



ROYAL DECREE

Ministry of Petroleum and Energy

Ref. no:

Minister: Tina Bru

Case no: 20/88-

Date: 12 June 2020

Opening of the areas *Utsira Nord* and *Sørliche Nordsjø II* for processing of applications for licences for renewable energy production pursuant to the Offshore Energy Act

I. Presentation of the case

Act No 21 of 4 June 2010 on Offshore Renewable Energy Production (the Offshore Energy Act) defines the framework for utilisation of renewable energy resources offshore. An important objective of the Act was to determine the framework for potential developments in good time, and to ensure control over the use of sea areas.

The Offshore Energy Act states that, as a rule, offshore renewable energy production outside the baselines can only take place once the Norwegian state has opened an area for licence applications. According to the Offshore Energy Act Section 2-2, the King in Council decides to open a geographically delimited area with a view to awarding licences pursuant to Section 3-1.

In follow-up of the Government's strategy for floating offshore wind power outlined in Proposition No 1 to the Storting (Resolution) (2017–2018), the Ministry of Petroleum and Energy proposed opening two areas for offshore renewable energy production and requested feedback in relation to a third area. The proposal has been distributed for public consultation.

Opening an area means that it will become possible to apply for licences for renewable energy production in the area in question. The proposal to open areas was therefore accompanied by draft Regulations to the Offshore Energy Act. These Regulations stipulate more detailed rules for the licensing procedure, among other things, and were adopted by Royal Decree on the

same date as the present Decree.

1. Strategic impact assessment

The Offshore Energy Act requires impact assessments to be prepared before areas can be opened. The Norwegian Water Resources and Energy Directorate (NVE) has conducted a strategic impact assessment in accordance with the conditions set out in the Offshore Energy Act for 15 sea areas.¹ This assessment has formed the basis for the Ministry's work on opening of areas.

NVE's strategic impact assessment is based on the report *Havvind – forslag til utredningsområder* ('Offshore wind – proposed areas for assessment' – in Norwegian only), which was prepared by a group of directorates and submitted to the Ministry in October 2010. The group comprised NVE, which led the work, what was then the Directorate for Nature Management, the Directorate of Fisheries, the Norwegian Coastal Administration and the Norwegian Petroleum Directorate.

The report proposed 15 areas and contained a draft programme for a strategic impact assessment.

During its work to identify suitable areas, the group took technical and financial factors as its point of departure, particularly sea depth and possibilities for connection to the power grid. The group arrived at the 15 areas proposed by also taking other area use and environmental considerations into account. Geographic information systems (GIS) were an important tool in this work.

The report was distributed for public consultation and in July 2011, based on the report and the consultation round, the Ministry charged NVE with conducting a strategic impact assessment of the 15 areas.

NVE submitted the strategic impact assessment to the Ministry in December 2012. The assessments were based on 13 specialist reports in the fields of the environment, business and public interests, and technical and financial conditions.

During the work, NVE was supported by a reference group comprising representatives of the Directorate for Nature Management, the Norwegian Petroleum Directorate, the Norwegian Coastal Administration and the Directorate of Fisheries. NVE also obtained input from Avinor, the Norwegian Defence Estate Agency and the Norwegian Meteorological Institute.

In the impact assessment, the 15 areas are divided into three groups: one group that should be opened first, one group that can be opened in the longer term, and one group of areas that should not be opened. In NVE's opinion, the following five areas should be opened first: Sørliche Nordsjø I, Sørliche Nordsjø II, Utsira Nord, Frøyagrunnane and Sandskallen-Sørøya Nord.

The Ministry distributed NVE's strategic impact assessment for public consultation in the first quarter of 2013. As more than six years had elapsed from the 2013 consultation round until

¹ *Offshore wind power in Norway – Strategic environmental assessment*, NVE report no 47-12.

the Ministry distributed its proposal for open areas for consultation in July 2019, the Ministry did not give decisive weight to the consultation submissions from 2013.

In 2018, NVE conducted an assessment² on behalf of the Ministry of whether material circumstances had changed since the strategic impact assessment was drawn up in 2012, and whether new or changed information suggested that changes should be made to the ranking of areas. The Ministry also requested that NVE submit a recommendation for which areas should be opened now.

As part of its work on the 2018 assignment, NVE again obtained opinions from relevant public bodies: the Directorate of Fisheries, the Norwegian Petroleum Directorate, the Norwegian Coastal Administration, the Norwegian Environment Agency, the Institute of Marine Research, the Norwegian Defence Estate Agency, the Civil Aviation Authority of Norway, the Norwegian Meteorological Institute and Avinor.

In NVE's opinion, there were no material changes to the knowledge base that would give grounds for changing its recommendation from 2012, and it recommended opening Utsira Nord and Sørlige Nordsjø I or Sørlige Nordsjø II. The Frøyagrunnane area was deemed less relevant, among other things because it is considerably smaller than the three recommended areas and thus had less potential for adaptation to other interests. Sandskallen-Sørøya Nord was also deemed to be a less relevant option due to bottlenecks in the power grid.

The Ministry hosted an open consultation meeting in June 2018 where industry players, public bodies and organisations provided input regarding which areas should be opened and how the industry should be regulated.

2. The Ministry's consultation paper

The Ministry's proposal distributed for public consultation on 2 July 2019 was to open the areas Utsira Nord and Sandskallen-Sørøya Nord. The Ministry also requested input on whether Sørlige Nordsjø II should also be opened.

In its assessment, the Ministry emphasised that areas should be opened that would allow for projects with both floating and fixed technology. The Ministry also gave priority to areas that are suited for commercial projects.

The Ministry has emphasised that the areas it proposes to open are flexible areas with good potential for adaptation of concrete projects.

The Ministry pointed out that areas should not be limited out of consideration for individual interests, as that would reduce flexibility and the possibility to take other interests into account during the licensing process. If the boundaries of the areas were to be adjusted, the natural way to do this would be through a new overall selection of areas with subsequent strategic impact assessment. The Ministry pointed out that project-specific impact assessments and a licensing process involving public consultation will ensure that different considerations are taken into account and weighed against each other before permission is

² <https://www.regjeringen.no/contentassets/856bdd85577c4084bb9dd415e6e45483/svar-pa-oppdrag-om-apning-av-omrader-for-vindkraft-til-havs.pdf>

granted to develop energy installations in the proposed areas.

Utsira Nord

The Utsira Nord area is located west of Haugalandet, and extends in the north-south direction from the Bømlafjord to the Boknafjord. The area's average depth is 267 metres, and it is only suitable for floating wind power technology.

NVE has assumed that the area can currently accommodate a development of between 500 and 1500 MW, based on an assessment of the scale of production it will be possible to connect to the Norwegian onshore power grid. This scope of development will require the use of between 6 and 19% of the area.

The short distance to shore makes it possible to develop this area with alternating current cables. Wind conditions in the area are good, and the strategic impact assessment assumes a capacity factor of 47–48%, which corresponds to approx. 4,300 full-load hours. The proximity to shore also allows for low operating costs.

