New Growth, Proud History

The Norwegian Government's Ocean Strategy
Norway is currently one of the world’s leading ocean economies. Our coastline is one of the longest in the world, and we control expanses of ocean more than six times larger than the area of our land. Every day hundreds of thousands of Norwegians go to work in the ocean industries, which together represent about 70 per cent of our export income. Norway is one of the world’s largest producers of oil and gas. We are one of the world’s largest and most advanced seafaring nations. We are the world’s second largest exporter of fish and seafood. In addition we have a world class service and supply industry. Norway is also at the forefront of marine research and responsible management of marine resources.

**Long and proud traditions**

For generations, our forefathers lived on the rich fish stocks along the Norwegian coast. The tools improved continuously, knowledge of the ocean kept growing. Since the time of the Hanseatic League, the bustling Lofoten fishery was vital to the rise of both Bergen and Trondheim as trade centres. Cargo traffic from Northern Norway to the south lasted for centuries, helping establish new industries and opportunities. Sailing improved in step with technological development. This created a bridge to the proud era of sailing ships in the 19th century, when Norway became the world’s third largest seafaring nation. We moved from sails to steam, and went on to become a modern ocean industry, which in turn formed the basis of the Norwegian oil boom. Today we see new bridges being built.

Petroleum technology is at the centre of the development of ocean-based aquaculture and ocean-based renewable energy.

Based on proud traditions we can say that Norway is currently one of the world’s leading ocean economies. Through the years, Norwegian men and women have refined this heritage, adapted the knowledge and further developed the technology of their time.

Together the traditional ocean industries represent the waves of technological change that have formed much of the basis for modern, technologically advanced Norway. Now it is our generation’s turn to pass the torch. Our goal is for Norway to be the top ocean-based economy. In order to reach this goal we must use our advantages and build on our existing knowledge and experience.

**The ocean as a source of growth for the entire coast**

There is much we don’t know about the future. What we do know is that the ocean will be an important contributor to future prosperity and growth. The OECD estimates that ocean-based industries could double their contribution to the global economy by 2030. At the same time the ocean is already under pressure as a result of climate change, overfishing and pollution.

Future growth in the ocean economy requires that we manage to harvest resources sustainably, and that we see the ocean holistically.
The Norwegian ocean industries are to be developed on the basis of existing industries, their interaction and where they intersect. We will continue developing the ocean industries where we have competitive advantages, while stimulating research, innovation and technological development in order to see new industries emerge. This will ensure Norway’s position as one of the world’s leading ocean economies. The focus on ocean industries is vital in order to maintain and develop strong local communities. The starting point is good. We have highly competent workers, businesses, clusters, and knowledge and research communities in the ocean industries along the entire coast.

In the three northernmost counties, the seafood industry holds a unique position. In Finnmark king crab is harvested and served in restaurants in New York and Tokyo only hours later. Marine research and technology development are strong: In Vesterålen in Nordland the company BioMar uses algae in its production of fish feed. In Tromsø we have a research community searching for valuable, biologically active components from maritime organisms through marine bioprospecting. These components can be used in anything from foodstuffs to pharmaceuticals.

The western counties Rogaland, Hordaland and Møre og Romsdal are particularly important to the ocean industries. Here the petroleum industry and the maritime industry represent a considerable percentage of employment and value creation. Some of the world’s most technologically advanced vessels are sailing under the Norwegian flag and are built and equipped at Norwegian shipyards, with equipment and technology from Norwegian suppliers. An example is the new Hurtigruten vessels to be built at Kleven shipyard in Ulsteinvik. The company Nordic Wildfish in Giske has equipped the trawler “Molnes” with hydrolysis technology in order to improve utilization of marine by-products from fishing.

In Central Norway, we find an outstanding research environment which has brought about the world’s first test area for autonomous vessels in collaboration with businesses and authorities. The maritime technology centre at Tyholt in Trondheim has helped place Norwegian industry at the forefront of ship building, shipping, offshore oil and gas, fisheries and aquaculture for generations.

Eastern Norway is also important to the ocean industries. Among other factors, many specialised service providers and financial institutions are established here. Oslo is the largest shipping exchange in Europe and the second largest in the world. Along the route Notodden – Kongsberg – Drammen – Oslo we also find Subsea Valley, with businesses developing and producing a wide range of subsea products and services.

Southern Norway also plays a central part as an important service provider for the petroleum and maritime industries. One example is the GCE NODE network there, with a number of businesses asserting themselves in their fields in the global market.
Exporting Norwegian ocean know-how

The ocean is about more than just creating jobs and further growth. The ocean will also be vital in meeting many of today’s major global challenges. By 2050, the world population is expected to surpass 9 billion. A rapidly growing population means increased demand for both food and energy.

