



ASSESSING THE BALANCE BETWEEN
NATURE AND PEOPLE IN EUROPEAN SEAS:

MARITIME SPATIAL PLANNING IN THE NORTH SEA

Written by the WWF European Policy Office in partnership with WWF-Belgium, WWF-Denmark, WWF-France, WWF-Germany, WWF-Netherlands and WWF-Sweden, and in cooperation with the North Sea Foundation for the assessment of the Netherlands.

The WWF European Policy Office wishes to thank colleagues from across the WWF EU network for their contributions to this report. For more detailed analysis, background information on the methodology, as well as further research and results on the topics explored in this report, please consult the Technical Annex available at wwf.eu.

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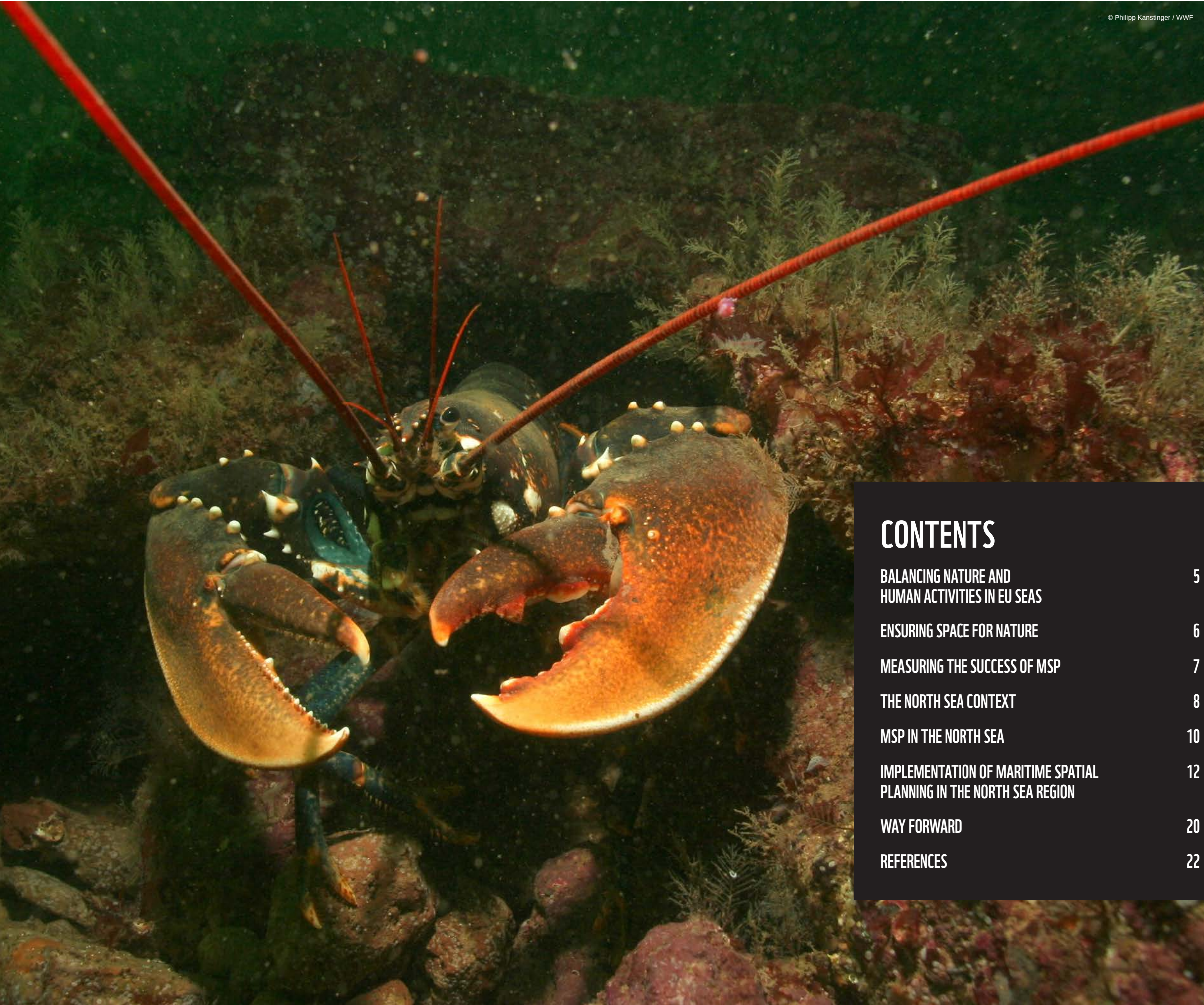
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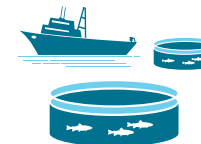
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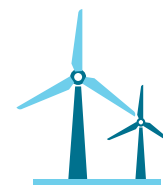
BALANCING NATURE AND HUMAN ACTIVITIES IN EU SEAS



