

2020 ESG REPORT



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### About HitecVision

HitecVision is a leading provider of institutional capital to Europe's energy industry, providing financing solutions for companies within energy production and energy solutions.

HitecVision currently manages six active private equity funds with a total committed capital base of USD 6.7 billion. Our customers are the investors who have invested in our funds, a global investor base that includes some of the world's largest and most demanding institutional investors, such as public and private pension funds, foundations and university endowments and sovereign wealth funds. Our responsibility is towards the ultimate owners of this capital, the current and future pensioners, students and researchers, and citizens.

We know that ESG issues can have a material impact on our financial performance and that of our portfolio companies, as well as on the communities in which both we and our portfolio companies operate. We believe that our strong focus on ESG factors and issues is critical to our long-term success as a private equity investor, and that in this respect, the interests of our investors are aligned with those of our portfolio companies, their employees, customers and the communities in which they operate. In the transition to a low-carbon energy future, HitecVision has decided to be part of the solution rather than part of the problem. This entails keeping two thoughts in mind: On the one hand increasing our investments in new companies that are taking the lead in the energy transition; on the other reducing emissions from our traditional oil and gas industry investments, where we can have a significant real-world impact by working with our portfolio companies to reduce their carbon footprints.

HitecVision has seen the development of the energy industry from the inside for more than three decades. We aim to keep that position, playing our part in the energy transition over the next decades.

Signatory of:

![](_page_3_Picture_7.jpeg)

I am pleased to introduce HitecVision's ESG report for 2020, the most unusual period this company has experienced in its 36-year history. It has been a year that has served up unique challenges for the firm, for our employees, our portfolio companies and their employees, and pretty much the rest of the world.

Despite the challenges, both HitecVision and our portfolio companies have come through the last year mainly unscathed – several of the portfolio companies have actually had an excellent year. Dealing with Covid-19 has of course added to the cost and complexity of doing business for all, but we have not seen any significant Covid-related incidents in our portfolio since the pandemic started.

With the global economy now starting to pick up, and a semblance of normality visible at the end of the tunnel, it is again possible to focus on the longer term. For us, that means the many aspects of the energy transition that the world is just seeing the beginnings of.

When considering the energy transition as a process rather than focusing on its end state, it is important to bear in mind how long it is expected to take. On the one hand, it is important to switch to non-fossil fuels as fast as possible. On the other hand, "as fast as possible" is still likely to be several decades, both for technical reasons, and because the social and economic costs of the transition would otherwise be too great, not least in less developed countries.

In this situation, we see significant investment opportunities both in a responsible oil and gas industry that strives to meet the most stringent emissions criteria while continuing to deliver the fuels that will be in demand until 2050 and beyond, and in the renewables and related industries that will eventually replace them. Over the last year we have been acting on both opportunity sets.

On the one hand, we have been busy building capacity and capability towards other parts of the energy industry than those we have traditionally addressed, and I am proud to have welcomed some great new members of our team over the last year. The Nordic region is expected to take a leading role in the energy transition in Europe, building on its long history in renewable power generation and as a leading offshore

![](_page_4_Picture_7.jpeg)

Opening of the fourth Paahjul workshop

energy province, and we see many investment opportunities to support the energy transition. We aim to build on these opportunities to create portfolio companies within renewable energy and green value chains in the same way that we have done within oil and gas, and have started by joining forces with Eni to establish Vårgrønn as a renewables-focused sister company to Vår Energi.

HitecVision is however also continuing its traditional work of building substantial companies within the oil and gas industry, both in the UK and Norway. In recent months we have signed acquisitions with a total value of more than USD 2 billion, propelling NEO Energy into the top five E&P companies in the UK and establishing Sval Energi as a significant company in Norway. We believe that being responsible and demanding owners of these companies is one of the most important contributions we can make to a better world.

The changing energy landscape means that HitecVision, as a specialised sector investor, will continue to keep two thoughts in mind and acting on opportunities in both the "old" and "new" segments of the energy industry. As any sports car enthusiast (such as me) will know: "Happiness isn't around the corner – happiness IS the corner!"

# ESG in the Energy Sector

Selected focus areas

# ESG in the energy sector

Selected focus areas

Since the start of the industrial revolution, the world has required increasing amounts of energy. We are however now at a point where the expectations and responsibilities of the energy sector are rapidly changing, and an urgent energy transition is in its early phases.

HitecVision believes that the world needs and deserves an energy system that

integrates environmental issues, social concerns, and governance (ESG) into its purpose and operation. We make investment decisions with these material topics in mind, ultimately contributing to an energy sector with ESG at its core. Understanding and managing the many ESG factors in the energy sector is therefore important both for us and for our stakeholders, many of whom will be readers of this report. Thus, we begin this year's ESG Report by discussing some of the material ESG areas for the energy sector, highlighting the sectoral performance in areas most relevant to our portfolio.

![](_page_7_Figure_1.jpeg)

Figure 1. People, Planet & Profit: Some material ESG topics for investors in the energy sector

![](_page_8_Picture_1.jpeg)

## Selected environmental focus areas

The world's energy systems influence the environment in many ways, and each piece of the system and part of the value chain have different environmental effects. Although climate change is a critical issue that has put the spotlight on fossil fuels in recent years, the environmental impacts of both this and other parts of the energy sector are far more diverse. In this section, we will therefore deal not only with the issues of greenhouse gas emissions, but also discuss certain additional environmental concerns that we believe should not be overlooked.

With much of the energy industry focusing on offshore solutions, from oil and gas to wind farms, we begin this section by discussing the impacts on ocean environments and how the energy sector can operate responsibly in these areas. We then go on to discuss climate issues, before briefly touching on some of the relevant impacts to be kept in mind in light of the expansion of onshore renewables.

### Ocean stewardship

Offshore oil and gas production makes up the majority of HitecVision's energy investments today, and ocean based renewables are expected to be a major growth area in the future. We therefore believe that ocean stewardship is key to leading environmental performance.

For the offshore oil and gas sector there is always the spectre of a major accident such as the Macondo or Exxon Valdez, and industry participants as well as regulatory authorities have established rigorous procedures to avoid these. There is however a range of other important topics, including smaller spills, regulated discharges such as produced water and drilling discharges, the use of chemical substances, local biodiversity impact, and potential disruption to life on the ocean floor. Some of these factors are also relevant to address when developing other offshore energy, such as wind farms.

### Produced water

Produced water is the water within hydrocarbon reservoirs that is brought to the surface during subsea oil extraction. Over time, as an oil field is depleted, the proportion of water to oil (the socalled water cut) increases. Following separation, the produced water is injected back into the reservoirs or legally discharged to the sea. Trace amounts of oil that cannot be fully removed during separation may be legally discharged with the produced water, constituting the dominant source of oil discharge to sea in the North Sea. This is regulated by the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention).

On the Norwegian Continental Shelf (NCS) the average concentration of oil in discharged water was 12.6 mg/l, far below the legal limit of 30 mg/l set by OSPAR. For the UK Continental Shelf (UKCS), this concentration was 16.9 mg/l in 2019, showing low concentration in the North Sea as a whole.

Discharges of produced water on the NCS fell for the fourth consecutive year in 2019, seeing a 15 percent decrease since 2015. On the UKCS, the amount also decreased by 3 percent year on year in 2019. Still, the 125 million m<sup>3</sup> of produced water released to the sea in 2019 on the NCS contained 1572 tonnes of oil. For the UKCS, around 140 million m<sup>3</sup> of produced water was released to sea in 2019, containing 2296 tonnes of oil.

### Other discharges to sea

In addition to produced water, discharges to sea include drilling discharges (a mix of drilling fluids and rock fragments), as well as small amounts of chemicals used in offshore operations. This environmental impact area is heavily regulated in Europe, including clear concentration limits, permits and chemical classifications. For offshore activity in the North Sea, for example, it is prohibited to discharge any oilbased or synthetic drill-cuttings or fluids with more than 10 grams of oil per kilogram of cuttings. Anything that surpasses this limit must be brought onshore for appropriate waste management (which has become a significant industry in itself), or injected back underground.

### Unplanned spills

Unplanned spills are accidental releases or discharges of oil or chemicals to the

![](_page_9_Picture_8.jpeg)

ocean environment. These can in the public mind be associated with catastrophic incidents such as blow-outs, though they are normally smaller incidents that are often immediately handled. In the North Sea oil and gas industry, there have fortunately historically been very few unplanned spills. Due to the robust management and maintenance programmes in place, along with strong physical barriers and preparedness plans, unplanned spills make up an insignificant amount of total oil output. There were only 45 incidents of unplanned spills of oil on the NCS in 2019, totalling a volume of 84 m<sup>3</sup>, or roughly 72 tonnes. On the UKCS, unplanned spills totalled 26 tonnes from a total of 235 incidents.

### Impact on biodiversity

As any industrial sector, the energy sector features physical installations and infrastructure that can pose a risk to local biodiversity, both onshore and offshore. For the offshore energy industry, both oil platforms and wind turbines can impact marine mammals and birds. For offshore wind, for example, installation of turbines can result in noise that has been found to be disruptive to marine mammals. For oil and gas, the same is true for installing cables or pipelines, positioning rigs and drilling during exploration & production. Seismic surveying which produces strong noise is thought to be particularly disruptive to whales, and there are ongoing discussions about further strengthening regulations to reduce this impact.

The North Sea energy sector has taken a proactive approach towards mitigating such risks. Innovations like installing a "bubble curtain", or a long circular tube releasing a dense curtain of bubbles that surrounds the foundations of offshore wind turbines, is one such mitigation effort. Another example is the research and modelling of marine animal vulnerabilities and migration. Marine Animal Ranging Assessment Model Barents Sea, or MARAMBS, is a collaborative project that supports the oil and gas industry in the Barents sea by utilising ecosystem-based modeling and management to better understand and mitigate the impact on marine species.

### Impacts on the ocean floor

The ocean floor and its biodiversity is another important component of strong ocean stewardship. Benthic species (organisms living on or near the seabed) are particularly vulnerable to the physical impacts of energy installations. In line with the precautionary principle and the use of science-based judgement, the North Sea energy sector has long looked to the best available science and research for guidance. According

![](_page_10_Picture_1.jpeg)

EMISSIONS FROM OIL AND GAS PRODUCTION IN NORWAY, COMPARED TO GLOBAL AVERAGE

to a decade-long study by the Research Council of Norway, the long-term impacts of current operational practices involving discharges to sea are moderate, thus not posing a significant risk to the ocean floor ecosystem.

Despite reassuring results, the industry still conducts comprehensive annual monitoring tests to ensure the ocean floor is healthy. The monitoring programs are designed to both document the environmental state and its development, both from manmade impacts and natural variations. In the case of offshore wind, the construction phase is the most disruptive to the ocean environment due to impacts from noise, sedimentation and hydrodynamics. Sedimentation, for example, may arise when construction causes particles to suspend or disperse. Increased sedimentation has been linked with decreased biodiversity, resulting in various on-site measures to mitigate this risk.

An example of this in practice was described in our 2018 ESG report. Ocean Installer (now Havfram) was engaged in the development of the Askeladd and Johan Castberg fields in the Barents sea, when large areas of coral were found in the optimal route for subsea installations. The company helped the client plan a new subsea installation route to avoid these. For more information, please refer to our 2018 ESG report.

### Industry-leading carbon intensity on the NCS

Greenhouse gas emissions from the industrial activities of the energy sector is of course a critical ESG issue, and undoubtedly the one that is currently receiving most attention both in the industry itself and among its stakeholders. In face of climate change impacts and the need for a transition to the low-carbon economy, the energy sector will need to lower its GHG emissions rapidly in the near future.

In the North Sea oil and gas industry, efforts to reduce carbon intensity have been ongoing for several years. This is particularly the case for Norway, where the oil and gas industry in 2019 released around 14 million tonnes of  $CO_2e$ , accounting for around 28 percent of the country's total greenhouse gas emissions. Decarbonising the oil and gas industry is therefore essential for reaching national climate goals for Norway, which aims to cut emissions by 50 to 55 percent by 2030 from 1990 levels.

As routine flaring has long been prohibited in Norway, the large majority of emissions is created by local energy production on platforms, typically from gas turbines. However, Norway is in the unique position of having an abundance of renewable energy in the form of hydropower, making it feasible (although not cheap) to replace this local energy production on platforms with onshore power.

As of late 2020, the NCS had eight oil and gas fields partly or fully electrified; there are another eight fields with sanctioned electrification projects, and many more in the planning phase. Rystad Energy expects that 60 percent of NCS production will come from electrified offshore platforms by 2025, significantly lowering the carbon intensity of the Norwegian shelf as a whole. This and other emissionreduction measures have resulted in the NCS having industry-leading carbon intensity, at less than half the global average. (See Figure 2)

For a more comprehensive treatment of the climate issue as it relates to the oil and gas industry, please see our 2019 ESG report:

https://www.hitecvision.com/ responsibility/environmental-socialand-governance-esg-practices/ esg-reporting

![](_page_10_Picture_13.jpeg)

![](_page_11_Figure_1.jpeg)

#### Figure 2. Upstream carbon intensity per barrel of oil in 2019 across oil-producing regions Source: Rystad Energy, from KonKraft Statusrapport 2020

### Explaining the low carbon intensity in the North Sea

"The [Norwegian oil and gas] sector is subject to a number of regulatory instruments such as CO<sub>2</sub> duty, EU ETS, the NOx duty / fund, flaring restrictions in production licenses, emission licenses with energy management requirements, as well as stipulations for the use of best available technology and assessment and implementation of power from shore for new developments. Together with robust resource and production governance, these regulatory instruments have triggered and will continue to trigger measures that represent emission reductions on the Norwegian shelf."

- Norwegian Oil & Gas Association, translated from the 2020 Climate & Environment Report

As exemplified in the quotation above, oil & gas operations on the NCS are subject to a comprehensive regulatory environment. In its entirety, the regulations and instruments are designed to reduce the environmental externalities and strengthen the governance of extractive industries.

All markets in the North Sea basin are subject to the EU's Emissions Trading System (EU ETS). Under EU ETS, relevant sectors have national emission allowances that will be gradually reduced in order to help the EU meet its targeted emission cuts by 43 percent of 2005 levels by 2030. This places a cost on carbon, which has recently increased in Europe. The average price in January 2021 was EUR 33.45 per tonne, up from an average of around EUR 25 throughout 2020.

On top of the EU ETS, operators on the NCS are subject to a national  $CO_2$  duty, which is currently around USD 69 per tonne  $CO_2$ . The Norwegian government has also recently proposed a climate plan that aims to gradually raise the cost of emitting  $CO_2$  towards 2030, targeting a total for the local  $CO_2$  duty plus the EU ETS to reach around NOK 2000 (USD 235) per tonne.

A final example of how Norway's regulatory environment has enabled top environmental performance is through the total ban on flaring for other than safety purposes on the NCS. Norway announced the ban in 1971, originally to stop oil companies wasting gas, that was seen as an important resource. This principle has since required developers to make gas utilisation plans before carrying out any field developments.

The sum of these regulatory instruments explains the industry-leading carbon intensity in Northern Europe, as well as the efficacy of responsible extractive resource policies.

### STAKEHOLDER PERSPECTIVE:

### Vår Energi's Oddvar Ims on reducing emissions

### What is your educational and professional background, prior to your current role?

I have a degree in electrical engineering, and my first job out of school in 1997 was in Hitec AS (the predecessor of HitecVision). When Hitec's drilling technology business was sold to National Oilwell in 2000 I stayed on, working on electrical engineering and drilling control systems.

Since then, I've spent about seven years in Esso, before joining Eni in 2008, which subsequently became Vår Energi. Whilst in Eni, I worked as an EICT Lead Engineer on the Goliat FPSO, broadening my experience beyond that of electrical engineering.

In Vår Energi, I was given the opportunity to head up the R&D unit. This role gave me the chance to focus on achieving solutions across disciplines, which I find very interesting. In my experience, Vår Energi is a company where you're given opportunities for development and the chance to try new things, if you're interested and motivated.

The key priority for Vår Energi's R&D programme whilst I was there was to develop and implement a research strategy aligned with the company's business strategy. In recent years the focus has been on lowering emissions, and in my time in the R&D unit we joined the Low Emission Centre and the Norwegian CCS Research Centre (NCCS). Amongst other things, we have looked at developing new hub technology for connecting discoveries within a 20-100 km radius back to a subsea manifold, as well as exploring solutions for electrification from shore and technology for converting gas turbines to run on hydrogen or ammonia.

My experience from the R&D unit has been relevant to my current role, where we need to see our electrification project in a larger picture, as it's related both to power generation and infrastructure development onshore, and the electrification plans of other operations in the area. In my time in Eni I was working closely with the team who planned the electrification of Goliat, and this understanding is something I've brought to the Balder-Grane electrification project.

### What is it that makes your current role interesting and meaningful?

The most motivating aspect of the electrification project is being part of developing and creating something that we'll be able to see the physical result of. In my former role in R&D I worked on projects where you have long timelines, towards 2050 for some of the technologies we were working on, but here there are immediate results. It's also motivating to be supporting the organisation with reducing its emissions and reaching important milestones in our climate strategy. I also really like the cooperation aspect of the electrification project, as we're working with a broad range of stakeholders, from government agencies to business partners and local communities. We're trying to achieve something with offshore wind in all of this, making it possible for offshore wind farms to supply us with renewable energy. We're looking to be connected both to the power supply onshore and to power production from offshore wind

![](_page_12_Picture_12.jpeg)

Oddvar Ims Head of the Balder-Grane Electrification Project, Vår Energi

![](_page_12_Picture_14.jpeg)

at Utsira Nord, for predictability purposes. With offshore wind we'd be needing less power from the grid.

#### What is the role of electrification in Vår Energi's business development and climate strategy?

The Balder-Grane electrification project is the single most important contributor to reducing emissions in the licences where Vår Energi is the operator. Working together with Equinor as the operator of Grane and Aker BP as coordinator for the grid connection, the electrification of Jotun FPSO and the Ringhorne and Grane platforms is estimated to have the potential to lead to a reduction in annual CO<sub>2</sub> emissions of 200 000 tonnes. This type of electrification is what will make us reach our goal of 50 percent reduction in greenhouse gas emissions from operated assets by 2030. New energy technologies and innovation, for example hydrogen, ammonia and CCS, have a large role to play in taking us to net-zero in 2050, but we need to start reducing emissions now and can't wait for these technologies to mature if we are to meet our short-term targets.

### Methane emissions

CO<sub>2</sub> is not the only significant gas emitted into the atmosphere during operations from the energy sector. Methane (CH<sub>4</sub>) is another greenhouse gas, estimated to be more than 80 times more potent than CO<sub>2</sub> in a 20-year perspective. Methane is relatively shortlived in the atmosphere compared to CO<sub>2</sub>, though the global warming impacts are still long term, due to its potency. In the oil and gas industry, methane can be emitted during cold flaring, or venting, as well as through leakages during transportation, and in many regions it is a major contributor to total GHG emissions.

However, with strong safety and environmental standards and continual monitoring of gas pipelines in Europe, particularly in the Nordics, methane leaks have historically not been a significant issue. Leaks can be detected from gas sensors on site, and as offshore platforms generally have a large number of these for safety reasons, significant leaks are as a rule discovered and remedied immediately. Minor leaks can be detected through Optical Gas Imaging, and annual surveys using this technology are now mandated in Norway.

Large-scale methane emissions can be detected by satellite imaging, as exemplified in Figure 3. Note that no emissions are shown in the North Sea region. **Figure 3.** Large methane emissions from oil and gas operations detected by satellite in 2019 and 2020.

Source: Kayrros analysis, from: International Energy Agency (2020), World Energy Outlook 2020, IEA, Paris

![](_page_13_Picture_7.jpeg)

![](_page_13_Picture_8.jpeg)

### Embracing new technologies to continue the reduction in carbon intensity

Despite the strong track record of emissions reduction in Northern Europe, further efforts must be made to fully decarbonise in line with aspirational global targets. New technologies that are still in early phases of maturity will play a key role in further emissions reductions. Carbon capture (utilisation) and storage (CCS/CCUS) is one such technology that is slated to pair well with oil & gas operations in the coming years.

Recognising the need to continually reduce carbon intensity is now a given among European oil companies, providing what we believe will be a long-term competitive advantage as the global energy sector transitions towards more sustainable practices. This, along with other dimensions of the changing energy sector, will be further discussed in the section Navigating into the future of energy.

![](_page_14_Picture_1.jpeg)

### Environmental impacts from land-based renewables

While HitecVision has traditionally invested in offshore energy related industries, our new focus on the energy transition means that we will also need to address the environmental impact of energy that is traditionally considered "green". Whether the source in question is hydropower, solar or wind, environmental due diligence and impact assessments will be necessary and standard components of M&A and project development. Environmental stewardship must be maintained for land-based operations in much the same way as for offshore installations and operations.

In Northern Europe, particularly in Norway, the long history of hydropower dam construction has resulted in valuable lessons from stakeholder dialogue between civil society and energy sector entities. These discussions have for example ensured that salmon populations are able to migrate up rivers in their instinctual fashion, and that land-use change is minimized during construction and, if necessary, rehabilitated once finalised.

Similarly, the rise of wind farms has resulted in new forms of environmental considerations, such as the preservation of untouched nature or environmentally significant peatlands and bogs. This is a particular concern in Norway, a sparsely populated country where many wind farms are being built in previously untouched nature rather than on agricultural or managed forest land as is the norm in many other parts of the world.

A particular issue is peatlands and bogs, which are of significance due to their function as carbon sinks (natural carbon storage systems that lock in carbon in a delicate combination of rich micronutrients and waterlogging). According to the United Nations Environment Programme (UNEP), peatlands cover just 3 percent of the planet's surface but store twice as much carbon as all the world's forests. Protecting these valuable natural resources as new renewable capacity is developed is therefore another aspect to be considered as we venture into the renewables space.

![](_page_15_Picture_1.jpeg)

## An industry powered by people

### Creating value and prosperity along the energy value chain

At the heart of the modern-day energy sector lies an instrumental workforce of competent and motivated employees. Without their technical experience and know-how, the sector could not perform at current levels. In turn, as the sector prepares for a low-carbon energy transition, it is equally important that change happens in such a way that it becomes a just transition for all.

The energy sector both directly and indirectly contributes to prosperous livelihoods for millions of people. According to a 2019 report from Menon Economics, the Norwegian oil and gas industry collectively employed around 225 000 people in 2017. This resulted in a government revenue stream through taxes and fees amounting to over 260 billion NOK in 2018, accounting for around 63 percent of the total corporate tax take in Norway. In the UK, the petroleum sector accounted for more than 300 000 jobs in 2019, creating energy that accounted for around 75 percent of the UKs primary energy needs.

Moreover, as European governments and energy providers are increasingly formulating strategies for diversified energy production, the opportunities for value creation in the form of creating new businesses and jobs in the renewables sector are significant and are already beginning to have an impact.

### Adapting to a changing environment

The modern energy sector is highly technological and skills-dependent, employing highly-educated personnel with significant skills and training. In Europe especially, largely due to the industry's long history with complicated offshore operations, the sector is blessed with a high level of technical competence. As the industry changes, however, the technical skills and expertise will also need to evolve. Creating further value through addressing the skills gap is an ESG topic that the energy sector must continue to tackle in the coming years. Ensuring that employees have the right skills to handle the needs of the future energy sector will be an important factor for the success of our portfolio companies in managing the transition. Investing in the competencies of the workforce will help build and retain a talented workforce for the future, especially when large parts of the industry becomes increasingly involved in the construction and maintenance of emerging energy infrastructure such as energy storage facilities, data centres and renewables installation.

According to the 2021 Global Energy Talent Index and their targeted survey of over 16 000 respondents, 42 percent would like to see more training and mentorship programmes to build resilience in the industry and continue to attract the right talent. These results highlight our strong support for prioritising the upskilling of our portfolio companies' employees, as well as elevating the focus on career development to attract the appropriate talent.

### STAKEHOLDER PERSPECTIVE: Working at Global Maritime

### What is your professional background prior to joining Global Maritime?

I graduated from Strathclyde University in Glasgow with a masters in Naval Architecture and Ocean Engineering. I had been working as a ship surveyor for the UK Maritime and Coastguard Agency in Aberdeen for two years. My role covered the statutory compliance of UK flagged ships and fishing vessels. The role included activities such as ISM auditing, plan approval, stability assessment and approval, dangerous goods compliance, safety awareness drills and safety campaigns for crew and the introduction of the Maritime Labour convention. Most of my days were spent onboard vessels in the North and Northeast of Scotland, ranging from single crewed <12m fishing vessels, to emergency response and rescue vessels for oil and gas platforms and multiple deck ro-ro car ferries carrying hundreds of passengers onboard.

### *What motivated you to join Global Maritime?*

I joined Global Maritime because I was keen to be involved in more of a technical engineering role. My previous role had given me exposure to the shipping industry and the fishing industry and also an understanding of international maritime codes and standards within design and operations, but I wanted to diversify into the project engineering side. I had a friend from university who worked for Global Maritime who gave me an overview of the type of oil and gas projects they were working on and it sounded interesting! How have you been able to apply your core competencies from O&G engineering to fixed and floating wind projects?

In terms of construction projects for example, many of the operations are governed by the same statutory codes. When it comes to the high level details of operations such as loadouts, transit and towage, mooring operations, and jack up operations, they are engineered using similar methodologies but with adaptations based on the specifics of a given project. So the mooring of an export cable lay vessel in shallow waters on a wind farm site can be performed using the same software as the mooring of a drilling rig in deep water, following the same processes, but applying the specifics and restrictions of the location and environment.

### How would you describe the transition that Global Maritime is currently in the middle of?

This is a time of opportunity. There is a shift in general in the culture of the younger generations to move away from fossil fuels and reliance on oil and gas. Global Maritime has for some years been advancing into the offshore windfarm sector at speed and we have a good track record of providing services for 'industry firsts'. With the pressure on for a shift to green energy and demand for experience in the sector, we are well placed to thrive in a challenging and competitive market.

![](_page_16_Picture_10.jpeg)

Jayne Deegan Technical Lead Maritime Warranty Survey, Global Maritime

![](_page_16_Picture_12.jpeg)

### Which opportunities do you see for O&G engineers and companies in the low carbon future?

I think there will always be a place for the experience gained through oil and gas operations and oil and gas companies if they are able to diversify into renewable markets. Statutory codes and guidance for offshore construction for example have been developed for a number of years through experience in the oil and gas industry, and it is these codes which we use to engineer the construction of renewable sector operations, adapting them where necessary to cater for the specifics of the differing environments.

With the increase in speed at which renewable energy projects are being approved and prioritised in government targets, I think there is a world of opportunities for oil and gas engineers to make the transition.

#### ESG IN THE ENERGY SECTOR

![](_page_17_Picture_1.jpeg)

#### ESG IN THE ENERGY SECTOR

![](_page_18_Picture_1.jpeg)

### Labour relations

In the energy industry as elsewhere, companies and their employees may have conflicting targets. However, increasingly the traditional antagonists have realised that they also share many common goals: A profitable company creates more jobs; an efficient workplace is also usually a more satisfactory one to work in; satisfied workers are often more efficient workers, and so on. This has reduced the level of conflict and introduced a useful measure of rationality and cooperation.

The Norwegian oil and gas industry has historically worked alongside labour

unions in a collaborative manner. This has resulted in strong HSE standards that protect the health & safety of employees, and also competitive compensation and career outlooks. In return, the oil companies have received a highly competent and motivated workforce and a relatively low level of labour conflicts. In many ways, labour union cooperation has become the heritage of the oil and gas industry in Northern Europe.

Similarly in the UK, cooperative labour relations is becoming more of a norm. Early 2021 saw a new landmark collective agreement between unions and major North Sea contractors and operators. The agreement is called the Energy Service Agreement and replaces the Offshore Contractors Partnership Agreement that expired at the end of 2020. It has been supported by operators, Oil & Gas UK, Oil & Gas Authority, and both UK and Scottish Governments. The new agreement provides baseline terms and conditions for offshore contractors and provides more security for the thousands of engineers and maintenance workers in the North Sea.

### **Relentless HSE focus**

Occupational health & safety has and always will be a major priority for the European energy sector. The regulatory environment in the North Sea in particular has resulted in some of the lowest registered workplace accident rates in the industry from a global perspective. There were no fatalities on either the NCS or UKCS in 2019.

![](_page_19_Picture_3.jpeg)

On the NCS there were a total of 181 registered injuries in 2019, resulting in an injury rate of 5.3 injuries per million hours of work. This is part of a positive trend since 2009, which saw an injury rate of 8.4 per million hours of work. We observe the same trend on the UKCS, though metrics are measured slightly differently. 2019 saw its lowest rate of both dangerous occurrences and non-fatal injury rates, with a total of 98 reportable injuries. According to data from the International Association of Oil & Gas Producers (IOGP), Norway and the UK registered a Lost Time Incident Rate (LTIR) of 0.78 and 0.52 respectively for 2019, both below the European average of 0.80.

In terms of serious injuries, both the UKCS and NCS continue to maintain robust performance. Of the reported injuries mentioned above, 32 and 25 were classified as serious for the NCS and UKCS respectively. The most common cause of injuries continues to be slips, trips and falls.

### The industry's safety response to the Covid-19 pandemic

In view of the public health crisis caused by the Covid-19 pandemic, the health, safety and wellbeing of the sector's workforce was especially placed under focus. Avoiding the spread of the virus to rigs and platforms, where conditions do not encourage social distancing, has been a major task. Given the ongoing nature of the pandemic, it is too soon to report on all safety metrics across the industry. However, there are some early figures that point towards very low transmission rates of Covid-19 on offshore rigs and platforms in the North Sea, primarily evidenced by the little disruption in production.

Equinor is one of the largest operators on the NCS, and has stated that workers travelled to and from its platforms more than 100 000 times from the pandemic broke out in Europe, to the end of the year. Despite this activity, the transmission rates have been relatively low, and mitigating efforts have been reported to be successful.

To ensure the safety of those who are offshore, the Norwegian Oil & Gas Association released common recommendations for all offshore workers less than a week after the government announced the first nation-wide restrictions. Similarly, the UK Oil & Gas Industry Association has published three issues of a guidance report on the safe working of offshore installations. The mentioned resources cover important components such as pre-mobilisation checks, social distancing guidelines, cleaning and sanitation standards, workforce management and the use of personal protective equipment (PPE) and face coverings.

In the UK, North Sea oil and gas operators began reducing the number of non-essential workers on platforms in March 2020 to limit the spread of the virus and to protect staff. For example, before the crisis there could be around 11 500 UK workers offshore at any given time. After the pandemic broke loose, this fell initially to about 7 000 before recovering to around 9 000 by July, where it has remained.

![](_page_19_Figure_11.jpeg)

#### ESG IN THE ENERGY SECTOR

![](_page_20_Picture_1.jpeg)

### Ensuring a diverse and inclusive workplace

The oil and gas industry has a very maledominated workforce, with renewables only slightly better. Based on data from the Global Energy Talent Index, women represent around 10 percent of the workforce in the oil & gas industry and 22 percent of the renewables workforce. Moreover, according to research from McKinsey & Company, the percentage of women in the industry declines as the position level increases, showing female representation in senior-level roles being particularly low. In the oil & gas industry, even for entry-level positions less than a third of staff are female, and for executive positions this rate is just two percent.

According to data from a global study by Universum surveying over 200 000 business, engineering and IT students, the perceived attractiveness of jobs is closely linked to inclusion and equal opportunities. In 2009, oil & gas was globally the 14th most attractive employer among students, but fell to 35th place in 2018. This highlights the expectations of the future workforce and underpins the need for continual efforts towards diversity and inclusion.

In addition to the mentioned perspective, diversity and inclusion can also drive financial performance. A report by PwC analysing how gender representation at the board level impacts the financial performance of the 40 most traded companies on the Oslo Stock Exchange found that female board representation is shown to bring consistently higher profit margins and returns on equity while also delivering less volatile growth. This is one of many indications that working towards a more inclusive and genderbalanced workforce is another key to success.

![](_page_21_Picture_1.jpeg)

### Uncompromising compliance & transparency

### Ethical conduct and regulatory standards

High governance standards supported by a focus on ethical conduct and strong institutions is the cornerstone of the energy industry in Northern Europe. Governance routines and regulations are essentially the catalyst for all ESG performance.

The industry's leading HSE performance is supported by the regulatory framework and strong safety standards that surround the industry. For example, all companies operating on the NCS and the UKCS must have a code of conduct that integrates health, safety and environmental standards and policies into their operational routines. This is mandated by law under the Petroleum Act of 1996 in Norway, and the Health and Safety at Work Act of 1974 in the UK.

The same is true for governance standards resulting in strong environmental performance, where industry regulations on emissions to air and water create an enabling environment for the industry to perform efficiently while obtaining competitive advantages across ESG dimensions.

### Trust & transparency

Strong institutions and a culture for transparency have helped the countries in Northern Europe rank among the best in perceived levels of corruption. According to Transparency International's 2020 Corruption Perception Index, Norway and the UK both rank in the top 6 percent out of a total of 180 countries. (See Figure 4)

Transparency in reporting is another key trust-builder, as exemplified by the Extractive Industries Transparency Initiative (EITI), which aims to improve governance of the extractive industries through disclosure and oversight of government revenues. This should in turn result in better management of natural resources and enable citizens to hold their governments to account for how the revenues are used. 55 countries are currently implementing the EITI standards, with Norway joining in 2009, one of the first to be accepted as EITI-compliant in March 2011 and the first country to mainstream EITI standards in government systems and corporate reporting. The UK is not far behind, having committed to EITI in 2013 with admission in 2014.

### Supply chain management

Working with the supply chain is a vital component of ESG management, and risk management more broadly. This can include measures such as ensuring human and labour rights and ethical conduct in all supplier contracts, setting environmental standards for all suppliers, collaborating for more comprehensive GHG accounting, or seeking other forms of governance through supplier codes of conduct.

For operators in the energy sector, setting clear ESG standards for suppliers is perhaps the most effective way of Figure 4. Top-ranking countries in perceived levels of corruption. Source: Transparency International. from Corruption Perception Index 2020

![](_page_22_Figure_2.jpeg)

Score	Country/territory	Rank
88	Denmark	1
85	Finland	3
85	Sweden	3
85	Switzerland	3
84	Norway	7
82	Netherlands	8
80	Germany	9
80	Luxembourg	9
77	United Kingdom	11
76	Austria	15
76	Belgium	15
75	Estonia	17
75	Iceland	17
72	Ireland	20
69	France	23

realising real-world ESG impact. Major oil and energy companies can harness their purchasing power through procurement practices, making ESG performance a competitive advantage. This also creates an incentive for suppliers to integrate ESG into their operations, while rewarding early movers who have already done so. Closer collaboration between E&P companies and their supply chain partners is another way to mitigate ESG risk in the supply chain while obtaining better ESG performance.

In the North Sea oil and gas industry, supply-chain ESG management is handled in part through joint qualification systems, such as EPIM JQS. EPIM JQS is the joint qualification system used by all of the operators on the NCS, making it a requirement for all suppliers who wish to do business with these. The system centralises all suppliers under one system in order to effectively pair operators and suppliers. In order to qualify for registration, the supplier must ensure the minimum compliance standards across various ESG areas, including a self-assessment of the company's capabilities within Health, Safety, Quality and Risk based upon international guidelines IOGP423-01. Moreover, EPIM JQS is under the supervision of the Norwegian Oil & Gas Association, ensuring robust oversight.

10-19 20-29

30-39 40-49 50-59 60-69 70-79 80-89 90-100

Another example of a joint qualification system is Achilles JQS, created in 1991. It provides operators, main contractors and suppliers with an industry accepted procurement service that streamlines procurement, manages risk and enables compliance with the relevant EU procurement directives. Achilles JQS provides operators with the confidence that all their suppliers are prequalified to the relevant oil & gas standards, such as the new NORSOK WA-S-006:2020 standard related to HSEQ qualification. In short, supply chain management and governance is a foundational component of ESG as it bridges expectations and practice across value chains. ESG efforts can lead to positive knock-on impacts throughout the supply chain, and negative impacts can also be mitigated through higher standards and selective partnerships.