A development in the Utsira Nord area will be visible from shore. There is also a lot of shipping activity in the area, with several different types of vessels passing through. Utsira Nord has been opened for petroleum activities, but so far there has been no activity, and no exploration models or prospects have been mapped in the area. The possibility that there could be petroleum deposits in the area cannot be disregarded, but in light of current knowledge, the area's resource potential is deemed to be low.

Utsira Nord is defined by four points:³

4° 16' 09" E, 59° 26' 53" N

4° 40' 25" E, 59° 28' 56" N

4° 24' 27" E, 59° 04' 10" N

4° 48' 44" E, 59° 06' 18" N

The area is 1,010 km² in size, and is located around 22 kilometres off the coast (Utsira). The entire area is outside the baseline.

Sandskallen-Sørøya Nord

The area Sandskallen-Sørøya Nord is located in the Barents Sea northwest of Hammerfest. The average depth in the area is 89 metres, but variations in depth within the area make it suitable for both bottom-fixed and floating technology.

In its 2012 strategic impact assessment, NVE pointed out this area as one of the five that should be opened first. NVE has assumed that the area can currently accommodate a development of between 100 and 300 MW, based on an assessment of the scale of production it will be possible to connect to the onshore power grid. This scope of development will

³ Geodetic datum: WGS 84

require the use of between 5 and 15% of the area.

The distance to shore makes it possible to develop this area with alternating current cables. This area does not have the best wind conditions compared with the other areas assessed, but its proximity to shore allows for low operating and investment costs. A capacity factor of approximately 40% is estimated, which corresponds to approx. 3,500 full-load hours.

Sandskallen-Sørøya Nord was not among the areas that NVE proposed for opening in its 2018 assessment. The main reason for this is limited grid capacity. In connection with the work on a national framework for wind power, NVE in 2019 proposed an area on shore near Sandskallen-Sørøya Nord as one of the best suited areas for onshore wind power development. NVE wrote the following about the grid situation in Finnmark:

‘However, it is possible that grid capacity may become less of a limitation in the long term due to the possibilities of increased power consumption and new power lines, or alternative solutions that will not require much grid capacity.’

The Ministry concurred with this assessment, and emphasised the fact that the area will allow for bottom-fixed wind power to be developed much closer to shore than the areas in Southern Norway. Its proximity to shore also enables smaller developments such as demonstration projects.

A development in the Sandskallen-Sørøya Nord area will be visible from shore. The area borders on LoppHAVET marine protected area. Exploration models for petroleum have been mapped in the area. The area's resource potential for petroleum is deemed to be very low, but the possibility that there could be petroleum deposits in the area cannot be ruled out.

Sandskallen-Sørøya Nord is defined by four points:

22° 12' 01" E, 70° 55' 10" N

22° 42' 35" E, 71° 02' 44" N

22° 54' 03" E, 70° 57' 36" N

22° 22' 34" E, 70° 50' 37" N

The area is 260 km² in size, and is located around 14 kilometres off the coast (Sørøya). The entire area is outside the baseline.

Sørilige Nordsjø II

Based on the strategic impact assessment and NVE's assessment from 2018, Sørilige Nordsjø I and Sørilige Nordsjø II would appear to have similar characteristics and more or less identical potential impacts on the environment, commercial activities and other interests.

At present, Sørilige Nordsjø II is not covered by production licences awarded pursuant to the Petroleum Activities Act to the same extent as Sørilige Nordsjø I. Sørilige Nordsjø I has a somewhat lower potential for conflicts with shipping interests and a lower environmental risk than Sørilige Nordsjø II. There are known cultural heritage sites (shipwrecks) in the Sørilige

Nordsjø II area.

As regards potential for grid connection, Sørliche Nordsjø II is the area located closest to the European power system. Moreover, Sørliche Nordsjø II is by far the largest of the two areas, which will simplify adaptation to other interests.

The Ministry requested feedback on a potential opening of the Sørliche Nordsjø II area.

It emerges in the strategic impact assessment that out of the 15 areas assessed, Sørliche Nordsjø I and Sørliche Nordsjø II are the most interesting for the petroleum industry. Both areas are located in mature petroleum areas with a good infrastructure. Parts of the areas included in the assessment overlap with areas for which production licences have been awarded. Several prospects and potential prospects have been mapped here, as well as several exploration models at different levels.

The Ministry therefore wished to see the input received during the consultation round before making its final decision on whether or not to open Sørliche Nordsjø II. The Ministry also announced that a more detailed assessment would be conducted of legal and practical issues that might arise if the wind power installations are to be established in areas with petroleum activity.

Sørliche Nordsjø II is located at Smalbanken southwest of mainland Norway, and east of the large oil and gas fields in the southwestern part of the North Sea. The area borders on the Danish economic zone to the south.

The average depth in the area is 60 metres, with depths varying between 53 and 70 metres. This makes the area suitable for fixed technology. The area could also be suitable for some floating wind power concepts.

In its strategic impact assessment, NVE has assumed that the area can currently accommodate a development of between 1,000 and 2,000 MW, based on an assessment of the scale of production it will be possible to connect to the Norwegian onshore power grid, but also with a view to exporting the production. This scope of development will require the use of between 6 and 10% of the area.

Wind conditions in the area are good, and a capacity factor of about 50% has been estimated, which corresponds to approx. 4,400 full-load hours.

As the area is located far offshore, direct current cables are the only option for connecting any developments here to the onshore power grid. The long distance also means that small developments are not really a relevant option.

Sørliche Nordsjø II is defined by five points:

4° 20' 48" E, 56° 49' 24" N

5° 10' 05" E, 57° 05' 36" N

5° 29' 51" E, 56° 44' 17" N

5° 02' 01" E, 56° 35' 30" N

4° 38' 29" E, 56° 29' 02" N

The area is 2,591 km² in size, and is located around 140 kilometres off the coast. The entire area is outside the baseline.

Oil and gas activities

Oil and gas are location-specific resources, but their exact location is not known until they have been detected through exploration. In areas that might contain oil and gas, there will always be some uncertainty regarding where and in what quantity these resources exist. Establishing offshore wind power will physically occupy areas and thus affect the possibilities of utilising any subsea oil and gas resources in the area. Among other things, it emerges from the strategic impact assessment that seabed covered by a wind farm or other marine installations cannot be used for petroleum activities for as long as the installations remain in place. It also emerges that once a wind farm has been established, it will be difficult to map petroleum deposits in the area.

In areas open to petroleum activities, areas are awarded through production licences based on applications from oil companies. Companies that want to access areas apply for a production licence that confers an exclusive right to engage in petroleum activities within the awarded area. If a commercially viable find is made under a production licence, the relevant area is developed for petroleum production. If no finds are made or the area is deemed not to be sufficiently promising for the companies to proceed with exploration activities, the production licence is relinquished to the State. The same area is awarded again and mapped repeatedly when oil companies see other/new opportunities to identify profitable resources in an area. The strategic impact assessment states that new exploration models, new geological insights and technological developments can lead to oil and gas being detected in production licences that other parties have abandoned. The Johan Sverdrup field is one such example. The area was first awarded during the first licensing round in 1965, the area was explored repeatedly, but the field was only found in 2010.

It follows from the Petroleum Activities Act that facilities placed in an area covered by a production licence must not cause unreasonable inconvenience to the licensee.

