



Grethe K. Moen. Photo: Anne Lise Norheim

A year of contrasts

There were two events in 2019 that were of particular importance both for Petoro and for the Norwegian oil and gas industry: start-up of the Johan Sverdrup field and an acknowledgement from the oil and gas companies that we must step up and take responsibility in the development toward a low-emission society. Together, these events illustrate that the industry continues to see a potential in projects on the Norwegian continental shelf, and that we are capable of participating actively in terms of climate measures.

The Johan Sverdrup development proves that even a mature Norwegian

Shelf presents opportunities for independent developments that will generate vast values. Equinor and its partners have been at the forefront in the largest offshore development project since the 1980s. In terms of technology, the field is a trailblazer – it is both prepared to utilise the technologies of the future, while also setting a new standard for CO₂ efficiency in oil production. The profitability of the development is world-class; Phase 1 of the development will be fully paid for by the end of 2020, just over one year after the field came on stream. This means that the field can produce profitably after this, even with very low oil prices.

Given a technical lifetime extending beyond 2050, all indicators point to Johan Sverdrup being an industrial fairy-tale come true, one that will yield billions of kroner in revenues for both its owners and the Norwegian state for a very long time to come.

At the same time as we can take pride in this fantastic field, the oil and gas industry both in Norway and globally faces growing challenges when it comes to our role in contributing to solve the climate challenge. The world is characterised by geopolitical unrest, protectionism and polarisation. Against this backdrop, the industry has evolved

from talking about being a part of the solution in the low-emission society, to setting clear goals and adopting firm plans to reach them.

Over the last year, the industry has worked actively to establish joint climate goals for the Norwegian Shelf. In January of this year, a united Norwegian oil and gas industry launched a new climate roadmap. The goal is to reduce greenhouse gas emissions from production by 40 per cent in 2030 as compared with 2005, and to further reduce emissions to near-zero in 2050. Concrete goals like this are essential to maintain the competitiveness of the industry, and in order for Europe to achieve climate neutrality by the middle of this century. Petoro uses the goals in the Paris Agreement as a foundation for our activities, and we have participated in the work to develop the climate roadmap. We are very pleased that our sector agrees with the ambitious goals for cutting emissions. The SDFI portfolio is extensive, representing nearly 30% of all production on the Norwegian Shelf. Petoro bears a great responsibility for helping to achieve the industry's goals.

The Norwegian Shelf excels at safe and efficient operations. From the very beginning of the industry in Norway, it has been accustomed to extremely high standards as regards climate and the environment. As early as in 1971, permanent flaring was banned due to the loss of resources and the burden it places on the climate. In addition to the CO₂ tax that was introduced in 1991, we also have a NO_x tax and strict regulations as regards discharges to sea. The oil and gas activities in Norway are also included in the EU's emission trading system. This has contributed to the result that oil and gas produced from

the Norwegian Shelf leads the world with its low climate and environmental footprint. Even so, it is crucial that we continue to lead the way toward further emission reductions. Electrification of fields has been and will continue to be a key measure in reducing the climate footprint from actual production of oil and gas. When the Martin Linge field and Johan Sverdrup Phase 2 start up, nearly 50 per cent of the SDFI production will be electrified. This percentage is expected to rise as a result of additional planned electrification projects.

Emissions from production account for about 15 per cent of total emissions from oil and gas. Reducing the emissions from production does not eliminate the emissions that occur when oil and gas is used, but it will nevertheless be a significant contribution towards reducing CO₂ emissions.

Today, the SDFI production consists of approx. 60 per cent gas. Gas, which has a substantially lower climate footprint than oil and coal, could take on greater significance in markets with high coal consumption. Today, CO₂ emissions from just one of Germany's large brown coal power plants are equivalent to total overall CO₂ emissions from production of oil and gas on the Norwegian Shelf. Cost-effective fields and reliable infrastructure make Norwegian gas extremely competitive in Europe.

Various decarbonisation measures are needed in order to achieve the goal of carbon neutrality. Hydrogen produced from natural gas where carbon capture and storage (CCS) is included can also secure a role for gas even in a low carbon society. Therefore, a transitioning of the Norwegian oil and gas industry does not mean shutting

down, but rather new opportunities to bring us into a competitive and climate-neutral future. Petoro is in a position to be a prime mover in the transition work, with its broad and multi-faceted portfolio of both fields and infrastructure.

All of this means that we are facing a challenging, but essential energy transformation. It will have a far-reaching impact in most areas; political, socio-economical and commercial. All of us who are players in the industry must contribute in the public debate along with our stakeholders in order to arrive at the best result. We will not solve the climate challenges by discussing a 'to be or not to be' for the Norwegian oil industry. Quite the opposite, in fact. We must be able to pursue more than just a single agenda; in other words, further developing the oil and gas industry while simultaneously accepting our obligation to help solve the climate challenges. In fact, our industry represents a formidable force in contributing to develop low emission solutions by applying cutting edge technological expertise, strong project execution capabilities, financial capacity and a broad global presence. One thing is definitely certain, this is a role the industry wants to take on.



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