As the world becomes increasingly interconnected, efforts in the supply chain are becoming a common expectation, and the potential for significant real world impact stretches far beyond a company's own operations.

## Stakeholder Perspective

## Green financing and ESG as seen by Norway's leading bank

![](_page_23_Picture_2.jpeg)

### STAKEHOLDER PERSPECTIVE:

### An interview with Nina Ahlstrand and Espen Kvilekval of DNB, Norway's largest bank.

Over the last few years we've witnessed considerable growth in green and sustainability-linked loans and bonds. What is your perspective on this development through 2020, and looking abead?

NINA: We are clearly seeing how capital is shifting in a more sustainable direction due to changing investor preferences. Despite the pandemic, this trend has gained strength through 2020, demonstrating the force of the green transition. Both banks and investors are expecting additional transparency from the companies they finance, and they wish to see how their strategies align with the goals of the Paris Agreement. Green and sustainability-linked loans and bonds have the advantage of giving the financier exactly this type of transparency. In the bond market, we're also seeing an emerging trend of sustainable bonds giving the issuer a price advantage.

Simultaneously, the market is diversifying. Green bonds and loans have thus far been the dominating trend, requiring capital to be earmarked for specific investments with environmental attributes. We're now seeing growth in sustainability-linked products, initially on the loan side but more recently in the bond market as well. Here, the capital is not earmarked, but the financial terms are linked to sustainability-related targets, such as reduction of  $CO_2$  emissions.

How will ESG affect the pricing and availability of financing moving forward? Will companies that are delivering on the ESG agenda achieve better financial conditions? Will there be companies that won't be eligible for loans at all, on the basis of ESG factors?

**ESPEN:** Capital of some kind may continue to be available for many companies, but if you're looking at for example bank financing in the European market, I definitely think ESG will have an impact on both the availability of financing and on the price. Regarding the latter, we have several examples of sustainability-linked loans given to oil and gas companies in the last year, where the margin depends on what the borrower achieves on pre-defined sustainability targets. Looking ahead, this type of agreement is likely to become increasingly prevalent.

### *Which projects and companies are especially attractive for green financing?*

NINA: The market initially focused on renewable energy, but over time we've seen a diversification. The green transition has today penetrated all sectors and green financing can be applied to finance projects that are already green, but also the route to get there. With sustainability-linked bonds and loans we're seeing even more opportunities for the companies that are driving the green transition. These financing solutions are suitable for a wide range of companies as long as they have concrete and quantifiable targets for how to contribute to the goals of the Paris Agreement, even if one hasn't achieved this yet.

![](_page_24_Picture_9.jpeg)

Nina Ahlstrand Head of Sustainable Finance, DNB Markets

![](_page_24_Picture_11.jpeg)

Espen Kvilekval Global Head of Oil & Gas, DNB Bank ASA

#### About DNB

DNB is Norway's largest financial services group and one of the largest banks in the Nordic region in terms of market capitalisation.

DNB is a major operator in a number of industries, for which it also has a Nordic or international strategy. DNB is one of the world's leading shipping banks and has a strong position in the energy sector and the fisheries and seafood industry.

## DNB

Which conditions do you consider important in terms of ESG, and which expectations and demands do you set to companies in the oil and gas sector?

**ESPEN:** ESG is a broad term and covers important topics along multiple dimensions. The oil and gas industry has taken an active position on ESG for many years already. In general I would say the sector has achieved a lot, whether it be on safety, environmental impact, or anti-corruption work, to name a few. All of this is still important, both to the industry and to DNB as a lender to the industry.

In the last few years, the climate issue and energy transition have dominated the ESG agenda. For DNB, it is important to both impact and help our customers through the transition. The world will need oil and gas in the energy mix for many years to come, even in low emission scenarios where we meet the goals of the Paris Agreement. It is therefore important that companies do what they can to produce oil and gas efficiently and with the lowest carbon intensity possible. Furthermore, the petroleum sector, with its competence and capital, plays an important role in terms of developing new renewable energy production and infrastructure, which DNB also would like to help facilitate.

We're in the middle of a far-reaching transition in the energy sector, with a range of new companies being established and a focus on renewable energy and new energy technology especially. Capital is shifting to sectors with low climate risk, but many of these companies have significant commercial risk. Do you have any comments on this paradox?

**NINA:** Looking 10-15 years ahead, many of these companies are likely to be large, well-established companies, but some of them won't succeed, and in those cases we may retrospectively view today's valuations as unrealistic. There's already a consensus that sustainability and profitability must go hand in hand, which is partly driving this development,

but it's simultaneously important to combine ESG analysis and financial analysis. Coming regulations from the EU may drive this development further, depending on which tools the EU chooses to apply. Today, only a minor part of the investment universe will likely qualify as environmentally sustainable according to the criteria of the upcoming EU Taxonomy. Potential incentives from the EU can thereby have significant consequences if large capital streams are to be directed to a small part of the market. To reach the goals of the Paris Agreement, we cannot only invest in what is already green today, we must also invest in the transition to ensure there are more green assets in the future.

### Oil and gas is an important part of DNB's loan portfolio. How do you evaluate the risks and opportunities attached to this portfolio as a result of the increased focus on ESG?

**ESPEN:** DNB's loan portfolio is a reflection of Norway's economy, where oil and gas remains the largest and most important sector. We also see that the energy transition, to a large extent, is driven by the competency, innovation and investments of companies that are part of the oil and gas value chain.

Companies in the oil and gas sector that don't take the energy transition seriously, are exposed to considerable climate-related transition risk. DNB aims to maintain a good balance between financing the energy transition and still being a leading provider of financial services to the oil and gas industry in the North Sea market. We prioritise customers that are working proactively with the energy transition, are positioning their activities in line with the goals of the Paris Agreement and are willing to set emission reduction targets for their own operations.

#### How do you expect the EU's action plan for sustainable finance will shape the market moving forward?

NINA: The EU has an ambitious goal of climate neutrality by 2050. To reach this goal, significant amounts of capital must be invested in a green direction, and we're now in the early stages of the EU issuing regulations to compel this shift in capital. Part of this is stricter definitions of which activities can be defined as "environmentally sustainable," as well as more comprehensive reporting requirements for investors, banks and companies. The first step is above all about achieving standardisation of reporting, but the long term goal is shifting capital, and we're already seeing how the coming regulations contribute to intensifying the green transition in the financial market.

#### How do you envision DNB's loan portfolio developing towards 2030? Which consequences will this have for the energy sector?

**ESPEN:** DNB has already completed a comprehensive rebalancing of the portfolio, reducing its exposure to cyclical industries. This took place in the period 2015-2017, when exposure to oil and gas was reduced by about 40 percent. Most of the reduction was related to activities in North America.

It is difficult to predict how the loan portfolio will develop in the future. It will depend on a range of factors, not least the activity in the market. Furthermore, I think the quality of the portfolio is more important than the actual size. One quality parameter is the carbon intensity of the loan portfolio, which will become a key parameter going forward. The quality is crucial for profitability but also for climate risk.

If we're taking the energy sector as a whole, we expect an increase in renewable energy. DNB has defined a target of contributing a total of NOK 450 billion to the financing of renewable energy and related infrastructure towards 2025.

### HITECVISION TEAM COMMENT:

## Maren Sleire Lundby on the ESG expectations of banks

#### What ESG requirements do you meet from banks? Has this changed over the last few years?

ESG requirements from banks have changed dramatically over the last two years. When we produced our ESG report for 2018 we had to proactively push it out to our banks. In 2020, ESG was a topic in all the financing discussions I had with both existing and new bank connections. My impression is that the Nordic banks are leading in this area, but European banks are not far behind. The most forward-looking banks are beginning to ask detailed questions about how HitecVision follows up ESG reporting from our investments, and about companyspecific information on emissions or ESG reporting.

### How do you and the Credit team work with banks in this area?

We have regular meetings with our key banks on ESG. In order for us to do a good job, we need to have a working understanding of ESG trends in the capital markets. We prefer bilateral meetings with the banks that know us well, where we discuss concrete issues and companies. That enables us to together find solutions that work for both parties. Without the banks we have limited agency, so it's essential that we are qualified, and ideally preferred, clients in these institutions.

#### How has HitecVision's outlook on risks and opportunities changed in this period?

The most significant risk for HitecVision is that the oil and gas sector, which we're an integral part of, is being carefully observed and examined by stakeholders. Both investors and banks have opinions and expectations about which role the industry will play in the future, and as a responsible investor we need to have a conscious relationship to the risk factors that go into considering an asset as being "fit for the future". I see this just as much as an opportunity for us, as we can make sure we're ahead of the game and become a preferred financial partner because of our strategic approach to ESG. A second space of opportunity is created by investors' increased motivation for contributing to the green transition. It's our job to allocate investments thereafter, and our energy sector expertise gives us the necessary prerequisites for succeeding with the establishment and development of renewable energy companies.

Ms. Sleire Lundby is a director on HitecVision's credit team, working with all aspects of financing for the portfolio companies as well as transaction financing. Before joining HitecVision, she was a client manager in the offshore team of Norway's largest bank, DNB, working for seven years with maritime and offshore financing at the bank's offices in Oslo, New York, London and Singapore.

![](_page_26_Picture_9.jpeg)

Maren Sleire Lundby Director Credit, HitecVision

## People, Planet and Profit

ESG and sustainability in HitecVision

## People, Planet and Profit

ESG and sustainability in HitecVision

HitecVision aims to integrate ESG into our core business approach, seeking returns on behalf of our investors while operating in an ethical and sustainable manner. Our motto, "We shall keep what we promise, and behave", captures this sentiment. We believe our focused approach towards ESG and sustainability builds a genuine competitive advantage, enabling us to identify, analyse and mitigate ESG risks whilst capturing opportunities. The sustainability agenda, broadly encapsulated in the previous chapter, is a fast-changing landscape. New regulations, reporting standards, stakeholder preferences and expectations are all part of this changing landscape. As our sector evolves, this requires our ESG approach to develop with it, ensuring resilience while creating value in the short and long run.

2020 stands out from an ESG perspective as we have been preparing to develop a second investment mandate, focusing on the energy transition. HitecVision has a 36-year history of investing in the oil and gas industry in Northern Europe, and has been adapting to many changes in the industry over that time. We are now entering a new era that reflects the coming transition in the global energy sector as a whole. Our ESG approach is a central component of this process.

### Being a responsible investor

At the very foundation of our ESG approach lie our Ethical Guidelines, which are included as an appendix to this report.

Broadly speaking, the guidelines are based on five underlying principles that ensure we perform all our activities in an ethical manner and in compliance with sound business practices. The principles are:

- **1.** We behave and comply with laws
- We respect our colleagues
   We protect our assets and
- confidential information
- 4. We never make illegal payments
- **5.** We avoid conflicts of interest

We established our Responsible Investment Policy several years ago, covering the relevant aspects of our investment activities. The Policy aims to ensure that HitecVision funds only invest in companies that operate in an environmentally responsible manner, respect human and labour rights, have good, healthy and safe working conditions, and maintain high ethical standards. Our procedures are rooted in these fundamental principles and policies, underpinning how we take responsibility in areas where we have influence.

Figure 5. Our Responsible Investment Policy Please see p. 159 for our Responsible Investment Policy

![](_page_29_Figure_17.jpeg)

## Integrating ESG into our investment approach

HitecVision believes that integrating ESG factors into our decision making and ownership practices contributes to long-term performance advantages, and that this increases the value of our investment platforms when the time comes for us to realise our investment.

As the energy transition is becoming more and more of a reality, we have started applying our approach to capture new opportunities in the low carbon transition of the energy sector. Some companies, such as Vårgrønn, our recently established joint venture with Eni, will work only in the renewables space. Others, such as the transformation of Ocean Installer to Havfram and the consolidation of 20 companies in Moreld, show how it is possible to provide a second leg for companies that have traditionally been focused on the oil and gas sector.

When acquiring new companies, our pre-investment procedures ensure that relevant ESG factors are part of our analysis. These include due diligence processes and necessary compliance checks, as shown in the left-hand side of Figure 6.

#### Figure 6. ESG activity throughout the investment process

![](_page_30_Figure_8.jpeg)

### Engaging with our portfolio companies during the ownership period

HitecVision builds companies, often from scratch. The most important part of our ESG activity thus occurs in the ownership phase, where we have the opportunity to work closely with management and boards of the portfolio companies to set priorities and influence the strategic direction of companies, communicate our expectations, and ensure the necessary resources and systems are in place.

Our ESG work with portfolio companies in this period can be divided into three: strategy development; oversight and monitoring; and continuous improvement.

### Strategy development

In cooperation with our portfolio companies, we consider how ESG can be integrated into each company's operations and broader business strategy. In light of climate change risks, integrating energy transition concerns into companies' business models is becoming ever more important. With some of our portfolio companies, this entails shifting the strategic direction of the company, or restructuring it to harness new market opportunities.

As stated above, Havfram and Moreld are prime examples of this. These companies already held the necessary competencies to establish themselves in new market segments outside the oil and gas industry, such as offshore renewables, and by utilising existing capabilities to meet the requirements of new segments, the companies are repositioning themselves towards emerging value chains.

Another example is that we have asked all portfolio companies to develop a Low-Carbon Transition Plan, outlining how they are going to adapt their business and strategy to prepare for and execute their transition to a low-carbon future. This has been a major strategic focus for most of the portfolio companies over the last year, with the plans being discussed and approved at board level. Although not all portfolio companies have the opportunity to move out of oil and gas, they will all need to adapt to the energy transition in their own way, such as demonstrating some of the most sustainable operations among their peers.

### Oversight and monitoring

All our portfolio companies are required to report to us on a quarterly basis. The quarterly reports include three main sections:

- 1. The company's general ESG maturity status, such as certifications; internal resources allocated to ESG; implementation status for processes and procedures; and alignment with UN Sustainable Development Goals
- **2.** Description of any ESG-related events, incidents or challenges in the quarter
- **3.** Numerical data on a number of Key Performance Indicators (KPIs). The reporting also allows us to aggregate important KPIs to track our performance at the portfolio level, as described in the following section.

The operational model, place in the value chain, and geography differ considerably between our portfolio companies, and so does the range of ESG topics that is material to each company. This is reflected in the aspect materiality analysis for each company, and determines differences in ESG strategies, as well as which ESG metrics are relevant to monitor and report on.

Information gained from the reports is used to set the agenda for the biannual ESG meetings described below, helping to identify issues that need to be discussed. This allows for constructive discussions around performance (or non-performance), avoidable incidents, and additional focus areas.

### Continuous improvement

When acquiring or building a new business, we introduce new guidelines unless the new portfolio company can demonstrate that it already has equivalent guidelines in place. We place the responsibility to implement the guidelines with the companies' boards, and necessary standards, practices and expectations are communicated both through the board and directly to management. Our governance model for the portfolio companies has two key components:

- 1. A package of documents for the board, including detailed guidelines and an annual calendar of board meetings, as well as a number of template documents such as authority matrices and reporting templates. This standardised package allows for consistency in our governance approach.
- **2.** A comprehensive compliance program called "We Behave and Comply," covering regulatory requirements and other governance expectations that our portfolio companies must adhere to. The compliance program includes model documents for a number of governance procedures. (See figure 7)

Both of these are mandatory for portfolio companies controlled by HitecVision, and are regularly updated. The compliance program was updated in 2020, with new policies and procedures regarding cyber security, data protection, personal trading and payments. Implementation of our standards and governance programs is followed up through annual compliance reporting. As part of our "We Behave and Comply" programme,

#### Figure 7. The compliance programme "We Behave and Comply"

![](_page_32_Figure_2.jpeg)

we require the CEO of each of our portfolio companies to prepare an annual report on compliance and ethics to the company's board.

Since 2016, anti-corruption training has been mandatory for all relevant employees, management and the board members of the portfolio companies. In 2020, new e-learning tools for anti-corruption training and cybersecurity awareness were added to the compliance program.

Senior management and non-executive directors of new portfolio companies are given onboarding training on the governance model of HitecVision, to ensure a consistent level of ESG awareness. The onboarding training covers our investment philosophy and operational model, as well as general governance, the board package, audit and risk, credit issues, our compliance programs, as well as other ESG and reporting requirements. This forms a solid foundation for our later work with the companies. During ownership, HitecVision initiates regular ESG meetings with each individual portfolio company, to review their current activities, discuss potential areas of improvement, and outline our requirements and expectations. We dedicate significant resources to these meetings, which are attended by HitecVision's Chief Sustainability Officer and Compliance Director, and relevant case partners and other investment team members. Representatives from the portfolio companies typically include the ESG / HSEQ team and key management, including most often the CEO of the company.

These meetings normally start with a review of the materiality analysis covering ESG aspects for each company. We regularly see that one or more aspects have become more important to the company itself or to its stakeholders, and the analysis is updated accordingly. Sometimes, the conclusion is that the whole materiality analysis needs to be updated, triggering a separate process. The meetings then go on to discuss issues of importance to both the portfolio company and HitecVision. In 2020, typical themes of discussion in these meetings were climate issues; diversity and inclusion; supply chain engagement; cybersecurity; and general compliance issues. One of our focus areas in 2020 was climate risk, including reporting of climate risk and opportunity in accordance with the Task Force on Climate-related Financial Disclosures (TCFD) guidelines. This project is described in further detail on <u>page 35</u>.

### PEOPLE, PLANET AND PROFIT

![](_page_33_Picture_1.jpeg)

### **CASE STUDY**

### The TCFD project

HitecVision works with its portfolio companies to ensure integration of material ESG issues into their core business strategies. Part of this mandate is building knowledge on important developments in the ESG field and supporting companies in the implementation of appropriate management systems, for example to manage ESGrelated risks. An example of this portfolio engagement approach is our implementation of a TCFD project in 2020.

Following the publication of the TCFD recommendations in 2017, we noted the increasing demand for data on climate risk exposure in the financial sector. Supporting the aims of the TCFD and expecting an integration of the TCFD reporting framework in financial reporting regulation, we developed an training and implementation programme for the portfolio companies, aiming to embed TCFD policies, procedures and reporting across our investments. The ambition was to be an early mover in this, building on the 2019 project on climate reporting, and enabling the portfolio companies to meet new regulations and expectations from key stakeholders as they develop.

The aim of the TCFD's recommendations is to give investors and lenders guidance on how climate change can affect the financial outlook for companies. The recommendations focus on how climate policies and climate change can affect companies financially, rather than how companies affect the climate. Internal governance, risk systems, climate-risk metrics and disclosure strategies are at the core of the TCFD reporting requirements. Thus, our TCFD project was run as a joint effort between two of the specialist functions in HitecVision, Audit & Risk and Sustainability.

The Task Force consists of 11 recommendations structured around four thematic areas (Governance, Strategy, Risk Management and Metrics and Targets) that represent core elements of how organisations operate. The framework distinguishes physical risks from the transition risks arising from decarbonisation. It also recommends scenario development to understand the potential impact of future risks, including a 2°C warming pathway.

In the first half of 2020, we developed and commenced a pilot implementation

process with two of the portfolio companies. Using insight from the pilot implementation process, we proceeded to define and execute a full-scale implementation plan for most of the remaining companies.

HitecVision encourages all its portfolio companies to incorporate the TCFD framework and reporting standards to facilitate ongoing commitment from its key stakeholders. Following the project, all major portfolio companies have finalised their first TCFD reports, with the aim of issuing it alongside each company's 2020 annual report.

#### Key takeaways

The portfolio companies have recognised the importance of implementing TCFD reporting standards to maintain credibility and safeguard reputation among investors, lenders and the public. Several of the companies are categorised as high-emitting companies due to the industry in which they operate. This has led to increased pressure from lenders and investors requesting decision-useful climate-related risk information in order to make informed capital allocations and financial decisions, and being able to deliver this information in a structured and recognisable way is expected to be a competitive advantage in the future.

Introducing a process for identifying climate risks resulted in each portfolio company focusing on these issues in a more structured way, and integrating this knowledge into the companies' existing risk management systems has allowed for a more efficient way of setting out mitigation and adaptation measures. The project has also ensured that the companies maintain an effective governance mechanism to manage the full integration of risks and opportunities.

Working with our stakeholders to improve the process, we asked one of our key lenders to review a pilot report, providing constructive feedback to the report in detail and on the overall set-up. Comments and suggestions were incorporated as appropriate into all the portfolio companies' reports. We have also drawn on the experience of portfolio company Vår Energi, an early adopter of the TCFD recommendations.

![](_page_35_Picture_4.jpeg)

Please see https://moreld.com/sustainability-at-moreld/ for Moreld's TCFD report

Espen Tørvold Guldbrandsen, Head of Legal and Compliance in OMP, comments that "The TCFD project is a great example of HitecVision's active ownership approach. The framework they set up worked really well for us to analyse our potential climate-related financial risks. As an organisation, we learned a lot about how a stronger focus on climate change is affecting the financial market. For our business, we see direct and immediate risks, and the TCFD project helped us map, understand and manage these risks." We anticipate that in the future all portfolio companies will report in alignment with the TCFD recommendations on an annual basis, as part of their financial filings. The reports, and in particular their most complex parts, the scenario analyses, will be further developed over time, providing more granularity and an even better foundation for decision-making.
# Low-Carbon Transition Strategy

Our Low-Carbon Transition Strategy was launched in 2020, and was probably our most important ESG initiative over the past year.

The strategy details how we wish to be part of the solution rather than the problem of the energy transition, and has wide-ranging implications both for our current portfolio companies, and for our future portfolio construction.

The strategy has five key elements, where three directly describe our ambitions for our portfolio, and two concern our own operations. Supporting the Paris Agreement, our overall target is to achieve a net zero climate footprint from our own operations from 2020 and from the portfolio by 2030. Our ambitions are listed below, with further details provided on our web page:

### IN OUR OWN OPERATIONS

**1.** We will be carbon neutral in our own operations from 2020.

- **a.** We will further increase the use of video conferencing and minimise business travel.
- **b.** We will ensure carbon neutrality in our office through securing 100% renewable electricity for our power consumption.

Where it is not possible to avoid business travel or secure renewable electricity we will buy natural carbon capture offsets to achieve net zero.

# **2.** We will contribute to driving down emissions from our customers, business advisors, banks and other counterparties.

**a.** We will offer online versions of all meetings and conferences with our investors, business advisors, banks and other counterparties.

- **b.** We will include ESG and carbon footprint strategies as a key criterion in our choice of advisors.
- **c.** We will require from our suppliers that they are able to use video conferencing instead of travel in meetings with us.

### IN OUR PORTFOLIO

**3.** We will build on our position as a leading energy-focused private equity firm to support the transition to net zero.

- **a.** We will aim to establish new funds to invest in and build companies focused on low- or no-carbon energy production, infrastructure and solutions, supporting the transition to a net zero energy system.
- **b.** We will leverage the know-how and workforce of our current and future portfolio companies to support our net zero targets.
- **c.** We will work directly and through our investment platforms to back policies that support a just transition, including carbon pricing.

**4.** We aim to halve the carbon intensity of our energy producing portfolio companies by 2030.

- **a.** For our energy producing portfolio companies, we aim for a reduction of the carbon intensity of their energy production by 50% by 2030, and for net zero by 2050.
- **b.** For all new E&P investments, we will include a price of carbon of USD 75 per tonne CO<sub>2</sub> eq. in our investment analyses.
- **c.** We will aim to make impact investments through energy producing companies where we see the

potential for significant reductions of emissions.

**5.** We aim to reduce the net greenhouse gas emissions from our other portfolio companies to zero by 2030.

**a.** Each company shall establish a Low-Carbon Transition Plan (LCTP) showing how it will achieve net zero by 2030. The LCTP shall be approved by the board of each company by the end of 2020.

We have achieved our ambition of carbon neutrality for Scope 1 and 2 emissions in our own operations in 2020. This was made possible by purchasing certified renewable energy as far as possible for our office spaces, and purchasing natural carbon offsets for those emissions we were unable to abate, mainly related to travel.

Our ambitions and strategy at the portfolio level were followed up in 2020 primarily with planning and preparations for our low-carbon energy investment strategy. Our portfolio companies have been tasked with establishing their own LCTPs, and we are beginning to see the effects of these on company strategy and actions.

As we start investing in opportunities closely linked to the energy transition and renewables, we will continually update and refine the Low-Carbon Transition Strategy. This will also include updates to how we follow up the LCTPs of our portfolio companies, as well as disclosing our progress on select KPIs that track our decarbonisation.



"The Gherkin", site of our London office, is known for its energy efficiency

### The climate footprint of our own operations

Business travel is normally by far the largest part of our organisation's climate footprint.

HitecVision has been an early adopter of videoconferencing to reduce travel, but even so air travel associated with our operations dropped significantly in 2020 due to Covid-19, leading to a reduction in total emissions from the firm of 88 percent.

Prior to the pandemic we already had video conference units in every meeting room and on every desk, and with the Covid-19 pandemic necessitating working from home, we have also during 2020 installed dedicated video conferencing equipment in most home offices. Through the purchase of certified renewable energy, our Scope 2 emissions were largely eliminated, helping us decarbonise our own emissions. For emissions we were unable to abate, carbon offsets were purchased to help us achieve carbon neutrality in our own operations for 2020.

#### **Table 1.** HitecVision's climate footprint for 2020 (tCO<sub>2</sub>-equivalent)

	2019	2020
Scope 1	0.0	0.0
Scope 2 <sup>1</sup>	20.5	16.0
Scope 3	198.6	9.8
Scope 3, waste <sup>2</sup>	_4	1.8
Scope 3, business travel <sup>3</sup>	198.6	8.0
Sum, Scope 1 and 2	20.5	16.0
Sum, Scope 1, 2 and 3	219.1	25.8

<sup>1</sup> Mainly electricity and district heating and cooling of our offices. <sup>2</sup> Scope 3, waste comprises emissions from incinerated residual waste and recycled organic waste. <sup>3</sup> Scope 3 business travel includes emissions from taxis, hotel accommodation, car rentals and air travel. <sup>4</sup> Scope 3 emissions in 2019 included only business travel.

# Transparency in ESG reporting

As mentioned, HitecVision requires all portfolio companies to follow an ESG reporting regime that allows us to monitor and follow up performance.

Some mandatory metrics are required from all companies, which can then be aggregated to display portfolio-level ESG performance. In 2019, we established a set of ESG related KPIs that are relevant for the whole portfolio, which allows us to aggregate significant indicators for environment, social and governance

For the current report, we have added a few more KPIs to the aggregated ESG reporting. New KPIs include the valueweighted average carbon intensity measure, greenhouse gas emissions per barrel produced for our oil and gas companies, the average employee turnover ratio at a portfolio level, and the percentage of employees who have completed anti-corruption training.

Weighted average carbon intensity (WACI) has been chosen as a KPI because it is recommended by the TCFD. It is defined as the total Scope 1 and 2 emissions per unit of revenue (i.e. the carbon intensity of each portfolio company) weighted by each portfolio company's proportion of total portfolio value. The WACI provides a benchmark that is comparable across industries and segments. A WACI of 92.4 for our portfolio compares with the MSCI World index at 162.4, with the North American index at 170.1 and Europe at 148.1.

### KPI developments in 2020

For environmental KPIs, two notable changes from 2019 to 2020 are observed for the climate-related KPIs: a decrease in Scope 1 and an increase in carbon intensity against both revenue and value creation. The main driver for the decrease in Scope 1 emissions is significantly reduced emissions from Vår Energi, mainly due to improved power management and the shut-down of the old Jotun FPSO. Vår's emissions per barrel of oil equivalent produced from its operated fields have been reduced by almost 30%. Other contributors are Prosafe and Atlantica, where reduced emissions are due to generally lower activity in the year, with rigs laid up instead of working.

The decrease from these companies was partly offset by increases in emissions by Havfram, which tripled its activity level from 2019 (in terms of vessel days), and NEO Energy, which acquired significantly more oil and gas production mid-2020, and for the first time became operator for some of its production.

The higher carbon intensity is primarily a result of lower oil prices. The largest emissions come from our oil and gas companies, and as these earn less for every unit of oil produced, their revenue carbon intensity automatically increases. For oil producing companies in the portfolio, we have also included the carbon intensity per barrel of oil for 2020. The number is largely driven by the increased activity of NEO Energy who acquired several new fields during 2020. This is offset by tremendous areas. Over time we hope to use this to measure actual improvement across the portfolio. The table on the next page shows our 2020 ESG performance for these core metrics<sup>1</sup>.

turnaround efforts by Vår Energi, who improved their emissions per boe significantly.

The most significant change related to KPIs within the social dimension of ESG between 2019 and 2020 is a significant improvement in the number of Lost Time Injuries. The oil and gas industry remains male-dominated, and the portfolio experienced a slight decrease in the average share of women in the workforce and in management. Havfram, Prosafe and OMP were the only portfolio companies to experience an increase in their female representation at the management level between 2019 and 2020.

There are some noticeable improvements across the governance indicators. For example, the portion of companies with an established whistleblower channel increased by over 9 percentage points. Moreover, all companies have now implemented an anti-corruption program and more than 80 percent of relevant employees have completed anti-corruption training. Similarly, increased focus on ICT security and risk has ensured that more than 96 percent of portfolio companies have implemented a cybersecurity policy or ICT risk management as part of their quality systems.

<sup>1</sup> We have made some adjustments to KPIs for this report, including tightening our definitions of the KPIs to ensure consistency of reporting across the portfolio. The 2020 results will therefore differ slightly from the 2019 figures for some companies, such discrepancies should however not be material. Table 2. Aggregated ESG metrics at the portfolio level <sup>1</sup>

KEY AGGREGATED FIGURES FOR THE PORTFOLIO	UNIT	2019 <sup>2</sup>	2020
Total number of employees <sup>3</sup>	#	4 705	4 723
Total revenues	USD million	7 461	4 763
Value added (wages / salaries cost + EBITDA)	USD million	5 023	2 741
ENVIRONMENT	UNIT	2019 <sup>2</sup>	2020
Greenhouse Gas Emissions			
Direct GHG emissions (GHG Protocol Corporate Standard Scope 1 for all reported companies)	) <sup>4</sup> tCO <sub>2</sub> e	245 718	216 629
Energy indirect GHG emissions (GHG PCS Scope 2 for all reported companies) <sup>4</sup>	tCO <sub>2</sub> e	6 142	7 077
Other indirect GHG emissions (GHG PCS Scope 3 for all reported companies) <sup>4</sup>	tCO <sub>2</sub> e	250 101	221 345
Carbon Intensity			
Weighted Average Carbon Intensity	tCO <sub>2</sub> e/ USDm	96.5	92.4
Carbon intensity per barrel of oil equivalent produced - operational control (oil companies only)	5 kgCO <sub>2</sub> e/boe	10.1	11.9
Carbon intensity per barrel of oil equivalent produced - equity share (oil companies only) <sup>5</sup>	kgCO <sub>2</sub> e/boe	11.0	12.6
Revenue carbon intensity - Scope 1 & 2	tCO <sub>2</sub> e/ USDm	68.3	83.8
Revenue carbon intensity - Scope 1, 2 & 3	tCO <sub>2</sub> e/ USDm	136.2	166.8
Value Creation intensity - Scope 1 & 2	tCO <sub>2</sub> e/ USDm	103.6	171.1
Value Creation intensity - Scope 1, 2 & 3	tCO <sub>2</sub> e/ USDm	206.5	340.4
Maturity in environmental matters			
Proportion of portfolio companies with ISO 14001 certification <sup>6</sup>	%	64.0%	63.0%
SOCIAL	UNIT	2019 <sup>2</sup>	2020
Health and safety			
Lost Time Injuries (LTI)	#	21	11
Diversity			
Share of women in workforce <sup>7</sup>	Weighted average %	20.4%	18.9%
Share of women in management <sup>8</sup>	Weighted average %	23.0%	24.7%
Employee turnover ratio <sup>9</sup>	%	-	6.5%
Maturity in environmental matters			
Proportion of portfolio companies with ISO 45001 (or OHSAS 18001) certification <sup>6</sup>	%	50.0%	48.1%
GOVERNANCE	UNIT	2019 <sup>2</sup>	2020
Maturity in governance matters			
Percentage of companies that have an anti-corruption program in place	%	92.0%	100.0%
Percentage of employees that have completed anti-corruption training <sup>6</sup>	%	-	81.9%
Percentage of portfolio companies with an established whistleblowing channel <sup>6</sup>	%	72.0%	81.5%
Percentage of portfolio companies that have an assigned responsible for ESG issues <sup>6</sup>	%	100.0%	100.0%
Percentage of portfolio companies that have an ICT / Cybersecurity Policy in place, or ICT risk management as part of its quality system <sup>6</sup>	%	92.0%	96.3%
Percentage of portfolio companies with ISO 9001 certification 6	%	73.1%	70.4%

<sup>1</sup> Aker Solutions, where HitecVision has a 7% ownership share, is not included in these figures. The company's ESG data can be found in its own sustainability report, available here: https://www.akersolutions.com/globalassets/sustainability/sustainability-report-2020.pdf.
 <sup>2</sup> 2019 results have been adjusted to match the current portfolio structure.
 <sup>3</sup> Adjusted definition to employees to FTEs at 31.12.2020.
 <sup>4</sup> Weighted by ownership share.
 <sup>5</sup> Vår Energi and NEO Energy. Carbon intensity per barrel for 2020 includes fields

acquired during the year on a full-year basis. <sup>6</sup> The complete portfolio of Windship share. <sup>4</sup> Val Energy and NEO Energy, barbon mensity per barbon in 2020 includes needs a cquired during the year on a full-year basis. <sup>6</sup> The complete portfolio of windship share. <sup>4</sup> Val Energy and NEO Energy, barbon mensity per barbon works a single company. <sup>7</sup> Adjusted definition to number of female FTEs in senior management positions. <sup>8</sup> Employees the target the complexes in the senior during the company on their sup initiative. (curverse ne. of complexes in the senior)

<sup>9</sup> Employees leaving the company on their own initiative / average no. of employees in the period.

### Calculating the carbon footprint of the portfolio

The aim of the carbon footprint data presented in this report is to get an overview of each portfolio company's greenhouse gas (GHG) emissions.

This carbon accounting is a fundamental tool in order to enable the companies to identify measures to reduce their energy consumption and corresponding GHG emissions.

Before HitecVision started the carbon footprint reporting project in 2019, only a minority of the portfolio companies calculated this information. Working with the companies and carbon accounting specialist CEMAsys, all companies now report their CO<sub>2</sub> emissions on a regular basis, allowing us to benchmark performance indicators and progress over time.

The input data is based on information from both internal and external data sources, which have been converted into tonnes of  $CO_2$  equivalent. The analysis is based on the international standard; A Corporate Accounting and Reporting Standard, developed by the Greenhouse Gas Protocol Initiative (the GHG protocol). This is the most widely used standard for measuring greenhouse gas emissions, and was the basis for the ISO standard 14064-I.

The Greenhouse Gas Protocol Initiative (GHG protocol) has been developed by the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD). The current analysis has been done according to A Corporate Accounting and Reporting Standard Revised edition, currently one of four GHG Protocol accounting standards explaining how to calculate and report GHG emissions. The reporting considers the following greenhouse gases, all converted into  $CO_2$ equivalents:  $CO_2$ ,  $CH_4$  (methane),  $N_2O$  (laughing gas), SF6, HFCs and PFCs.

Unless otherwise noted, the analysis in this report is based on the operational control aspect that defines what should be included in the carbon inventory, as well as in the different scopes. When using the control approach to consolidate GHG emissions, companies choose between either the operational control or financial control criteria. Under the operational control approach, a company accounts for the GHG emissions from operations over which it has control. It does not account for GHG emissions from operations in which it owns an interest but has no control. In 2019, we reported the emissions of one company, NEO Energy, using the equity share approach, as the company had at that time no operated oil and gas fields.