Sørilige Nordsjø II is located in quadrants 3, 4, 9 and 10 in the petroleum administration's system. This is a mature petroleum province with well-developed infrastructure and good seismic data coverage. As of July 2019, the area had some overlap with a production licence under the Petroleum Activities Act where Equinor Energy AS held the operatorship and Faroe Petroleum Norge AS took part in the licence, but this production licence has since been relinquished.

Fisheries

Consideration for fisheries has been an important factor in the work to select areas as well as in the strategic impact assessment, and it will also be an important consideration in the processing of licence applications.

Offshore wind power development will entail restrictions on the areas in question. A wind farm will probably represent a material obstacle to fisheries. Insofar as the area can be used for fishing at all, it will be small vessels and passive fishing gear that can be permitted.

Fisheries were an important topic in the consultation submissions received during the consultation round for the 2013 strategic impact assessment. The Norwegian Fishing Vessel Owners Association was against Utsira Nord being opened on grounds of consideration for shrimp and Norway lobster fisheries. The Ministry of Fisheries was also of the opinion that considerations for fisheries indicated that the Utsira Nord area should be moved to the northeast and that Sandskallen-Sørøya Nord should not be opened. Finnmark county authority also opposed the opening of Sandskallen-Sørøya Nord for the same reasons, while Hammerfest municipality also pointed to impact on seabirds. The Norwegian Fishermen's Association wrote in its submission that no areas should be opened for offshore renewable energy production until the impact on fisheries have been determined in greater detail. The Norwegian Coastal Fishermen's Association expressed similar views.

Fishing takes place in all the areas assessed by NVE in its strategic impact assessment. What is considered in connection with opening of areas and the subsequent consideration of licence applications is to what extent fisheries would be affected by any wind park developments.

One of the challenges of assessing the impact on fisheries in advance is that it varies from year to year which areas have good conditions for fishing, since fish stocks move around. Some factors may not be taken into account at an overall strategic level, which is the level of a strategic impact assessment, and such factors must be considered if a project-specific assessment is conducted.

The Directorate of Fisheries deemed the impact on fisheries in the Utsira Nord area to be low. This area was also among those that offer the best opportunities for adaptation, as it is large in relation to the development potential that NVE pointed out in its strategic impact assessment. As regards Sandskallen-Sørøya Nord, the Directorate of Fisheries considered that opening the area for wind power development would have a particularly large impact on fisheries, and advised against it. NVE was nevertheless of the view that wind power can be established in the area and referred to the fact that the impact can be mitigated by only utilising parts of the area.

The impact on fisheries is a crucial and important topic in project-specific assessments. The Offshore Energy Act sets out the principles and process for coverage of losses incurred by fishermen in Norway as a result of fishing grounds being occupied etc. The Offshore Energy Regulations contain, among other things, the Ministry's proposals for the composition of committees tasked with considering claims for compensation and appeals against the consideration of such claims, and the principles for assessment of evidence.

Particularly valuable and vulnerable areas

The management plan for the marine areas (Report No 20 to the Storting (2019-2020)) designates certain parts of the areas as particularly valuable. These areas are important to biological production and biodiversity.

Utsira Nord overlaps to a significant degree with the Karmøyfeltet bank area, which has been identified as a particularly valuable and vulnerable area due to it being spawning grounds for Norwegian spring-spawning herring and home to large shrimp stocks. The area also functions as a retention area for drifting fish eggs, larvae and fry. This makes it an attractive area for seabirds and marine mammals. Utsira Nord's depth makes the area suitable for floating wind power installations. If wind power installations are constructed and operated in this area, they could have an impact on seabirds, fish and marine mammals alike.

Sørilige Nordsjø II overlaps somewhat with the particularly valuable and vulnerable area Tobisfelt sør, which is a habitat and spawning grounds for sandeels. The depth of this area means that it is primarily suitable for fixed technology. Sandeels are a key species in the North Sea ecosystem, and is very stationary due to its specific requirements of the seabed (course sand) that they bury themselves in. Physical encroachment could affect these seabed habitats. Sandeels can also be vulnerable to noise and vibrations, both of which will be generated during the construction and operation of wind power installations.

Sandskallen-Sørøya Nord is within the Tromsøflaket bank area, which has been defined as a particularly valuable and vulnerable area due to its rich natural diversity. In addition to fish larvae of herring, cod, haddock and other organisms, including a large and important fauna of sponges, the area is also important breeding and wintering area for seabirds, including two of Norway's five largest puffin colonies. Moreover, the area borders on LoppHAVet, which has been proposed as a marine protected area. If wind power installations are constructed and operated in this area, they could have an impact on seabirds, fish and marine mammals alike.

An area's status as particularly valuable does not preclude other activities, but signals that it is important to exercise particular caution in these areas. A concrete assessment must be conducted of how to accommodate the environmental values on which the area's designation was based, and the project-specific impact assessments will map natural values (including the seabed) to provide a sufficient knowledge base to ensure that developments are appropriately located and prevent conflict with important natural values such as sandeel and seabird habitats. It may be an option to stipulate conditions to reduce or avert conflict. The Ministry assumes that concrete assessments will be conducted as part of the processing of licence applications and in connection with the approval of detailed plans.

Military use

The northern part of Utsira Nord partly overlaps with the firing and training range END253 Utsira (Norwegian Air Force). This conflict was discussed in NVE's strategic impact assessment, and it was concluded that a realisation of wind power projects in the Utsira Nord area would not render the Norwegian Armed Forces' infrastructure less functional, and that there was therefore no reason to change the boundaries of Utsira Nord.

The Norwegian Defence Estate Agency wrote in its 2013 consultation submission in connection with the strategic impact assessment that the training range can be moved, but that it cannot be closed down until a new one has been established.

Unlike NVE, the Ministry found that offshore wind power and the Armed Forces' activities on

a training range cannot co-exist in the same area, and it will therefore not consider awarding licences in the part of Utsira Nord that overlaps with END 253.

The Ministry of Defence has initiated work to assess its training and firing ranges at sea. The possibility that the boundaries or function of END 253 could be changed, or that it could be closed down or moved as a consequence of this work, cannot be disregarded, and the Ministry will therefore uphold the boundaries of Utsira Nord as they were drawn up in the strategic impact assessment.

Shipping

Shipping will largely have to avoid areas where wind farms are established. The strategic impact assessment has emphasised avoiding areas that are important to shipping. However, all offshore wind power development could potentially cause inconvenience to shipping.

In the 2013 consultation round, the Norwegian Coastal Administration (NCA) wrote that Utsira Nord should be delimited to the east to allow room for shipping and not push it closer to Utsira. Also, the NCA was of the opinion that the area should be delimited to the south to allow room for shipping to pass into and out of the fjords and not give rise to conflict with traffic in the east-west direction. The NCA believed that a considerable increase in marine traffic in the Sandskallen-Sørøya Nord area could be expected, and that it should be delimited to the east and west in order to reduce the potential for conflict. As regards Sørliche Nordsjø II, the NCA pointed out that corridors and good passage should be ensured if the area is opened.

The Ministry referred to the fact that traffic patterns at sea are not static, and that decisions in concrete development cases must be based on the most up-to-date knowledge about current status and predicted developments available. The Ministry was also of the opinion that considerations for shipping must be dealt with in the project-specific assessments, and that considerations must be weighed against each other as part of the consideration of licence applications.