At the same time global greenhouse gas emissions must be reduced considerably in order to avoid the major adverse effects of climate change. Sustainable fisheries and aquaculture will play an increasingly important role in global food safety and nutrition. During the next decades, oil and gas will be very important energy sources. However, the ocean as a source of renewable energy will also be important when facing climate challenges. Shipping is an energy efficient transport alternative for cargo, and in the future we can gain access to new natural resources such as minerals and metals from the sea bed.

One of the great challenges of the future will be to balance the need for increased production with the requirements for stronger protection of the ocean resource base. Norway must ensure sustainable ocean development in collaboration with other countries. A central ambition is to take on a leading international role in important ocean matters, as Norway has a strong interest in securing a healthy and productive ocean. This spring the government will present a white paper on oceans, which will address the role of the ocean in Norway’s foreign and development policy.

Norway has important competence to share with other countries. We have a long tradition of maritime research. Norway also has strong traditions in fisheries management.

Knowledge of sustainable management and resource utilization from the ocean is an export product in itself. The goal is for Norway to become the ocean economy the world looks to, and to become the preferred partner for collaboration on ocean matters.

Blue growth through green restructuring

The world is changing rapidly. New technology, more digitization and new production methods require that we are constantly ahead of development. We have long-standing traditions for doing this in Norway. However, we need to be better at attracting the brightest minds. Therefore, we will make sure that Norway becomes a more attractive destination for investments in ocean industries and facilitate more research collaboration across borders. We will also help more Norwegian ocean businesses reach world markets by focusing on internationalization, export financing, and better market access.

For generations, the ocean-based industries have demonstrated amazing adaptability, innovation, and technological development. We will use this as a basis for further growth and development. This strategy is the first comprehensive strategy that looks at the ocean industries in context. The Government’s goal is for Norway to become the world’s foremost ocean economy. We will achieve this by facilitating blue growth through green restructuring.
Summary
Considerable growth in the global ocean industries is expected. The Organisation for Economic Co-operation and Development (OECD) demonstrates in its report “The Ocean Economy in 2030” that economic activity in the ocean is growing rapidly, and estimates that the ocean economy will provide 40 million jobs and double its contribution to global value creation by 2030. Much of the growth is expected to take place in industries where Norway already has important advantages.

At the same time, development in the global ocean economy is limited by the ongoing deterioration of the state of the ocean. One of the great challenges in the future will be to balance the need for increased productivity with the need for stronger protection of marine resources.

The Ocean Strategy acknowledges that Norway is a considerable ocean economy, and that the petroleum industry, the maritime industry, and the seafood industry all have internationally leading players. The strategy also recognizes that if we are to ensure that Norway remains a leading ocean economy, public authorities must facilitate further growth of established ocean industries, the development of new industries, and, not least, that sector specific knowledge is shared and utilized across the industries. The policy measures put forward by the strategy will contribute to furthering and strengthening the efforts for increased transfer of knowledge and learning across the ocean industries, and to facilitate collaboration. The Government will lay the foundation for this through regulation and the alignment of policy instruments.

The main objective of the Norwegian Government’s Ocean Strategy is to contribute to the greatest possible sustainable value creation and employment in the ocean industries. In order to achieve this, the Government will work along three tracks:

First of all, the Government will contribute to a strong regulatory framework by furthering and further developing efficient, predictable and knowledge based regulation of the ocean industries.

In order to attain this goal, the Government will facilitate further development of the ocean industries and the development of new, profitable ocean industries within a sustainable framework, make sure legislation does not hamper innovation and the transfer of technology and experience across the ocean industries, and strive to secure technology neutral regulations that help promote technological development.

Secondly, the Government will facilitate the development of knowledge and technology in the ocean industries through research, innovation, education, and competence.

In order to attain this goal, the Government will strengthen fundamental knowledge of the ocean, further and strengthen the development and knowledge in current ocean industries, and strengthen collaboration across industries and academic environments. Furthermore, the Government will help facilitate new industries, ensure a good and relevant education system which helps cover the ocean industries’ need for competence, as well as promote recruitment to maritime research, education and professions.

Thirdly, the Government will strengthen the competitiveness of the Norwegian ocean industries by assisting in efforts to improve market access, internationalization, and profiling of the ocean industries.

In order to attain this goal, the Government will strengthen the efforts of ensuring a global, predictable and competitive regulatory framework and help more businesses step out into the world and succeed, and make sure that Norway consolidates its leading global position as a hub for the development of ocean-based technology.