The carbon inventory is divided into three main scopes of direct and indirect emissions.

**SCOPE 1:** Mandatory reporting includes all direct emission sources where the organisation has operational control. This includes all use of fossil fuels for stationary combustion or transportation, in owned, leased or rented assets. It also includes any process emissions, from e.g. chemical processes, industrial gases, direct methane emissions etc.

**SCOPE 2:** Mandatory reporting includes indirect emissions related to purchased energy; electricity or heating/cooling, where the organisation has operational control. Most companies are reporting using the CEMAsys online reporting tool. The electricity emissions factors used in CEMAsys are based on national gross electricity production mixes on a 3-year rolling average (IEA Stat). The Nordic electricity mix covers the weighted production in Sweden, Norway, Finland and Denmark, which reflects the common Nord Pool market area. Emission factors per fuel type are based on assumption in the IEA methodological framework. Factors for district heating/ cooling are either based on actual (local) production mixes, or average IEA stat.

**SCOPE 3:** Voluntary reporting of indirect emissions from purchased products or services in the value chain. The scope 3 emissions are a result of the company's different activities, which are not controlled by the company, i.e. they're indirect. Examples are business travel, goods transportation, waste handling, consumption of products etc. In general, the GHG report should include information that users, both internal and external to the company need for their decision making. An important aspect of relevance is the selection of an appropriate inventory boundary that reflects the substance and economic reality of the company's business relationships. In the 2019 version of this report, Scope 3 emissions cover only business travel, primarily by air, unless otherwise noted. We aim to systematically extend the coverage of Scope 3 emissions in the future.

**REFERENCES:** ■ Department for Business, Energy & Industrial Strategy (2020). Government emission conversion factors for greenhouse gas company reporting (DEFRA) ■ CA (2020). CO<sub>2</sub> emission from fuel combustion, International Energy Agency (IEA), Paris. ■ IEA (2020). Electricity information, International Energy Agency (IEA), Paris. ■ IMO (2014). Reduction of GHG emissions from ships - Third IMO GHG Study 2014 (Final report). International Maritime Organisation, www.iadc.org/wp content/uploads/2014/02/ MEPC-67-6-INF3-2014-Final-Report complete.pdf ■ IPCC (2014). IPCC fifth assessment report: Climate change 2013 (AR5 updated version November 2014). www.iadc.org/wp content/uploads/2014/02/ MEPC-67-6-INF3-2014-Final-Report complete.pdf ■ IPCC (2014). IPCC fifth assessment report: Climate change 2013 (AR5 updated version November 2014). www.ipcc.ch/report/ar5/ ■ IAB, RE-DISS (2020). Reliable disclosure systems for Europe – Phase 2: European residual mixes. ■ WBCSD/WRI (2004). The greenhouse gas protocol. A corporate accounting and reporting standard (revised edition). ■ World Business Council on Sustainable Development (WBCSD), Geneva, Switzerland Morld Resource Institute (WRI), Washington DC, USA, 116 pp. ■ WBCSD/WRI (2011). Corporate value chain (Scope 3) accounting and reporting standard: Supplement to the GHG Protocol corporate accounting and reporting standard. World Business Council on Sustainable Development (WBCSD), Geneva, Switzerland /World Resource Institute (WRI), Washington DC, USA, 149 pp. ■ WBCSD/WRI (2015). GHG protocol Scope 2 guidance: An amendment to the GHG protocol corporate standard. World Business Council on Sustainable Development (WBCSD), Geneva, Switzerland /World Resource Institute (WRI), Washington DC, USA, 117 pp.



### Future focus areas

### Making a difference through our portfolio companies

### Low-Carbon Transition Plans

In the coming year, we will continue to work with our portfolio companies to further strengthen their ESG performance. As explained above, many of our portfolio companies have taken important steps to integrate a Low-Carbon Transition Plan into their corporate strategy. Monitoring the implementation of these is probably our most important task for 2021.

### Extending climate footprint awareness

Another key target for 2021 is to expand the Scope 3 GHG emissions reporting from the portfolio companies. Scope 3 reporting can be a complex exercise, and when we initially implemented GHG reporting, we started with only those factors where data were generally available, with a clear intention of expanding coverage over time. Gradually building a more comprehensive coverage of Scope 3 emissions will help companies realise the entire extent of their carbon footprint and provide a basis for value chain improvements.

### **UN Sustainability Goals**

We have for some time encouraged our portfolio companies to include their engagement with and contribution to the UN's Sustainable Development Goals (SDGs) in their quarterly reporting to us. We see that more and more companies pick up on this, and will continue to work on this aspect in 2021, with a target of all portfolio companies analysing their business in relation to the SDGs and selecting the relevant ones to integrate in their strategy and sustainability profiles.

# Embedding ESG in our company culture

Ultimately, ESG performance comes down to people, starting with ourselves. In addition to instilling values and building knowledge, everyone at HitecVision needs to be aware of how our business impacts the surrounding world. By addressing our own team we try to build ESG awareness first across our own organisation, and through them ensuring significant real-world impacts through our portfolio companies.

### Ensuring ESG competence in HitecVision

HitecVision has an ambition for continuous improvement of the competencies within the organisation.

Activities are performed under our HitecVision Academy umbrella, which is our programme to continually upskill our professionals as well as management and board members of our portfolio companies. Raising the ESG competence level is part of this. We educate our team through regular ESG-themed courses and seminars, both for our investment team and other staff members.

Due to Covid-19, the amount of internal training in 2020 has been lower than planned. Even so, we have conducted sessions on the energy transition, on TCFD and climate risk disclosure, and on the most recent update to our compliance programme – the latter with full-day seminars (before Covid-19) in Stavanger, Oslo and London for our own staff and for management and board members of the portfolio companies.

As reported in our ESG report for last year, we ran a series of thematic HitecVision Academy sessions in early 2020 to inform all employees about the risks and opportunities associated with the transition to a low-carbon economy. The sessions were provided by DNV, who publish a yearly report on this subject called The Energy Transition Outlook. The seminar series featured three modules. The first explored the future of energy supply and demand, the second highlighted the role of oil and gas in the energy transition, and the third explored the growth of renewable energy and the functional perspectives of the power sector.



### **EMPLOYEE PROFILE:**

### Maren Stangeland on HitecVision's culture

### *What drew you to apply for a role in HitecVision?*

After finishing my studies in finance, I began working as a consultant within financial transactional support. This role exposed me to M&A and the PE sector, and I became motivated to move towards private equity in order to be able to follow the M&A processes more closely from idea to closing. In addition to being a significant European PE firm, HitecVision has a unique position and track record as a serial entrepreneur in the energy sector, which weighed positively on my decision to apply for a job here.

### How would you describe the work culture in HitecVision?

In the investment team, we work in small teams. This enables us to work closely with each other, and it reduces the distance from analysts to senior partners. Everyone who joins HitecVision is aware that the company has high expectations when it comes to quality, tempo and dedication. When we all share that mindset, it gives us a great dynamic and drive as a team.

### How have you noticed the strategic direction of HitecVision changing since you joined the firm?

When I joined the company, I was interested to see how an oil and gas

heavyweight like HitecVision would adapt to the coming changes in the energy sector. The redirection in focus and vision came sooner than expected, and I'm proud to work for a company that takes a proactive role in the energy transition.

Change is not a new concept to HitecVision, we've been ahead of the next trend for decades, as our CEO regularly reminds us. I believe this is one of the key reasons why the company is still such an important player in the European energy market - and it's one of the things that makes it such an exciting place to work.

Ms. Stangeland is a senior associate on HitecVision's investment team. She joined our graduate programme in 2018, from a position as consultant at Deloitte Financial Advisory.

### **Diversity & Inclusion**

HitecVision has been working strategically to improve diversity and inclusion for a number of years. We believe that achieving balance in our organisation, not just in terms of gender but also in terms of age and background, is key to our company culture and performance. This is a part of HitecVision's long-term strategy for organisational development.

The HR department monitors and reports regularly on the status of diversity and inclusion to the CEO and board of directors. As our organisation is relatively small and the workforce is stable, we are conscious that changes must take place over time, supported by clear goals and measures.

Our Ethical Guidelines (see Appendix A) set out our commitment to build a creative, diverse and inclusive working environment. The guidelines highlight our zero tolerance for harassment, discrimination and bullying, our expectation that everyone in HitecVision should treat all colleagues with courtesy and respect, and our focus on qualifications, demonstrated skills and achievements as the basis for promotion and rewards. We have zero tolerance for discrimination, and will always recruit, promote, train and reward our employees based on merit alone. All new employees are introduced to and have to sign off on our Ethical Guidelines and other governing documents as part of their onboarding process.

Our whistleblowing channel is available to all employees and provides the opportunity to report concerns anonymously and without retaliation, retribution or harassment. We evaluate performance systematically, based on an appraisal system that maps each employee's performance on both personal skills, such as planning and organisation, problem analysis / resolution and communication and presentation skills, as well as technical skills such as industry knowledge, understanding of ESG issues, valuation and modelling and IT proficiency. This ensures that decisions regarding promotions and rewards are based on demonstrated skills and achievements.

Our gender diversity target is to achieve a minimum of 33 percent female or male representation in all teams and parts of the organisation, and all potential recruitments are assessed against this goal. When advertising available positions, we have matured a more conscious approach on how we present our diversity and inclusion approach.

Our continued work on diversity and inclusion is producing tangible results. At the end of 2020, HitecVision's workforce totalled 60 persons, of whom 58 percent are male and 42 percent are female. Our group management comprises four men and four women. In our investment team, there is an overall over-representation of men (76 percent), but below partner level we have achieved an equal gender balance.





We have an age average of 40.7 years across the organisation, aligned with our target of an average age of 40 years.

### Additional information

(provided in accordance with Norwegian regulations on mandatory diversity & inclusion reporting)

Numbers per 31/12/2020:

TEMI EMPL(	PORARY DYMENT	FAMIL (AVERAGE OF	FAMILY LEAVE ERAGE NUMBER ACTUAL INVOLUNT OF WEEKS) PART-TIME PART-		LUNTARY ART-TIME		
WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN
0	2 <sup>1</sup>	13 <sup>2</sup>	0	0	0	0	0

<sup>1</sup> Internships. <sup>2</sup> 2020 part of longer leave periods.

Family leave policy	Our family leave policy is regulated by the Norwegian Working Environment Act. The parental benefit period totalling 49 weeks consists of a period of three weeks before the due date for the mother; a maternal quota of 15 weeks (of which the first six weeks must be taken immediately following the birth); a paternal quota of 15 weeks; and a joint period of 16 weeks. The company policy is that all employees, regardless of gender or function, are required to take their allocated parental leave, as a minimum. HitecVision covers full pay throughout the leave period for all employees.
Recruitment	Six new employees joined HitecVision in 2020. Three are men and three women and all joined the investment team.
Promotions	Nine employees gained promotions in 2020, out of which five were given to women and four to men.
Training provided	560 hours of training were undertaken in 2020. Of these 52.5 percent represents training conducted by external resources, with 47.5 percent conducted by internal senior resources.
Pay structure	As stipulated in the reporting requirements, HitecVision has completed a pay structure mapping, to ensure equal pay in the organisation. Because of the limited number of employees in each group the information can however not be published.

### Diversity on the portfolio company boards

Over the last two years, we have made a concerted effort to improve the gender balance of the boards of directors of our portfolio companies. In March 2019 we completed a mapping of the gender balance of board members in our portfolio companies, and found that there were only two female board members at the time – fewer than we had had for a long time. To reverse this trend we took action to create change in line with our belief that a better gender balance on companies' boards has a long term positive value impact. Since the project started our portfolio has undergone significant restructuring, most notably with the creation of Moreld, and the establishment of Sval and Vårgrønn, and the subsequent changes in board composition gave us an opportunity to simultaneously achieve an improvement in gender balance. We have seen concrete improvements in this area as a result of our work, and have recruited 12 new female board members in this period. We currently have an average of 28 percent female representation across the boards of our portfolio.



The appointment of female board members has never come into conflict with our requirements when it comes to skills, background and experience. Our organisation has a large network from which we identify suitable candidates, and with targeted mapping of this network and support from external recruitment resources when necessary, we have been able to identify excellent candidates of both genders.

Our focus on diversity and inclusion also extends to other stakeholders. Our Supplier Expectations Statement (see Appendix B) specifies that we expect our suppliers to have a policy on diversity and inclusion and an active programme for implementing it, whilst providing employees with good, healthy and safe working conditions, offering equal opportunities and respecting fundamental human rights, labour rights and union engagement.

Building the board of Sval Energi is a representative case study of the considerations we weigh when appointing non-executive directors to a newly established company. HitecVision always aims to establish a board made up of members with complementary experience and skillsets, that can support company management and us in executing the company's strategic plans. We look for individuals with international experience, management and energy sector experience, and specialised knowledge in finance, digitalisation, ESG, politics, or other competency areas of specific importance to our portfolio companies.

In the establishment of Sval Energi's board, our appointment process resulted in a board composed of two female and four male board members, with extensive and relevant experience within oil and gas, renewable energy and infrastructure (see overview below and <u>https://</u> sval-energi.no/about/ for details).

Our focus on diversity and inclusion will continue to be an integrated part of the way we work both in HitecVision and with our portfolio companies.



### Sval Energi's Board of directors

**GUNNAR OLSEN** Chairman

TIM BUSHELL Non-executive director

JOHN KING Non-executive director

GUNNAR HALVORSEN Non-executive director ANNE STRØMMEN LYCKE Non-executive director

KARI EKELUND THØRUD Non-executive director



### Supporting the local community

Since 1985, HitecVision has been a part of Norway's energy industry, creating local value and jobs. Our roots in our local communities are deep.

Our commitment to these communities has led to HitecVision becoming involved in social impact projects beyond our core business mandate. Our two flagship activities within social entrepreneurship are Paahjul and Gatelaget Viking.

Unlike our ESG initiatives, the work we do in the CSR arena is primarily driven by the social, community and philanthropic impact it generates rather than any commercial imperative. Wherever possible we seek to align some of our philanthropic activities with those undertaken within our portfolio.

In Stavanger, where we are headquartered, we have proudly contributed to building the city's industrial heritage, and are equally proud of our community engagement outside of oil and gas.

### Paahjul

Over the last nine years, HitecVision has supported the reintegration of people recovering from substance abuse issues in the workforce through the social entrepreneurship project Paahjul initiative in Stavanger and Oslo. Paahjul are bicycle repair shops that offer work training for former drug abusers. Participants in the programme are offered individually tailored work training to enable them to rejoin a normal work life.

The first bicycle repair shop opened in Stavanger in 2013, the second shop opened in 2015 at Hinna, Stavanger, the third shop opened in 2016 at Barcode, Oslo and the most recent shop opened in 2019 in Sandnes. Each shop aims to introduce four to six new people to the programme per year, helping them become familiar with the routines and expectations of a workplace. The target is that those who are able to proceed beyond the Paahjul experience shall move on to standard work with another employer, based on the knowledge and work experience gained with Paahjul.

In the establishment of Paahjul, HitecVision joined forces with Kirkens Bymisjon (the Church City Mission) to play an active role in the interface between society and the corporate landscape, combining HitecVision's competence as entrepreneurs with Kirkens Bymisjon's well-established humanitarian position in the society. Paahjul combines HitecVision's serial entrepreneur model and Kirkens Bymisjon's social entrepreneur model to contribute capital, competence, and our respective networks to create positive returns to society.



In order to achieve the overall targets of the programme, HitecVision supports the project with necessary funds and competence to assist in the daily management and operation, while Kirkens Bymisjon has the key responsibility for the people taken into the program. By applying our business profitability mindset to the societal challenge of getting people outside of the labour force back to meaningful employment, we are using our core competence to make a difference.

### Gatelaget

In 2019, HitecVision entered another social value creation partnership, this time with local football club Viking FK and local health organisation Helse Stavanger. This initiative, called Viking Gatelag, is a football team for women and men with substance-related problems. By providing an opportunity to experience teamwork and a sense of belonging and achievement through team sports, Gatelaget provides another model for bringing people back to employment or education.

### Measuring impacts

Since its inception, the Paahjul programme can boast a 47 percent success rate, with 30 individuals re-integrated in the workforce through the project. Viking Gatelaget has seen 8 people move on to work or education, with a 17 and 7 percent success rate for 2019 and 2020<sup>1</sup> respectively.

### Paahjul Social Results 2020

- 49 people participated in work training
- 31 people completed the training programme in 2020
- 16 of those who completed the training went on to ordinary jobs

### **Gatelaget Social Results 2020**

- 30 soccer players in the programme, with 6 being regular team members
- 2 people left the team to go to ordinary jobs or studies

### Other CSR activities

#### Christmas support to disadvantaged families

Sponsored by HitecVision, each employee with his/her family has since 2019 created Christmas boxes with food and gifts that are donated to disadvantaged families. Each employee is allocated one anonymous family, with details of wish lists for children, favourite foods, etc. 56 Christmas boxes were donated in Oslo and in Stavanger in cooperation with local charities.

<sup>1</sup> Due to Covid-19 restrictions related to physical activities and sports, Gatelaget has reduced/adapted its activities during the Covid-19 pandemic.



#### Sponsorlauget

Sponsorlauget is another programme with Kirkens Bymisjon in Stavanger. Through this sponsor fellowship, we are helping improve the livelihood and dignity of others, supporting the following activities:

### The Night Ravens ("Natteravnene")

The Night Ravens is a preventive measure against youth violence and disorderly behaviour. Volunteering adults patrol the streets at night, providing a visible but low-key adult presence in the city streets where young people congregate in the evenings and nights.

#### The Street Pastor ("Gatepresten")

The Street Pastor's main objective is to be a priest for those who have challenges, and he or she spends much of their time on the streets. The priest also conducts outreach and is available for conversation support, guidance and care for those who seek support and consolance.

### The Release Valves ("Ventilene")

The Release Valves is a meeting place for young relatives and family members of people with issues such as substance abuse, violence, mental or physical handicaps. The Release Valves invites these children and adolescents to join weekend and holiday events and activities.

### The Street Lawyer Stavanger ("Gatejuristen")

The Street Lawyer Stavanger offers free legal assistance to substance abuse victims in the greater Stavanger area. Since its inception in 2013, The Street Advocate in Stavanger has managed 800 cases.

# Stakeholder Perspective

### ESG in private equity, as seen by one of Europe's leading investors



### STAKEHOLDER PERSPECTIVE:

# An interview with Keimpe Keuning of LGT Capital Partners

With reference to your ESG in Private Equity 2.0 Report, please share your thoughts on the current investment practices of GPs, and how these have matured in recent years. In your experience, what makes a GP successful in integrating ESG into its investment strategy?

To help managers frame their approach to enhancing ESG capabilities, LGT Capital Partners published in 2020 the second edition of a guide on ESG integration in private equity, called "Implementing ESG in private equity 2.0". The guide highlights best practices of ESG integration by private equity managers (GPs). Specific topics of attention are Climate Change and Diversity & Inclusion.

GPs are getting more granular on the ESG KPIs they track. This helps them to better manage the ESG risks and opportunities within their portfolio companies. They have also more deeply embedded ESG processes into their investment decision-making, monitoring and reporting activities.

Value creation is now clearly at the forefront of private equity owners in managing the material ESG topics at their portfolio companies. As such, many ESG activities are shifting to focus on specific outcomes that can enhance a company's bottom line, whether in terms of eliminating costs or generating additional revenue streams. What do you think should be the most important focus areas for the GPs for the coming years?

The three most important focus areas should be:

- 1. Setting clear goals in terms of expectations and achievable outcomes from ESG integration efforts and continuous focus on materiality of ESG topics for different businesses.
- **2.** Improving data collection and transparency in terms of reporting on ESG factors and ratios.
- **3.** Prioritising and working actively on developing investment strategies and portfolios consistent with achieving a global target of net zero emissions by 2050.

What do you regard as the most important ESG factors in the portfolio companies, from an LP perspective? Are these changing over time? What developments do you see over the coming years - will the climate issue continue to overshadow all other ESG factors?

Climate change is undoubtedly the most important and the most urgent topic for the coming years. The focus in climate change has increased ever since the Paris Agreement was signed in 2015. By now the vast majority of investors are working to minimize the GHG emissions from their investments, as well as trying to assess how climate change is affecting the riskiness and the return expectations of their holdings. This is of course also a big topic for us at LGT Capital Partners and for our private equity portfolios. We see more private equity managers actively working on the topic in different business areas.



Keimpe Keuning Executive Director

Keimpe Keuning is an executive director at LGT Capital Partners where he is responsible for ESG and sustainability in Private Markets, including Private Equity.

He is a member of the firm's ESG Committee and chairs the Private Markets ESG sub-committee.

#### About LGT

LGT Capital Partners, part of the LGT Group, is a global multi-alternatives platform with USD 70 billion in assets under management and more than 550 institutional clients in 41 countries.

An international team of over 550 professionals is responsible for managing a wide range of investment programs.



This can be by putting the topic on board agendas but for instance also by looking deeper into supply chain management and circularity or end of life product questions.

We expect that climate change will remain a top priority for the current decade as well as the two following decades. Basically until 2050 or earlier if the net zero goals have been reached.

Next to climate, there are of course other very important topics within ESG. One key area of focus is diversity & inclusion where a lot of attention, and rightfully so, goes to gender diversity and equal opportunities including equal pay.

Another major trend is the evolution of ESG from its historic focus on process to an increasing concern with real world outcomes. The investment industry has achieved a lot with ESG in the last 15 years, as it is now part of almost every investor's approach, and most organisations have dedicated substantial resources to this end. But it has been difficult to define success and the outcomes we wanted to achieve. This has become easier since 2015, when all nations agreed on combating global warming with the Paris Agreement and the unanimous approval of the 17 SDGs. The SDGs enable investors to take a more outcome-oriented approach to sustainable investing because the goals enable them to measure impact towards achieving targets that have been globally agreed and quantitatively defined.

With the coming energy transition, there is a lot of interest in "green" investments - renewables and new energy technologies. While positive from a climate perspective, do you also see negative ESG aspects to this type of investment?

The fact that "green" investments support the energy transition and directly contribute to reducing GHG emissions is of course great from an environmental perspective. The businesses that sell these products or technologies generally have a strong focus on sustainability. It doesn't however make them automatically great at all aspects of ESG. A wind turbine manufacturer or component supplier still needs to professionally manage H&S at their operating facilities, proactively manage employee matters and think about its waste and own energy consumption, just to name a few topics.

By doing "good" in one area you definitely don't want to do "bad" in other areas. This is something that you can now also find in the new EU regulations and the new taxonomy. Climate friendly business activities such as renewable energy should "do no significant harm" ("DNSH") to other environmental dimensions.

### What link do you see between ESG factors and financial performance, and has this changed with increased focus and increased sophistication of ESG rating tools in recent years?

This is a very relevant question and still debated by some investors. Although it gets less attention nowadays compared to a few years ago. There are a few different reasons for this:

- Starting with the most recent health crisis of Covid-19 (and of course generalising to a certain extent), resilient businesses with strong ESG practices performed better during this crisis and ESG investment funds have generally outperformed their relative peers or benchmarks.
- Going back a bit longer and into academic analysis, there is significant evidence by now to show that integrating ESG into business and investment practices leads to lower risks and therefore improved risk/ returns. For example, a new metastudy by the NYU Stern Center for Sustainable Business, partnering with Rockefeller Asset Management, examined the relationship between ESG activities in organisations and their financial performance in more



than 1 000 research papers over the last five years. Researchers found that ESG investing provides downside protection, especially during a social or economic crisis and it appears to drive better financial performance due to mediating factors such as improved risk management and more innovation.

Ending with a 30 000 feet view, the global megatrends are all pointing towards the need to prioritise sustainability and ESG. These megatrends range from depletion of natural resources and the availability of new technologies to changing demographics and changing consumer trends.

If there is one conclusion to draw from these insights, it is probably that ESG and sustainability topics are here to stay with an ongoing increase in importance and relevance for businesses and investors.

# The future of energy

Navigating through the energy transition



As a specialist investor in the energy sector, HitecVision has to understand the dynamic drivers and outlooks that shape the industry today and in the future. Navigating into the future of energy requires a good understanding of both future needs and trade-offs, especially in light of the challenges of climate change. In this section, we discuss the future of energy by considering key trends, drivers and outlooks under various scenarios. After this backdrop, we take a closer look at the fundamental issue of climate change to further discuss how this societal challenge is shaping the sector. In order to start understanding the implications of climate change and the energy transition as a whole, we deconstruct the challenges of the transition before highlighting the many opportunities that arise.

# Understanding the world's future energy demand

Climate change and the need for decarbonisation has set in motion what is commonly called the energy transition. This is a process that is likely to take several decades, and understanding what the transition means for the various forms of energy, and over what timespans, is not straightforward. Forecasting future demand for primary energy is the necessary starting point, though this is no exact science. Many firms and organisations that publish forecasts have widely differing approaches, often ending up with large differences in future outcomes. Using a range of scenarios offers a pragmatic approach to understanding future energy systems, and in this report we will mainly refer to the International Energy Agency's (IEA) annual flagship report, the World Energy Outlook 2020 (WEO), which offers some of the most commonly used scenarios of interest across regions, energy types and timelines. In this report, we mainly focus on developments towards 2030, though some specific references will be made to other timelines based on the available data. Figure 8 visualises the projected change in total primary energy demand by fuel across the four scenarios of the WEO (see fact box on the following page for definitions and detailed figures for each scenario).

Figure 8. Primary energy demand (Mtoe) across IEA scenarios, by fuel type. Source: IEA, World Energy Outlook 2020



### Potential Futures: The four IEA Scenarios

# THE STATED POLICIES SCENARIOKey ta(STEPS) is based on today's policy<br/>settings from governments around<br/>the world, and an assumption thatThis<br/>by aOil a

the pandemic is brought under control in 2021. Primary energy demand returns to pre-pandemic levels by 2023 in this scenario.

### Key takeaways:

- This scenario forecasts an increase in global primary energy demand by around 9 percent to 2030.
- Oil and gas still account for more than half of the total primary energy supply in 2030, with renewables seeing an increase to 15 percent.
- This scenario predicts a permanent reduction in coal demand, seeing a 7 percent decline between 2019 and 2030. Moreover, the scenario forecasts that coal, for the first time in modern energy history, will dip below 20 percent of global energy supply by 2040.

### THE DELAYED RESPONSE

**SCENARIO (DRS)** is a new addition to this year's WEO, constructed in light of uncertainties related to the Covid-19 pandemic. This scenario assumes that outbreaks continue in 2021 and beyond, leading to sustained restrictions and economic slowdown, along with vaccination facing various challenges.

### THE SUSTAINABLE DEVELOP-

**MENT SCENARIO (SDS)** is an outcome-based scenario, modelling what needs to happen in order to achieve SDG 13, Climate action. This means meeting the 2°C-target of the Paris Agreement combined with universal access to affordable, reliable and modern energy services by 2030 and a substantial reduction in air pollution.

### NET ZERO EMISSIONS BY 2050

**SCENARIO (NZE2050)** extends the SDS analysis to detail what would be needed in the next decade to put  $CO_2$  emissions on track to reach net-zero by 2050.

### Key takeaways:

- Global primary energy demand remains relatively flat, with only a 4 percent increase between 2019 and 2030.This scenario highlights the lasting impacts of missed opportunities
- for a sustainable recovery.
- The global economy returns to its pre-crisis size only in 2023, and the pandemic causes a decade of slow growth in energy demand not seen since the 1930s.
- Renewables are predicted to make up 15 percent of primary energy supply in 2030, as predicted in the STEPS.

### Key takeaways:

- This scenario is based on the world achieving net-zero emissions by around 2070.
- Global primary energy demand in 2030 would need to be 7 percent lower than 2019 levels.
- Oil demand in 2030 decreases by 12 percent from 2019 levels, equivalent to a roughly 1.21 percent year-on-year reduction.
- Gas is expected to see little change, with only a 1 percent total decrease between 2019 and 2030.

### Key takeaways:

- Global primary energy demand needs to decrease by 17 percent from 2019 levels to 2030 for this scenario to play out.
- Oil demand needs to decrease by 34 percent from 2019 levels, equivalent to a roughly 3.7 percent year-on-year reduction.
- Gas would need to decline by 9 percent, but keeps its relative position with about 25 percent of total global energy demand.
- In this scenario, the percentage increase in the demand for renewables is roughly twice that of STEPS and DRS.

### Alternative outlooks, similar prognoses

Other industry outlooks note the same trends as those referred to here, such as BloombergNEF's New Energy Outlook 2020. This assessment has two main scenarios: the "Economic Transition Scenario" (ETS), based on an economicsled approach employing both near-term market analysis, least-cost modelling, consumer uptake and trend-analyses to describe the deployment and diffusion of commercially available technologies; and the "NEO Climate Scenario", based on constructed GHG pathways to meet the well-below 2°C emission budget. BloombergNEF looks towards 2050 in their outlook, and includes assessments for both primary energy demand and final energy use.

In the ETS, primary energy demand grows by 9 percent between 2019 and 2050. Fossil fuels remain largely flat in absolute terms over this period, and their share in the primary energy mix falls from around 80 percent to 70 percent. Renewables see more than a fourfold increase, making up 14 percent of primary energy compared to 4 percent in 2019.

In BloombergNEF's "NEO Climate Scenario", electricity makes up around 45 percent of final energy use in 2050, up from today's 20 percent. To compare, the ETS projects electricity to make up 24 percent of final energy use. Electrification as the main decarbonisation measure in the "NEO Climate Scenario" results in the demand for electricity increasing by 63 percent more than what is projected in the ETS. So-called "green" hydrogen produced with zero emission electrolysis makes up another quarter of final energy use in 2050, with the remaining 30 percent being a combination of existing bioenergy and residual oil and gas reserved primarily for aviation and shipping.

 Table 3. Projected change in primary energy demand across scenarios and fuel types, with projected share of total in 2030.

Source: IEA, World Energy Outlook 2020

		Demand 2019 (Mtoe)	Demand 2030 (Mtoe)	Change 2019-2030	Portion of total primary energy demand in 2030
Renewables	STEPS	1 451	2 315	60 %	15 %
	DRS	1 451	2 264	56 %	15 %
	SDS	1 451	2 965	104 %	22 %
	NZE2050	1 451	3 367	132 %	28 %
Nuclear	STEPS	727	803	10 %	5 %
	DRS	727	776	7 %	5 %
	SDS	727	895	23 %	7 %
	NZE2050	727	979	35 %	8 %
Gas	STEPS	3 340	3 816	14 %	24 %
	DRS	3 340	3 618	8 %	24 %
	SDS	3 340	3 312	-1 %	25 %
	NZE2050	3 340	3 026	-9 %	25 %
Oil	STEPS	4 525	4 774	6 %	30 %
	DRS	4 525	4 582	1 %	31 %
	SDS	4 525	3 963	-12 %	30 %
	NZE2050	4 525	2 988	-34 %	25 %
Coal	STEPS	3 775	3 503	-7 %	22 %
	DRS	3 775	3 186	-16 %	21 %
	SDS	3 775	2 243	-41 %	17 %
	NZE2050	3 775	1 546	-59 %	13 %
Biomass	STEPS	588	544	-7 %	3 %
	DRS	588	588	0 %	4 %
	SDS	588	0	-100 %	0 %
	NZE2050	588	0	-100 %	0 %

Another industry analysis includes BP's Energy Outlook 2020. This outlook includes a "Business-as-Usual" scenario, a "Rapid" scenario, and a "Net-Zero" scenario with similar assumptions as the IEA. This outlook predicts primary energy demand to increase by around 10 percent to 2050 for both the Rapid and Net Zero scenario, and around 25 percent in the "Business-as-usual" scenario. According to the report, natural gas has the most durable outlook within fossil fuels, with its level in the "Rapid" scenario in 2050 largely unchanged from current levels, and even a projected 35 percent increase in the "Business-as-Usual" scenario. Renewables are expected to increase ten-fold in the "Rapid" and "Net Zero" scenarios, and accounts for 90 percent of the increase in primary energy in the "Business-as-Usual" scenario.

### Electricity in focus

There is broad industry consensus that electricity as an energy carrier is the clear growth winner for the coming decade, and that renewables will provide most of that increase. Figure 9 shows key end-uses that drive the demand for electricity for advanced economies in the STEPS scenario, while also highlighting the assumed energy efficiency gains of the coming decades. The EU's regulations on energy efficiency are a regional component at play, bringing savings of around 250 TWh annually by 2030 as existing stocks of consumer goods and industrial equipment are gradually replaced.

Electrification of road transport, mainly for passenger electric vehicles (EVs), is expected to be another key driver in the increased electricity demand in Europe. The STEPS scenario projects that new sales of EVs in Europe alone will boost electricity demand by 70 TWh by 2030, or roughly half of the total projected increase from road transport for all advanced economies.

Other important drivers include the increased demand for data and digital services. This is due to increased internet traffic, mobile internet users, and Internet of Things (IoT) connections to name a few. Though these estimates are uncertain due to the dependence of energy efficiency developments, various analyses point to significant energy demand from data centres.

According to forecasts by Mordor Intelligence, the European data centre power market is expected to grow at a CAGR of over 7 percent between 2021 and 2026. According to The Danish Energy Agency's Energy & Climate Outlook 2019, data centre electricity consumption is projected to grow from less than 1 percent of Danish electricity demand in 2019 to 15 percent of total electricity consumption in 2030.



Figure 10. Electricity supply per fuel type in the IEAs Stated Policies Scenario until 2030 Source: IEA, World Energy Outlook 2020



Figure 9. End-uses driving electricity demand in advanced economies under the IEA's Stated Policies Scenario Source: IEA, World Energy Outlook 2020

According to Statnett, the Norwegian state-owned TSO, electricity demand from data centres in Norway is expected to grow from 0.5 TWh today to 4 TWh in 2030, equivalent to a seven-fold increase.



INCREASED ELECTRICITY DEMAND FROM EUROPEAN EVS BY 2030

On the supply side, the IEA's STEPS scenario projects that renewables will meet 80 percent of global growth in electricity demand by 2030. As shown in Figure 10, most of the capacity growth in the STEPS scenario is projected to come from solar PV and wind energy in the next decade, mainly as a result of low costs and policy support in more than 130 countries. 2019 was the first year that renewables and nuclear together overtook coal's share in the global electricity mix.

However, as made evident in Figure 10, natural gas is also projected to play a stable role in both energy demand and supply, also contributing to the broader energy transition as a less carbonintensive alternative to coal and oil.



# The resilience of natural gas in the energy transition

Natural gas can play two important roles in the energy transition. Firstly, natural gas can support and speed up the shift away from coal, especially in less developed countries where there is significant growth in electricity demand. In the medium term, gas will also play a role as a grid stabiliser in more advanced economies, supplementing renewables on days when the wind does not blow and the sun does not shine. Carbon emissions per unit of energy produced for natural gas when burned is around 40 percent lower than emissions from coal, and around 20 percent lower than oil.

Secondly, natural gas has the potential of delivering low-carbon energy when paired with CCS, either as a direct source of energy to the power and industrial sectors, or when used to produce 'blue' hydrogen as a net-zero fuel. Blue hydrogen refers to hydrogen that is produced using steam reforming in the same way that traditional 'grey' hydrogen is produced, but combined with CCS to capture the resulting CO<sub>2</sub> emissions. The BP Energy Outlook's "Rapid" scenario, largely equivalent to the IEA's SDS, projects that natural gas with CCUS will make up around 8 percent of primary energy supply by 2050, as opposed to only 1 percent in their "Business-as-Usual" scenario.

We will discuss both hydrogen and CCS/CCUS' link to the energy sector in more detail in the following section.

Developments in liquified natural gas (LNG) as an energy carrier also plays a role in the durability of natural gas, as well as its role in decarbonising hard-to-abate industries. The IEA has noted that achieving a smooth balance between LNG supply and demand may be a challenge towards the latter end of the decade, however. This is mainly because of a tougher financing environment due to a combination of fewer committed buyers, lower capital spending, and leaner upstream portfolios in the wake of the pandemic. All of the IEA scenarios project stable supply until 2025, but diverge thereafter depending on both the post-pandemic economic environment and the direction of policies for a sustainable recovery.