Opening of more areas

In its consultation paper, the Ministry stated that the areas being considered for opening were the three above-mentioned areas: Utsira Nord, Sandskallen-Sørøya Nord and Sørliche Nordsjø II.

The Ministry pointed out that it may become relevant to consider at a later date whether there is reason to open more areas. Proposals will be distributed for public consultation in accordance with normal procedure should this become an option. The Ministry also stated in the consultation paper that, unless it becomes clear in this consultation round or through other signals that strong arguments exist for considering other areas than the ones covered by the strategic impact assessment, the Ministry will continue to base its work on the strategic impact assessment conducted.

Financial and administrative consequences

The opening of areas and adoption of regulations to the Offshore Energy Act can be expected to give rise to licence applications for offshore renewable energy production. Case processing costs are assumed to be covered within the energy authorities' budgets and partly covered by

the case processing fee proposed in the draft regulations.

3. Public consultation

The draft regulations and the proposal to open areas were distributed for consultation during the period from 2 July to 1 November 2019. Approximately 300 consultation submissions were received.

II. Consultation input and the Ministry's assessments

1. General consultation input

Regarding offshore wind power, subsidies, goals

Norwegian Research Centre AS, Trøndelag county authority, Aust-Agder county authority, Vest-Agder county authority, I-Tech, ABB, KS Bedrift, the Confederation of Norwegian Enterprise (NHO), the Norwegian Maritime Officers' Association and the Norwegian Union of Marine Engineers take a generally positive attitude to the proposal to open areas, without going into the concrete areas.

WWF and the Norwegian Society for the Conservation of Nature are of the opinion that offshore wind power can provide new power production and contribute to reducing greenhouse gas emissions.

ABB is of the opinion that such development should partly be used for electrification of offshore petroleum installations and to supply shipping and connect to the power systems of other countries, alternatively to a larger grid in the North Sea.

The Green Warriors of Norway, Motvind Norway and local branches Motvind Vestland, Motvind Sørvest and Motvind Dalane, as well as a number of private individuals, object strongly to offshore wind power for several different reasons. The grounds given include environmental impacts such as noise, microplastics and impact on seabirds.

The Åffjord branch of the Norwegian Society for the Conservation of Nature opposes offshore wind power with reference to the consultation submissions from the Norwegian Institute for Nature Research (NINA) and the Norwegian Coastal Fishermen's Association.

The Norwegian Ornithological Society (NOF) is of the opinion that offshore wind power may be less harmful to the natural environment than onshore wind power. The organisation points out that shallow areas and areas near the coast will generate the highest level of conflict.

Sabima is of the opinion that, provided that certain conditions are met, offshore wind power could be a good way of generating renewable energy. The organisation considers floating facilities far from shore to be most promising.

Agder Energi refers to development plans in the countries around the North Sea and encourages the Norwegian authorities to participate in the discussions between these countries.

Technip FMC, Norwegian Energy Solutions, Multiconsult, the Fred. Olsen companies, I-Tech, Aker Solutions, ABB, Kværner, Equinor, the regional economic development organisation Haugaland Vekst, GCE Node, Norwegian Offshore Wind Cluster, MacGregor Norway AS, Maritimt Forum, Maritimt Forum Nord, Tekna – the Norwegian Society of Graduate Technical and Scientific Professionals, the Federation of Norwegian Industries, the Norwegian Shipowners' Association, the Norwegian Confederation of Trade Unions (LO), the Norwegian Maritime Officers' Association, the Norwegian Union of Marine Engineers, NHO,

WWF and the University of Bergen all in some way advocate establishing goals and/or support schemes for offshore wind power project development. Some of them also support an agreement on offshore wind power between the Norwegian state, the industry and employee organisations, what is known as a sector agreement, modelled on an agreement of this kind in the UK.

LO is of the opinion that tax rules must be introduced straight away to ensure that society will get its fair share of the value created.

Vestland county authority requests that offshore and onshore wind power be subject to the same tax regime.

The Norwegian Maritime Officers' Association calls for framework conditions that ensure Norwegian supplier expertise, for example through supplier programmes that stipulate requirements for Norwegian expertise, employment and Norwegian pay and working conditions. *The Norwegian Union of Marine Engineers* is of the opinion that it must be made a requirement that the use of natural resources also yields benefits in the form of jobs in Norway. They refer to the fact that there is legal freedom of action to implement Norwegian pay and working conditions and requirements to use Norwegian labour and Norwegian manufacturers, shipyards and factories.

The Norwegian Shipowners' Association proposes two different schemes: firstly, a reimbursement scheme where the tax value of costs are reimbursed annually on completion of the tax settlement, and secondly, that an offshore wind fund be established for the purpose of ensuring, through annual funding provided by the Norwegian state, that offshore wind parks receive a minimum price per kWh produced throughout the project's service life.

Energy Norway warns against the introduction of volume-based support schemes, but believes that investments should be made in research, development and demonstration.

Equinor encourages dialogue between the industry and authorities about framework conditions. *Agder Energi* is of the opinion that the development of new renewable power production must be based on signals from the market, and that support schemes should not be used.

Siemens Norge AS outlines a development of an annual production of 20–25 TWh in stages over a period of 10–12 years, connected to new onshore pumped storage power facilities in Norway, and discusses possible regulatory and other issues that could arise in light of such a project.

The Ministry's comments

Some of the consultation submissions spoke against the development of offshore wind power on principle, and against the opening of areas for offshore renewable energy production. Certain potential environmental impacts that the consultation parties deem to be so serious that wind power technology cannot be allowed offshore have also been pointed out. The Ministry is of the opinion that the concrete impact on the environment and other considerations must be clarified and considered during the licensing process.

Some of the consultation submissions proposed support schemes or that the development of offshore renewable energy should contribute to attaining goals related to employment, greenhouse gas emission cuts, technology development etc. The Ministry takes note of this input, but does not consider it central to the question of opening areas.

On the opening of areas

The Norwegian Coastal Fishermen's Association is of the opinion that certain interests must be taken into consideration even before areas are opened, and that it is not sufficient to adapt projects during the licensing process.

The Norwegian Fishermen's Association takes a critical view of the fact that input provided by the organisation in 2013 has not been discussed in the consultation paper. The Norwegian Fishermen's Association also believes that the Ministry is disregarding important guidelines issued by the Storting on co-existence between fisheries and offshore renewable energy production, that the requirements of the Instructions for official studies and reports have not been complied with, and that the Ministry has failed to comply with the Public Administration Act's provisions on the duty to provide guidance, clarify the case and provide information.

The Norwegian Association of Local and Regional Authorities (KS) opposes the opening of areas and adoption of regulations until significant changes to the system for processing wind power cases have been adopted, cf. their consultation submission to the national framework for onshore wind power.

Energy Norway proposes expanding the possibility of granting exemptions from the rule on opening of areas to apply to supplying offshore activities other than petroleum activities.

Fred. Olsen Ocean and *Fred. Olsen Renewables* are of the opinion that the State should facilitate development by making areas available with completed impact assessments and grid connection.

