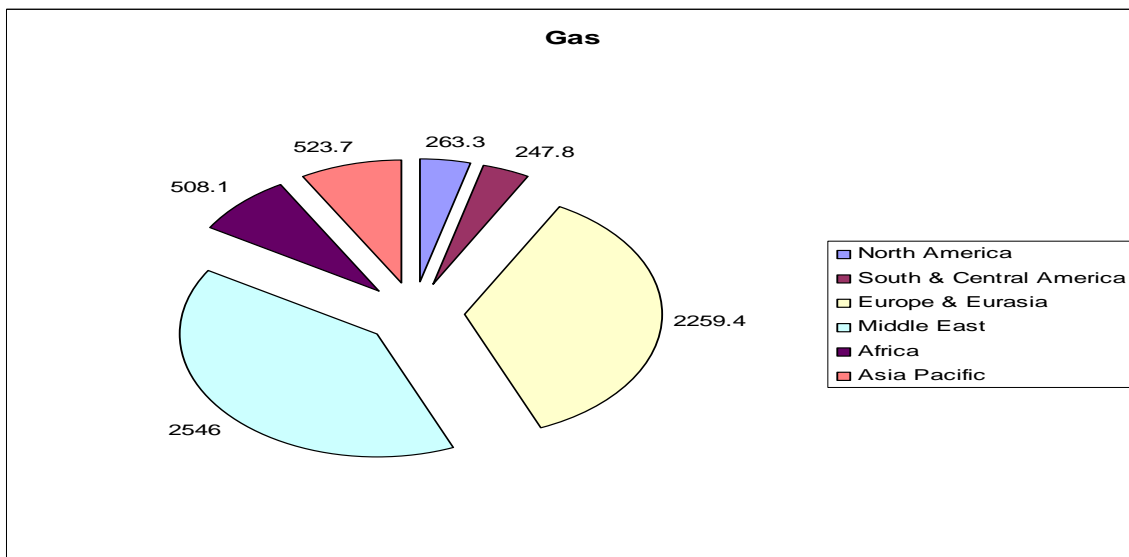
Source: OGP, 2006

Total Global Proven Reserves 2005



Numbers indicate thousand million tonnes.

Source: BP Statistical Review 2006



Numbers indicate trillion cubic metres.

Source: BP Statistical Review 2006

Employment

The oil and gas industry in Europe provides directly or indirectly about 1 million jobs.

Investment

OGP considers that the upstream industry has increased its investment levels: Since 1999, it has doubled from \$130 billion to \$260 billion in 2006 (today's \$ value). It is expected that \$200 billion annually are needed to meet demand until 2030 with continued investment of large sums in import infrastructure.