In short, natural gas as a low-carbon alternative to other fossil fuels partly explains its resilience in the energy transition. The other component is its ability to supplement weather-dependent renewables, ultimately offering energy security in a world that still lacks universal access to electricity. Though there is significant growth and potential for renewables in the coming decade, the role of natural gas in the energy sector is likely to endure.

# Addressing the need for climate action

Energy powers the world and is a necessity for a functional society. However, around three-quarters of the world's greenhouse gas emissions comes from either the production or the consumption of energy. This places the energy sector at the centre of the transition to a low-carbon economy, acting as the main enabler for many sectors to decarbonise.

In short, a societal transition to a low-carbon economy is largely equivalent to an energy transition. In this section, we take a closer look at the urgent challenges of climate change and the need for global decarbonisation.

### Decarbonising the world

Climate change is recognised as one of the most pressing challenges of our time.

As noted in the Intergovernmental Panel on Climate Change's (IPCC) 2018 Special Report on 1.5°C of global warming, nations are strongly advised to collectively limit global warming to well below 2°C above pre-industrial levels in order to limit the most catastrophic impacts of climate change.

Current decarbonisation rates are not sufficient to meet this target. In order to meet the goals laid out in the UN Paris Agreement to limit global warming to well below 2°C, there is a need to decarbonise at an annual rate of 7.7 percent (See Figure 11). According to PwC's 2020 Net Zero Economy Index, which tracks the rate of decarbonisation for the world's 20 largest economies (G20), 2019 only saw a 2.4 percent reduction in carbon intensity, calculated as GHG emissions per unit GDP. It should be noted that the longer the world continues undershooting its annual targets in this way, the more drastic measures will be needed to get back on track, in turn leading to increased regulatory risk.

Figure 11. Decarbonisation pathways for G20 countries Source: PwC Net Zero Economy Index 2020



### THE FUTURE OF ENERGY



### A surge in climate commitments

Despite (or perhaps because of) the sobering figures presented above, the world's nations are increasingly addressing the need for climate change action.

Climate change is inherently an issue that requires collective global action, and historical emissions from wealthy countries have resulted in a call for an equitable approach towards emission reductions. At the international level, current burden sharing for climate mitigation is largely through Nationally Determined Contributions (NDCs). NDCs are essentially the stated intentions of governments' climate action measures, required by all member parties of the UN Paris Agreement. Though not legally binding, the NDCs are nested in a binding framework that requires all nations to update their ambitions on climate change every five years, as well as reporting progress on a biennial basis.

Beyond the NDCs, the growth of Net Zero ambitions for regions, cities and

corporations have also increased dramatically in recent years. These pledges detail when the entity in question plans to reach net zero emissions, or the point where they are able to sequester or utilise at least the same amount of emissions they release. According to the NewClimate Institute, net zero ambitions from cities, regions and companies roughly doubled between 2019 and 2020. As of September 2020, net zero pledges have been set by more than 800 cities, 100 regions, and 1 500 companies.



For most of these companies, this has meant diversifying their approach to becoming broader, cross-segment energy solution providers. This strategic change is likely motivated by an understanding of the coming changes implicit in a world transitioning to a low-carbon economy. This includes changes in market dynamics, regulations, political expectations, and financial flows. In order to ensure long-term viability as a profitable energy provider, drastic measures will be required.

Many first-movers appear to base their strategies on a belief that acting today will pay off down the road, even if it means investing through lower returns in the short term. As an example, BP has stated its intention to cut dividends by 50 percent through 2025, a period when significant plans to diversify the company's offering will be enacted. The company plans to reduce oil and gas production by 42 percent by 2030 while increasing low carbon energy investment from USD 500 million to USD 5 billion annually. These investments will result in 50 GW of renewable power generation by 2030, increased bioenergy production from 22 000 barrels per day to more than 100 000, growing the company's market share in hydrogen production, and expanding charging infrastructure for EVs. These are ambitious targets to say the least, where achieving its renewables goal alone would make BP the largest developer of renewables in the world.

Other oil majors have also taken a clear stance in their transition strategy. Equinor has ambitions of installing 16 GW of renewable power generation by 2035, mostly through offshore wind installations. Shell also has 11.3 GW of renewables in its portfolio, 83 percent of which is offshore wind. This includes a 67 percent stake in NortH2, a Dutch 10 GW offshore wind farm dedicated to producing emission-free hydrogen through electrolysis ("green hydrogen"). Finally, Total is targeting a mixed renewables portfolio that features both onshore and offshore wind, solar PV and biofuels. The company plans to expand its portfolio nearly five-fold, from its existing 5.6 GW portfolio to 25 GW by 2025.

The stated ambitions of major oil & gas producers to scale up their investment in renewables and diversify their portfolios are indicative of the current state of the energy transition. This is partly driven by a call for climate action, but equally a call for long term viability and profitability as Big Oil transitions to Big Energy.



### The challenges of the energy transition

In light of the recent surge in commitments addressing the challenges of mitigating climate change, it is evident that the energy transition is well underway.

When facing the transition head-on, it therefore becomes important to break down the obstacles that lie ahead. Though the challenges are numerous, we would like to highlight three main hurdles for the energy sector:

1. The energy transition requires new and updated infrastructure. According to the IEA, using existing energy infrastructure in the same way as we have in the past would contribute to "carbon lock-in" for decades to come, contributing to a global rise in temperatures of 1.65°C alone. A transition to a low-carbon economy therefore requires the production of new, low-carbon energy infrastructure, as well as retrofitting existing infrastructure to lower carbon intensity.

The rise of EVs is another example, where charging infrastructure must be developed and rolled-out in tandem with the growth of electrification. Moreover, the future demand for electricity will change how power grids are managed, maintained and updated. Beyond the power grid, the low carbon transition may also need to update natural gas distribution infrastructure that blends in hydrogen to deliver gas with lower carbon intensity. Blending in low-emission gases is discussed later in a dedicated section on the innovations of hydrogen.

- 2. The energy transition is largely dependent on the ability to store energy and manage intermittency. As the energy mix becomes increasingly reliant on intermittent sources such as wind and solar, the ability to store and manage energy in an optimal way is a major challenge. Energy storage solutions, in the form of batteries or energy carriers like hydrogen, are needed to address the inherent factors of seasonality and irregularity for many renewable energy types. Managing short-term variability is a challenge as energy markets change and develop, highlighting the importance of grid management and energy transmission between markets. We discuss this challenge alongside various solutions in the section on integrated energy systems.
- **3.** An energy transition that achieves net-zero emissions by mid-century will be dependent on CCS. CCS/ CCUS technologies are a necessary component of all Paris-aligned emission pathways laid out by the IPCC. For several hard-to-abate industries such as steel and cement production, CCS is considered a requirement for achieving net zero emissions by mid-century. Developments in CCS are also discussed later in a dedicated section.

While these challenges in the energy transition exemplify the hurdles ahead, they equally point to the rise of new opportunities that we are excited to explore and capitalise on. We believe that strategies and developments that competitively address these hurdles while meeting future energy needs will set industry leading benchmarks.

# A sea of opportunity

As mentioned, the energy transition entails major challenges, but it is also expected to offer many opportunities.

These are particularly clear for renewables, which are seeing not only unprecedented growth, but also resilience to the impacts of the pandemic. Figure 13 shows the resilience of renewables through the turbulent year of 2020, being the only energy type with an increase in demand relative to 2019.

Renewables are poised to play a particularly large role in Europe. According to the scenarios presented in BloombergNEF's outlook, the cleanpower transition goes farthest and fastest in Europe, with wind energy dominating across the continent. Together with some solar PV in southern Europe, renewables account for 74 percent of electricity in 2050.

The declining cost of wind and solar generation is another notable feature in the rise of renewables. Looking at BP's scenarios again, illustrated in Figure 14, we see that the constantly falling costs of wind and solar contribute to their sixfold increase in the power sector by 2050 even in the most modest "Business-as-Usual" scenario. In the "Net Zero" scenario, BP projects a 14-fold increase from 2018 levels. The cost of solar is expected to more than halve by mid-century regardless of scenario, and the cost of wind is expected to fall by roughly a quarter against 2018 levels.

Europe in particular has taken an assertive position on renewables, underpinned by the roll-out of the EU's Green Deal. The ultimate goal of the Green Deal is to make Europe the world's first carbon neutral continent by 2050, but also includes other targets such as increasing the share of renewable energy to at least 32 percent by 2030 Figure 13. The IEAs estimated changes in energy demand,  $CO_2$  emissions and energy investments in 2020 relative to 2019 Source: IEA, World Energy Outlook 2020



(a target that is expected to rise through future revisions of the plan). Solar PV may have been declared the new king of renewable energy by the IEA at the global level, but wind energy is the chosen champion for Europe. Making up 15 percent of European energy supply today, the IEA has projected wind to be the dominant source of power for Europe by 2027.

This is supported by the EUs recently launched Strategy on Offshore Renewable Energy. It aims to boost Europe's offshore wind capacity from its current level of 12 GW to at least 60 GW by 2030 and to 300 GW by 2050. To achieve this goal, the Commission estimates a need for investments of nearly EUR 800 billion between now and 2050, mostly from private capital, enabled by regulatory frameworks and financial mobilisation mechanisms proposed under the Member States' Recovery and Resilience Facility.

For the Nordic region in particular, offshore wind is expected to dominate. The rapid increase in wind power capacity in the Nordics has historically been driven by Denmark, but the region as a whole is expected to undergo major change over the next decades. According to forecasts from Thema Consulting Group, this change corresponds to a potential increase in total production from 87 TWh in 2021 to 237 TWh in 2040, corresponding to a CAGR of around 4.6 percent. The Thema forecast is for both onshore and offshore wind power to grow rapidly, but the largest acceleration of growth is offshore.

### THE FUTURE OF ENERGY



**Figure 14.** BP's projected renewable energy consumption (EJ) in the power sector across scenarios (left) and projected cost reductions in wind and solar energy against a 2018 index across scenarios (right). *Source: BP Energy Outlook 2020* 





### CASE STUDY

### **ENERGY TRANSITION CASE STUDY:**

# Global Maritime: Applying existing skills to new business segments

As the oil price went into a cyclical downturn in 2014, Jonny Logan and Ekkehard Stade, as managers of Global Maritime's offices in Scotland and Germany respectively, realised the company would need to be creative in looking for business opportunities in new sectors to maintain their project pipeline. Analyses of the offshore wind market in the UK and Germany looked promising, and they saw a clear application of Global Maritime's marine warranty and engineering services, previously primarily in demand from the oil and gas industry. There was also a potential need for Global Maritime's extensive marine operations experience, as most of the engineers in the growing offshore wind sector primarily had onshore project experience.

Global Maritime has since been involved in the installation and/or development of more than 5 000 bottom-fixed offshore wind turbines, across 11 countries, with a total installed capacity of 34 GW.

Global Maritime is involved with virtually all current floating wind projects. It has been working on the Kincardine project since 2018, where the first 9.5 MW floating offshore wind turbine has recently been installed. The company also won the marine warranty contract for Equinor's recently commenced Hywind Tampen project, and has been involved in four other floating offshore developments in the UK and Europe, providing general marine engineering consultancy and verification services, in addition to marine warranty survey. Global Maritime has also entered a new phase of transition: The company has expanded from applying its traditional oil and gas services to new business segments, towards building up new expertise in a broader range of markets. On the design side, Global Maritime has, for example, designed offshore fish farms, including the world's first, and installed wave power devices.

The company has been involved in several early phase concepts to mature concepts for tidal energy and wave energy and optimise the technology involved. Within the engineering division, the company has, amongst other things, developed a new zoning system for offshore wind farms, which significantly reduces the number of site assessments needed to operate jack-up installation vessels in a wind park and helps drive down installation costs.

Global Maritime is currently in the market as part of a consortium providing EPCI (engineering, procurement, construction and installation) services for floating wind, expanding its scope of work in offshore wind from marine warranty to cover the whole process from engineering through to installation. The company is also working on floating solar, having assisted in the design and mooring of two floating solar plants, as well as with the verification of existing market designs and technology, to identify the optimal design solution.

Jonny Logan, now CEO of the company, believes that Global Maritime's multi-

disciplinary expertise has given the company a competitive advantage: "Our ability to offer both design, installation and marine warranty has enabled us to develop new integrated concepts, and we're now assessing the opportunity of becoming an EPCI provider of hybrid solutions." One of the exciting new business opportunities in this area is the development of integrated utilities solutions for remote communities. Global Maritime is currently designing facilities that integrate osmosis-based freshwater generation, waste treatment (including power generation from waste incineration), and power generation from solar and wind. The floating facilities are planned to solve multiple infrastructure needs for remote island communities, construction projects in remote locations, or areas struck by natural disasters that have compromised their infrastructure.

In 2020, 17 percent of the company's earnings came from renewables, with an additional 10 percent from other nonoil and gas segments. Global Maritime estimates that within a few years, around half of its revenues will come from nonoil and gas projects, as the company positions itself for growth in offshore renewables, floating solar, aquaculture and utilities provision.

Global Maritime is a specialist marine, offshore and engineering consultancy, and is a part of the Moreld group of companies. The company has about 250 employees and offices in 15 countries.



# Jon Vatnaland on the energy transition

### What opportunities does HitecVision see in the current energy sector transition?

The current energy sector transition is one of the greatest industrial transformations in modern history. The transition from fossil to renewable electricity production is the first step. In the next step, electricity from renewable sources can be used to decarbonise energy-related emissions in other economic sectors, like transport, buildings and industry. This megatrend creates a range of opportunities for investments, both directly in projects and in building new companies. This includes both the renewable energy generation segment, as well as in other low carbon and green infrastructure areas. As a serial entrepreneur, the changes we are experiencing are creating unprecedented opportunities for us to create new businesses for the decades to come.

### What does the energy sector in Norway look like in 2030?

In 2030, the key sources for electricity will still be hydropower and onshore wind, with offshore wind playing an increasingly important role. In addition to the flexible hydropower, technologies like hydrogen, ammonia and battery technologies, as well as more robust demand side management, will play an important role in balancing a more integrated European energy system. For Norway, a key topic will be how our oil and gas industry will be able to play a role in this transition, building on the technology leadership and capabilities of this sector and bringing it to play in the green economy. Key areas for the application of oil and gas expertise are within offshore wind and green/blue ammonia production.

### Which role can HitecVision play in, and beyond, the energy transition?

The transformation of the energy sector requires significant amounts of capital, and will force both a restructuring of current companies and the establishment of new ones. Norway and the Nordic countries are well placed to play a key role in the transformation of the European energy sector. HitecVision is equally well positioned both to provide the necessary capital to make these changes happen, and to contribute with our expertise to the associated restructuring and innovation processes. The portfolio that we represent in 2020 already demonstrates our ability to seize new opportunities, and be a driving force for innovation and growth.

HitecVision is approaching this across different initiatives, and we are doing it together with industrial companies in the relevant sectors. Examples include our broad relationship with Eni through Vår Energi and now more recently



Jon Vatnaland Senior partner, HitecVision

Vårgrønn. The newly forged partnership with Agder Energi also demonstrates the type of cooperation we believe will be necessary going forward.

Mr. Vatnaland is a senior partner in HitecVision. He joined the firm in 2020, after more than ten years at Statkraft, Europe's largest producer of renewable energy.

### Next-generation energy in Norway

Total power generation in the Nordic market is forecasted to amount to almost 450 TWh in 2021, with Sweden as the largest producer, followed by Norway, as illustrated in Figure 15.

Hydropower is the single most important source of energy, contributing more than half of total generation.

Until recently, electricity demand forecasts in the Nordics were typically in line with population growth, at a compounded annual growth rate of around 1 percent. In earlier years, growth and forecasts were more in line with GDP growth. However, more recent analyses point to a step change in the demand for new renewable power generation to fuel the energy transition.

In the case of Norway, a central focus area in the energy transition is expanding the power sector. According to the state-owned TSO, Statnett, Norway's projected consumption of electricity is expected to grow from today's 140 TWh to around 180-190 TWh between 2040 and 2050. The Nordic region more broadly is predicted to see an increased consumption by 40 percent, also underpinning the opportunities for power distribution across the region. This is driven by factors already discussed, such as the electrification of transport and various industrial processes, as well as the emergence of new power-hungry industries like hydrogen and ammonia production, battery manufacturing and the growth of data centres.

The demand for power in the Nordics is expected to be met by a formidable roll-out of new renewable power generation. Wind power is meeting the bulk of this demand, with offshore wind power being the main contributor, supported by some new solar power generation. Most of the offshore wind is forecasted to be built in Denmark, **Figure 15.** Projected power generation (TWh) by country in 2021. *Source: Thema, Nordic Power Market Forecast, Autumn 2020* 



Figure 16. New power generation (TWh) in the Nordics from 2020 to 2050. Source: Thema, Nordic Power Market Forecast, Autumn 2020



Sweden and Norway, with Finland and Sweden also adding capacity from onshore wind (see Figure 16).

Ushering in the next generation of energy will require private investment. The IEA estimates that more than 70 percent of the necessary investments in the energy transition could come from private companies. When HitecVision starts investing in this segment, Norway is a prime focus area. In terms of wind power generation, the onshore market is the most mature today. According to the Statnett analysis mentioned above, the low cost of landbased wind power makes it an economically competitive business case even without subsidies. The main hurdle facing onshore wind in Norway is gaining acceptance from local communities and conservation organisations. Offshore wind is another highly relevant area for Norway, with its long coastline and good wind conditions. Today's offshore wind market is currently dominated by bottom-fixed installations, a relatively mature market representing a global installed capacity of around 29 GW in 2019. While floating offshore wind is not yet competitive with bottomfixed installations, the cost improvements seen in other renewable technologies when scaling are expected to also be experienced for floating offshore wind, and DNV expects 7 GW of installed capacity in Norway alone by 2050. Floating wind is important because of its potential to open up entire new provinces for offshore wind power that are not suitable for fixed.

Much of Norway's coastline is surrounded by deep seas, making it a natural pioneer in the development of floating installations. The construction of Hywind Tampen, for example, will be the world's largest floating offshore wind farm when it is built. Construction is underway, with production due to start up in the third quarter of 2022. Please see our 2019 report for further details of this innovative project, where Vår Energi is a major owner.

Centuries of maritime experience and decades of expertise from the offshore oil & gas industry make Norwegian companies well positioned for developing offshore wind ventures. However, ensuring a competitive industrial expansion of next-generation energy in Norway does not only include the expansion of renewable energy. As noted earlier when deconstructing the hurdles of the energy transition, renewable energy production is only a piece of the puzzle. The opportunities of the energy transition should also be understood at a systemic level, where new and old energy production infrastructure can mutually support one another in an integrated energy system.

### The rise of the integrated energy system

The expansion of new and clean energy types is a vital part of the energy transition, though it does not address the systemic components surrounding energy production. The transition will also require a completely new energy system that integrates energy production into existing infrastructure in a smart and effective way. An integrated energy system is one that exploits interactions and strengths of different energy carriers, making the overall system more flexible, efficient and cost-effective.

Electricity, oil, natural gas and hydrogen are energy carriers that will play a role in the future of energy supply. Energy storage solutions, distribution infrastructure and CCS are also important parts of the picture. The challenge is designing a system where these components complement one another in the best possible way.

### The industrial role of hydrogen

Modern renewables are non-dispatchable energy sources, meaning they do not necessarily produce power when needed, and must be complemented by storage technologies. Methods that utilise excess renewable energy to create stable energy carriers that can be both stored and consumed is broadly referred to as "power-to-x", where the "x" in question can be a variety of energy carriers. Power-to-hydrogen is particularly interesting for the oil & gas industry since it is already familiar with the industrial production and distribution of hydrogen. Energy can be stored through hydrogen over longer periods,

thus having an advantage over battery technology in this regard. Although the conversion of power-to-hydrogen and back to power is quite inefficient today, the key merit of this technology is its ability to utilise the excess power produced when demand is low. Figure 17 compares various technologies that help to balance power systems, showing the advantages of hydrogen for longer storage periods.

As mentioned earlier, hydrogen can be produced in various ways, resulting in the differentiation between "grey," "blue" and "green" hydrogen. Grey hydrogen is the most commonly produced type today, created using fossil fuels in a process called steam-methane reformation. Blue hydrogen also uses steam-methane reformation, but with



**Figure 17.** Comparing the advantages and disadvantages of energy storage technologies. *Source: BP Energy Outlook 2020* 

the addition of CCS to capture associated emissions. Green hydrogen is the production of hydrogen using power generated from renewables in combination with electrolysis of water, resulting in a zero-emission hydrogen that can act as both a consumable fuel and an on-demand power generation source for balancing power systems.

The growth of the hydrogen economy is both important for optimising renewables, but also an essential decarbonisation option for hard-toabate industries like steel and fertiliser production, as well as heating for buildings. The production of green hydrogen is seeing significant interest by the EU, especially since the outbreak of the pandemic and the focus on making the recovery a sustainable one. "

EU'S HYDROGEN STRATEGY AIMS FOR AN ADDITIONAL 6 GW OF RENEWABLE POWER DEDICATED TO GREEN HYDROGEN BY 2024

The European Commission's hydrogen strategy aims for an additional installment of at least 6 GW of renewable power dedicated to green hydrogen production by 2024, rising to 40 GW by 2030. The strategy is based on attracting an estimated EUR 470 billion of public and private investments by 2050 through the public-private European Clean Hydrogen Alliance. According to Rystad Energy, 51 percent of the world's emissions are fully or partially addressable by hydrogen, contributing to a fivefold increase in demand by mid-century. Many experts doubt that green hydrogen alone can satisfy this demand, underpinning the role of blue hydrogen alongside green hydrogen.

Although the application of renewable power-to-hydrogen is not expected to reach industrial scale for several years, there are already ongoing projects that have proven the viability of the technology. The other side of the equation is developing the necessary infrastructure for utilising hydrogen. For example, the roll-out of hydrogen for road transport lags well behind that of battery-electric vehicles.

Hydrogen for domestic combustion is being tested, however. HyDeploy is a pilot project in the UK, which has demonstrated that it may be possible to inject up to 20 percent hydrogen into the existing domestic gas grid, thus reducing carbon intensity significantly. If the entire UK's gas grid was to blend in 20 percent green hydrogen, the emissions reductions would be equivalent to taking 2.5 million cars off the road.

Creating an industrial value chain for hydrogen is a major interest of the Norwegian government, which created the PILOT-E programme that aims to allocate funding to research and development projects related to hydrogen. Additionally, it was announced in early 2020 that Mongstad, where ABP is a major property owner, was selected as the location for what could become Norway's first production plant for liquid hydrogen serving the maritime market. See the following box for one of the potential spinoff results of this. Continues on page 74.


#### **CASE STUDY**

## CIRCULAR ECONOMY CASE STUDY: Onshore salmon farming at Mongstad

Production of sustainable marine proteins in the middle of a green industrial park.

By placing circular economies in the core of business innovation, Asset Buyout Partners (ABP) has developed a sustainable business model planned for Mongstad Industrial Park, where waste heat and surplus outputs from adjacent industrial processes will be used as inputs in the operation of an aquaculture facility. At Mongstad, ABP, as owner of the park's industrial real estate and available land, is positioned to take a leading role in developing new circular businesses, creating synergies between the various industrial activities present in or planned for the park. The aquaculture project is part of

Greenspot Mongstad - a broad-based effort to transform Mongstad Industrial Park into the "green spot" of Norway, attracting new sustainable industries and supporting existing clients in transforming their business.

ABP is in dialogue with a leading company within land-based salmon farming, and the parties plan to build a full-scale salmon farm on existing zoned and leveled seaside land. By positioning the facility adjacent to a planned hydrogen production plant, excess heat and oxygen from hydrogen production can be used as inputs to the aquaculture facility, in addition to utilising excess energy from the neighboring Equinor refinery. All parties will benefit from improved earnings and an overall reduced environmental footprint. Building the salmon farm onshore in a controlled environment also reduces the exposure of the fish to parasites and diseases, reducing the use of antibiotics and improving animal welfare.

In addition, waste from the salmon production could be used to produce biogas and biofertilizers. ABP is currently estimating that the aquaculture facility could produce up to 35 000 tonnes of salmon per year and is planning to invest up to NOK 4 billion in the facility in two to three phases. A final investment decision is expected in 2021.

## Rapid growth in storage technologies

While hydrogen can decarbonise certain hard-to-abate industries and address the challenge of long-term storage, other storage technologies must also be deployed to enable shortterm flexibility of power supply.

These storage technologies may be broadly divided into two areas; electrochemical storage (i.e. batteries), and energy reservoir storage (i.e. hydropower with storage in reservoirs). Both of these technologies are expected to play important roles in a low-carbon integrated energy system, especially for providing stability for power grids. In order to meet the needs of the IEA's SDS, for example, close to 10 TWh of storage solutions will be required worldwide by 2040. This is nearly 50 times more than the size of the current market.

According to a study by the European Commission, energy storage in the EU is currently dominated by energy reservoir storage. In fact, the IEA states that 90 percent of current installed storage capacity is through energy reservoir storage, totalling around 160 GW worldwide. In Europe, roughly half of hydropower storage is through pumped-hydro, and the other half is through large water reservoirs in Norway.

These forms of hydropower can act as large batteries that store the gravitational potential energy of water. Water can be released through power stations during times of high energy demand, and withheld or even pumped back again (through pumped-hydro) once demand falls using available excess power. In relation to intermittent renewables, pumped-hydro is often used in combination with solar energy, where excess energy during sunny days is used to pump water back into reservoirs. In Norway, however, geographical characteristics have allowed for larger water reservoirs that traditionally do not

require pumping at all. This type of reservoir storage is therefore uniquely positioned to complement wind energy, since solar energy is only unavailable at night whereas wind energy can experience longer periods without production. In this case, Norwegian water reservoirs can act both as reliable storage reservoirs and grid stabilisers.

Despite being a mature technology already in use, however, storing potential energy using hydropower methods is naturally restrained by inefficiencies. In order to profit from pumped-hydro today, there needs to be fairly large price differences that allow companies to pump when prices are low and release when prices are high. Current methods in the industry also include withholding hydropower and importing cheaper electricity from other markets experiencing good weather conditions for renewables, then releasing hydropower during times when these markets experience lower production. In short, the optimal use of energy reservoir storage in combination with renewables is another complex challenge that integrated energy systems must address.

**50**x

MORE STORAGE CAPACITY NEEDED TO MEET THE NEEDS OF THE SDS.

Electrochemical storage, or battery technologies, have experienced fast market maturation over recent years. According to a joint study by the IEA and the European Patent Office, patenting activity in batteries and other electricity storage technologies has seen an average annual growth of 14 percent per year worldwide between 2005 and 2018. This is around four times faster than the average of all other technology fields. The study also notes how the price level for batteries has undergone rapid change. In the case of lithium-ion batteries for electric vehicles, prices have dropped by nearly 90 percent since 2010, and by around two-thirds for stationary applications such as grid management.

Production of batteries is a powerintensive industry, well suited for the Nordic countries with their relative abundance of renewable electricity. This is exemplified by a number of new battery producers setting up shop in the region, such as Sweden's Northvolt and Norway's lithium-ion battery start-up FREYR. The latter has secured around USD14 million in pre-construction financing for what will likely be the first gigawatt-scale lithium battery manufacturing facility in Norway. FREYR aims to quickly roll out an initial 2 GWh of production capacity in Mo i Rana, with a plan to eventually build a further 34 GWh of production.

Only a few months after the FREYR announcement, Panasonic signed a memorandum of understanding with Equinor and the Norwegian aluminium company Hydro to explore the potential for "green battery business." These and other examples highlight the exciting business opportunities around energy storage as an integrated component of next-generation energy companies.

In short, battery storage offers various avenues for profitable business ventures as the world transitions to a low-carbon economy. However, replacing emissionintensive energy types is only part of the solution. To realise a truly sustainable energy sector, carbon emissions must be both reduced where possible, and captured where reductions are not possible.

## Carbon Capture and Storage – Longship and Northern Lights

CCS is another key component of an innovative and integrated energy system, and a prerequisite for the realisation of an industrial value chain for blue hydrogen. There are currently 13 commercial CCS facilities in operation or various stages of development across Europe, 4 of which are in Norway and 7 in the UK. The Norwegian government aims for Norway to be a global leader in CCS, exemplified by the launch of the connected Longship and Northern Lights programmes.

The Longship programme takes aim at two carbon capture projects, with full funding granted to the first and partial funding granted to the second on the condition of additional backing from the EU. The NORCEM facility in Brevik is the first industrial-scale project funded under Longship, and will be the world's first cement factory equipped with CCS. The Fortum waste-to-energy facility in Oslo is the second project with backing from the government, likely becoming one of the world's first industrial-scale facilities that combine energy recovery from waste with CCS to deliver negative emissions

The final component of industrial-scale CCS integration into the energy system is ensuring there is a viable transport and storage value chain behind it, which is the aim of the Northern Lights project (see Figure 18). Northern Lights is a collaboration between Equinor, Shell and Total to create a fully functional value chain for capturing, transporting and storing  $CO_2$  on the NCS. The planned value chain begins with the transport of liquified and pressurised CO<sub>2</sub> from the NORCEM and Fortum facilities, which will be loaded from the capture site to ships that transport it to an onshore terminal at Øygarden outside Bergen. The CO<sub>2</sub> will then be offloaded into onshore intermediate storage tanks before further transport by pipeline to subsea wells for injection into geological reservoirs. After a final investment decision from the Norwegian government was made in 2020, the project is slated to be operational by 2024, with eventual capacity far exceeding the amount of CO<sub>2</sub> supplied by the two initial sites.

Norwegian Full-Scale CCS Fortum Oslo Varme Northern Lights CO. Capture Capture from industrial plants Compressed and temporarily stored Norcem CO<sub>2</sub> capture Capture from industrial plants Compressed 3rd Party and temporarily stored Transport Compressed CO<sub>2</sub> transportet by ship Permanently Stored CO2 received and temporarily stored Export via pipeline offshore Permanently stored in reservoir (approximately 3000 meter below sea level)

Figure 18. Visualisation of the Northern Lights value chain for CCS Source: Northern Lights CCS

The offshore oil & gas industry in Norway is uniquely placed to play an important role in the rise of CCS. The industry already holds significant expertise in this area, dating back as early as 1996 at the Sleipner offshore gas field. Here  $CO_2$  has been separated from produced gas and reinjected into a saline aquifer nearly 1000 meters below the ocean floor. In fact, the existing CCS projects on the Sleipner, Gudrun and Snøhvit fields are the only large-scale facilities in the offshore industry. In addition to providing CCS for hardto-abate industries such as cement production, the integration of CCS on the NCS to both capture  $CO_2$ during gas production, as well as in the production of blue hydrogen, is a significant opportunity to prolong the use of natural gas in the energy transition.

## HITECVISION TEAM COMMENT: Jan Harald Solstad on industrial synergies towards new energy systems

Given your long career in the Norwegian oil and gas sector, what is your view on the changes we see in the energy sector today?

The oil and gas sector is indeed facing new challenges today, but also opportunities. The energy challenge, to provide the world with affordable energy and at the same time tackle the climate crisis, is an immense task. The oil and gas industry has the knowledge, expertise and financial resources to take on this challenge.

By delivering on the ambitious carbon reduction targets set by leading oil and gas companies we are already seeing meaningful actions taken. The big European oil majors are now also becoming leaders in renewables, in particular offshore wind, building on their offshore oil and gas experience and technology.

The whole industry is taking important action on decarbonising the production of oil and gas through electrification from shore, process improvements and digitalisation. At the same time, we are seeing structural changes within the industry as priorities and focus areas are shifting among majors and other large players. This is creating a new dynamic, and with that opportunities for well-funded and agile companies to grow and prosper by moving into assets and fields previously inaccessible to smaller companies. A totally new energy landscape is emerging, and taking part in this change is both exciting and rewarding!

## *What does the Norwegian energy sector look like in 2030?*

Over the next 10 years, I believe the Norwegian energy sector will prosper in the midst of a European energy revolution.

- We will still produce oil and gas, but we are world leading in terms of CO<sub>2</sub> emissions per produced unit due to comprehensive electrification of production installations, and improvements in how we develop and produce oil and gas.
- The Norwegian oil and gas industry will be a leader in CCS, and will be producing clean hydrogen and ammonia from natural gas, enabled by carbon capture technologies and utilisation of our large subsurface storage reservoirs on the continental shelf.
- The traditional offshore service sector has diversified into also serving the renewable industry, and will have a leading role as a service provider to the international offshore wind sector.
- We will produce green energy from our large hydropower resources, and from both onshore and offshore windparks. We will have a number of leading technology companies providing key technologies to the international green industries.

#### Will today's energy sector actors in Norway be internationally competitive in the new market segments that are emerging?

I am optimistic on behalf of Norwegian companies competing in the renewables sector. Norway has a long history of industrial innovation and transformation, and we have a highly educated and skilled workforce who, together with



Jan Harald Solstad Senior partner, HitecVision

ambitious and smart young people, will drive change and competitiveness.

We already have a number of industrial locomotives with leading positions in the energy transformation, with strong international presence in for example clean energy production and offshore wind. Behind these, many new and established companies are positioning themselves for the large international growth we are expecting in the green industries.

Mr. Solstad is a senior partner in HitecVision. He joined the firm in 2015 after a career as an oil and gas company executive, investment banker working with the oil and gas industry, and founder and CEO of Core Energy, one of the predecessor companies to Vår Energi.

# ESG in the Portfolio Companies







Headquarters: Sandnes, Norway Website: www.varenergi.no Number of employees: 901 Revenues (2020): USD 2 849.7 million Countries of operation: Norway HV's shareholding: 30.15% Investor: Fund V, VI and VII, and two co-investment vehicles Certifications: ISO 45001

ESG Responsible: Ove M. Helle

#### **COMPANY DESCRIPTION**

Vår Energi is the second largest E&P company on the NCS. Average production is about 270 000 barrels of oil equivalent per day (boepd), targeting 350 000 boepd by the early 2020s through a number of ongoing development projects. Vår Energi operates four oil and gas fields across all regions of the NCS, the Barents Sea (Goliat), the Norwegian Sea (Marulk) and the North Sea (Balder and Ringhorne). In addition to the four operated fields, Vår Energi currently holds ownership interests in 31 partneroperated fields and a number of exploration licenses. Vår Energi is headquartered in Sandnes, with additional offices in Hammerfest and Oslo. The company has approximately 900 employees across its offshore fields and onshore office locations.

Vår Energi is owned by Eni (69.85 percent) and HitecVision (30.15 percent).

Vår Energi aims to deliver ambitious growth plans, while providing a safe and sustainable working environment. "Our vision is committed to deliver a better future," explains Kristin Kragseth, CEO of Vår Energi. "We are strongly committed to creating value for both our shareholders and the Norwegian society at large. Oil and gas will continue to play a fundamental role in the global energy mix long into the future. However, real action is needed to reduce climate emissions and to tackle the climate challenges. Consequently, sustainability is the key to our long-term value creation."