The Ministry's comments

The Ministry is of the opinion that the work done by the directorates to select areas, the strategic impact assessment prepared by NVE and the 2019 consultation round provide a sufficient basis for determining whether areas can be opened.

The concrete impact of individual projects will be clarified through the processing of licence applications, and only then will it be possible to assess whether a licence to establish a renewable energy generation facility can be awarded.

The Ministry is of the opinion that it will be satisfactory to open areas for applications for offshore renewable energy production regardless of proposals related to the licensing process for onshore wind power.

The principle that areas must be opened before it becomes possible to submit applications for licences for renewable energy generation facilities, and the exemptions from this principle, are laid down in the Offshore Energy Act and cannot be changed through regulations. The

Ministry takes note of input concerning the Offshore Energy Act and will consider these issues in the event that it becomes relevant to propose legislative amendment.

The knowledge base

The Norwegian Environment Agency is of the opinion that the knowledge base should be updated through the licensing process and impact assessments, particularly as regards seabirds. The agency believes that the strategic impact assessment from 2012 is becoming outdated, and recommends that the Ministry consider plans for updating the assessment or conducting a new one.

The Norwegian Institute for Nature Research (NINA) is of the opinion that the knowledge base should be updated before the area Sandskallen-Sørøya Nord is opened, while such an update can be conducted as part of the processing of licence applications for the other two areas. NINA also requests the authorities to initiate a survey of bird migration along the Norwegian coast before awarding licences for new onshore or offshore wind farms.

Energy Norway is of the opinion that the strategic impact assessment provides a sufficient basis for this process, but that subsequent processes should be based on updated assessments.

The Norwegian Fishermen's Association is of the opinion that the scientific basis is inadequate and demands that new assessments be made and another consultation round held before a decision is made on the opening of areas. The association's view is that no offshore wind power licences must be awarded until the effects of low-frequency noise from wind farms on fish have been sufficiently clarified.

The Directorate of Fisheries recommends that knowledge about fisheries be updated before any development takes place.

The Norwegian Seafood Federation is of the opinion that changes have taken place since the 2012 strategic impact assessment in that parts of the aquaculture industry have been organised to move activities further offshore and that new species are expected to be harvested in future. These changes mean that before new areas are used, new future industries' need for sea areas must be taken into consideration. The organisation refers to the fact that socioeconomic analyses can be an important tool in ensuring the best possible management of sea areas. At the same time, the Norwegian Seafood Federation points out that co-location and multiple uses of the same area could be an option in future, but that this will require a process at the overriding level.

The Norwegian Society for the Conservation of Nature is of the opinion that, in addition to research, surveys of natural values in opened areas should be carried out. The society also suggests making it a requirement that new knowledge must be obtained for each impact assessment, and that methodological requirements should also be stipulated.

Sabima is of the opinion that further surveys and updating of the strategic impact assessment must be conducted before licences for development can be awarded. *The Norwegian Ornithological Society* is of the opinion that the strategic impact assessment needs to be updated. *The University of Bergen* suggests better mapping of wind resources.

WWF proposes that the countries around the North Sea should collaborate to map the natural diversity of the North Sea and the impact of wind power on this diversity.

The Ministry's comments

The Ministry's view is that project-specific impact assessments will be the tool that ensures a sufficient basis for determining whether wind farm licences can be awarded in areas that have been opened. Updating the strategic impact assessment is not an option at this time. The Ministry otherwise refers to the discussion of the question of opening more areas.

The Ministry will not initiate or fund mapping of opened areas over and above what is funded by the players as part of impact assessments.

The Ministry refers to Norway's participation in the Norths Seas Energy Cooperation on offshore wind power, which also focuses on environmental impact.

Research

The Norwegian University of Science and Technology (NTNU) and SINTEF recommend establishing a more comprehensive research, innovation and supplier development programme.

The Institute of Marine Research proposes project-specific surveys and making follow-up surveys a requirement, and also recommends conducting detailed surveys of the seabed etc. in areas that are opened. On a general level, the institute refers to surveys of wind power plants in other countries, but it considers that local conditions indicate that similar surveys must be made of Norwegian areas.

Norwegian Research Centre AS (NORCE) recommends that the Ministry conduct impact assessments of the areas before opening them, and that research cooperation with the R&D sector is allowed for in the planning. The centre believes that measurement data and research conducted in connection with offshore wind power development must be made openly available. It also proposes building research platforms for meteorological and oceanographic instruments, in addition to biological monitoring equipment, in connection with developments.

Vest-Agder county authority requests that the State contribute to research that can help to make offshore wind power profitable.

The Ministry's comments

The Ministry refers to the fact that offshore wind power is one of the six key focus areas of Energi21, which is the authorities' advisory body for prioritisation of research funding in the field of energy. The Ministry is of the opinion that research grants must be channelled via the established schemes of the Research Council of Norway.

The Ministry agrees that further knowledge is required before deciding whether to award concrete projects a licence for development, but emphasises that such knowledge will emerge from the project-specific impact assessments. Developers are free to cooperate with research

institutions, but the Ministry will not impose on them a general obligation to do so. The Regulations dictate that impact assessments are to be distributed for consultation, and they will thus become public.

2. Consideration for other interests

Fisheries

A number of the fishing industry organisations and private individuals are of the opinion that offshore wind power establishment, both in general and within the areas proposed, will hinder fishing. It is pointed out both that areas will be unavailable to fishing vessels and that the effects of establishing offshore wind farms are not sufficiently well known. Possible effects mentioned include noise, electromagnetic fields and disturbance of sediments. The possibility that greenhouse gas emissions could increase as a result of fishing vessels having to travel longer distances to avoid wind farms was also pointed out.

The Norwegian Seafood Federation is uncertain about whether sufficient account is taken of the interests of the fishing industry and consider it important that fishing is not hindered by wind power projects.

The Directorate of Fisheries cannot envisage how commercial fishing activities could operate in a wind farm for safety reasons.

The Institute of Marine Research points out that wind farms can have both positive and negative effects on marine organisms.

The Ministry's comments

The Ministry's view is that in the licensing process, one must strive to avoid the establishment of offshore renewable power production causing inconvenience for the fishing industry. Providing information at an early stage and engaging in good dialogue are important in order to ensure a good knowledge base before the energy authorities make their decisions. Good dialogue with the fishing industry organisations is vital in this context.

The Ministry will therefore facilitate dialogue with the fishing industry organisations before adopting project-specific impact assessment programmes and before making a final decision in licence cases.

Seabirds

The Norwegian Institute for Nature Research (NINA) is of the opinion that the knowledge base for seabirds has changed since the strategic impact assessment was prepared in 2012, and points to the research programmes SEAPOP and SEATRACK. NINA believes that it would be unfortunate to open for the establishment of wind power installations in Norwegian coastal and offshore areas without integrating the new knowledge in the assessments. NINA considers that there could be a high risk of conflict with seabirds and migrating birds in the Sandskallen-Sørøya Nord area. As regards Utsira Nord and Sørliche Nordsjø II, NINA points out that its research indicates that these areas could be important to seabirds outside the breeding season.

The Norwegian Ornithological Society is of the opinion that the knowledge base concerning birds is insufficient, and that new information from the research programmes SEAPOP and SEATRACK must be included in the knowledge base.

Vestland county authority is of the opinion that the knowledge base for seabirds should be updated.

The Ministry's comments

The Ministry agrees that the knowledge about how seabirds use the specific areas to be opened should be updated before wind farm licences are awarded in these areas. The Ministry is of the opinion that such updated knowledge must be obtained as part of the impact assessment of specific projects.

Shipping

The Ministry of Transport is of the opinion that the areas that are opened for renewable energy activities should be limited out of consideration for safety at sea. It also referred to the statement of the Norwegian Coastal Administration.

The Norwegian Union of Maritime Officers, the Norwegian Shipowners' Association and Maritimt Forum consider it important that areas with significant shipping activity are avoided and that shipping is taken into account in licensing cases.

The Ministry's comments

The Ministry is of the opinion that great emphasis must be placed on considerations for safe passage at sea in concrete project designs within the areas opened. This consideration is particularly important with regard to Utsira Nord, and it will be a condition for the awarding of renewable energy production licences that the wind farm is placed where it will not have a negative impact on safety at sea.

Petroleum

The Norwegian Petroleum Directorate points out that the petroleum industry has interests in the North Sea, the Norwegian Sea and the Barents Sea. The Directorate discusses the drawbacks of wind power development. In particular, it points out that it will make exploration for petroleum resources more difficult, as well as have consequences for the possibilities of establishing petroleum infrastructure.

The Norwegian Confederation of Trade Unions (LO) assumes that areas with potential petroleum resources are surveyed before renewable energy production licences are awarded.

Aker Solutions supports the Ministry's view that a review is necessary of the regulation of co-existence of offshore wind power and petroleum activities. Equinor encourages dialogue between the authorities and the industry on co-existence with petroleum activities.

Greenstat, WWF and the Norwegian Society for the Conservation of Nature are of the opinion that renewable energy production must take precedence over petroleum in the event that they are competing for the same areas.

Fred. Olsen Ocean and *Fred. Olsen Renewables* are of the opinion that electrification of oil and gas installations, for example by introducing requirements for renewable power supply, can enable rapid testing of new technologies.

ABB, Zero Emission Resource Organisation and *Technip FMC* suggest identifying areas near oil and gas installations to ensure electrification and a transition to large-scale hydrogen production.

The Ministry's comments

The Ministry has conducted an assessment of the technical, practical and legal issues that will arise if wind farms are planned and installed in areas of interest to the petroleum industry, based on, among other things, a report by the Norwegian Petroleum Directorate (NPD).

The Ministry is of the opinion that an area being opened for renewable energy production will not in itself prevent continued petroleum exploration in the area. The NPD's report concludes that conflicts between petroleum activities and offshore wind power over areas can arise in connection with the collection of seismic data, well drilling, and development and operations. The obstacles make it less likely that petroleum exploration will take place within an established wind farm because the exploration and development costs are higher than in areas without wind farms. In combination with the long production period of wind farms (at least 20 years), this makes it important to survey an area well before deciding the location of a wind farm in order to detect and be able to take into account any petroleum resources in the area. The NPD suggests an overall survey before an area is opened for wind power and more detailed surveys before wind farm licences are awarded.

The Ministry agrees that it is important that areas are properly surveyed and will address these considerations when adopting impact assessment programmes.

The Ministry proposes setting a limit for the scale of wind power development that can be permitted in the Sørliche Nordsjø II area. The Ministry proposes that wind power licences cannot be awarded for areas where petroleum production licences have been awarded, unless it is specified in the production licence that wind power development may be permitted in the area or by agreement with the holder of the production licence.

Once the Ministry has adopted a project-specific impact assessment programme and thereby defined the project area for a wind power project, such notification is expected to be given in connection with any new petroleum production licences subsequently awarded within the same area.

Otherwise, no such notification should be given for petroleum production licences within areas opened for activities under the Offshore Energy Act. Such notifications would only create unnecessary uncertainty for petroleum activities. Since the areas opened under the Offshore Energy Act are relatively large and only a smaller part of them will be utilised, it should be possible to find suitable project areas while avoiding areas for which petroleum production licences have been awarded.

Good dialogue between holders of petroleum production licences and those involved in wind power projects is key to facilitating co-existence. This is particularly true in cases where a petroleum development licence is awarded within a wind power project area.

The Ministry considers that contact between petroleum and renewable energy interests at an early stage will be important to ensure good coordination and a good knowledge base for the Ministry.

The Ministry's assessment in this area is described in more detail in the Royal Decree adopting the Offshore Energy Regulations, dated the same date as the present Decree.

Military use

The Ministry of Defence refers to the fact that Utsira Nord partly overlaps with the Norwegian Air Force's firing and training range END253 Utsira, and considers that wind power cannot coexist with the Armed Forces' activities. The Ministry of Defence refers to ongoing work to assess the Armed Forces' firing and training ranges. A firing range that overlaps with Sandskallen-Sørøya Nord has been proposed, and there are plans to establish a military training airspace that would cover the Sørliche Nordsjø II area.

The Danish Ministry of Defence points out that parts of Sørliche Nordsjø II are in Danish airspace and that the Royal Danish Air Force has a training area there (TRA Nordsø 9). The Danish Ministry of Defence writes that wind farms established in the area will have limited impact on training activities.

The Ministry's comments

The Ministry agrees that it is probably not possible for wind power to coexist with the Norwegian Air Force's firing and training activities, and that no wind farm licence should be awarded for the part of Utsira Nord that overlaps with firing and training range END 253 for as long as the range is in use or the Ministry of Defence considers coexistence impossible.

The Ministry proposes making this a condition for opening Utsira Nord.

Wave power

The Directorate for Cultural Heritage is of the opinion that its natural conditions make Norway uniquely suited for wave power, and that a one-sided focus on wind power is unfortunate.

The Ministry's assessment

The Ministry would like to emphasise that the Offshore Energy Act is technology-neutral, although wind power is the most relevant technology for the foreseeable future.

Limitation and usage of opened areas

The Norwegian Shipowners' Association concurs with the Ministry's assessment that the areas identified should not be limited out of consideration for individual interests.

The Norwegian Fishermen's Association's regional association Fiskarlaget Nord questions

whether all of or only parts of an opened area can be developed.

The Directorate of Fisheries take a critical view of the areas being larger than necessary.

The Ministry's assessment

The Ministry has not altered the boundaries for the areas proposed. The Ministry has chosen to stipulate the conditions that particular consideration must be shown for shipping and petroleum interests in the Utsira Nord area and for petroleum interests in the Sørliche Nordsjø II area. These conditions could entail a reduction of the area available for licence applications, but it may be time-limited and lapse following more detailed surveys. Among other things, licences under the Petroleum Activities Act are awarded for a limited time, the Armed Forces' use of firing and training ranges could change, as could the extent of shipping activities. Licence applications are to be considered on the basis of the most up-to-date knowledge available following a project-specific impact assessment.

The Ministry has emphasised that the areas allow for adaptation to other interests in that the outlined scope of development will mean that a relatively small proportion of the total areas will be used.

The Ministry considers that the scope of development should be predictable for other interests. This indicates setting an upper limit to the scope of development for which licences can be awarded when opening an area. Such a limit must be objective and quantifiable, and the Ministry has therefore chosen to stipulate a ceiling for maximum installed output, measured in megawatts, for the areas that are opened.