Kristin Kragseth, CEO

#### **KEY REPORTED ESG FIGURES FOR 2020**

#### (2019, 2018 and 2017 figures displayed where available):

ENVIRONMENTAL	2017	2018	2019	2020
Direct GHG emissions (GHG Protocol Corporate Standard Scope 1, in tonnes) <sup>1</sup>	281 797	343 988	290 087 <sup>2</sup>	194 174
Energy indirect GHG emissions (GHG PCS Scope 2, in tonnes) <sup>3</sup>	-	13 394	13 709	17 275 <sup>4</sup>
Other indirect GHG emissions (GHG PCS Scope 3, in tonnes) <sup>5</sup>	-	-	21 360	75 621
Carbon intensity - Scope 1 & 2 (tCO2e / million USD revenues)	-	-	61.8	74.2
Carbon intensity - Scope 1, 2 & 3 (tCO <sub>2</sub> e / million USD revenues)	-	-	66.1	100.7
Waste (tonnes)	516 <sup>6</sup>	7 486	7 347	4 227
Recycling Ratio	36%	16%	6%	8%
Unplanned spills (emissions to ground/sea/air)	8	22	12	18
Hazardous waste	122	6 623	6 513	3 636
Non-Hazardous waste	394	863	833	591
Oil in produced water (tonnes oil to sea in period)	63.6	48	38	31
Drill cuttings (tonnes discharged)	0	641	301	198

SOCIAL	2017	2018	2019	2020
Number of employees <sup>7</sup>	358	844	843	901
Total Recordable Incident Frequency (TRIF) <sup>7</sup>	5.5	2.1	2.2	3.5
Lost Time Injuries (LTI)	-	1	2	1
Medical treatment case (MTC)	1	3	6	10
First aid case (FAC)	13	14	23	34
Share of women in total workforce <sup>7</sup>	-	27%	27%	26%
Share of women in management <sup>7</sup>	-	20%	23%	25%
Employee turnover ratio	-	-	0.5%	1.5%

GOVERNANCE	2017	2018	2019	2020
Share of relevant staff who have completed anti-corruption training (%)	-	-	80%	80%
Breaches of ethical guidelines	-	0	0	0
Investigations or lawsuits in relation to ESG issues	-	0	0	3
Cyber attacks or similar incidents resulting in loss of data, loss of integrity or other loss	-	0	0	0
Whistleblowing cases being addressed by management or board	-	0	1	3

<sup>1</sup> GHG emissions from combustion of diesel, fuel gas and combustion of gas in flare.
 <sup>2</sup> Figures are updated from 2019 Sustainability report.
 <sup>3</sup> Total energy consumption, operational control (electricity consumption, district heating consumption).
 <sup>4</sup> There is a minor discrepancy between this figure and that reported by Var Energi due to the use of different emission factors.
 <sup>5</sup> Includes company business travel, incinerated waste, treated hazardous waste and upstream transport and distribution.
 <sup>6</sup> 2017 waste figure includes only waste from Point Resources.
 2017 also saw no drilling activity, resulting in significantly less waste than other years.

Boundary	Unit	2017	2018	2019	2020
Operational Control	boe	-	40 024 891	28 820 272	27 150 198
Equity Share	boe	3 605 852 <sup>8</sup>	48 783 030	101 223 192	94 572 961
Equity Share	tCO <sub>2</sub> e	-	-	1 097 086	1 023 979
Operational Control	kgCO <sub>2</sub> e/boe	-	8.7	10.1	7.2
Equity Share	kgCO <sub>2</sub> e/boe	-	-	10.8	10.8
Operational Control	tCO <sub>2</sub> e	-	21 238	19 948	74 521
Equity Share	tCO <sub>2</sub> e	-	-	23 508 188	26 334 396
Equity Share	tCO <sub>2</sub> e	-	-	11 178 378	10 509 941
Operational Control	+CO o			856	
Operational Control	100 <sub>2</sub> e	-	-	050	726
	Boundary Operational Control Equity Share Operational Control Equity Share Operational Control Equity Share Equity Share Equity Share Equity Share Operational Control	Boundary     Unit       Operational Control     boe       Equity Share     boe       Equity Share     tCO2e       Operational Control     kgCO2e/boe       Equity Share     kgCO2e/boe       Operational Control     tCO2e       Operational Control     tCO2e       Equity Share     tCO2e       Equity Share     tCO2e       Equity Share     tCO2e	Boundary     Unit     2017       Operational Control     boe     -       Equity Share     boe     3 605 852 8       Equity Share     tCO2e     -       Operational Control     kgCO2e/boe     -       Equity Share     kgCO2e/boe     -       Operational Control     tCO2e     -       Operational Control     tCO2e     -       Equity Share     tCO2e     -       Operational Control     tCO2e     -       Equity Share     tCO2e     -	BoundaryUnit20172018Operational Controlboe- $40.024.891$ Equity Shareboe $3.605.852^8$ $48.783.030$ Equity SharetCO <sub>2</sub> eOperational ControlkgCO <sub>2</sub> e/boe-8.7Equity SharekgCO <sub>2</sub> e/boeOperational ControltCO <sub>2</sub> eOperational ControltCO <sub>2</sub> e-21.238Equity SharetCO <sub>2</sub> eEquity SharetCO <sub>2</sub> eEquity SharetCO <sub>2</sub> eEquity SharetCO <sub>2</sub> e	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

<sup>8</sup> Includes only production from Point Resources. <sup>9</sup> Includes helicopters, supply vessels and from 2020 also tankers.

The most notable environmental trend for Vår Energi is the significant reduction in Scope 1 emissions. The company's emissions per barrel of oil equivalent produced from its operated fields have been reduced by almost 30 percent. This is partly due to the shut-down of the old Jotun FPSO and partly due to a significant improvement in energy management practices, in particular at the Goliat platform, which is now almost entirely run on electricity supplied from shore. The flip side of this is of course an increase in Scope 2 emissions. The company has also seen a notable decrease in hazardous waste for the company.

Looking at social issues, the most notable trend is the increase in the number of employees in recent years, which has continued in 2020. The share of women in management has also continued to rise.

The four pillars of the company's strategy for long-term value creation specifies the company's contribution to the UN's SDGs:

Strategy for long-term value creation		Contribution to the SDGs
Nobody gets hurt or ill - the safety of employees and contractors as the highest priority	SDG 8	8 DECENT WORK AND ECONOMIC GROWTH
Vår Energi prioritises climate	SDG 13	13 CLIMATE
Delivering value to local communities	SDG 8	8 DECENT WORK AND ECONOMIC GROWTH
Collaboration for innovation and efficiency	SDG 9	9 INDUSTRY, MNOVATION AND INFRASTRUCTURE

The Balder field

In addition to sustainability being an integral part of the company's long-term strategy, Vår Energi has a sustainability strategy focused on improving the company's performance on its material sustainability topics:

- **Environment:** Climate; energy efficiency; biodiversity and environmental protection.
- **Social:** HSE; people, training and diversity; local value creation.
- **Governance:** Business integrity; sustainable supply chain; research and development (R&D); privacy and data security.

#### **ENVIRONMENTAL APPROACH**

#### Climate and energy efficiency

Vår Energi is strongly committed to and supports the Paris Agreement. The company has in 2020 developed a decarbonisation plan that has been approved by the board. The decarbonisation plan lays out the measures that will help the company achieve its  $CO_2$  emission reduction goals:

- 50 percent reduction in CO<sub>2</sub> emissions from operated assets by 2030 (Scope 1)
- Near zero CO<sub>2</sub> emissions from operated assets by 2050 (Scope 1)

Electrification with power from shore will be central to Vår Energi reaching these targets. The electrification of Goliat is becoming increasingly effective and an assessment of the potential for electrification of the Balder re-development is currently ongoing.

Other measures that will help achieve emission reductions are increases in operational efficiency through enhanced energy management, portfolio management, and further reductions in cold venting and fugitive emissions. Long term GHG emissions can be reduced through implementation of low emission technologies and CCS technology.

To achieve an emission reduction in the magnitude of 40 percent in Scope 1 emissions on the NCS in total, Vår Energi sees collaboration between oil and gas companies as a key success factor. Alignment towards the same goals and ambitions is crucial, as several emission reducing measures require significant investments which need to be approved by the involved license owners. Collaboration and alignment are important for Vår Energi with regards to its portfolio of partner operated assets.

#### Biodiversity and environmental protection

Vår Energi considers protection of the environment and the conservation of biodiversity in ecosystems as a fundamental component of sustainable development, and has a "Biodiversity and Ecosystem Services Policy" and has adopted the "No Go" Commitment for UNESCO Natural World Heritage Sites. The company has a target of zero discharge of environmental hazardous substances. To secure protection of the environmental resources in areas that Vår Energi operates in, environmental impact assessments, monitoring campaigns and R&D projects are executed. All plans for activities that may impact the environment are required to undergo a public hearing process before final permission is given by the Norwegian authorities. This secures a transparent process where stakeholders can review the professional basis for the activities.

The company promotes transparent and continuous dialogue with stakeholders, conservation NGOs, and national and international scientific institutions. Vår Energi also participates in several industry collaborations and R&D projects to continuously improve performance on topics related to biodiversity and environmental protection.

#### SOCIAL APPROACH

#### HSE

Vår Energi's number one priority is the health and safety of employees, contractors, and other partners, and the company has a target of being the safest operator on the NCS. The company has implemented a management system for safety, health and welfare, with the aim to secure sound working conditions for the individual employee and contractors, and to ensure that everyone working for Vår Energi complies with internal and external requirements.

Vår Energi's management system is founded on principles set out in IOGP 510 covering relevant elements from NS-EN ISO 9001, NS-EN ISO 14001, NS-EN ISO 26000, NS-EN 27001, NS-EN ISO 31000 and NS-ISO 45001. Vår Energi is certified according to ISO 45001 and ISO 14001. The management system is based on the "Norwegian model", regulated by the Norwegian Working Environment Act and Norwegian legislation, characterised by employee involvement (WEC, safety delegates, discussions with representatives).

In 2020 no serious injuries were recorded, despite high levels of activity both offshore and onshore, including ramping up work related to the lifetime extension on the Balder field. The company's TRIF for 2020 was 3.5, slightly higher than the 2019 result of 2.2. None of the registered personnel injuries were classified as serious. Vår Energi had eight events with higher potential in 2020. No personnel were injured during these events. All events have been investigated according to internal guidelines, and improvements have been implemented.



Jotun FPSO at Rosenberg yard for refitting



#### People, training and diversity

Vår Energi firmly believes that its employees are its most valuable asset, and people and diversity are key factors in executing the overall business and sustainability strategy. Ensuring personal development, a diverse organisation and equal opportunities, are therefore key priorities for Vår Energi. Training and education are important to ensure employees comply with company standards on topics like health, safety, anti-corruption, privacy and data security. Training offered to employees involves a combination of a comprehensive e-learning programme, classroom training carried out in-house and on supplier premises, as well as a training programme tailored to each employee's own position. An ambition for 2021 is to ensure all employees conduct mandatory integrity training. The development of new e-learning courses is also planned for next year.

Vår Energi's strategic focus on diversity is directed at building a robust organisation based on equality and development. Vår Energi is working towards a goal of reaching 40 percent gender diversity in the entire organisation. Towards 2025, the company is working towards the following targets:

- 40 percent female employees onshore
- 15 percent female employees offshore, and
- A ratio of female managers reflecting the gender balance onshore and offshore

#### Local value creation

Vår Energi's ambition is to contribute to industrial activity, job creation and competence development, whereever it operates. In connection with operations both in the northern and southern parts of the NCS, Vår Energi facilitates local employment and development in the oil service industry, as well as supporting cultural and educational initiatives.

The company views its ability to create real local ripple effects as integral to delivering on its purpose of sustainable value creation. A case study of the local value creation associated with the Balder Future project can be found on page 85.

#### **GOVERNANCE APPROACH**

#### **Business integrity**

Ethical integrity, fairness, and compliance with laws, regulations and internal rules is a constant commitment and duty for all Vår Energi employees, and the company aims for this to characterise the conduct of the organisation.

Vår Energi conducts mandatory compliance and ethics training for all employees and contractors. In 2020 an e-learning program called "Fighting corruption" was issued, as recommended by HitecVision. This consisted of six interactive modules focusing on preventing, detecting, managing and reporting possible corruption and bribery incidents and dilemmas. Compliance was also the main theme of an internal Industry Network Seminar, where all who participate in industry initiatives, committees or networks on behalf of Vår Energi were obliged to either attend in the auditorium or watch the streaming on Workplace.

#### Privacy and data security

The topic of data security is centred on how the company protects its assets. Up-to-date systems and personnel training are key facets of how Vår Energi prioritises data security measures. Several measures are put in place to maintain the integrity and security of Vår Energi's information: risk assessments, access control, built in security, maintainance of data quality, personnel training, rigorous backups, control mechanisms and internal audits. A mandatory nano learning process on digital security was issued to all employees in the autumn of 2020, consisting of 18 3-minute modules.

In order to ensure the appropriate management of personal data, Vår Energi has introduced a new Privacy and Data Protection Procedure, based on the General Data Protection Regulation (GDPR) procedures of Eni Norge, Point Resources and ExxonMobil, and updated with the most recent legislation. Guidance on GDPR was also made part of the Employee Handbook together with the Code of Ethics, and further training on GDPR was offered to departments in Q4 2020.

#### Sustainable supply chain

When it comes to improving the environmental and social performance of its supply chain, Vår Energi works actively to identify and mitigate risks in the supply chain, while working together with suppliers to identify and utilise opportunities. Vår Energi requires that all main suppliers must have a sustainability policy with a stated ambition or plan for reducing its environmental and social impact. In 2020 Vår Energi implemented a new policy requiring that sustainability is evaluated in all procurement processes and that environmental and social performance will be weighted up to 30 percent in tender evaluations where this is material and feasible.



#### **Research and development**

Investing in R&D is essential for Vår Energi to develop the innovative technical solutions that will deliver competitive advantages in the short, medium and long term. The oil and gas industry has a long history of innovation, investing in the research and development of new technologies to produce, refine and manufacture energy and other products for society. To contribute to meeting the oil and gas industry's climate goals, Vår Energi will intensify its efforts to develop and employ new technical solutions.

Vår Energi is engaged in large scale national projects aiming to develop and demonstrate GHG emission reduction capabilities, such as low emission- and CCS techniques. The R&D department invests approximately NOK 80 million per year (although due to the Covid-19 situation and the significant drop in the oil price, the R&D figure was reduced to NOK 70 million for 2020). Vår Energi's R&D portfolio included 35 projects in 2020, mainly administered in the form of Joint Industry Projects or consortia, but also as bilateral R&D contracts.

The 2020 R&D budget is distributed along four main categories in the following way:

R&D Categories	Unit	2020
Maximise Recovery	NOK	8 426 228
Operational Excellence	NOK	32 085 757
Safety and Environmental Protection	NOK	12 802 000
Successful Exploration	NOK	16 100 290
Grand Total	NOK	69 414 275

The two largest R&D GHG reduction projects Vår Energi is involved in are the Norwegian CCS Research Centre (NCCS) and the Low Emission Research Centre. NCCS is run by SINTEF and contributes to the government's ambition to realise a full-scale CCS value chain by 2022. Vår Energi cooperates with the centre in evaluating decarbonisation techniques for removal of  $CO_2$  from natural gas for export.

The Low Emission Research Center endeavors to develop new technology and concepts for offshore energy systems and integration with renewable power production technologies. This will accelerate development and implementation of low-emission offshore technologies on the NCS.

Vår Energi is working to deliver sustainable growth opportunities on the Norwegian Continental Shelf. By creating value for its shareholders and the Norwegian society at large, whilst working to meet its ambitious climate targets, Vår Energi has two thoughts in mind.



Jotun FPSO at Rosenberg yard for refitting

#### CASE STUDY

## VAR ENERGI: Energy production with local ripple effects

Vår Energi is committed to delivering a better future. Part of this is creating value for society, and especially in the local communities where the company has operations. The company is actively using its supply chain strategy to maximise industrial activity, job creation and competence development where it operates.

Vår Energi's work with its suppliers is an important part of the company's ESG focus. Suppliers are audited on relevant safety and sustainability aspects in the tendering process, as well as in the post award verification and subsequent audits. The company requires all main suppliers to have a sustainability policy with a stated ambition or plan for reducing their environmental and social impact. This is one of the measures through which the company will reach its goal of reducing  $CO_2$  emissions by 50 percent by 2030.

Several strategic measures have been introduced to reach the target of creating local value. These include implementing local content expectations in projects' procurement strategies, dividing large contracts into smaller parts to allow local businesses to participate, and organising supplier workshops and industry related seminars to ensure local industry related seminars to ensure local industrial content and ripple effects. Vår Energi also facilitates opportunities for national suppliers to establish local presence and enter industrial cooperation locally when relevant, especially in Northern Norway.

The Balder Future project exemplifies the important ripple effects created by a systematic approach to maximising local value. The project is a part of the major investment made to extend the production from the Balder field, license no. 001 on the Norwegian Continental Shelf. The field has been in production since 1999 and is now being prepared for the next 25 years. According to estimates in the plan for development and operation, the project will create approximately 25 000-30 000 man-years from the commencement of the project until end of life in 2045. Approximately 70 percent of the total contract value of about NOK 20 billion will be spent with Norwegian suppliers.

One of the main local suppliers to benefit from the project is the Rosenberg Worley yard in Stavanger, which was awarded the EPCI contract to refurbish the Jotun FPSO. The FPSO is currently at the yard undergoing major upgrades before being re-installed in the field during the summer of 2022. Currently, the yard employs approximately 1000 workers directly as an effect of the project.

The Jotun FPSO upgrade is currently the second largest project at the yard, and provides work for 30 percent of the workforce. Jan Narvestad, managing director of Rosenberg states that "The lifetime extension of Jotun FPSO has provided us with a unique opportunity to expand our competence, knowledge and facilities, enabling us to take on similar projects in the future." The ambition to contribute to a sustainable future through re-use and upgrades of existing industrial facilities such as this is in line with the company's sustainability objectives.

Similar to Vår Energi, Rosenberg also has a strong focus on utilising local suppliers and estimates that close to



Jan Narvestad Managing director, Rosenberg

70 percent of procurement is done locally. Local presence and engagement continue to be a focus point for both companies, both in facilitating a local business environment, but also in the search for and development of more sustainable solutions and new ways of thinking.

Thanks to the Balder Future project, Rosenberg saw an increase in activity and employment in 2020, in contrast to the general downturn in activity in the oil and gas service sector. The positive impact on the Rosenberg Worley yard is just one example of the local ripple effects the Balder Future project is having on industry and employment in the Greater Stavanger region.

Vår Energi is scheduled to undertake its next ripple effect analysis during the first half of 2021, encompassing both northern and southern activities. The analysis will further detail the concrete results of the company's work to increase local value creation.





Headquarters: London, UK Website: www.neweuropeanoffshore.com Number of employees: 153 Revenues (2020): USD 278.2 million Countries of operation: UK HV's shareholding: 100% Investor: Fund VI and VII Certifications: OSPAR 2003/5, ISO 14001 (GP III FPSO only)

#### ESG Responsible:

Robert Adams, CFO (Compliance) and Paula Webber (HSE & ESG Manager)

#### **COMPANY DESCRIPTION**

NEO Energy has over the last year established itself as a leading next generation UKCS oil and gas producer, through a combination of organic and inorganic growth. The company was formed following the merger in 2019 of HitecVision's two UK North Sea businesses, Verus Petroleum and NEO E&P.

NEO Energy is in the midst of a strong growth phase. In August 2020, the company completed the acquisition of Total's production and development assets in the Central North Sea, increasing the company's headcount from 70 to 134. In February 2021, the company announced another major transaction, the acquisition from ExxonMobil of non-operated interests in 14 fields in the Central and Northern North Sea. Just two weeks later, the company announced further growth through the acquisition of Zennor Petroleum Limited. When these transactions close later in 2021, they will more than double NEO Energy's production to about 80 000 boepd, making the company the fifth largest producer in the UK.

The overarching objective of NEO Energy is to grow production to 120 000 boepd in the short term, through M&A and long-term investments, with an underlying focus on sustainable and responsible operations. Sustainability is an integral part of the company's growth strategy. Carbon intensity is used by NEO Energy to benchmark its performance, as well as being a key factor in decision making regarding acquisitions and potential capital investments.



Russell Alton, CEO

#### **KEY REPORTED ESG FIGURES FOR 2020**

#### (2019, 2018 and 2017 figures displayed where available):

ENVIRONMENTAL	2017	2018	2019	2020
Direct GHG emissions (GHG Protocol Corporate Standard Scope 1, in tonnes)	-	78	67 393 <sup>1</sup>	71 257
Energy indirect GHG emissions (GHG PCS Scope 2, in tonnes)	79	82	17	17
Other indirect GHG emissions (GHG PCS Scope 3, in tonnes)	42	40	64	35
Carbon intensity - Scope 1 & 2 (tCO <sub>2</sub> e / million USD revenues)	-	-	288.8	256.2
Carbon intensity - Scope 1, 2 & 3 (tCO <sub>2</sub> e / million USD revenues)	-	-	289.1	256.3
Waste (tonnes)	3	5.4	0.8	0.5
Recycling Ratio	45%	70%	85%	75%
Unplanned spills (emissions to ground/sea/air)	0	0	0	10
Hazardous waste	0	0	0	0
Non-Hazardous waste	3	5.4	0.8	0

SOCIAL	2017	2018	2019	2020
Number of employees <sup>2</sup>	14	18	39	153
Total Recordable Incident Frequency (TRIF)	-	-	-	7.1
Lost Time Injuries (LTI)	-	-	-	1
Medical treatment case (MTC)	-	-	-	0
First aid case (FAC)	-	-	-	1
Short term sick leave (onshore / offshore) <sup>2</sup>	0.3%	0.2%	0.0%	0.2%
Long term sick leave (onshore / offshore) <sup>2</sup>	0%	0.0%	0.0%	1.2%
Share of women in total workforce <sup>2</sup>	28%	16%	31%	23%
Share of women in management <sup>2</sup>	0%	0%	29%	16%
Employee turnover ratio	7%	5%	0.5%	1.1%

GOVERNANCE	2017	2018	2019	2020
Share of relevant staff who have completed anti-corruption training (%)	100%	100%	100%	100%
Breaches of ethical guidelines	0	0	0	0
Investigations or lawsuits in relation to ESG issues	0	0	0	0
Cyber attacks or similar incidents resulting in loss of data, loss of integrity or other loss	0	1	0	0
Whistleblowing cases being addressed by management or board	0	0	0	0

<sup>1</sup> Scope 1 emissions for 2019 was calculated on equity share basis. <sup>2</sup> Adjusted definition from 2019.

Indicators	Boundary	Unit	2017	2018	2019	2020
Oil and gas production	Operational Control	boe	-	-	-	4 154 814
Oil and gas production	Equity Share	boe	593 529	1 692 875	4 413 582	9 130 422
Carbon intensity per barrel of oil equivalent produced	Operational Control	kgCO <sub>2</sub> e/boe	-	-	-	42.8 <sup>3</sup>
Carbon intensity per barrel of oil equivalent produced	Equity Share	kgCO <sub>2</sub> e/boe	-	-	15.3	30.7 <sup>3</sup>

<sup>3</sup> Carbon intensity per barrel includes fields acquired during the year on a full-year basis.

NEO Energy is in a build-up phase, and oil and gas production has increased significantly from 2019 to 2020. The company acquired Total's assets in the Central North Sea with effect from 1 August, increasing both the level of operated production and the number of employees significantly. With further acquisitions agreed in 2021, the growth is expected to continue. Another effect of the Total acquisition is that for the first time, the company has a significant number of offshore workers, a typically male-dominated type of employment which reduces the percentage of female employees overall.

With a notable amount of operated production, the company now reports greenhouse gas emissions in accordance with the Operating Control boundary, whereas 2019 figures were calculated using the Equity Share boundary. Emissions and carbon intensity figures are therefore not directly comparable, it is however notable that the company's revenue carbon intensity has been reduced despite lower oil and gas prices. Some of the assets acquired from Total are in the late phase of field life with relatively high emission levels, leading to high per-barrel emissions figures, in particular for operated fields.

The recorded decrease in Scope 3 emissions is due to less business travel.



The Shearwater platform

Russell Alton, CEO of NEO Energy, comments that "The low-carbon transition is at the forefront of our minds, as is the net zero ambition of the UK, so when we think commercially about our assets we need to include environmental considerations as well. We recognise that we're in an energy transition, and that our industry is playing an important role in that transition. We all agree on the importance of reducing the  $CO_2$ -intensity of our energy systems over time, and we are committed to playing our part in that process."

#### **ENVIRONMENTAL APPROACH**

Guided by its focus on sustainable and responsible operations, NEO Energy has undertaken considerable work to integrate ESG priorities in all its activities, from acquisitions, to operations and decommissioning, as well as further integrating ESG in its risk management and business strategy.

NEO Energy is a company in growth mode, with the management team focused on continuing to identify value accretive acquisitions. ESG issues are part of the investment committee investigation of potential acquisitions, to ensure the company builds a sustainable portfolio. One example of this is the acquisition of Babbage, a modern field supplying gas to the UK as the country reduces its dependence on coal as an energy source. For assets added as part of recent acquisitions, the priority is to improve asset integrity, to ensure the highest safety standards and also reduce the carbon emissions of these assets.



The Cormorant East platform



The Britannia platform

For assets where NEO Energy has an interest but is not the operator, the company takes a proactive approach in working with the operating partner to identify and champion opportunities to improve the operational efficiency at these assets. "We've done detailed analyses of operational efficiency improvements available for each of our assets," HSE & ESG Manager, Paula Webber, explains. "We're focused on identifying technological solutions to reduce the environmental footprint of our portfolio". The company has a dedicated focus on extending late-life production and thus the life of its fields.

Beyond acquisitions and operations, NEO Energy is also bringing an environmental focus to decommissioning, as demonstrated by the recently submitted decommissioning plan for the Victoria field. Through an integrated decommissioning approach and systematic application of the waste hierarchy, resource use and the environmental footprint of the decommissioning process are reduced.

A key activity in 2020 was the development of a low-carbon transition plan for the company. The focus over the last year in this comprehensive process has been on gathering the data necessary for benchmarks. The resulting plan, with targets for  $CO_2$ -emission reduction, will be announced in 2021 following board approval.

NEO Energy has also worked with HitecVision to complete a climate risk assessment in accordance with the TCFD recommendations. The company is planning to publish the findings in a TCFD-aligned climate risk report early in 2021.

As a partner in the low-carbon energy transition, NEO Energy has committed GBP 2.5 million to the Centre for Doctoral training in Geoscience and the Low Carbon Energy Transition at Heriot-Watt University, Scotland. This supports PhD students researching a range of carbon reduction solutions and initiatives.

NEO Energy has also committed GBP 0.5 million to GeoBus, an educational outreach project supporting Earth Science learning in schools in the UK. Geobus was developed by the Department of Earth & Environmental Sciences at the University of St Andrews in 2012 and has been running ever since. Supported by the Natural Environment Research Council, Scottish Government and industry, GeoBus has been visiting schools across Scotland, reaching all educational regions and over 250 schools.



The Global Producer III FPSO

#### SOCIAL APPROACH

Throughout 2020, HSE and employee wellbeing has been a key focus for the organisation. The onset of Covid-19 presented a particular challenge to deal with in a year in which the company's headcount also increased fourfold. Thanks to the work of the Covid-19 readiness group, the implementation of an active monitoring and testing system, and management's proactive communication and engagement with the organisation, NEO Energy saw no downtime or incidents related to the pandemic.

As a relatively new company in the UK oil and gas sector, NEO Energy has over the course of 2020 prioritised extensive stakeholder engagement, in order to understand expectations and establish the company's place as a leading player within the UKCS. This engagement is vital in establishing NEO Energy's 'licence to operate' and to allow it to succeed in its growth ambitions.

In addition to direct engagement with regulators, partners and employees, this process has been supported by the creation of external and internal communications tools. In July 2020 NEO Energy launched a new website (www.neweuropeanoff-shore.com) detailing its operations, strategy and growth aspirations. This online presence was further bolstered by a corporate LinkedIn channel, with much of the content published focused on NEO Energy's social and environmental commitments.

Through its growth, NEO Energy has also made a positive contribution to employment in the UK oil and gas sector through a challenging period for the industry. To ensure the growing team is properly supported and working in the best possible environment, NEO Energy has invested in newly refurbished office spaces in both London and Aberdeen, specifically designed to improve employee wellbeing and facilitate group work and interaction. It has also demonstrated a clear commitment to employee engagement through the establishment of an intranet, online employee networking tools and regular all-company meetings with the CEO. NEO Energy plans to undertake its first employee engagement survey later this year in order to understand and baseline employee sentiment.

NEO Energy is planning to develop its supply chain ESG management in the future, and has already initiated dialogue on select ESG issues, such as net zero plans, with suppliers in some contract negotiations. The company is also considering including a diversity metric as part of its corporate KPIs, a topic that will be revisited throughout 2021.

NEO Energy seeks to make a positive contribution to local communities. In November 2020 the company participated in Movember, fundraising and raising awareness amongst employees of men's health issues. This was followed in December by the company making a corporate donation to the Trussell Trust, an NGO and charity that supports food banks throughout the UK.



The Etap platforms

#### **GOVERNANCE APPROACH**

Key measures to improve governance performance in 2020 included anti-corruption training and a cyber security assessment. Training for employees on cyber security was launched in 2021.

The process of integrating ESG into the company's governance structure has continued. The HSE manager now reports directly to the CEO as part of the leadership team. ESG has been combined with Strategy to highlight the importance of focusing on ESG impacts as NEO Energy grows. The board of directors has considerable ESG expertise, and both HSE and ESG are set items on the board's meeting agenda. Recently, an audit and risk committee and a technical and commercial assurance committee were formed, establishing a set process for board follow-up on key ESG issues.

NEO Energy believes that a strong social 'licence to operate' is central to achieve continued growth, and this will only be established by making sustainability a core driver for the company. NEO Energy is working to achieve this by actively engaging with stakeholders, integrating ESG in the company's governance structure, growing and operating its portfolio with a strong focus on lowering emissions, improving HSE and increasing local value generation.





Headquarters: Stavanger, Norway Website: www.sval-energi.no Number of employees: 45 Revenues (2020): USD 447.6 million Countries of operation: Norway HV's shareholding: 99.5% Investor: Fund VII Certifications: None

ESG Responsible: Ingrid Landråk

#### **COMPANY DESCRIPTION**

Sval Energi AS is transforming from a pure gas infrastructure owner to become a new generation energy company. The company is taking a material position in oil and gas, infrastructure, and renewable energy. Sval believes that oil and particularly gas will continue to be important in the energy transition, and aims to reach a production volume of 100 000 boepd in the near future. Through its significant position in gas infrastructure, Sval plays a vital role in providing gas to Europe. The company's exploration approach is focused on near field exploration in order to reuse existing infrastructure and thus reduce emissions through all project phases.

The company seeks to contribute to the energy transition through supporting the UN's SDGs on "Climate Action" and "Providing Clean And Affordable Energy". In order to succeed in this and effectively manage transition risks, the company's vision is to be a top quartile exploration and production company by 2030, measured in terms of carbon intensity from its energy production.

As a part of Sval's low carbon strategy, the company will pursue carbon reduction projects on offshore and onshore installations, which might include: electrification of offshore oil and gas fields; investments in renewable energy generation; carbon capture and storage; and advancing other technological solutions to reduce the carbon intensity of its energy production.



Nikolai Lyngø, CEO

#### **KEY REPORTED ESG FIGURES FOR 2020**

#### (2019, 2018 and 2017 figures displayed where available):

ENVIRONMENTAL	2018	2019	2020
Direct GHG emissions (GHG Protocol Corporate Standard Scope 1, in tonnes)	-	0	0
Energy indirect GHG emissions (GHG PCS Scope 2, in tonnes)	-	1	12
Other indirect GHG emissions (GHG PCS Scope 3, in tonnes) <sup>1</sup>	-	238 243	193 551
Carbon intensity - Scope 1 & 2 (tCO <sub>2</sub> e / million USD revenues)	-	0.0	0.0
Carbon intensity - Scope 1, 2 & 3 (tCO <sub>2</sub> e / million USD revenues)	-	306.5	432.5
Waste (tonnes)	0.1	0.1	4.2
Recycling Ratio	70%	70%	63%
Unplanned spills (emissions to ground/sea/air)	0	0	0

SOCIAL	2018	2019	2020
Number of employees <sup>2</sup>	-	7	45
Short term sick leave (onshore / offshore) <sup>2</sup>	0.0%	0.1%	0.3% <sup>2</sup>
Long term sick leave (onshore / offshore) <sup>2</sup>	0.0%	0.0%	0.0%
Share of women in total workforce <sup>2</sup>	20%	30%	35%
Share of women in management <sup>2</sup>	0.0%	33%	25%
Employee turnover ratio	0.0%	20%	3.8%

GOVERNANCE	2018	2019	2020
Share of relevant staff who have completed anti-corruption training (%)	50%	100%	100%
Breaches of ethical guidelines	0	0	0
Investigations or lawsuits in relation to ESG issues	0	0	0
Cyber attacks or similar incidents resulting in loss of data, loss of integrity or other loss	0	0	0
Whistleblowing cases being addressed by management or board	0	0	0

<sup>1</sup> Scope 3 for Sval includes ownership shares in various natural gas networks and infrastructure, as well as company business travel. <sup>2</sup> Adjusted definition from 2019.

Sval Energi is in a strong growth phase, and has through the year concluded several acquisitions. This is demonstrated by the significant increase in the number of employees. With another acquisition closed in 2021, this is expected to continue.

The reduction of Scope 3 greenhouse gas emissions is due to lower emissions from the Gassled system, where Sval Energi holds a 15.6 percent interest.

### Metsälamminkangas (MLK) wind farm

In March 2020, Sval acquired a 50 percent interest in the MLK wind farm in Vaala, northern Finland. The wind farm consists of 24 wind turbines with 5.5 MW installed capacity, totalling 132 MW. The average annual electricity production is 404 GWh, equivalent to the electricity consumption of about 80 000 households.

Finland is one of the fastest growing markets for wind energy investment in Europe. The electricity produced will be delivered to the integrated Nordic power market Nord Pool, via Fingrid, Finland's national power grid.

The investment forms part of Sval's low-carbon strategy, and contributes to diversify the company's portfolio by adding an asset with low-risk and long-dated cash flows, building on Sval's existing infrastructure position. Through the MLK acquisition, Sval is making a statement that it will be a diversified and profitable energy company, relevant for decades to come.

As the company continues to grow, it aims to be a contributor towards reduction in carbon intensity from the relevant licences it participates in. Core ESG priorities such as HSE, asset integrity, emissions to air and sea,  $CO_2$  intensity and the long-term decarbonisation goal feed into the assessment of potential acquisitions.

"Our M&A approach has produced an asset portfolio with a good  $CO_2$ -intensity profile," Sval CEO Nikolai Lyngø comments. "We have a holistic approach to acquisitions, and our ESG parameters are part of this picture. In the next degree, we are engaging proactively with our business partners to reduce emissions in the assets already in our portfolio. Combining the expertise of our technical and commercial team, I'm confident we will succeed in finding the optimal balance between maximising production and reducing emissions in these assets."

Sval's ESG approach is founded on four priorities:

- diversifying the energy production portfolio;
- investing in a low-carbon upstream portfolio;
- electrifying and improving the energy efficiency of its upstream assets;
- integrating ESG into the valuation of all investment decisions.

In December 2020, Sval announced the acquisition of Edison Norge AS. The transaction will increase the reserve base of Sval, adding net 25 mmboe (with 57 percent gas). The acquisition exemplifies Sval's growth strategy focus on acquiring low-emission assets and utilising existing infrastructure. The merger is expected to be completed in the first half of 2021.



Gassled is the world's largest offshore gas transmission system

#### **ENVIRONMENTAL APPROACH**

Sval's approach to reducing its environmental footprint is three-pronged, aiming to achieve a reduction in emissions from own operations and already-owned assets, whilst growing through the acquisition of low emission assets. As a non-operating partner in most of its assets, Sval's approach to reducing the environmental footprint of these relies heavily on leveraging its influence in the license partnership to achieve emission reductions in cooperation with its business partners.

"As a licence partner rather than an operator, our most important contribution to reducing emissions from our assets is pushing this agenda in our licence partnerships," Ingrid Landråk, SVP Business Support Services notes. "An example of this from 2020 is the decision by Gassled to proceed with the concept development of part electrification of the Kårstø processing plant. This is a proposal that we have supported from its inception." The concept for the electrification project will be selected in the spring of 2021, with the decision to proceed to the FEED phase planned for June 2021. The main concept alternative for the project is estimated to have a cost framework of approximately NOK 6 billion and will result in a CO<sub>2</sub> emission reduction of 500 000 tonnes, in addition to a 200 000 tonnes reduction from sub-projects that have already been decided.

In addition to asset-related measures, Sval works continuously to reduce emissions in its own operations. Some measures introduced here include the purchase of renewable energy guarantees of origin for office energy use, and reduced energy consumption in the office.

In 2020, Sval has completed a TCFD-aligned climate risk assessment, including a risk register dedicated to climate-related risks that is integrated with the company's overall risk register. The climate-related risks are viewed as material and are continuously managed.

A decarbonisation roadmap is being developed as the ESG work matures further.

#### NorthWind - the new wind power research centre in Norway

In December 2020, the Minister of Petroleum and Energy, Tina Bru, announced an investment of NOK 120 million in a new wind power research centre in Norway. The centre will focus on innovations to make wind power cheaper, more efficient and more sustainable, with offshore wind research as a key priority.

The research centre will be led by SINTEF, but brings together over 50 partners from research institutions and industry globally. Sval is a proud industry partner of NorthWind.

"As a new generation energy company, Sval sees the world's need for clean energy and recognises the business opportunities that arise in the ongoing energy transition" comments Nikolai Lyngø, CEO of Sval Energi. "Our ambition is to provide energy from oil and gas and new energy sources. We participate in the exploration and development of oil & gas fields as well as owning a wind park development in Finland, so naturally offshore wind power is an interesting area for us as we continue to grow our company."

#### SOCIAL APPROACH

Through its growth in the past year, taking care of employees has been a core priority for Sval. In recruitment processes, there has been a clear focus on achieving equality between both men and women and between different age groups and backgrounds, as Sval believes a more diverse workforce creates better solutions for the company. An occupational health service has been established, and in addition to work environment considerations such as ergonomics all employees have been given medical consultations.

In the current growth phase, safety is a top priority. Sval has no employees that regularly work offshore, and the company had no HSE incidents in its own operations in 2020. Beyond its own operations, Sval is an advocate for improving the safety culture of the assets in which it holds an ownership stake. Each asset is audited on HSE and emergency preparedness. There are regular dedicated HSE meetings with operators, and quarterly HSE action plans are followed up through auditing.

Sval has a focus on using local suppliers, to ensure value creation and knowledge sharing directly in the communities where the company's operations are based. In the summer of 2021, Sval will launch paid summer internships for students. The aim is to both contribute to building expertise, and to create an interest in the energy sector among tomorrow's workforce.

#### **GOVERNANCE APPROACH**

Sval is committed to operating in a responsible manner. To this end, the governance system and procedures ensure both that risks are managed and that the company's standards and expectations are communicated to employees and to business partners. ESG issues are integrated in the company's performance management and are a priority for the board of directors. This ensures that ESG is integrated in all decision-making.

ESG is a set item on the agenda of board meetings, and the organisation regularly reports to management on ESG. The board evaluates the performance of Sval's management team across key areas, one of which is delivering strong ESG results and safety performance in assets. Sval will consider including ESG KPIs in its performance evaluation of asset managers.

Sval has implemented an integrated business management system which is actively used as a management tool by the management team. Developing compliance policies has also been a focus in 2020, with a special focus on GDPR.



From the Kårstø gas processing plant

All employees have been provided with e-learning on the company Code of Conduct, and other key company policies, on whistleblowing, anti-corruption, data protection, and personal trading, to name a few. Targeted digital security training was introduced in November 2020 and will continue throughout 2021, complemented by safety exercises on topics like phishing. Governance compliance requirements are detailed in contracts with suppliers.

Looking ahead, Sval is positioned for further growth, aiming to strengthen its position as a significant exploration and production company and a positive contributor to society.

# ESG in the Portfolio Companies

## **Energy Solutions**

## 🐜 vårgrønn



Headquarters: Stavanger, Norway Website: www.vargronn.no Number of employees: 1 Revenues (2020): 0 Countries of operation: Norway HV's shareholding: 30.4% Investor: Fund V, VI and VII, and two co-investment vehicles

#### **COMPANY DESCRIPTION**

Vårgrønn is a Norway-based renewable energy company owned by Eni and HitecVision, mirroring the ownership of Vår Energi, Norway's second largest oil and gas company. The company was launched in November 2020 with Olav Hetland, formerly responsible for a.o. the offshore wind activities of Statkraft, Europe's largest renewable energy producer, as CEO.

Vårgrønn aims to develop, construct, operate and finance green energy and infrastructure projects in Norway and the Nordic markets. As a first step, the company will pursue opportunities in the offshore wind sector by participating in the upcoming Norwegian tenders for offshore licenses, also supporting sister company Vår Energi's ambition to reduce its greenhouse gas emissions through the electrification of its upstream assets.

Since its establishment, Vårgrønn has taken steps to prepare its applications for offshore wind licenses in the Utsira Nord and Sørlige Nordsjø II licensing areas. These areas were opened for offshore wind activity by the Norwegian government on the 1st of January 2021, and applications are due later in the year. The areas are expected to have a joint capacity for developments of around 4 500 MW.



Olav Hetland, CEO

Vårgrønn has contracted the necessary expertise and capabilities to develop robust commercial and technical concepts and prepare the impact assessment programs. The company is currently working to establish appropriate consortiums for each license application, and will collaborate with Agder Energi on Sørlige Nordsjø II.

In addition to these near-term offshore wind initiatives, Vårgrønn will explore other opportunities within renewables, with a long-term ambition of reaching an installed capacity in the region of 1 GW towards 2030.

#### **ENVIRONMENTAL APPROACH**

Vårgrønn's mandate is inherently environmentally friendly. Vårgrønn is currently assessing renewable energy opportunities across the Nordic and Baltic countries, in line with the ambition of reaching 1 GW installed capacity towards 2030. The company will also explore other low carbon emission opportunities.

#### SOCIAL APPROACH

Stakeholder engagement has been a key priority for Vårgrønn since its establishment. Offshore wind is a new and growing segment of Norway's energy sector, and it has been important for Vårgrønn to contribute to the knowledge-building and coordination efforts initiated by the Norwegian government and key organisations.

"Decision makers in the offshore wind sector are taking our opinions into serious consideration when it comes to defining the framework conditions for the sector, so it's important for us as a company to demonstrate that we are a competent actor, able to identify solutions that will be good for the country as a whole, and not just for Vårgrønn," CEO Olav Hetland explains. Together with specialised experts and business partners, Mr. Hetland has spent a significant amount of time engaged in stakeholder dialogue with both government, regulators and suppliers, and with local communities on the agenda going forward. "We need to work with our stakeholders to create local value and make sure there are ripple effects of our projects in their communities. From the start, we have emphasised being transparent, also about the questions where we don't have a clear answer yet."

Value creation is a priority for Vårgrønn. The company is developing a strategic approach to maximising local value creation, focusing on supply chain management and job creation. The company believes this will be key to establishing a strong social license to operate for the entire offshore wind industry. Vårgrønn aims to be a company that makes a difference, contributing to the successful transition of the Norwegian oil and gas service industry towards new market segments.

#### **GOVERNANCE APPROACH**

Since the company was established in November, Vårgrønn has established a business management system tailored to the company's current activity level. When entering project development and asset operations, Vårgrønn will establish a project management system tailor made for the renewable industry based on best practice from the oil and gas sector.

Vårgrønn was established towards the end of 2020 and has no ESG KPIs to report.

## ASSET BUYOUT PARTNERS



Headquarters: Oslo, Norway Website: www.abpre.no Number of employees: 15 Revenues (2020): USD 63.1 million Countries of operation: Norway HV's shareholding: 99.7% Investor: Fund VII

#### **Certifications:**

Company has no certifications, however, is registered in EPIM JQS

ESG Responsible: Karl Otto Eidem

#### **COMPANY DESCRIPTION**

Asset Buyout Partners (ABP) is an industrial real estate company with a dedicated investment strategy focusing on mission critical real estate and infrastructure. The company's assets are located in major Norwegian energy and maritime clusters along the coast, from Hammerfest in the north to Stavanger in the south. ABP's advantage lies in the versatility and development potential of its real estate portfolio, coupled with its business model of long-term contracts with solid counterparties.

ABP's properties, although mainly having an origin in the oil and gas industry, are ideally located to capture and facilitate the green industrial transition within the oil and gas industry, as well as other onshore and offshore transition activities, offering access to high quality infrastructure attractive to multiple other industries such as offshore wind, aquaculture, hydrogen and biogas. Several of ABP's tenants are in the process of diversifying their activities above and beyond oil and gas, and now have considerable backlogs towards offshore wind and other alternative industries, with ABP playing an active role in promoting more sustainable and circular operating models.

William W. Wittusen, CEO of ABP, views sustainability as a prerequisite for the company's future growth: "We expect our energy transition project portfolio to be a mainstay of our future growth. New industrial development in Norway will be circular, and our properties are some of the best suited in the country for



William W. Wittusen, CEO

#### **KEY REPORTED ESG FIGURES FOR 2020**

#### (2019, 2018 and 2017 figures displayed where available):

ENVIRONMENTAL	2017	2018	2019	2020
Direct GHG emissions (GHG Protocol Corporate Standard Scope 1, in tonnes)	-	-	0	0
Energy indirect GHG emissions (GHG PCS Scope 2, in tonnes)	-	-	1	1
Other indirect GHG emissions (GHG PCS Scope 3, in tonnes) <sup>1</sup>	-	-	40	16
Carbon intensity - Scope 1 & 2 (tCO <sub>2</sub> e / million USD revenues)	-	-	0.02	0
Carbon intensity - Scope 1, 2 & 3 (tCO <sub>2</sub> e / million USD revenues)	-	-	0.7	0.3
Waste (tonnes)	12	8	8	8
Recycling Ratio	100%	100%	100%	100%
No. of supplier audits that include environmental auditing	2	1	1	3

SOCIAL	2017	2018	2019	2020
Number of employees <sup>2</sup>	7	12	15	15
Share of women in total workforce <sup>2</sup>	0.0%	17%	20%	20%
Share of women in management <sup>2</sup>	0.0%	0.0%	0.0%	0.0%
Sick leave, short term <sup>2</sup>	0.0%	0.0%	1.3%	0.0%
Sick leave, long term <sup>2</sup>	0.0%	0.0%	0.0%	0.0%
Employee turnover ratio	0.0%	4.0%	4.5%	0.0%

GOVERNANCE	2017	2018	2019	2020
Share of relevant staff who have completed anti-corruption training (%)	96%	57%	89%	100%
Breaches of ethical guidelines	-	-	0	0
Investigations or lawsuits in relation to ESG issues	-	-	0	0
Cyber attacks or similar incidents resulting in loss of data, loss of integrity or other loss	-	-	0	0
Whistleblowing cases being addressed by management or board	-	-	0	0

<sup>1</sup> Company business travel. <sup>2</sup> Adjusted definition from 2019.

As a company with a small staff, all office-based, ABP has a limited direct environmental footprint. 2020 is a year of little change in terms of ESG-performance, where the most notable development is related to the decrease in Scope 3 emissions due to less business travel. Increased revenues lead to lower carbon intensity figures.

realising these projects. Our tenants have set ambitious targets for decarbonisation and industry diversification, and we are more than ready to partner with them and apply our assets to see these goals realised."

ESG is fundamental to ABP's business strategy. Good corporate governance and corporate management reduce risks, while enabling the company's resources to be utilised in an effective and sustainable manner. To this end, ABP has implemented an ESG strategy aiming to maximise the company's positive contribution to SDGs 9 - Industry, innovation and infrastructure, 13 - Climate action and 8 - Decent work and economic growth:



To support its industry diversification, ABP has participated in the launch of "Greenspot Mongstad", a collaboration between the largest owners at Mongstad Industrial Park and local and national authorities, to transform the industrial park to a cluster of sustainable business models. This has been a key part in positioning ABP for the green industrial transition.

A milestone from 2020 is the decision by BKK, Equinor, Air Liquide and others to construct a green hydrogen production plant at Mongstad. The plans include the construction of two hydrogen-fueled cargo ships, and has a total investment cost of NOK 1.7 billion. A second project maturing significantly during 2020 is a "wind power on asphalt" project, where wind turbines can be built amongst the industrial facilities at Mongstad, together with an energy storage battery system to optimise the use of the renewable energy produced in the local power grid.

Another new development, a circular economy aquaculture project at Mongstad, is described on <u>page 73</u>. Together with additional projects currently under consideration, the environmental footprint of Mongstad is set to be significantly reduced over the coming years, whilst increasing value creation.

In November 2020, ABP secured an option to acquire significant interests in Mo Industrial Park (MIP) and the Helgelandsbase (HBH). MIP has already developed unparalleled green infrastructure for energy-intensive process industries, with new energy initiatives such as an industrial scale battery cell production facility, a green hydrogen facility, as well as CCU solutions for production of green methanol under development. These projects are expected to create thousands of new jobs in the region. This makes MIP and HBH a perfect strategic fit for ABP's investment strategy, providing further opportunities for contributing to the green transition of Norwegian industrial activity.



From Kristiansund Base



From Mongstad base

In January 2021, ABP acquired Kristiansund Base. Moving forward, ABP will explore opportunities for introducing recycling and circular solutions here as well, to develop the area into a green industrial park. Dialogue is ongoing with potential customers to explore projects within aquaculture and marine minerals in the longer term.

#### **ENVIRONMENTAL APPROACH**

From a strong focus on HSE, ABP works actively to address climate and environmental risks and opportunities. This includes investments in energy efficient properties and infrastructure, facilitating and promoting technological development and promotion of circular solutions.

Circular solutions are currently under development in a range of ABP's properties. Mongstad is the most significant example, but many of ABP's properties are well positioned for innovative circular solutions as ABP, in close cooperation with both tenants and public organisations, matures ambitions and investments in this area.

As the main property owner at Mongstad, ABP is in a unique position to be a driving force for environmental improvement initiatives.

As part of its energy efficiency project, ABP is gradually upgrading light fittings throughout its portfolio to LED, with an estimated potential for total energy consumption reduction of up to 3 MWh, of which around 1 MWh reduction was realised in 2019-2020. The company is also exploring the use of Energy Performance Contracting (EPC) in collaboration with tenants. An EPC contractor will finance the investment in energy efficiency measures based on future cost reductions, increasing the inherent value of ABP's properties, while reducing energy consumption and costs for the tenants.



From Mongstad base

As part of HitecVision's TCFD project, ABP has completed a TCFD-aligned climate risk assessment. The risks and opportunities mapped in the exercise are managed through ABP's sustainability and business development strategies. Moving forward, the company will continue its work to align its assets with the new EU taxonomy for sustainable activities.

#### SOCIAL APPROACH

ABP emphasises maintaining a constructive dialogue with its main stakeholders, providing valuable feedback and enabling the company to continue to improve, to build trust and to enhance its reputation. ABP collaborates with a number of business developers and industrialists, to develop the industries of tomorrow, through sharing ideas and knowledge and coordinating investments and industrial activity.

"Cooperation, including both public and private initiatives, is essential to secure the transition to the low carbon economy," CFO of ABP, Karl Otto Eidem comments. "We incentivise and contribute to the transition to more sustainable businesses by facilitating circular reuse options for resources that were previously viewed as waste. We're however planning along multiple dimensions at the same time: Local value creation is important to us, and we're seeing that the transition is creating new business opportunities across our locations." In the creation of circular solutions and renewable energy projects at ABP's properties, the company and its partners strive to maximise local value creation, combining commercial, environmental and social targets.

In the course of 2020, four construction projects have been completed for which ABP was the property developer. Contractors working for ABP must meet stringent qualification requirements to be accepted for tenders, including i) ABP HSEQ procedures for approval of contractors, ii) ISO 9001/14001 requirements, and iii) StartBANK approval (https://www.achilles.com/no/community/startbank/), including amongst other things requiring a waste recycling degree of 100 percent and for all employees to have an HSE card. There were no HSE incidents among suppliers associated with the construction activities in 2020. ABP performs 2-3 audits yearly of selected key suppliers.



From Mongstad base

Safeguarding its own employees as well as those of its tenants has been a priority in ABP since the initial lockdown due to Covid-19 in March 2020. The company's routines and procedures ensured a good transition, and the tenants' activity levels have been unaffected by the situation. Introduced infection control measures have proved effective, and there has been a limited number of Covid-19 infections in ABP's properties.

#### **GOVERNANCE APPROACH**

ABP has over time developed a robust governance system. The governance system is subject to continuous revision and saw improvements on cyber security and gender diversity in 2020. ABP's payment and accounting systems have been reviewed, particularly with a view to improve protection against fraud. ABP has also audited its IT contractor to ensure compliance with GDPR and the company's general cyber security standards.

At board level, governance of ESG falls under the mandate of the audit and risk committee, which reports annually to the board of directors in addition to quarterly incident reporting.

Based on HitecVision's priorities there has been a change in the board composition, improving the gender diversity of the board from 2019 to 2020.

ABP's investment strategy has positioned the company well to take advantage of the opportunities created by the green industrial transition. Through its proactive approach to understanding and managing climate-related transition risks, ABP has realised new business opportunities, and is set for future growth.





Headquarters: Oslo, Norway Website: www.omp.no Number of employees: 12 Revenues (2020): USD 53.0 million Countries of operation: Norway HV's shareholding: 68.7% Investor: Fund VI

#### Certifications:

None (OMP Capital AS is a regulated company/Norwegian FSA)

ESG Responsible: Espen Tørvold Gulbrandsen

#### **COMPANY PROFILE**

Offshore Merchant Partners (OMP) is a specialty finance and asset management company, focusing on providing bespoke financing solutions to projects in the energy and energy infrastructure sectors. The company has through 2020 completed a process of reorienting its investment strategy away from its traditional focus on the oil and gas, shipping and E&P industries, towards opportunities in the low-carbon and renewable energy sector (gas, hydro, wind and solar power especially), including infrastructure and onshore renewables.

The company focuses on deal structuring, financing and management of assets, providing long-term financing to its target markets. OMP provides long-term financing through sale-leaseback structures and fixed income instruments, and has primarily been targeting cash flows and asset-backing from efficient and future-ready vessels and other assets.

OMP's business is organised as an alternative investment fund structure and complies with regulations in three different jurisdictions: Norway, Malta and Guernsey. All investment decisions are subject to strict investment evaluations and due diligence processes, including due diligence relating to the transaction structure, target company and related parties. The Guernsey and Malta funds are subject to specific compliance procedures to ensure compliance with ESG guidelines applicable in these jurisdictions.



Asle Andersson, CEO

#### **KEY REPORTED ESG FIGURES FOR 2020**

#### (2019, 2018 and 2017 figures displayed where available):

ENVIRONMENTAL	2017	2018	2019	2020
Direct GHG emissions (GHG Protocol Corporate Standard Scope 1, in tonnes)	-	-	0	0
Energy indirect GHG emissions (GHG PCS Scope 2, in tonnes)	-	-	0	0
Other indirect GHG emissions (GHG PCS Scope 3, in tonnes) <sup>1</sup>	-	-	34	1
Carbon intensity - Scope 1 & 2 (tCO <sub>2</sub> e / million USD revenues)	-	-	0.01	0
Carbon intensity - Scope 1, 2 & 3 (tCO <sub>2</sub> e / million USD revenues)	-	-	0.6	0

SOCIAL	2017	2018	2019	2020
Number of employees <sup>2</sup>	14	12	11	12
Short term sick leave (average) <sup>2</sup>	0.4%	0.4%	1.0%	0.5%
Long term sick leave (average) <sup>2</sup>	0.2%	0%	0%	0.0%
Share of women in total workforce <sup>2</sup>	-	-	9%	8%
Share of women in management <sup>2</sup>	-	-	0%	0%
Employee turnover ratio (average)	0.0%	0.0%	8.3%	16.7%

GOVERNANCE	2017	2018	2019	2020
Share of relevant staff who have completed anti-corruption training (%)	-	100%	100%	100%
Breaches of ethical guidelines	0	0	0	0
Investigations or lawsuits in relation to ESG issues	0	0	0	0
Cyber attacks or similar incidents resulting in loss of data, loss of integrity or other loss	-	-	0	0
Whistleblowing cases being addressed by management or board	-	-	0	0
IDDs and audits of supplier, distributor or JV partner that include ESG issues	-	-	0	0

<sup>1</sup> Company business travel. <sup>2</sup> Adjusted definition from 2019.

As a company with a small staff, all office-based, OMP has a limited direct environmental footprint. The significant decrease in OMP's Scope 3 emissions is related to the drop in business travel due to Covid-19.

During 2020 OMP experienced a relatively high staff turnover.
The company's geographical focus moving forward will be on the OECD countries, especially the Nordic countries. Looking ahead, OMP will finance key energy transition projects in its markets, reducing its climate-related risk exposure whilst realising new opportunities. Parts of the current portfolio will be core investments also under the new mandate, whereas other non-core investments will be farmed out by 2025.

"The details of our new direction have just been finalised," explains Espen Tørvold Guldbrandsen, Head of Legal and Compliance in OMP. "We're now in a phase where all our governing documents are being updated and aligned with the new mandate. Developing a sustainability strategy is one of the elements we're focusing on as part of this work."

#### **ENVIRONMENTAL APPROACH**

OMP's overall target is to establish a sustainable long-term business as a capital manager. The update to OMP's mandate to permit further investments in renewable energy and energy infrastructure contributes to this target. Reducing energy transition risks and pursuing associated opportunities will improve the ability of OMP and its managed funds to access debt financing on attractive terms and to succeed in raising capital for new investment opportunities.

OMP has initiated a process to establish an environmental footprint benchmark for both its own operations and that of its portfolio. This is a necessary first step to setting emission reduction targets for both scopes. The process was paused pending the update of OMP's investment mandate, and has now been resumed as the mandate is being implemented in the organisation.

Another key process to complete in 2021 under the environmental dimension is to establish an environmental framework. OMP is developing a framework aligned both with the new investment mandate and with the EU taxonomy for sustainable activities.

OMP completed a TCFD-aligned climate risk assessment in 2020, and will during Q1 2021 update this assessment to reflect the changed risk exposure of the new investment mandate.

None of the company's assets have been involved in accidents or accidental spills during 2020, and there were no reported breaches of regulations or of OMP's guidelines.

#### SOCIAL APPROACH

Managing the Covid-19 pandemic has been a key focus of 2020. Proactive implementation of measures such as the provision of home office equipment for all employees, enabled operations to proceed as normal throughout the year.

Due to the strategic process that has dominated the previous year, OMP has not succeeded in increasing the diversity of its management team. This will however remain a priority as the new mandate is established and the organisation is adjusted to be able to deliver on the new mandate. Female applicants are actively sought in all recruitment processes, and will continue to be encouraged to apply.



#### **GOVERNANCE APPROACH**

Due to the nature of OMP's business, maintaining robust governance procedures is indispensable to reducing the company's risk exposure. OMP has comprehensive compliance procedures in place covering inter alia anti-corruption, anti-money laundering, payments, and cyber security. All employees are required to complete general anti-corruption and anti-money laundering training, as well as additional training tailored to each employee's function, such as fund-specific training on anti-money laundering and payments.

OMP has strict employee trading procedures in place. Employees' securities transactions must be pre-approved, and employees are not allowed to trade in securities exposed to the sectors in which OMP invests. Clear communication of these rules, together with an annual business risk assessment on both the fund and on the fund manager level, provides robust risk management on insider trading. Changes in employees' risk exposure are additionally assessed on an ad hoc basis.

No governance-related incidents were reported in 2020.

OMP is entering a new phase, with sustainability at the core of its investment approach. To succeed in the new markets it plans to enter, the company has initiated and will continue to undertake several mapping and strategy processes with relevance for its ESG profile in the coming year. Offshore Merchant Partners is financing a major upgrade of the Amazon subsea construction vessel

# ESG in the Portfolio Companies

## **Energy Transition**

### >>> Havfram



Headquarters: Stavanger, Norway Website: www.havfram.com Number of employees: 252 Revenues (2020): USD 261.1 million Countries of operation: Norway, UK, USA, UAE, Australia, China HV's shareholding: 99.6% Investor: HVAS and Fund V (indirectly) **Certifications:** ISO 9001, ISO 14001, ISO 45001

ESG Responsible: Eirik Ørsland

#### **COMPANY DESCRIPTION**

Havfram, formerly Ocean Installer, has started to transition from a pure oil service company to a broader energy company, aiming to build on its leading position in oil and gas to achieve a similar role in the offshore wind industry. Havfram has established three business areas: Hav Dyp, Hav Vind and Hav Kraft. The company's large internal engineering and project implementation team provides synergies across the business segments.

Hav Dyp includes the company's current operations within subsea oil and gas projects. Hav Dyp delivers full EPCI services for marine and subsea operations, with expertise in the subsea structures, umbilicals, risers, and flowlines (SURF) segment. The business unit Hav Vind will carry out installation and other project execution relating to offshore wind. Hav Kraft aims to become a significant consultant within the development of offshore wind farms, both nationally and internationally.

In August, the company announced a collaboration with the shipyard group VARD to develop one of the world's most advanced installation vessels for offshore wind turbines. This specialised vessel will have the ability and capacity to install turbine components of 1 000 tonnes at a height of 150 metres. The market for the installation of the latest giant turbines is expected to increase significantly, as large projects are currently being planned across Europe, Asia and the US East Coast.



Odd Strømsnes, CEO

#### **KEY REPORTED ESG FIGURES FOR 2020**

#### (2019, 2018 and 2017 figures displayed where available):

ENVIRONMENTAL	2017	2018	2019	2020
Direct GHG emissions (GHG Protocol Corporate Standard Scope 1, in tonnes)	-	-	12 248	47 718
Energy indirect GHG emissions (GHG PCS Scope 2, in tonnes)	-	-	34	28
Other indirect GHG emissions (GHG PCS Scope 3, in tonnes) <sup>1</sup>	-	-	660	680
Carbon intensity - Scope 1 & 2 (tCO <sub>2</sub> e / million USD revenues)	-	-	128.5	182.8
Carbon intensity - Scope 1, 2 & 3 (tCO <sub>2</sub> e / million USD revenues)	-	-	135.4	185.4
Waste (tonnes)	-	-	35	39
Recycling ratio (average)	63%	91%	83%	77%
Unplanned spills (emissions to ground/sea/air)	0	1	0	1

SOCIAL	2017	2018	2019	2020
Number of employees <sup>2</sup>	136	150	198	252
Total Recordable Incident Frequency (TRIF)	-	0	0	0.4
Lost Time Injuries (LTI)	-	0	0	0
Restricted Work Cases (RWC)	-	0	0	1
First aid case (FAC)	-	-	-	4
Share of women in total workforce (average) <sup>2</sup>	-	31%	27%	27%
Share of women in management (average) <sup>2</sup>	-	30%	29%	31%
Short term sick leave (average) <sup>2</sup>	-	1.1%	1.3%	0.2%
Long term sick leave (average) <sup>2</sup>	-	1.6%	1.1%	0.4%
Employee turnover ratio (average)	-	2.0%	1.8%	0.9%

GOVERNANCE	2017	2018	2019	2020
Share of relevant staff who have completed anti-corruption training (%)	-	94%	75%	86%
Breaches of ethical guidelines	-	0	0	0
Investigations or lawsuits in relation to ESG issues	-	0	0	0
Cyber attacks or similar incidents resulting in loss of data, loss of integrity or other loss	-	0	0	0
Whistleblowing cases being addressed by management or board	-	0	0	0

<sup>1</sup> Company business travel, transportation of goods and emissions from various waste incineration and recycling. <sup>3</sup> Adjusted definition from 2019.

Havfram increased its activity extensively during 2020, with revenues increasing by 190% and more than three times the number of vessel days performed. General growth is the driver behind the increase in the number of employees, while a higher proportion of offshore operations is the reason for the increase in Scope 1 emissions and carbon intensity. The company continues its "green operations" initiative, and aims to continue to introduce emission-reducing initiatives whilst expanding its business.

The level of sick leave shows a good improvement; there was however one LTI in 2020, against zero in recent years.

Havfram's ESG strategy is based on prioritising measures to maximise impact. Several potential measures are continuously evaluated for impact and commercial viability. In 2021, Havfram plans to map the impact of its business in relation to the UN's SDGs to identify how its strategy and measures contribute to the global agenda of sustainable development.

The company is certified according to ISO 9001, ISO 14001 and ISO 45001, which ensures good quality management as well as systematic management of environmental factors and employee health and safety issues.

#### **ENVIRONMENTAL APPROACH**

The organisational shift from Ocean Installer to Havfram is an expression of the company's strengthened commitment to renewable energy and the energy sector's green transition. Havfram is working towards a goal of 50 percent of revenues from renewable energy projects by 2024.

Optimising the fuel consumption of the vessels used in its projects, for example related to dynamic positioning, has been a prioritised area for Havfram over time, and will continue to be so moving forward. Other areas of focus include reducing waste onboard vessels. As part of its transition towards the renewables market, Havfram has implemented a detailed data collection system on  $CO_2$  emissions. The company continues its "green operations" initiative, and saved 422 tonnes  $CO_2e$  in 2020 compared to what would have been released if no changes to the operations were made. Havfram also works with its suppliers to reduce their  $CO_2$ -emissions (Scope 3 for Havfram), and has proven willing to change suppliers to achieve an emission reduction.

As part of HitecVision's TCFD project, Havfram has completed a TCFD-aligned climate risk assessment, and plans to finalise its low-carbon transition plan in the coming year. In establishing an emissions reductions target for 2030, Havfram will look to the Norwegian Shipowners' Association's target of halving shipping sector emissions by 2030.

#### SOCIAL APPROACH

Building on the strong safety performance of Ocean Installer, Havfram has a systematic approach to health and safety in all its operations. The company's HSE procedure outlines how Havfram works to achieve zero accidents and harm and a high degree of quality in all services and activities. The policies are readily available on the company website. Looking to 2021, Havfram will continue to implement the Always safe programme in its operations. The company has formulated a goal of 20 safety inspections, and will look at ways to further digitalise the inspection procedure.

Havfram has a strong motivation to contribute to making the Norwegian supplier industry internationally competitive in offshore wind. As the company expands to new markets internationally, this priority will shape the company's procurement strategy.

Havfram is committed to good labour practices in marine operations, and is following the ongoing political discussion related to labour regulations for vessels in Norwegian waters and on the Norwegian continental shelf closely.



Suction anchor installation

#### STAKEHOLDER PERSPECTIVE:

## Sten Magne Eng Jakobsen on working at Havfram

You've been with Ocean Installer and now Havfram for nine years. Which core competence has been especially important throughout your career? How will this competence be important in future offshore wind projects?

I have a degree in Subsea Systems and Marine Operations from the University of Stavanger, and prior to starting in Havfram I worked in a similar company. My first job in Havfram was working as a project engineer on the different projects the company was running in Norway. Later on I took on roles like lead engineer and project technical manager, before starting to work in the commercial department. I have also been involved in various improvement programs in the company, for example on digitalisation.

Through these years I've developed an expertise on advanced marine operations which will be important in offshore wind. The different roles I've had in the company have given me good insight into the project management and engineering that happens onshore, as well as the interface on how to plan safe and efficient operations offshore. I've found that good communication and clear role descriptions between all parties involved is a key success factor. This knowledge can be applied to solve the customers' need for safe and efficient operations in the construction phase of both floating and bottom-fixed offshore wind.

### *What makes Havfram an exciting place to work?*

Havfram offers me the opportunity to apply myself to a broad and varied

range of tasks, in different fields of engineering. Personally I find it very interesting to be part of an industry that is developing green energy, and being involved in the first commercial floating wind projects is motivating but also challenging. We're now in a phase where we're taking on an increasing amount of work outside of the oil and gas sector. This triggers curiosity and creativity in all of us.

Since I joined the company, Havfram has always had a good working atmosphere with lots of talented people working together to achieve our common goals. It may be hectic sometimes, but it is fun working with such positive people.

#### Which competence and project experience makes Havfram well placed to take a leading position in the offshore wind industry?

As a new company, Havfram is unique in that we have already built up specialised expertise from our operations in the oil and gas industry over the last decade. Havfram's expertise in cable laying, mooring installation and tow operations and, generally, advanced marine operations, is transferable to the offshore wind industry, where our expertise can make a difference with respect to quality, safety and efficiency. Our experience with large and complex projects and maritime operations is the core from which we will succeed in offshore wind.

In the future, I think Havfram will become a leading actor in advanced maritime operations within both oil



Sten Magne Eng Jakobsen Engineering Lead, Havfram

### >>>> Havfram

and gas, bottom-fixed offshore wind and floating offshore wind. By 2025-2030, we hope to be running large projects in both bottom-fixed and floating wind. The wind industry is a truly global industry and I believe we are well positioned to take on exciting, new projects across the world.





Installing a subsea template

Havfram has clear targets on gender diversity, and aims to increase the share of female employees and managers to 35 percent by 2024.

#### **GOVERNANCE APPROACH**

Updated compliance documents have been onboarded in the business management system, and employees have been given anti-bribery training. In addition, all employees complete an annual review of the company's ethical guidelines.

Select ESG parameters are integrated in the management team's performance review, exemplifying how the sustainability perspective is a driver in Havfram's core operations. Progress on key ESG KPIs are presented to directors at every board meeting.

In 2020, Havfram made a concerted effort to improve cybersecurity, focusing especially on raising employee awareness. In the coming year, Havfram will introduce more campaigns to raise the organisation's compliance awareness. The company will also complete a mapping of coming legal and regulatory changes, to ensure good governance as the legal framework evolves.

Havfram has announced ambitions to more than double its revenues over the next 3-4 years. "We expect to see considerable growth in the offshore wind segment around 2024," CEO of Havfram, Odd Strømsnes, explains. "If Norwegian energy companies are going to succeed in offshore wind, they will be dependent on strong suppliers that are internationally competitive and have access to the necessary investment capital. Our established oil and gas business provides us with stability whilst we build our offshore wind expertise."



### MORELD



Headquarters: Stavanger, Norway Website: www.moreld.com

Number of employees: 3 003 Revenues (2020): USD<sup>1</sup>616.6 million **Countries of operation:** Norway, Sweden, UK, Poland, Italy, USA, Germany, Canada, Australia, Egypt, Azerbaijan, Qatar, UAE, China, Malaysia, Singapore, Indonesia, Ireland, Netherlands, Thailand, Brazil, Mexico

HV's shareholding: 100% Investor: Fund IV, V and VI

#### **Certifications:**

ISO 9001 - 94%, ISO 14001 - 75%, ISO 45001/ OHSAS 18001 - 56%

**ESG Responsible:** Jan Erik Rugland

#### **COMPANY DESCRIPTION**

Moreld is an industrial group created in December 2019 through the merger of 20 of HitecVision's portfolio companies with roots in the North Sea offshore energy sector. As all parts of the oil and gas industry prepare for the transition to a low-carbon future that will inevitably take place over the coming decades, industry structures are changing. In this transformational period, being able to adapt and still retain competitiveness will be dependent on size, robustness and access to talent and other key resources.

At the same time, size will open opportunities in new business lines, e.g. within renewable energy, that smaller companies will not be able to exploit to the same degree individually. While the Moreld companies will aim to maintain their already strong positions in the oil and gas industry, they will also, individually and as a group, actively develop new business lines in other industries, in particular sustainable ocean related business such as offshore wind power and offshore fish farming.

Geir Austigard, CEO of Moreld, highlights that: "When we're talking about Moreld, we're talking about a sustainable future - that's the premise our whole company is founded on." Moreld aims to establish itself as a leader in providing end-to-end sustainable solutions to all energy industries, seizing opportunities to increase its foothold in sectors such as aquaculture, offshore wind, infrastructure and other

<sup>1</sup> Converted from NOK to USD by using Norges Bank's average exchange rate for 2020.