Time of opening

The Ministry has chosen to make the opening of areas effective from the New Year on 1 January 2021.

Opening of more areas

Nordland county authority requests that the area Selvær, which formed part of the Træna fjorden-Selvær area in the Norwegian Water Resources and Energy Directorate's strategic impact assessment, be opened. The county authority also requests that larger sea areas off the coast of Nordland be opened.

Arctic Cluster Team, Oil and Gas Cluster Helgeland, Coast Center Base and NCE Aquaculture request that the areas Selvær and Træna Vest be opened.

The Norwegian Confederation of Trade Unions (LO), Technip FMC, Aker Solutions, Equinor, the Federation of Norwegian Industries, GCE Node and Norwegian Offshore Wind Cluster advocate considering new areas, for example an area for floating wind power in the southern part of the North Sea, or facilitating activities other than connection to the Norwegian onshore power grid.

Norwea is of the opinion that the method and basis for selecting areas should be reviewed after this round of openings and that, in future, an area's resource potential and possibilities for connection to foreign markets should be decisive to which areas are selected rather than

onshore grid capacity or sea depth.

WWF is of the opinion that more areas must be identified for floating wind farms, among other things in order to make it possible to locate the farms outside the radius of action of red-listed seabird species. In *WWF*'s opinion, the responsibility for selecting areas should be assigned to the Norwegian Environment Agency.

The Norwegian Shipowners' Association calls for a system that facilitates the opening of new areas on a regular basis.

ABB suggests a system whereby industry players can nominate areas in advance of impact assessments and openings.

The Ministry's assessment

Material changes have taken place in commercial activities and knowledge of the environment and, not least, in wind power technology since 2012. Therefore, the Ministry believes that the scientific basis for the 2012 Norwegian Water Resources and Energy Directorate's strategic impact assessment will soon need to be updated.

The Ministry will consider whether to select new candidate areas and conduct a new strategic impact assessment. The Ministry also notes the interests in areas off the coast of Helgeland, and will consider whether there are grounds for proposing opening such areas.

3. About the areas proposed

Utsira Nord

The joint committee for the new City of Stavanger following municipal merger (Fellesnemnda for nye Stavanger kommune), Rogaland county authority, Vestland county authority, RWE, Fred. Olsen, Agder Energi, Aker Solutions, Kværner, Equinor, Norwegian Offshore Wind Cluster, Norwea, the Norwegian Shipowners' Association, Energy Norway, the Norwegian Oil and Gas Association, the Norwegian Environment Agency, the University of Bergen, the Norwegian Society for the Conservation of Nature, WWF and Zero Emission Resource Organisation all take a positive attitude to Utsira Nord being opened.

The Norwegian Pelagic Association advises against opening Utsira Nord.

The Directorate of Fisheries pointed out that no material changes have taken place in relation to the strategic impact assessment, and that the potential for conflict with fishing interests is probably lowest in the north-eastern part of the area. The Norwegian Fishing Vessel Owners Association and the Norwegian Coastal Fishermen's Association are of the opinion that the Utsira Nord area should be moved to the northeast as proposed by the Directorate of Fisheries.

The Norwegian Coastal Administration refers to the fact that the shipping traffic density is high in and near Utsira Nord, and advises against opening the area unless its extent is reduced on the east and south sides.

The Directorate for Cultural Heritage is of the opinion that the visual impact on Utsira Lighthouse must be assessed if wind power development in the Utsira Nord area becomes an option. There is a potential for shipwreck finds in the area.

The Ministry's assessment

The Ministry has emphasised that Utsira Nord is the only one of the areas currently under consideration for opening that is particularly suitable for floating wind power. The area is also one of the best from a technical and financial perspective, and one of the areas closest to the coast.

The strategic impact assessment only covers the 15 areas selected, and not their neighbouring areas. Shifting the area to the northeast would entail opening an area for which no impact assessment has been conducted, which would be in breach of the Offshore Energy Act.

It emerges from the consultation round that this is an area with a high level of activity and different interests that will be important to give thorough consideration to in a licensing process. Impacts on fisheries, military use, transport, cultural heritage sites and natural diversity are some of the aspects that would have to be elucidated by means of project-specific impact assessments.

It is uncertain what impact wind farms would have on the Air Force's training activities in the training range END253. As long as it is uncertain whether or not the training range will be

continued, and the impact on training activities have not been sufficiently elucidated, the Ministry recommends a condition that no wind farm licence can be awarded in the part of Utsira Nord that overlaps with the training range END253 unless the Ministry of Defence either moves or closes down the training range or concludes that a wind farm will not have a material negative impact on the training activities.

There is little room for adaptation to other interests in Utsira Nord if it is not possible to use the part of the area that overlaps with the Armed Forces' firing and training range END253, and because it is necessary to consider shipping in the eastern and southern part. The Ministry is therefore of the opinion that the maximum scope of development that can be permitted in Utsira Nord is 1,500 MV, and recommends making this a condition for opening the area. It may be decided during the consideration of licence applications that not even this scope of development is advisable.

The consultation round has not yielded material new information to indicate that the Ministry should reconsider whether the area should be opened for licence applications. The Ministry recommends that the area be opened.

Sandskallen-Sørøya Nord

Hammerfest municipality, RWE, Fred. Olsen, Agder Energi, Aker Solutions, Norwea, Maritimt Forum Nord, the Norwegian Shipowners' Association, Energy Norway, the Norwegian Oil and Gas Association, the Norwegian Society for the Conservation of Nature, WWF and the Zero Emission Resource Organisation all take a positive attitude to the area being opened, although some had certain reservations.

Karlsøy municipality, Hasvik municipality, Finnmark county authority, the Sami Parliament, Equinor, the Norwegian Environment Agency, the Institute of Marine Research, the Directorate of Fisheries, the Norwegian Fishermen's Association, the Norwegian Pelagic Association, The Norwegian Fishermen's Association's regional association Fiskarlaget Nord, the regional branch of the Norwegian Fishermen's Association for Nordland county, the Norwegian Coastal Fishermen's Association, the local branch of the Norwegian Coastal Fishermen's Association for Western Finnmark and the local branch of the Norwegian Coastal Fishermen's Association for Sørøy/Loppa advise against opening Sandskallen-Sørøya Nord. The fishing industry organisations, the Green Warriors of Norway and a number of private individuals refer to the expert advice from the Directorate of Fisheries, among other things.

The Directorate of Fisheries has compiled data that shows that well over 80 vessels could be fishing in this area.

The Norwegian Fishing Vessel Owners Association points out that the landed value of the fish caught in fishing grounds 04-12 and 04-23 is NOK 200 million per year. The local branch of the Norwegian Coastal Fishermen's Association for Western Finnmark describes a decrease in activity in the coastal fishing fleet based in the municipalities near Sandskallen-Sørøya Nord.

The Norwegian Environment Agency refers to e.g. considerations for seabirds when they advise against opening the area. The Institute of Marine Research points to the fact that this

area forms part of the spawning grounds for cod and capelin.