Geir Austigard, CEO

#### **KEY REPORTED ESG FIGURES FOR 2020**

#### (2019, 2018 and 2017 figures displayed where available):

ENVIRONMENTAL	2020
Direct GHG emissions (GHG Protocol Corporate Standard Scope 1, in tonnes)	1 407
Energy indirect GHG emissions (GHG PCS Scope 2, in tonnes)	1 843
Other indirect GHG emissions (GHG PCS Scope 3, in tonnes)	4 407
Carbon intensity - Scope 1 & 2 (tCO <sub>2</sub> e / million USD revenues)	5.27
Carbon intensity - Scope 1, 2 & 3 (tCO <sub>2</sub> e / million USD revenues)	12.42
Waste (tonnes)	2 605
Recycling ratio	78%
Unplanned spills (emissions to ground/sea/air)	3

SOCIAL	2020
Number of employees	3 003
Total Recordable Incident Frequency (TRIF)	5.8
Lost Time Injuries (LTI)	9
Medical treatment case (MTC)	16
First aid case (FAC)	28
Share of women in total workforce	16%
Share of women in management	26%
Short term sick leave	2.1%
Long term sick leave	3.3%
Employee turnover ratio	7.7% <sup>1</sup>

GOVERNANCE	2020
Share of relevant staff who have completed anti-corruption training "portfolio weighted average"	79%
Breaches of ethical guidelines	0
Investigations or lawsuits in relation to ESG issues	0
Cyber attacks or similar incidents resulting in loss of data, loss of integrity or other loss	2
Whistleblowing cases being addressed by management or board	1

<sup>1</sup> Employee turnover ratio is based on the number of employees leaving the portfolio companies against the total number of employees.

Moreld was established in 2020 and as such this year's data establishes the baseline for measuring the company's future ESG performance.

relevant renewable energy sectors and circular business models, whilst continuing to nurture existing energy service operations.

The group's diversified offering and experience from several decades in the oil service sector will be leveraged to provide know-how in the transition to a sustainable energy services sector. In order to future-proof its business strategy at the point of consolidation, the group has in 2020 completed a comprehensive mapping of its core competencies. Complemented by a scenario analysis of the market segments in which growth is expected over the next decade, Moreld has developed a focused and ESG-oriented growth strategy, aimed at leveraging current competencies in growing market segments.

Moreld is targeting 40 percent of revenues from non-oil and gas industries by 2026. "We are very focused on several specific opportunities in the new market segments as these represent our main growth areas. We've set a high growth ambition for the company, and we can't reach that target in oil and gas alone," Geir Austigard explains. Some group members are already far ahead of this target, like Suretank which has already shifted its revenues from being dependent on the oil and gas industry for 90 percent of its revenues, to currently deriving 80 percent of its business from other sectors.

To drive development and innovation, the group has established cross-company organisational clusters within recycling, smart grid, hybridisation/electrification, hydropower, aquaculture, and offshore floating wind. Moreld has also established two new companies, Moreld Offshore Wind and Moreld Aqua, to further focus its business development in these areas.

Moreld's ESG policy outlines the principles through which the group seeks to operate in an environmentally and socially sound manner. Moreld's board of directors has played an active role in defining the ESG policy and mapping its contribution to the UN's Sustainable Development Goals (SDGs). Guided by the ESG policy, Moreld has integrated environmental, social and ethical issues into the assessment and selection of new and existing business lines. The company is driven by its values: sustainable, industrial, customer oriented and profitable.



#### We will minimise our waste

KPI 2021: We aim to recycle 64% and energy recover 23% of our waste Target 2030: We aim to recycle 75% and energy recover 23% of our waste

#### We aim to be carbon neutral

**KPI 2021:** A 20% reduction in scope 1 and 2 emissions from 2019 – 2021 **Target 2030:** Carbon neutral for scope 1 and 2 emissions

We will provide equal opportuinites and a sound gender balance KPI 2021: 18% women in workforce and 25% women in leading positions Target 2030: 35% women in workforce and 50% women in leading positions

We will provide a healthy, safe and secure working environment KPI 2021: Zero serious incidents, Zero LTI, Zero accidental spills/emissions, Short term sickleave under 2% Target 2030: Zero incidents vision

Moreld has recently published its first ESG report, please see <u>https://moreld.com/</u> sustainability-at-moreld/.

	AGILITY Subsea Fabrication	Aluminium Offshore
<b>ΛΡΡLΥ</b> <sup>°</sup>	aquamarine	
əDrilling	EMTUNGA	EUREKA
	<b>FPE</b>	GLOBAL
KARSTEN MOHOLT	LEIRVIK	
	ogno	
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#### **ENVIRONMENTAL APPROACH**

Work on improving the environmental footprint of Moreld has in 2020 focused on reducing waste and carbon emissions especially. Moreld has defined a target of reducing Scope 1 and 2  $CO_2$  emissions by 20 percent from 2019 to 2021, moving towards carbon neutrality in Scope 1 and 2 by 2030. The group also has targets of 64 percent recycling and 23 percent energy recovery of waste by 2021, moving towards 75 percent and 23 percent respectively by 2030.

Moreld is proud to see how group companies are already succeeding in reapplying existing expertise, and innovating new solutions, to significantly reduce  $CO_2$  emissions for customers. One example of this is Deep Sea Mooring, a company in the Vryhof group, whose mooring solutions, as an alternative to dynamic positioning, enable significant reductions in fuel consumption.

Recycling and reuse are also important focus areas in the group, with, amongst others, Karsten Moholt and Aquamarine making a contribution to reducing resource use through advanced re-use of heavy-duty electric equipment such as e.g. motors.

A detailed case study of the transition process in Global Maritime is available on page 67.

To reduce emissions and the environmental footprint of its supply chains, all procurement units in the Moreld group have integrated ESG into their procurement strategies. Group initiatives on sourcing and specification of ESG criteria have contributed to knowledge sharing and standardisation across the group. The set of ESG criteria forwarded to suppliers is constantly under revision, with specific KPIs on  $CO_2$  emissions and waste recycling increasingly being included.

As part of HitecVision's TCFD project, Moreld has completed a TCFD-aligned climate risk assessment, and will publish its findings in a dedicated report.

#### SOCIAL APPROACH

HSE and improving gender diversity have been prioritised areas in 2020. Moreld has a strong focus on its stakeholders, internal as well as external. The company aims to build internal pride around the group's contribution to sustainable development, and the knowledge and innovation that lies behind these achievements. Creating engagement and excitement around contributing to the energy transition is a success factor for Moreld to reach its growth targets, and it is therefore a key focus in the management team's leadership approach.

Building on the Moreld companies' strong HSE track record and culture, Moreld has established a zero ambition on serious incidents, LTI, and accidental spills/ emissions. Monthly review by Moreld's top management and board of directors on key HSE KPIs has been introduced to further strengthen the HSE culture. The result is strong performance on HSE, as evidenced in the KPIs for 2020.

In working towards its gender diversity target, Moreld has introduced a rule that no job application from a female applicant can be rejected without a clear justification, to decrease unconscious bias in hiring processes. All Moreld companies have moved this issue up their agendas, and set targets in alignment with those of Moreld.



Karsten Moholt specialises in the maintenance of large electric motors



To minimise the impact of the Covid-19 pandemic on people and operations, Moreld has emphasised regular contact with all employees and facilitating productive working conditions, within government guidelines.

#### **GOVERNANCE APPROACH**

The consolidation of 20 companies to create Moreld took the greater part of 2020. In the process, the organisation was restructured and made leaner, to ensure integration of all group companies, easier communication and a working organisational hierarchy. COO of Moreld, Jan Erik Rugland, comments that "The formation of Moreld has allowed us to make fundamental changes to our organisational structure and strategy to ensure we're positioned to reach our targets, with ESG and sustainability as key elements. As a group, we have a clear plan for which companies to position for each target area of growth. Our approach has been systematic as well as dynamic through interaction with the owner, board and group companies, and that has been key to its success."

#### ESG IN THE PORTFOLIO COMPANIES | ENERGY TRANSITION | MORELD



Moreld has since its inception implemented a comprehensive governance system, modelled on that of HitecVision. This includes a strong corporate and organisational focus on compliance, HSE and other key risk areas. Each board meeting begins with ESG and HSE, complemented by a quarterly detailed review of targets and status.

Moreld management maintains open dialogue with the group companies to harmonise ESG KPIs and targets across the group, and develop an ESG governance structure in which the group pulls together towards shared targets, with individual companies maintaining their sector- and activity-specific focus areas. This process will continue into 2021 and will provide an important next step in how Moreld will reach its ESG and growth targets.

The creation of Moreld is a concrete example of transition in the energy sector. Through its systematic and forward-looking approach to understanding future opportunities, Moreld has positioned itself for growth in new segments.





Headquarters: Tananger, Norway Website: www.wellpartner.no Number of employees: 33 Revenues (2020): USD 14.5 million Countries of operation: Norway HV's shareholding: 75.4% Investor: Fund VII Certifications: ISO 9001

**ESG Responsible:** Siv Janne Aarrestad

#### **COMPANY DESCRIPTION**

WellPartner delivers equipment and services to E&P companies, drilling rig contractors and other service companies. WellPartner's engineers design components for outsourced production and perform in-house component assembly and testing. The company's main rental product is high pressure risers, but it also provides surface risers, the WellSafe family of weak-link systems, Casing Landing Assembly (CLA) equipment and consulting services. WellPartner is located in Tananger, Norway. The main market is the NCS, with many of the major E&P companies among its clients.

WellPartner has a strict focus on quality and safety in its product and service delivery. The company aims to deliver products and services in an efficient manner without any harm to people, equipment or the environment. The products and service delivery models also have economic and environmental benefits, as product utilisation is maximised through sublease arrangements, reducing manufacturing needs and cost of ownership. WellPartner's services also contribute to more efficient operations on part of the clients.



Eivind Håvarstein, CEO

#### **KEY REPORTED ESG FIGURES FOR 2020**

#### (2019, 2018 and 2017 figures displayed where available):

ENVIRONMENTAL	2017	2018	2019	2020
Direct GHG emissions (GHG Protocol Corporate Standard Scope 1, in tonnes)	-	-	4	2
Energy indirect GHG emissions (GHG PCS Scope 2, in tonnes)	-	-	32	33
Other indirect GHG emissions (GHG PCS Scope 3, in tonnes)	-	-	34	17
Carbon intensity - Scope 1 & 2 (tCO2e / million USD revenues)	-	-	2.5	2.4
Carbon intensity - Scope 1, 2 & 3 (tCO2e / million USD revenues)	-	-	4.8	3.6
Waste (tonnes)	-	17.8	23.4	19.5
Recycling ratio (average)	-	69%	82%	71%
Unplanned spills (emissions to ground/sea/air)	0	0	0	0

SOCIAL	2017	2018	2019	2020
Number of employees <sup>1</sup>		29	30	33
Total Recordable Incident (TRI=LTI+MTC+RWC)	0	0	0	0
Lost Time Injuries (LTI)	0	0	0	0
Medical treatment case (MTC)	-	-	-	0
First aid case (FAC)	-	-	-	0
Share of women in total workforce (average) <sup>1</sup>	15%	15%	14%	16%
Share of women in management (average) <sup>1</sup>	30%	30%	30%	30%
Short term sick leave (average) <sup>1</sup>	0.7%	0.4%	1.2%	0.2%
Long term sick leave (average) <sup>1</sup>	2.7%	3.7%	0.8%	0.3%
Employee turnover ratio (average)	1.1%	3.9%	11.0%	9.5%

GOVERNANCE	2017	2018	2019	2020
Share of relevant staff who have completed anti-corruption training (%)	74%	81%	97%	97%
Breaches of ethical guidelines	0	0	0	0
Investigations or lawsuits in relation to ESG issues	0	0	0	0
Cyber attacks or similar incidents resulting in loss of data, loss of integrity or other loss	0	0	0	0
Whistleblowing cases being addressed by management or board	0	0	0	0

<sup>1</sup> Adjusted definition from 2019.

Wellpartner had a stable 2020. The level of sick leave shows good improvements and Scope 3 emissions are reduced due to restricted traveling caused by Covid-19.

#### **ENVIRONMENTAL APPROACH**

As an oilfield service company on the NCS, WellPartner operates in compliance with statutory and clients' requirements. WellPartner's own operations have only a limited impact on the environment. However, its products and services, including high pressure risers and WellSafe weak link systems, are integral components in reducing the risk of major incidents and oil spills. Other WellPartner products and systems, such as the CLA product, are designed to improve efficiency and reduce rig time which in turn reduces emissions per well.

A goal for 2020 was to increase the recycling ratio from 82 percent in 2019 to 85 percent in 2020. The recycling ratio has decreased to 70 percent, but the total amount of waste produced has been reduced by 19 percent.

#### SOCIAL APPROACH

WellPartner is guided by a zero vision, with the goals of having zero injuries, zero unplanned spills and zero damage to equipment. The company once again achieved its zero vision targets in 2020. The number of HSEQ registrations in its reporting system iQubes has increased significantly from 2019 to 2020, indicating that the company is progressing in its goal of ensuring that all employees actively use the HSEQ reporting systems in their daily work, following the upgrade of HSEQ reporting systems in 2019.

WellPartner's most important asset is its employees, and the company has increased its headcount by 10 percent in 2020, from 30 to 33. The company's short- and long-term sick leave remains low. A slight increase in long-term sick leave was recorded in 2020, but this is non-work related. The share of women in management remains stable at 30 percent, with a slight increase in share of women in the total workforce from 2019 to 2020.

#### **GOVERNANCE APPROACH**

WellPartner retains a strict focus on supplier requirements, from pre-qualification and due diligence through to product quality specifications.

With over a doubling in the number of customer satisfaction surveys completed in 2020, WellPartner has kept its high customer satisfaction score of 93 percent.





Headquarters: Oslo, Norway Website: www.akersolutions.com Number of employees: 14 494 Revenues (2020): USD 3 127.1 million

**Countries of operation:** Angola, Australia, Brazil, Brunei, Canada, China, Cyprus, Finland, Ghana, India, Italy, Malaysia, Nigeria, Norway, Qatar, Republic of Congo, Russia, Saudi Arabia, Sweden, UAE, UK, USA HV's shareholding: 7.1% Investor: Fund VII Certifications: ISO 9001, ISO 14001, OHSAS 18001, ISO 3834-2

Aker Solutions delivers integrated solutions, products and services to the global energy industry. The company in its current form is the result of a 2020 merger of Kværner ASA and Aker Solutions ASA. The company's main areas of operation are front-end studies and engineering services, renewable energy solutions, electrification and low-carbon solutions, topsides, substructures and facilities, subsea production systems and lifecycle services, and maintenance, modifications and decommissioning. Aker Solutions employs more than 14 000 people in more than 20 countries.

Aker Solutions reports comprehensively on sustainability. Its Sustainability Report 2020 is available on the company's website: <u>https://www.akersolutions.com/globalassets/</u>sustainability/sustainability-report-2020.pdf.

HitecVision holds a 7 percent ownership stake in Aker Solutions.

Aker Solutions reports comprehensively on sustainability.

Its Sustainability Report 2020 is available on the company's website: <u>https://www.akersolutions.com/</u> globalassets/sustainability/sustainability-report-2020.pdf.

# ESG in the Portfolio Companies

## Energy service: Asset-based companies

### Prosafe



Headquarters: Stavanger, Norway Website: www.prosafe.com Number of employees: 99 Revenues (2020): USD 56.7 million Countries of operation: Norway, UK, Brazil HV's shareholding: 28.9% Investor: Fund VI and VII

#### Certifications:

ISO 9001, ISO 14001, ISO 45001, ISM Code Document of Compliance (Singapore MODU's & Bahamas Passenger Ship plus MLC)

ESG Responsible: Karine Cosemans

#### **COMPANY DESCRIPTION**

Prosafe owns and operates semi-submersible offshore accommodation vessels used by the oil and gas industry as temporary living quarters for offshore personnel. Demand is primarily driven by maintenance and modification of installations on fields already in production, hook-up and commissioning of new fields and decommissioning. Due to the Covid-19 pandemic, one contract was cancelled in 2020 and another two contracts were rephased for 2021 in agreement with the clients. Furthermore, two vessels in Brazil were temporarily on standby before resuming operations in September and October, respectively.

In its ESG work, Prosafe is working to reduce emissions from its vessels. Prosafe is currently seeking certification in accordance with ISO 50001 Energy Management and exploring measures to reduce fuel consumption and emissions. The company believes that fuel efficiency goes hand in hand with both emission reductions and reducing the costs for its end clients.



Jesper Kragh Andresen, CEO

#### **KEY REPORTED ESG FIGURES FOR 2020**

#### (2019, 2018 and 2017 figures displayed where available):

ENVIRONMENTAL	2017	2018	2019	2020
Direct GHG emissions (GHG Protocol Corporate Standard Scope 1, in tonnes)	110 149	113 558	133 332	53 744
Energy indirect GHG emissions (GHG PCS Scope 2, in tonnes)	227	163	156	11
Other indirect GHG emissions (GHG PCS Scope 3, in tonnes)	3 030	2 657	3 193	1 785
Carbon intensity - Scope 1 & 2 (tCO <sub>2</sub> e / million USD revenues)	-	-	591.5	948.1
Carbon intensity - Scope 1, 2 & 3 (tCO <sub>2</sub> e / million USD revenues)	-	-	605.7	979.5
Waste (tonnes)	2 716	1 099	2 309	1 034
Recycling Ratio	48%	53%	56%	9.1%
Unplanned spills (emissions to ground/sea/air)	0	0	0	0
Hazardous waste	335	312	245	62
Non-Hazardous waste	1 628	1 099	2 064	903

SOCIAL	2017	2018	2019	2020
Number of employees <sup>1</sup>	430	417	150	99
Total Recordable Incident Frequency (TRIF)	1.5	2.5	1	7.2
Lost Time Injuries (LTI)	2	2	0	0
Medical treatment case (MTC)	6	3	6	2
First aid case (FAC)	53	49	27	7
Short term sick leave (onshore / offshore) <sup>1</sup>	0.24% / 0.26%	0.8% / 1.9%	0.5% / 0.8%	0.55%
Long term sick leave (onshore / offshore) <sup>1</sup>	0.57% / 3.51%	0.8% / 1.9%	0.9% / 1.9%	0.61%
Share of women in total workforce <sup>1</sup>	43.2% / -	40.6% / -	36.6% / 0.9%	26.7%
Share of women in management <sup>1</sup>	16.7%	25.0%	26.8%	30.1%
Employee turnover ratio	5.9%	8.5%	19.2%	8.11%

GOVERNANCE	2017	2018	2019	2020
Share of relevant staff who have completed anti-corruption training (%)	N/A	N/A	78%	88%
Breaches of ethical guidelines	0	0	0	0
Investigations or lawsuits in relation to ESG issues	0	0	0	0
Cyber attacks or similar incidents resulting in loss of data, loss of integrity or other loss	0	0	0	0
Whistleblowing cases being addressed by management or board	0	1	1	2

<sup>1</sup> Adjusted definition from 2019.

2020 was a difficult year in Prosafe's market, and activity has been significantly lower than in previous years, with several rigs idle for parts of the year. This has resulted in a significant decrease in the amount of emissions, however lower day rates has impacted revenues per rig day, and thus increased revenue carbon intensity.

The effects of the lower activity can also be seen in the lower levels of waste, and in the drop in the number of employees, many of whom were offered voluntary redundancy packages at the end of 2019.

#### **ENVIRONMENTAL APPROACH**

Prosafe has a high focus on reducing emissions and fuel consumption, and set several KPIs in 2019, which are currently being reviewed. The KPIs cover, amongst others areas, the reduction of GHG emissions, waste reduction, waste recycling, and zero emissions to the natural environment. Additional targets are planned to be introduced as baseline data from 2020 is analysed.

The reduction in  $CO_2$  emissions for 2020 reflects both a reduction in activity level and improved operating procedures.

Prosafe's environmental focus for 2021 consists of three main actions:

- Reduce emissions from vessels through implementing solutions that either directly reduce operational emissions or that reduce the energy required to power the vessels.
- **2.** Assess "Fuel for the future" to identify available measures when it comes to choice of fuel in the long term.
- 3. Implement ISO 50001 to improve focus on energy use and emissions.

When it comes to reducing emissions and considering alternative fuels, the company is currently finalising a set of actions for implementation, balancing commercial and environmental concerns. The company is already using low sulphur fuel (maximum 0.1 percent), exceeding the MARPOL requirement of 0.5 percent. To further improve the fuel environmental footprint, Prosafe has appointed an "Emissions reduction project" group with a mandate to identify fuel consumption reduction opportunities. "Fuel is the main driver of our emissions," CEO of Prosafe, Jesper K. Andresen, explains. "We're now in the process of exploring the short- and long-term improvement measures available to us through applying proven technological solutions." An investment proposal will be presented to the board in 2021. Approved measures are targeted for implementation prior to commencing new operations in 2022.

Prosafe sets clear requirements for its suppliers on a range of environmental issues, including environmentally friendly and legislative compliant products for the provision of 'compressed gases' for automatic fixed systems, and minimal environmental impact from hazardous substances. The company gives preference to suppliers with ISO 14001 certification, ensuring robust environmental management in its supply chain.

Prosafe has set a goal to improve its ESG profiling and will continue the work to identify measures to achieve this.

#### SOCIAL APPROACH

Workplace health and safety is the main priority of Prosafe's social focus. The company's management team has made a concerted effort to ensure regular information sharing and contact with employees throughout the 2020 pandemic-related lockdown. Amidst this, the company has maintained a high focus on safety, resulting in zero lost time injuries and a sickness absenteeism rate of only 0.46 percent.

In order to take care of employees through 2020, Covid-19 plans were introduced for all operations and vessels, and remote working was introduced in all offices. Prosafe has been building a more flexible cost structure over the last several years, and so only a limited number of people were furloughed or laid off in 2020. Salaries were reduced by 10 percent for an extended period across the organisation in order to reduce cost and spend, while at the same time retaining core staff for further





Top: Safe Zephyrus at the Ivar Aasen field, Norway Bottom: Safe Boreas at the Montrose field, UK

streamlining of the operating model in anticipation of increased activity post Covid-19. Towards the end of 2020, the number of office staff was temporarily increased by 10 percent via trusted partners to prepare for a contracted high activity level in 2021, with 6 of 7 vessels working all or parts of the year.

Prosafe's approach to respecting human rights starts with the company's commitment to its workforce. This includes ensuring that staff are treated fairly and without discrimination, have a healthy, safe and secure working environment, and respecting their right to freedom of association and rights to negotiate and cooperate through relevant representative bodies.

Prosafe does not accept any breaches of human rights or labour standards when recycling older vessels. In all cases, Prosafe will adhere to relevant conventions, such as the 2009 Hong Kong Convention and the 1989 Basel Convention, always adopt best practice, provide financial guarantees and appoint independent recycling yard representation where necessary, until the asset is completely recycled. The company will conduct extensive diligence when recycling any asset.

#### **GOVERNANCE APPROACH**

ESG is firmly integrated in Prosafe's governance model, all the way up to the board of directors. The highest responsibility for ESG is vested in the Safety, Sustainability and Ethics committee of the board of directors. The committee reports at least annually and otherwise when needed to Prosafe's Audit committee and full board.

A key priority in 2020 has been raising employee awareness on key governance topics and to improve risk management across the organisation. Prosafe's e-learning programmes for human rights and labour standards, and for anti-corruption and anti-bribery are mandatory and must be completed by all employees, consultants and agency personnel. An effort has been made to increase the number of employees that have completed the training, which is reflected in the increased completion rates from 2019 to 2020.

Prosafe has a robust cyber security system, which is considered essential as 57 percent of nearly 2 million emails received in 2020 were spam. E-learning on cyber security is mandatory for employees. In 2020, there was no loss of data, no loss of integrity or other loss, and no downtime of critical IT systems due to cyber-attacks or similar incidents.

ESG is integrated in supply chain management through the Prosafe Approved Supplier Verification Questionnaire, which sets out clear expectations to suppliers of upholding Prosafe's values and Code of Conduct, respecting all individual and basic human rights standards, conduct their business without bribery and corruption, engage in fair competition, uphold labour standards and prevailing trade union agreements where applicable, and comply with applicable laws and regulations. The supplier auditing programme has in 2020 been reduced in scope due to the general decrease in activity and restrictions due to Covid-19.

Moving into 2021, Prosafe aims to complete the ISO 50001 certification, and make a decision on the recommendations arising from the "Emissions reduction project".







Headquarters: Houston, USA Website: www.atlanticatd.com Number of employees: 147 Revenues (2020): USD 110.6 million Countries of operation: USA, Brazil, Congo HV's shareholding: 69.2% Investor: HVAS and Fund V (indirectly) **Certifications:** 

ISO 9001, ISO 14001, ISO 45001, IADC Competency Management System

ESG Responsible: Mike Cadigan

#### **COMPANY DESCRIPTION**

Atlantica operates two modern tender drilling units specialized for deepwater oil fields. The Beta unit has been working for Petrobras in Brazil since it was delivered in 2013, but was in December 2020 given notice to demobilise from the Papa Terra field. The rig is currently demobilising and will leave Brazil by Q3 2021. The Atlantica Delta unit concluded its contract with Total in the Republic of Congo in 2020, and is currently laid up in Las Palmas. Atlantica is thus expecting to be without revenue from Q3 2021, and has reduced its organisation significantly. At the time of writing the company remains in constructive dialogue with its financial creditors regarding a formal standstill and the way forward.

Atlantica has strict routines and ESG reporting practices, with a particular focus on rig uptime, crew safety, protection of the environment, avoiding accidents and minimising waste. Atlantica's rigs are tailored to clients' operational requirements, and specific targets on safety and environmental performance per operation are set to match the clients' HSEQ policies and requirements.



Mike Cadigan, CEO and COO

#### **KEY REPORTED ESG FIGURES FOR 2020**

#### (2019, 2018 and 2017 figures displayed where available):

ENVIRONMENTAL	2017	2018	2019	2020
Direct GHG emissions (GHG Protocol Corporate Standard Scope 1, in tonnes)	-	-	39 221	21 720
Energy indirect GHG emissions (GHG PCS Scope 2, in tonnes)	-	-	286	236
Other indirect GHG emissions (GHG PCS Scope 3, in tonnes) <sup>1</sup>	-	-	712	1 249
Carbon intensity - Scope 1 & 2 (tCO <sub>2</sub> e / million USD revenues)	-	-	247.7	198.5
Carbon intensity - Scope 1, 2 & 3 (tCO <sub>2</sub> e / million USD revenues)	-	-	252.2	209.7
Waste (tonnes)	1 307	3 057	2 013	1197
Recycling ratio (average)	23.2%	10%	12%	16%
Unplanned spills (emissions to ground/sea/air)	3	1	6	0

SOCIAL	2017	2018	2019	2020
Number of employees <sup>2</sup>	-	357	370	147
Total Recordable Incident Frequency (TRIF)	0.6	0.47	0.24	3.5
Lost Time Injuries (LTI)	0	0	0	0
Restricted Work Cases (RWC)	-	-	-	2
First aid case (FAC)	-	-	-	3
Share of women in total workforce (average) <sup>2</sup>	-	-	6%	9%
Share of women in management (average) <sup>2</sup>	-	-	1.4%	2.6%
Short term sick leave (average) <sup>2</sup>	-	0.0%	0.0%	0.0%
Long term sick leave (average) <sup>2</sup>	-	0.0%	2%	0.0%
Employee turnover ratio (average)	-	-	1.3%	0.02%

GOVERNANCE	2018	2018	2019	2020
Share of relevant staff who have completed anti-corruption training (%)	100%	92%	100%	100%
Breaches of ethical guidelines	0	0	0	0
Investigations or lawsuits in relation to ESG issues	0	0	0	0
Cyber attacks or similar incidents resulting in loss of data, loss of integrity or other loss	1	0	0	0
Whistleblowing cases being addressed by management or board	0	0	0	0

<sup>1</sup> Company business travel and emissions from various waste incineration and recycling. <sup>2</sup> Adjusted definition from 2019.

In 2020, one of Atlantica's rigs was on a standby rate for much of the year, which reduced Scope 1 emissions without a corresponding reduction in revenues. The other rig completed its contract during the year, and has been laid up since.

The reductions in emissions, waste and the lower number of employees are all mainly due to these factors, although measures to reduce fuel use have also been implemented.

The company has continued its excellent safety record, reaching 2000 days of drilling in October without a single Lost Time Incident.

#### **ENVIRONMENTAL APPROACH**

In its environmental work, the company focuses especially on improving fuel efficiency in operations. In 2020, Atlantica began a review of its environmental management system, setting goals and targets for the year. This is part of the ISO-certification of the company's environmental management system, and contributes to continuous improvements to fuel use and emissions.

Data on  $CO_2$  emissions from 2020 are not comparable to previous years due to the decrease in operational activity, and measures introduced to improve fuel efficiency are not adequately reflected in the numbers.

One example of this is an innovation by Atlantica staff to backfeed a small generator back to the Atlantica Delta rig, resulting in a reduction in fuel consumption of up to 400 litres per day whilst stacked in the Canary Islands. The team on the Atlantica Delta rig is currently mandated with identifying technological innovations and other measures available to upgrade the rig and save energy.

#### SOCIAL APPROACH

Safety remains the highest priority for Atlantica, and in 2020 this commitment extended to ensuring the health and safety of all workers through the Covid-19 pandemic. The Atlantica Delta rig was still under its 17-well contract with Total in the Republic of Congo when the global pandemic hit. The company responded by introducing proactive measures to ensure appropriate quarantine for workers and protect staff. This resulted in the rig being able to complete drilling the 16th well, as agreed with Total, and demobilise, without a single case of Covid-19 on the rig.

With a similarly impressive safety track record, the BassDrill Beta completed its drilling programme in Brazil with only one small Covid-19 outbreak among staff and without a single lost time incident in operations.

For 2021, Atlantica has defined the following targets:

- Zero fatalities
- Zero lost time incidents
- Zero recordable incidents
- Zero dropped objects incidents
- Zero overboard spills
- Zero safety critical overdue maintenance without deferral

Mike Cadigan, CEO of Atlantica, explains how the company applied its general approach to safety to manage the Covid-19 pandemic: "To manage the pandemic we utilised the safety programmes that we've had established from day one, and we had someone from senior management on the rigs at all times, so we knew what was going on. When we were there, we prioritised having direct closed-door meetings with the crew, building trust, and that paid off in the long run. All organisations have relatively short attention spans, but we managed to keep on top of this. Covid-19 was no different, it tested everybody's attention span and tested our routines."

Regular safety culture surveys have been conducted, with issues raised being followed up by senior management. An example of this is the implementation of a training programme for leaders called Crucial Conversations that helped improve safety supervision on the rigs. By being faithful to its safety management system, Atlantica has operated since 20th of April 2015 without a lost time incident.



From the drillfloor at Atlantica Tender Drilling's Delta rig, offshore Congo



Crew on the Beta celebrating five years of LTI-free operations

Another social topic that has been prioritised by Atlantica is investing in local staff. For the company as a whole, Atlantica saw an 82 percent proportion of local employees to expatriates in the previous year, demonstrating the company's commitment to investing in the local workforce. This is particularly important in the Republic of Congo where there is a shortage of formally qualified workers in the oil and gas sector. By providing training and support to employees, Atlantica saw four Congolese workers reach the rank of Assistant Driller. This is an important contribution to increasing the local expertise and capability of the oil and gas sector in the Republic of Congo.

The company's commitment to its workers has resulted in the building up of trust over time, reducing the risk of downtime due to labour unrest and giving the company better insight into risks and grievances. For example, when leaving Congo after completing its contract, Atlantica had to intervene, on behalf of its workers, to ensure the correct severance payment to its workers through the local labour provider.

The company already has a strong and competent local workforce in Brazil across all levels.

#### **GOVERNANCE APPROACH**

Atlantica has a well-functioning governance management system in place. All employees have completed anti-corruption training and there were no recorded governance incidents in 2020.

Atlantica is currently in the process of evaluating which elements of its IT systems will become superfluous when the company ceases to be engaged in active drilling operations during 2021. All systems necessary for safety management will be maintained while the rigs are demobilised.

Atlantica's supplier auditing programme was reduced in scope in 2020, due to the reduction in operational activity.

### energy drilling S



Headquarters: Singapore Website: www.edrill.com

Number of employees: 63 Revenues (2020): USD 11.6 million Countries of operation: Singapore, Thailand HV's shareholding: 51.8% Investor: Fund VI Certifications: None

ESG Responsible: Alexander Maroske

#### **COMPANY DESCRIPTION**

Energy Drilling operates six self-erecting tender drilling rigs, of which it owns two. In 2020, the ED1 and ED2 were drilling for natural gas in Thailand and Indonesia for the Thai national oil company PTTEP and MedcoEnergi respectively. At the end of the year, one rig remained working for PTTEP in Thailand and the other was 'smart-stacked' in Singapore, awaiting new business. A third, semi-submersible, tender rig has been built and is available for work. In February 2021, Energy Drilling entered a management agreement with Seadrill Partners LLC to maintain, market and operate the tender rigs Seadrill-T15, Seadrill-T16 and West Vencedor on its behalf. The rigs are preserved in Singapore, Malaysia and Indonesia and will be actively marketed by Energy Drilling to operators in the region and in West Africa.

2020 has been a challenging year for Energy Drilling, requiring great effort to commence and maintain operations through the Covid-19 pandemic and to maintain activity levels. A company-wide drive to reduce costs has led to significant savings. Energy Drilling has managed the uncertainty of the past year in a good manner relative to the rest of the industry, keeping all employees on and only needing to introduce a small pay cut. Through this period, safety has remained an ingrained part of the company culture, as evident in excellent HSE statistics.



Marcus Chew, CEO

#### **KEY REPORTED ESG FIGURES FOR 2020**

#### (2019, 2018 and 2017 figures displayed where available):

ENVIRONMENTAL	2017	2018	2019	2020
Direct GHG emissions (GHG Protocol Corporate Standard Scope 1, in tonnes)	34 610	38 266	19 625	14 389
Energy indirect GHG emissions (GHG PCS Scope 2, in tonnes)	-	-	23	21
Other indirect GHG emissions (GHG PCS Scope 3, in tonnes) <sup>1</sup>	-	-	565	62
Carbon intensity - Scope 1 & 2 (tCO <sub>2</sub> e / million USD revenues)	-	-	665.4	1244.6
Carbon intensity - Scope 1, 2 & 3 (tCO $_2e$ / million USD revenues)	-	-	684.5	1250.0
Waste (tonnes)	866	946	424	126
Recycling ratio (average)	30%	40%	40%	40%
Unplanned spills (emissions to ground/sea/air)	0	0	0	0
Fuel Used (in million litres)	12.6	12.4	7.2	5.8

SOCIAL	2017	2018	2019	2020
Number of employees <sup>2</sup>	112	110	67	63
Total Recordable Incident Frequency (TRIF)	0	2.43	1.22	4.6
Lost Time Injuries (LTI)	0	1	0	0
Medical treatment case (MTC)	-	-	-	1
First aid case (FAC)	-	-	-	1
Share of women in total workforce <sup>2</sup>	0%	0%	0%	7.9%
Share of women in management <sup>2</sup>	0%	0%	0%	0%
Short term sick leave (average) <sup>2</sup>	-	-	0%	0.2%
Long term sick leave (average) <sup>2</sup>	-	-	0%	0.0%
Employee turnover ratio (average)	-	-	3.8%	15.4%

GOVERNANCE	2018	2018	2019	2020
Share of relevant staff who have completed anti-corruption training (%)	66%	66%	100%	100%
Breaches of ethical guidelines	0	0	0	0
Investigations or lawsuits in relation to ESG issues	0	0	0	0
Cyber attacks or similar incidents resulting in loss of data, loss of integrity or other loss	0	0	1	0
Whistleblowing cases being addressed by management or board	0	0	0	0
IDDs and audits of supplier, distributor or JV partner that include ESG issues	0	0	0	0

<sup>1</sup> Company business travel and commuting. <sup>2</sup> Adjusted definition from 2019.