The Norwegian Society for the Conservation of Nature points out that it may be difficult to take sufficient account of natural values and nature-based industries in the Sandskallen-Sørøya Nord area.

The Sami Parliament demands consultation with the Ministry before a possible opening of this area, and that at all stages of the licensing process be subject to a consultation obligation.

Statnett points out that grid development in Finnmark can remove bottlenecks at the local level, but not out of Finnmark, and that an increase in consumption can allow for more wind power.

The Ministry's assessment

The Ministry notes the emphasis on Sandskallen-Sørøya Nord as a fishing ground of local and regional importance. At the same time, the Ministry believes that there is a possibility that a project-specific impact assessment of a small wind power project would have concluded that a location can be found within the area that would be acceptable to the fishing interests.

In the Ministry's view, consideration for seabird migration also speaks against opening the area.

This area is not among the best from a technical and economical perspective, which indicates that this area should not be prioritised for opening. There is also little political support locally for opening the area.

Following an overall assessment, the Ministry has concluded that Sandskallen-Sørøya Nord should not be prioritised for opening at this time.

Sørilige Nordsjø II

The joint committee for the new City of Stavanger following municipal merger (Fellesnemnda for nye Stavanger kommune), Aust-Agder county authority, Rogaland county authority, RWE, Greenstat, Fred. Olsen, Agder Energi, Aker Solutions, Kværner, Equinor, AS Norske Shell, Ny Energi AS, Norwegian Offshore Wind Cluster, Norwea, the Norwegian Shipowners' Association, Energy Norway, the Norwegian Oil and Gas Association, the Norwegian Environment Agency, the University of Bergen, the Norwegian Society for the Conservation of Nature, WWF and Zero Emission Resource Organisation all take a positive attitude to Sørilige Nordsjø II being opened.

The Norwegian Pelagic Association advises against opening Sørilige Nordsjø II. *The Norwegian Fishermen's Association, the Norwegian Coastal Fishermen's Association, the Directorate of Fisheries and the Institute of Marine Research* recommend that the size of the area be reduced, among other things to avoid sandeel grounds.

The Directorate of Fisheries also points out that the scope of foreign fishing activities was not considered in the strategic impact assessment. Reduced possibilities for the foreign fishing fleet in Norwegian waters could have adverse consequences for the Norwegian fishing fleet in

the form of reduced access to other countries' sea areas.

The Norwegian Petroleum Directorate points out that Sørilige Nordsjø II is located within the pre-defined area of the North Sea and that large parts of the area have been repeatedly covered by exploration licences.

The Directorate for Cultural Heritage is of the opinion that there is a high potential for finding both shipwrecks and early Stone Age cultural heritage sites in Sørilige Nordsjø II.

Statnett is of the opinion that the Ministry should consider whether the area could accommodate the development of more than 1–2 GW, among other things because a development would require the use of direct current technology.

The Danish Ministry of Defence points out that parts of Sørilige Nordsjø II are in Danish airspace and that the Royal Danish Air Force has a training area there (TRA Nordsø 9). The Danish Ministry of Defence writes that wind farms established in the area will have limited impact on training activities.

The Ministry's assessments

Sørilige Nordsjø II is particularly well suited for wind power based on technical and economic parameters. The Ministry notes that there is considerable interest in Sørilige Nordsjø II among industry players. The area can accommodate large-scale development, which could potentially take place without public funding.

Several of the consultation parties point out that wind farm projects can be developed in the area that can deliver energy to other countries or to a potential future grid in the North Sea.

The Ministry makes it clear that licences under Section 3-1 and connection of power must be in compliance with international law and the conditions stipulated in the Offshore Energy Act for such delivery.

The Norwegian Petroleum Directorate, in consultation with the Norwegian Water Resources and Energy Directorate and the Petroleum Safety Authority Norway, has assessed the practical impact that the establishment of wind farms will have on petroleum activities. In this assessment, the Norwegian Petroleum Directorate points out that conflicts between petroleum activities and offshore wind power over areas can arise in connection with the collection of seismic data, well drilling, and development and operations, and that it will therefore be important to find solutions that take account of the management of both industries. The Ministry proposes conditions out of consideration for petroleum activities.

The Ministry has taken note of input to allow developments larger than 2 GW in Sørilige Nordsjø II. The Ministry also concludes that a 2 GW development will only require 10% of the Sørilige Nordsjø II area. The Ministry considers it advisable to stipulate a limit for development in the area of 3 GW without the degree of utilisation being higher than for other areas that have been assessed.

The Ministry notes that parts of the area overlap with Danish airspace and a Danish Defence training area, but that the Danish Ministry of Defence considers the probability that a potential

development will have a negative impact on their activities to be low. In accordance with the requirements of international law, the Danish authorities shall be notified by the appropriate authorities at an early stage of any licensing processes.

There are important environmental values in the area, and the Ministry assumes that knowledge about seabirds and marine organisms, among other things, will be updated through project-specific impact assessments.

The Ministry recommends that Sørlige Nordsjø II be opened.

4. Conclusion

The Ministry recommends that the areas Utsira Nord and Sørlige Nordsjø II be opened for applications for licences for offshore renewable energy production. The Ministry advises against opening Sandskallen-Sørøya Nord at the present time.

The Ministry of Petroleum and Energy

recommends:

that the areas Utsira Nord and Sørliche Nordsjø II be opened for processing of applications for licences for renewable energy generation facilities with effect from 1 January 2021 in accordance with the enclosed proposal.

Appendix

Fixing of boundaries and conditions for the processing of applications for renewable energy generation facilities in areas opened pursuant to the Offshore Energy Act. Coordinates are given in geodetic datum WGS 84.

I. Sørilige Nordsjø II

Applications will be accepted for licences for renewable energy generation facilities within the area defined by the following five points:

4° 20' 48" E, 56° 49' 24" N

5° 10' 05" E, 57° 05' 36" N

5° 29' 51" E, 56° 44' 17" N

5° 02' 01" E, 56° 35' 30" N

4° 38' 29" E, 56° 29' 02" N

Special conditions for Sørilige Nordsjø II

- a. Licences cannot be awarded in areas where petroleum production licences have been awarded, unless this is specified in the production licence or by agreement with the holder of the production licence.
- b. In connection with activity in particularly valuable and vulnerable areas, conditions must be expected to prevent harm to particularly valuable and vulnerable environmental values.
- c. The maximum scope of development for which licences can be awarded is 3,000 MW.

II. Utsira Nord

Applications will be accepted for licences for renewable energy generation facilities within the area defined by the following four points:

4° 16' 09" E, 59° 26' 53" N

4° 40' 25" E, 59° 28' 56" N

4° 24' 27" E, 59° 04' 10" N

4° 48' 44" E, 59° 06' 18" N

Special conditions for Utsira Nord

- d. No wind farm licences shall be awarded within the Norwegian Armed Forces' firing and training range END253 unless the Ministry of Defence consents to a licence being awarded.
- e. No licences shall be awarded that might have a negative impact on safety at sea, and weight shall be given to the assessments of the Norwegian Coastal Administration.
- f. In connection with activity in particularly valuable and vulnerable areas, conditions must be expected to prevent harm to particularly valuable and vulnerable environmental values.
- g. The maximum scope of development for which licences can be awarded is 1,500 MW.