Figures for Energy Drilling for 2020 reflect both lower activity, with rigs being idle instead of working for parts of the year, and lower day rates for the rigs when operating. This results both in lower greenhouse gas emissions in absolute terms and in a significant increase in calculated carbon intensity. Other effects are much lower amounts of waste and a further reduction in the number of employees, as well as a high employee turnover ratio as the company scaled down in early 2020 and up again towards the end of the year to prepare for new conctracts.





The ED-2 conducting development drilling

#### **ENVIRONMENTAL APPROACH**

Energy Drilling seeks to conduct its business in an environmentally responsible manner, through managing its environmental footprint and proactively assessing and controlling environmental impacts. Operational parameters are however tightly managed by the oil company for which each rig is drilling, limiting Energy Drilling's scope to introduce new measures to reduce emissions. The reduction in CO<sub>2</sub> emissions recorded for 2020 is thus a result of lower activity levels rather than of the introduction of emission-reducing measures.

A positive environmental development has been broader adoption of the IOGP recommendation on limiting flaring in operations in the jurisdictions in which Energy Drilling operates. This represents a positive step-change in oil sector emissions.

Energy Drilling maintains its goal of having zero environmental incidents, and has not seen any accidental spills or other environmental incidents in 2020.

#### SOCIAL APPROACH

Energy Drilling is focused on reliable operations and ensuring the health, safety and well-being of its employees. The company has seen and appreciated an impressive dedication from staff through the last year. Under strict travel restrictions due to Covid-19, employees have offered to relocate internationally for the company to be able to deliver on its contracts. Senior management have prioritised staying in close contact with all crew members and ensuring their health and wellbeing is safeguarded.

HSE has continued to be a core priority in Energy Drilling. Each rig has a safety committee, with representatives from each work group. This offers an opportunity for the crew to raise concerns, and has led to several follow-ups both internally and with business partners. The start-up of ED1's contract for PTTEP in Thailand in June 2020 was incident-free, despite a demanding labour situation. "As soon as we got the green light from our client, we enlisted local safety coaches onboard," Alex Maroske, Head of QHSE explains: "The safety coaches acted as flies on the wall in safety meetings, and stepped in to explain things in more detail whenever instructions were being given too quickly, focusing on dangers and risks. This ensured safety risks and procedures were adequately understood by the crew pre-job, helping to build a good understanding of roles and responsibilities on the job."

The company's safety policy, amongst others, has been updated, to make individuals more accountable in the documentation of joint risk assessments. The updated policies have been rolled out in the organisation, with training of staff being monitored.

#### **GOVERNANCE APPROACH**

Energy Drilling is committed to responsible business practices and has an uncompromising focus on corporate governance. The company's compliance programme provides employees training on all relevant governance topics, such as anti-corruption and human rights, and is periodically reviewed and updated. All relevant personnel are required to complete annual e-learning. In 2020, Energy Drilling's cyber security system has been penetration tested, resulting in the infrastructure being upgraded. Employee awareness on cyber-related risks has been heightened, and management makes sure this remains on the agenda.

Energy Drilling is subject to a range of legal jurisdictions due to the international nature of its operations, creating a risk related to changes in legislation. Changed requirements on safety training and lifting inspections are currently being implemented in Thailand.



From the driller's shack on the EDrill-1

# Appendix

### A. Ethical Guidelines

#### 1.0 Introduction

- **1.1** HitecVision Advisory AS (the "**Company**") is authorized as AIF manager pursuant to section 2-2 of the Alternative Investment Fund Manager Act. (the "**AIFM Act**").
- **1.2** The Company is subject to supervision by the Financial Supervisory Authority of Norway.
- **1.3** Under the AIFM Act, the board of directors and the senior management have a particular responsibility to ensure that the business activities are performed in accordance with applicable laws. Consequently, the board of directors and the CEO have established and revised internal procedures, hereunder the ethical guidelines, to ensure proper management and control of the Company.
- **1.4** The following important factors of the AIFM Act are reflected in the ethical guidelines;
  - to perform the business activities in compliance with sound business practice;
  - to avoid conflicts of interest and if unavoidable, the interest of the relevant Fund shall take precedence over the Company's own interest; and
  - the Duty of Confidentiality.
- **1.5** The ethical guidelines are supplemented by the following procedures;
  - Procedure for use of ICT Services
  - Business Hospitality Procedure
  - Procedure for Personal Transactions and businesses
  - Whistleblowing procedure
  - Data protection procedure
  - Insider dealing regulations procedure
  - Policy Statement on Political Activities in the USA
- **1.6** The general rules and procedures described in these ethical guidelines and the supplementing procedures are to be considered as instructions for all employees of HitecVision.
- **1.7** The guidelines also apply to the members of the board of directors, temporary staff and contracted staff of HitecVision.

#### 1.8 Definitions

"**Compliance Officer**" means Director Compliance or such other person appointed from time to time.

The "**Funds**" means any fund managed or advised by HitecVision from time to time.

"HitecVision" or the "Company" means HitecVision Advisory AS and to the extent relevant HitecVision AS and the HV Capital entities incorporated in connection with fundraising.

#### 2.0 The five principles

- **2.1** We have five principles to ensure that we perform the business activities in compliance with sound business practice, avoid conflict of interest and protect confidential information.
- 2.2 The five principles are:
  - 1. We behave and comply with laws
  - 2. We respect our colleagues
  - 3. We protect our assets and confidential information
  - 4. We never make illegal payments
  - 5. We avoid conflicts of interest
- **2.3** Should you ever be in doubt whether a decision upholds the principles, consult your manager or the Compliance Officer.

#### 2.4 PRINCIPLE 1:

#### We behave and comply with laws

- 2.4.1 Employees of the Company shall demonstrate absolute integrity and professionalism in their work for the Company. They are expected to act honestly and objectively in all parts of the Company's operations and all business activities.
- 2.4.2 Employees are obliged to comply with the laws and regulations applicable to the Company at any given time and perform their work in compliance with sound business practice and the Company's core values set out in these ethical guidelines.

2.4.3 Employees shall also comply with the prevailing internal procedures adopted by the Company, hereunder HitecVision's Responsible Investment Policy', enclosed as <u>Appendix 1</u> as well as the ethical guidelines laid down by the Norwegian Venture Capital Association, as amended from time to time.

#### 2.5 PRINCIPLE 2: We respect our colleagues

- 2.5.1 Our goal is to recruit, develop and retain the best people, and we want a creative, diverse and inclusive working environment.
- 2.5.2 We want our employees to perform to their full potential and to be recognised and rewarded fairly for their performance. To help each employee to achieve and perform to his/her full potential, colleagues may give honest feedback in a constructive and respectful way. Management also welcomes and encourages input from the Company's employees.
- 2.5.3 We want to ensure that the workplace is safe and free from harassment, discrimination and bullying. We will never tolerate any form of abuse or harassment of our colleagues or business partners.
- 2.5.4 We will treat everyone with courtesy and respect, regardless of race, gender, national or social origin, disability, sexual orientation, religious belief or political opinions, or other status.
- 2.5.5 We recruit, select, train, promote and reward our employees on merit, and irrespective of their race, gender, national or social origin, age, disability, sexual orientation, religious belief or political opinions. All employee-related decisions will be based on qualifications, demonstrated skills, achievements or other professional criteria.
- 2.5.6 You should never:
  - Behave in a way that could reasonably be considered offensive, intimidating, discriminatory or insulting. Avoid abusive language or inappropriate jokes, such as jokes of a racial or sexual nature, in the workplace.

- Engage in any form of harassment. Harassment does not have to take place at work or involve a colleague to violate our Code.
- Humiliate, ridicule or injure another person.
- Directly or indirectly discriminate an employee on the basis of race, gender, age, national or social origin, disability, sexual orientation, religious belief or political opinions.
- Turn a blind eye to harassment or discrimination in the workplace. Voicing concerns or reporting incidents to management will never result in retaliation.

#### 2.6 PRINCIPLE 3: We protect our assets and confidential information

- 2.6.1 We always take care to protect our business assets and information of a confidential nature. Such assets and information may include property, time, intellectual property, inside information, personal data, business opportunities, investor lists, Company assets and Company equipment. We also respect the intellectual property and trade secrets of others.
- 2.6.2 We have a duty of confidentiality with respect to any matter concerning inside information, the Company, investors, Funds and portfolio companies. We are obliged to sign HitecVision's declaration of confidentiality, which is enclosed as <u>Appendix 2</u>. The declaration of confidentiality shall be signed at commencement of the employment and on an annual basis.
- 2.6.3 We also safeguard access to, and the appropriate use of, the Company's ICT-resources. All information stored, processed, sent or received on HitecVision's systems is the property of the Company. The company therefore reserves the right to access all such information except where limited by law or agreement.

We are all responsible for making sure our resources are not misused or wasted. Examples of misuse are thefts of supplies, equipment, documents, cash or other property.

#### 2.6.4 In particular, you should ensure that you:

- Take reasonable care when using Company property at all times, making sure that it is not damaged or lost.
- Report lost or stolen property or equipment without delay.
- Utilise computer and communication systems, including voicemail service, e-mail and internet in accordance with the Procedure for the use of ICT Services.
- Protect Company information and never disclose confidential or Company information to nonemployees or to other employees unless required for the purpose of the performance of the work. This obligation applies not only during your employment, but also after termination of your employment with the Company.
- Process personal data in accordance with the data protection procedure.
- Ensure that no unauthorized persons are granted admittance to the Company's restricted office areas unless preapproved by Compliance.
- Act in accordance with the insider dealing regulations procedure
- Handle inside information or other confidential information with due care so that such information does not come into the possession of unauthorised persons or is misused.
- Discuss inside information or other confidential information in a proper manner even within the Company's restricted offices areas.
- Do not discuss inside information or other confidential information in the canteen, reception area or other public places such as airports or restaurants.
- 2.6.5 The Compliance Officer is responsible for ensuring that inside information and other sensitive information is handled with due care in accordance with applicable regulations from time to time, including but not limited to ensuring that lists of persons with access to inside information are drawn up etc.
- 2.6.6 In the event of confidential information being leaked, the Compliance Officer shall be notified and shall initiate an internal investigation.

2.6.7 The purpose of such an investigation is to identify if the leak originated from the Company and the source of the leak. Depending on the outcome of the investigation the CEO shall consider if the procedure should be amended. The CEO shall inform the board of directors of the outcome of such investigations.

For more guidance, please consult:

- Insider dealing regulations procedure
- Data protection procedure
- Procedure for the use of ICT Services

#### 2.7 PRINCIPLE 4: We never make illegal payments

- 2.7.1 Illegal payments comprise all types of payments that are illegal under applicable laws. The term 'illegal payments' should be taken to mean not only corruption, but also embezzlement and fraud. Illegal payments will typically lead to the enrichment of a person or several persons at the expense of the Company, the Funds, or the Funds' portfolio companies. In making an illegal payment you will most likely be acting against the best interest of your company. Such payments are strictly forbidden and will in most cases lead to the immediate termination of your employment.
- 2.7.2 Corruption is a threat to fair competition, and it undermines legitimate business activities. Any violation within our organisation will be a threat to our reputation and credibility in the market. Corruption is wrong and unacceptable, and no business advantage for our Company will ever justify paying a bribe.
- 2.7.3 The definition of corruption may differ from one jurisdiction to another, however, the main concept is the same: giving an improper advantage to a person in the public or the private sector in the conduct of their duties is not permitted. We shall comply with the Norwegian anti-corruption provisions, the UK Bribery Act (UKBA) and the US Foreign Corrupt Practices Act (FCPA).
#### 2.7.4 For this reason, you are prohibited from:

- Giving or offering an improper advantage in connection with a person's position, office or assignment in either the public or private sector.
- Offering, promising or giving a financial or other kinds of advantage to another person with the intention to (i) induce a person to perform improperly a relevant function or activity, or (ii) in order to reward a person for the improper performance of such a function or activity.
- Offering to pay, paying or authorising the payment of money or anything of value to a foreign official in order to influence any act or decision of the foreign official in his or her official capacity or to secure any other improper advantage in order to obtain or retain business.
- Offering or giving an improper advantage to a third party in exchange for this person trying to influence the conduct of someone else (trading in influence).
- 2.7.5 The Company not only prohibits active bribery, but also the acceptance or receipt of an improper advantage in connection with your position in our Company. Never accept a kickback, "private commission" or money from any of our business partners.
- 2.7.6 It is not only the transfer of money that constitutes bribery; also gifts, services, offering preferential terms for a product or a service, and travel and accommodation may in certain cases expose the Company to a compliance risk.
- 2.7.7 It is also strictly forbidden to make any unauthorised transfer of money or anything of value from the Company to yourself, to any of your close relatives or to any person acting on your behalf. Stealing Company assets or funds will never be accepted.

For more guidance, please consult: Business Hospitality Procedure

#### 2.8 PRINCIPLE 5: We avoid conflicts of interest

- 2.8.1 The Company's business shall at all times be conducted in a manner that minimises the risk of any conflict of interest. Where a conflict of interest is unavoidable, HitecVision has a particular duty to ensure that the interests of the relevant Funds / the Fund's investors take precedence over the Company's own interests, and to ensure that one or more individual Funds / investors are not unfairly favoured at the expense of other Funds / investors.
- 2.8.2 Should the Company have a special interest outside the normal course of business, information about such interest shall be conveyed to the relevant body (Board of Directors or investor committee) within the Fund in question. This also applies where HitecVision and/or employees have personal interests in relation to transactions or investments subject to HitecVision's advice.
- 2.8.3 Should there be any potential for raising doubts about the objectivity or integrity of an employee due to a potential conflict of interest (including but not limited to circumstances related to the Funds, The Funds' portfolio companies, inside information etc), the employee shall raise the matter with the Compliance Officer as soon as the employee becomes aware of the (potential) conflict of interest. The person concerned shall immediately resign from further work on the matter in question if the Compliance Officer deems that there is a risk of conflict of interest.

For more guidance, please consult:

- Policy Statement on Political Activities in USA
  Procedure for Personal Transactions and Businesses
- Business Hospitality Procedure

### 3.0 Miscellaneous

#### 3.1 Publicity and contact with media

All media contact is to be coordinated by the CEO or by a person with delegated authority to give statements on behalf of the Company.

You are not allowed to give statements to the press or in the social media about the Company, the Funds, the Funds' investors and portfolio companies without prior approval.

Enquiries from the media should always be responded to by stating "no comment" and it should be referred to the CEO.

Private use of social media should not be of such a nature that it may result in breach of confidentiality, or damage to HitecVision's reputation.

#### 3.2 Annual revision

- 3.2.1 These ethical guidelines shall be reviewed and if necessary revised at least once every year.
- 3.2.2 Should requirements stipulated by law or regulation necessitate an amendment of the ethical guidelines, such amendment shall be implemented immediately.

#### 3.3 Whistleblowing

Please consult the Whistleblowing Procedure.

#### 3.4 Sanctions

Any breach of the provisions in these ethical guidelines may have severe consequences for HitecVision and for the individual employee. Violation by an employee may involve (without limitations) warnings or in more serious events, dismissal, liability to pay compensation and criminal liability, including imprisonment.

### **APPENDIX 1**

### Responsible investment policy

#### Introduction

HitecVision is a leading private equity investor in the European energy industry. HitecVision's objective is to create value by developing and building strong portfolio companies and on this basis generate superior returns for its investors.

HitecVision believes that a strong focus on environmental, social and governance factors and issues is critical to its long-term success as a private equity investor. HitecVision is a signatory of the UN-supported "Principles for Responsible Investment".

We are convinced that in this respect, the interests of our investors are aligned with those of our portfolio companies, their employees, customers and the communities in which they operate.

On this basis HitecVision has adopted this responsible investment policy that forms an integral part of its investment process and its active owner practices.

#### **Overall principles**

In the assessment and selection of potential investments, HitecVision integrates consideration of environmental, social and ethical issues, including climate issues.

HitecVision seeks to ensure that its portfolio companies operate in an environmentally sound manner, as well as ethically, responsibly and profitably in everything they do.

HitecVision aims to be transparent regarding all issues covered by these principles, and will seek to ensure similar transparency from the portfolio companies.

#### Environmental

HitecVision works to ensure that its portfolio companies operate in an environmentally responsible manner and aim to follow best industry practice.

HitecVision seeks to invest in companies that are part of the solution to the climate challenge.

#### Social

HitecVision seeks to ensure that its portfolio companies offer equal opportunities to all employees, respect fundamental human rights, labour rights and union engagement, and provide their employees with good, healthy and safe working conditions.

Furthermore, HitecVision seeks to ensure that its portfolio companies contribute positively to the communities in which they operate by developing businesses, encouraging innovation and enhancing international competitiveness.

#### Governance

HitecVision strives to professionalise the governance models of its portfolio companies through its board work, and aims to follow Invest Europe's Corporate Governance Guidelines.

HitecVision seeks to ensure that its portfolio companies comply with all applicable laws, rules and regulations in the markets in which they operate, including environmental, labour, anti-corruption and anti-money laundering laws, rules and regulations.

HitecVision seeks to contribute to high ethical standards being maintained by its portfolio companies.

# **B.** Supplier Expectations Statement



## Some terms and abbreviations used in this report:

boe / boepd	Barrels of oil equivalent / barrels of oil equivalent per day.
CAGR	Compound annual growth rate.
CCS / CCUS	Carbon Capture (Utilisation) and Storage.
CSR	Corporate Social Responsibility.
DRS	Delayed Response Scenario.
EICT	Electro, Instrument, Control and Telecom.
EITI	Extractive Industries Transparency Initiative.
EJ	Exajoules, or 10 <sup>18</sup> joules.
EPC <sup>1</sup>	Energy Performance Contracting.
EPC <sup>2</sup> / EPCI	Engineering, Procurement, Construction, Installation – common contract formats in the energy industry.
ESG	Environment, social and governance.
ETS	Economic Transition Scenario.
EU ETS	EU's Emission Trading System, a "cap and trade" system for GHG emissions.
EV	Electric vehicle.
E&P	Exploration and production.
FAC	First Aid Cases - Workplace injury which is treated by first aid or minor manipulation to provide relief for a strain or bruise. A minor injury does not require treatment by a professionally trained paramedic or physician and does not incur loss of work time other than time of the shift on which it occurred.
FEED	Front-End Engineering & Design.
FPSO	Floating Production, Storage and Offloading - a ship-shaped floating oil platform.
FTE	Full-time employee.
GDPR	General Data Protection Regulation.
GHG	Greenhouse gases, primarily Carbon Dioxide (CO <sub>2</sub> ), Methane (CH <sub>4</sub> ), Nitrous Oxide (N <sub>2</sub> O), Chlorofluorocarbons (CFCs) and Hydrofluorocarbons (incl. HCFCs and HFCs).
GHG PCS	Greenhouse Gas Protocol Corporate Standard.
GW / GWh	Gigawatt / gigawatt hours.
HSE / HSSE / HSEQ	Health, Safety, Security, Environment, Quality – terms used by different companies in the industry, with broadly the same meaning.
ІСТ	Information and communications technology.
IEA	International Energy Agency.
IOGP	International Association of Oil and Gas Producers.
IPCC	Intergovernmental Panel on Climate Change.
ISM auditing	International Safety Management Code auditing.
ISO 3834	International standard for quality requirements in welding.
ISO 9001	International standard for quality management systems.
ISO 14001	International standard for environmental management systems.
ISO 14064-1	International standard for quantification and reporting of GHG emissions and removals.
ISO 26000	International standard for social responsibility.
ISO 27001	International standard for managing information security.
ISO 31000	International standard for managing risks.
ISO 45001	International standard for occupational health and safety management systems. A new standard that replaces OHSAS 18001.

ISO 50001	International standard for energy management systems.
KPI	Key Performance Indicator.
LCTP	Low-Carbon Transition Plan.
LNG	Liquified Natural Gas.
LTI	Lost time injury - workplace injury causing an individual to be unfit for work with more than 24 hours absence, death or permanent disability .
MARPOL	The International Convention for the Prevention of Pollution from Ships.
mmboe	Million barrels of oil equivalent.
мтс	Medical treatment case - Workplace injury which is treated by a paramedic or a physician without loss of work time other than time of the shift on which it occurred, and the injured person continues with his normal scheduled work.
Mtoe	Million tonnes of oil equivalent.
MW / MWh	Megawatt / megawatt hours.
NCS	Norwegian Continental Shelf.
NCCS	Norwegian CCS Research Centre.
NDC	Nationally Determined Contribution.
NZE2050	Net Zero Emissions by 2050 Scenario.
OECD	Organisation for Economic Cooperation and Development, with 37 member states.
OHSAS 18001	Occupational Health and Safety Assessment Series, an inter- nationally used British Standard for occupational health and safety management systems. Gradually being replaced by ISO 45001.
OSPAR Convention	Convention for the Protection of the Marine Environment of the North-East Atlantic.
RWC	Restricted work case - Workplace injury resulting in an employee being given a temporary job, or work at his normal job but not full-time, or work at a permanently assigned job but unable to perform all duties normally assigned to it.
R&D	Research and development.
SDG	Sustainable Development Goal - the UN's 17 Sustainable Development Goals define the global 2030 Agenda for Sustainable Development.
SDS	Sustainable Development Scenario.
STEPS	Stated Policies Scenario.
SURF	Subsea Structures, Umbilicals, Risers, Flowlines.
TCFD	Task Force on Climate-related Financial Disclosures.
TRI	Total recordable injuries - a measure that encompasses all fatalities, lost time injuries, restricted work cases and medical treatment cases (TRI=LTI+RWC+MTC).
TRIF	TRIF - Number of TRI per 1 000 000 hours worked.
TSO	Transmission System Operator.
TWh	Terawatt hours.
UKCS	UK Continental Shelf.
UNEP	United Nations Environment Programme.
WACI	Weighted average carbon intensity.
WBCSD	World Business Council for Sustainable Development.
WEC	Work Environment Committee.
WEO	World Energy Outlook.
WRI	World Resources Institute.

# D. References

#### References used in section ESG in the Energy Sector

Airswift (2021). "The 2021 Global Energy Talend Index (GETI) report: Opportunity from Uncertainty." Airswift. https://www.airswift.com/geti/

Brenna (2021). "Nå koster det nesten 1000 kroner per tonn med CO2-utslipp." *enerWE*. https://enerwe.no/co2-avgift-klima-klimakvote/

na-koster-det-nesten-1000-kroner-per-tonnmed-co2-utslipp/396293

#### e-Tools Age (2021). "Oil converter and

calculator". e-Tools Age.com. https://www.etoolsage.com/converter/Oil\_ converter.

\_\_\_\_\_\_ asp?range=%28.8-1.2%29&Ds=.86&DensityTbl=.86&Meas1=cubic+metre&Meas2=metric+ton&selectUnit=84&Result=68.8+metric+ton+%28s%29&Coin1=&Er=&Coin2=&priceFrom=&priceFromUnit=&priceTo=&price-ToUnit=&totalFrom=&totalUnitFrom=&total-To=&totalUnitTo=

EITI (2021). "United Kingdom Extractive Industries Transparency Initiative: Overview." Extractive Industries Transparency Initiative. https://eiti.org/united-kingdom

#### Finkelstein et al. (2020). "Decarbonization is becoming a highest priority. Here is how it can be done - and how much it might cost." McKinsey & Company.

https://www.mckinsey.com/industries/ electric-power-and-natural-gas/our-insights/ how-to-decarbonize-global-power-systems

## Fjose et al. (2019). "Bakgrunnsnotat om database over olje- og gassrelaterte inntekter i kommunene: Menon-Notat Nr. 14/2019" Menon Economics.

https://www.menon.no/wp-content/ uploads/2019-04-Bakgrunnsnotat-om-olje-oggassrelaterte-inntekter-og-velferd-i-kommunene.pdf

#### Forskningsrådet (2012). "Langtidsvirkninger av utslipp til sjø fra petroleumsvirksomhet: Resultater fra ti års forskning." Norges Forskningsråd.

https://www.forskningsradet.no/siteassets/ publikasjoner/1253975497365.pdf

IOGP (2021). "IOGP data portal." International Association of Oil and Gas Producers (IOGP). https://data.iogp.org/Home/Index

# KonKraft (2021). "Fremtidens energinæring på Norsk sokkel: Klimastrategi mot 2030 og 2050, Statusrapport 2021." *KonKraft*.

https://konkraft.no/wp-content/ uploads/2021/02/FERDIG-VERSJON-2-Statusrapport-klima-2021.pdf

Norsk Olje og Gass (2020). "Klima- og miljørapport: Olje- og gassindustriens klima-og miljøarbeid." *Norsk Olje og Gass*. https://www.norskoljeoggass.no/contentassets/8aa21e513fee4740944b00b730e4e3c2/ norog-klima--og-miljorapport-2020.pdf

Norsk Olje og Gass (2021). "Norske olje og gass' anbefalinger for coronavirus (Covid-19) og utreise offshore." Norske Olje og Gass. https://www.norskoljeoggass.no/koronavirus/ anbefalinger-covid19/

# Norwegian Petroleum (2021). "Transparency - EITI." *Norsk Petroleum.* https://www.norskpetroleum.no/en/economy/

transparency-eiti/

OGUK (2020). "Health, Safety and Environment Report 2020." *Oil & Gas UK*. <u>https://cld.bz/HBLvA1y/24/.</u>

OGUK (2020). "COVID-19: Safe Working for UKCS Offshore Installations." Oil & Gas UK. https://oilandgasuk.co.uk/wp-content/ uploads/2020/06/OGUK-Guideline-COVID-19-Safe-Working-on-UKCS-Offshore-Installations-Issue-3-Dec-20.pdf

### Petroleumstilsynet (2020). "RNNP 2019: Risikonivå i petroleumsvirksomheten norsk sokkel 2019." Petroleumstilsynet.

https://www.ptil.no/contentassets/1a88cd8a426b44808897e284ae-3ca42a/1.4-rnnp-2019-sokkelrapport.pdf

#### PwC (2019). "Investing in gender equality." PwC, Storebrand, CARE International. https://www.pwc.no/no/nyheter/annet/ investing-in-gender-equality.pdf

#### Rystad Energy (2020). "Press release: Top North Sea emitter UK needs to electrify its rising oil and gas output to reach climate goals." Rystad Energy.

https://www.rystadenergy.com/newsevents/ news/press-releases/top-north-sea-emitter-ukneeds-to-electrify-its-rising-oil-and-gas-outputto-reach-climate-goals/

## Tollaksen (2021). "Koronasmitte på flere oljeinstallasjoner." *E24*.

https://e24.no/olje-og-energi/i/41bx3g/ koronasmitte-paa-flere-oljeinstallasjoner

#### Transparency International (2021). "Corruption Perception Index 2020." Transparency International.

https://www.transparency.org/en/cpi/2020/ index/nzl

#### UNEP (2019). "Peatlands store twice as much carbon as all the worldæs forests.' United Nations Environment Programme.

https://www.unep.org/news-and-stories/story/ peatlands-store-twice-much-carbon-all-worldsforests

#### Watts (2021). "UK oil group in call for North Sea workers to get Covid-19 vaccine.' Upstream Online

https://www.upstreamonline.com/coronavirus/ uk-oil-group-in-call-for-north-sea-workers-toget-covid-19-vaccine/2-1-950856

#### Wilhelmsson et al. (2010). "Greening Blue Energy: Identifying and managing the biodiversity risks and opportunities of offshore renewable energy." International Union for Conservation of Nature.

https://www.actu-environnement.com/media/ pdf/news-22257-etude-uicn.pdf

#### WWF (2014). "Environmental Impacts of Offshore Wind Power Production in the North Sea: A Literature Overview." *World Wildlife* Fund For Nature Norway.

https://www.wwf.no/assets/attachments/84-wwf\_a4\_report\_\_\_havvindrapport.pdf

#### Yanosek et al. (2019). "How women can help fill the oil and gas industry's talent gap.' McKinsey & Company.

https://www.mckinsey.com/industries/ oil-and-gas/our-insights/how-women-can-helpfill-the-oil-and-gas-industrys-talent-gap

#### Ørsted (2020). "Sustainability report 2020:

A sustainable build-out of green energy". Ørsted. https://orstedcdn.azureedge.net/-/media/ annual2020/sustainability-report-2020. ashx?la=en&rev=c64fc4e893b942f2b6416c9ff-2ca4a0d&hash=7DB0051512EDF-601D5A0F282D9CF275E

#### References used in section

#### The Future of Energy

Abnett (2020). "European Union plans mammoth expansion of offshore wind farms." Reuters. https://www.reuters.com/article/us-eu-energy-renewables-idUKKBN27Z1LH

#### BloombergNEF (2020). "New Energy Outlook 2020: Executive Summary." BloombergNEF.

https://assets.bbhub.io/professional/ sites/24/928908\_NEO2020-Executive-Summary.pdf

#### BP (2020). "Energy Outlook 2020 edition." British Petroleum.

https://www.bp.com/content/dam/bp/ business-sites/en/global/corporate/pdfs/ energy-economics/energy-outlook/bp-energy-outlook-2020.pdf?utm\_source=newsletter&utm\_medium=email&utm\_ campaign=newsletter axiosgenerate&stream=top

Colthorpe (2020). "Financing secured to 'enable rapid development' of Norway's first lithium battery cell gigafactory." *Energy Storage News.* https://www.energy-storage.news/news/

financing-to-enable-rapid-development-of-norways-first-lithium-battery-cell

#### Colthorpe (2020). "Giga-Norway: Panasonic, Equinor check out green battery business potential in northern Scandinavia." Energy . Storage News.

https://www.energy-storage.news/news/ giga-norway-panasonic-equinor-check-outgreen-battery-business-potential-in

#### Data Driven Envirolab (2020). Press Release: Momentum towards zero emissions accelerates alongside Climate Week." Data Driven Envirolab. http://datadrivenlab.org/featured/press-re-

lease-momentum-towards-zero-emissions-accelerates-alongside-climate-week/

#### Danish Energy Agency (2019). "Denmark's Energy and Climate Outlook 2019." Danish Energy Agency.

https://ens.dk/sites/ens.dk/files/Analyser/ deco19.pdf

European Commission (2020), "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: An EU Strategy to harness the potential of offshore renewable energy for a climate neutral future." *European Commission*.

https://ec.europa.eu/energy/sites/ener/files/ offshore renewable energy strategy.pdf

#### European Commission (2020). "Study on energy storage: Contribution to the security of the electricity supply in Europe". European Commission.

https://op.europa.eu/en/publication-detail/-/ publication/a6eba083-932e-11ea-aac4-01aa75ed71a1/language-en?WT.mc\_ id=Searchresult&WT. ria\_c=37085&WT.ria\_f=3608&WT.ria\_ ev=search

#### EDF (2021). "Methane: A crucial opportunity in the climate fight." Environmental Defense Fund. https://www.edf.org/climate/methane-crucial-opportunity-climate-fight

#### Equinor (2021). "Hywind Tampen: the world's first renewable power for offshore oil and gas." Fauinor

https://www.equinor.com/en/what-we-do/ hywind-tampen.html

## Global CCS Institute (2021). "Global Status of CCS 2020." *Global CCS Institute*.

https://www.globalccsinstitute.com/wp-content/ uploads/2021/03/Global-Status-of-CCS-Report-English.pdf

#### Hall (2020). "New EU Clean Hydrogen Alliance to build 6 GW of electrolyzer capacity by 2024." S&P Global.

https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/070820-neweu-clean-hydrogen-alli-

ance-to-build-6-gw-of-electrolyzer-capcity-by-2024

#### HyDeploy (2020). "UK's first grid-injected

hydrogen pilot gets underway." HyDeploy. https://hydeploy.co.uk/about/news/ uks-first-grid-injected-hydrogen-pilot-gets-underwav/

IEA (2020). "Innovation in Batteries and Electricity Storage." International Energy Agency.

https://www.iea.org/reports/innovation-in-batteries-and-electricity-storage

#### IEA (2020). Methane Tracker 2020: Methane from oil & gas." International Energy Agency. https://www.iea.org/reports/methane-

tracker-2020/methane-from-oil-gas#abstract

#### IEA (2020). "Press release: A rapid rise in battery innovation is playing a key role in clean energy transitions." International Energy Agency. https://www.iea.org/

news/a-rapid-rise-in-battery-innovation-is-playing-a-key-role-in-clean-energy-transitions

#### IEA (2020). "World Energy Outlook 2020." International Energy Agency. Paris, France.

IPCC (2018). "Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty" Intergovernmental Panel on Climate Change.

www.ipcc.ch/site/assets/uploads/ sites/2/2019/05/SR15\_SPM\_version\_report\_ LR.pdf

#### Klima- og Miljædepartementet (2021). "Meld. St. 12 (2020-2021) Melding til Stortinget: Klimaplan for 2021-2030." Det Kongelige Klima- og Miljødepartement.

https://www.regjeringen.no/contentassets/ a78ecf5ad2344fa5ae4a394412ef8975/nn-no/ pdfs/stm202020210013000dddpdfs.pdf

#### Mordor Intelligence (2021). "Europe Data Centre Power Market - Growth, trends, Covid-19 impact, and forecasts (2021 - 2026). Mordor Intelligence.

https://www.mordorintelligence.com/industry-reports/europe-data-center-power-market

MSCI (2021). "MSCI index carbon footprint metrics." MSCI. https://www.msci.com/index-carbon-footprintmetrics

New Climate Institute (2020). "Navigating the nuances of net-zero targets." New Climate Institute. https://newclimate.org/2020/10/22/navigatingthe-nuances-of-net-zero-targets/

#### Norwegian Petroleum (2021). "Transparency - EITI." Norsk Petroleum.

https://www.norskpetroleum.no/en/economy/ transparency-eiti/

#### PwC (2019). "Investing in gender equality." PwC, Storebrand, CARE International. https://www.pwc.no/no/nyheter/annet/

investing-in-gender-equality.pdf

#### PwC (2021) "Net Zero Economy Index 2020: The Pivotal Decade." PwC.

https://www.pwc.co.uk/sustainability-climate-change/net-zero-2020/the-net-zero-economy-index-2020.pdf

#### Rystad Energy (2021). "Rystad Energy Transition Report, February 2021 edition". Rystad Energy.

https://sf-asset-manager.s3.amazonaws. com/97637/12/599.pdf

#### Statistics Norway (2021). "Utslipp til luft." Statistisk sentralbvrå.

https://www.ssb.no/klimagassn

## Statnett (2020). "Langsiktig Markedsanalyse Norden og Europa 2020-2050." Statnett.

https://www.statnett.no/om-statnett/nyheter-ogpressemeldinger/nyhetsarkiv-2020/tror-pa-europeisk-kraftsystem-uten-utslipp/

#### Strauss (2020). "Europe maps out green hydrogen vision on path to net-zero." Reuters. https://www.reuters.com/article/us-climatechange-eu-hydrogen-idUSKBN24920M

#### Tellefsen et al. (2020). "Norwegian Hydropower: Connecting to Continental Europe" IEEE Power and Energy Magazine, vol. 18, no. 5, pp. 27-35. https://ieeexplore.ieee.org/document/9

Thema Consulting Group (2020). "Nordic Power Market Forecast, Autumn Edition 2020, Special Issue: The impact of weather years. Thema Consulting Group.

https://thema.no/price-forecasts-and-models/ nordic-power-price-forecast/?lang=en

TPI (2020). "Carbon Performance of European Integrated Oil and Gas Companies: Briefing paper, May 2020." Transition Pathway Initiative. https://www.transitionpathwayinitiative.org/ publications/58.pdf?type=Publication

#### Wind Europe (2021). "Wind energy - powering the European Green Deal." *Wind Europe*. https://windeurope.org/about-wind/campaigns/ european-green-deal/

Winje et al. (2020). "Virkemidler for å realisere flytende havvind på norsk sokkel, Menon publikasjon nr. 116/2020." Menon Economics. https://offshore-wind.no/wp-content/ uploads/2020/10/2020-116-Virkemidler-for-arealisere-flytende-havvind-pa-norsk-sokkel-MENON.pdf

## **Assurance Statement**





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