THE EU IS THE SIXTH-LARGEST PRODUCER OF FISHERY AND AQUACULTURE PRODUCTS

Europe's marine waters are some of the busiest and most intensively exploited on Earth. The EU is the sixth-largest producer of fishery and aquaculture products, and nearly 80% of global shipping (by volume) and over 90% of installed offshore wind capacity occurs in EU seas.¹

These and other maritime sectors, such as coastal tourism, oil and gas, and shipbuilding, to name a few, have enormous impacts on EU economies and marine species. Striking the balance between sustainable human activities and healthy ecosystems is vital to alleviate the impacts of climate change via carbon storage and renewable energy. By leaving space for nature to recover, the EU can be a global champion to fight biodiversity loss and support food security for the billions of people whose seafood is connected to European waters.



OVER 90% OF INSTALLED OFFSHORE WIND CAPACITY OCCURS IN EU SEAS

Among numerous European policies that aim to secure a sustainable balance for marine spaces and resources is the Maritime Spatial Planning Directive (MSPD, 2014/89/EU).² The MSPD was developed to provide an integrated planning and adaptive approach to how the EU and its Member States (MS) manage human-led activities in their waters. **Maritime Spatial Planning (MSP)** is a future-oriented process that considers all economic sectors and ecological factors related to a marine area and allocates space, both geographically and temporally, to different activities and people whose livelihoods are tied to our seas for the purpose of ensuring a long-term sustainable balance between people and nature.

The MSPD set 31 March 2021 as the deadline for MS to present their maritime spatial plans to the European Commission. The objective of these plans is to detail a nation's strategies for the sustainable management of their marine areas and resources. While the MSPD initiated the much-needed conditions and means to support public policy for maritime planning at the national, regional and EU levels, its absence of clear definitions for key concepts of MSP and guidance on steps to follow for establishing national plans has resulted in a disjointed seascape of how MS seek to implement the MSPD, jeopardising the objectives for safeguarding a sustainable balance between nature and human activities across the EU.

A crucial manifestation of these gaps in the MSPD came when only six of the EU's twenty-two coastal countries (Belgium, Denmark, the Netherlands, Finland, Latvia and Portugal) met the March 2021 deadline,³ despite some MS having some form of maritime planning in place. This meant that, officially, less than 38% of EU waters had a tentative, coherent, sustainable and forward-looking plan in place for the various maritime sectors involved. Between March and the end of 2021, however, several other MS published their plans, including the remaining North Sea nations. The maritime spatial plans of the North Sea MS, namely Belgium, Denmark, France's plan for the English Channel, the Netherlands and Sweden are the focus of this analysis.

ENSURING SPACE FOR NATURE

Holistic and integrated approaches to MSP are necessary to secure a sustainable blue economy, address the levels of environmental degradation in our seas and support the development of impact assessment tools whose scope is wide enough to consider complex maritime seascapes against the backdrop of the ecosystems within which they exist.



THE EU AND ITS MEMBER STATES ARE AIMING TO PROTECT AT LEAST 30% OF MARINE AND COASTAL AREAS BY 2030

It is in this vein that WWF advocates for an **ecosystem-based approach (EBA)** to MSP,⁴ which views maritime spaces as integrated systems that provide various resources and services to both people and the planet, and acknowledges that ecosystems have a limited carrying capacity to remain healthy against human pressures. **An EBA to MSP can transform how sea spaces are accessed and managed.** It does so by increasing national and regional abilities to integrate and adapt to multisectoral changes, thus supporting sustainable economic benefits within oceanic boundaries.

For example, the effective management of Marine Protected Areas (MPAs) safeguards particularly sensitive habitats, species and/or ecological processes, reduces or eliminates human pressures on marine ecosystems, and supports wider sea basin and ocean health; this, in turn, delivers direct benefits to industries like fisheries and tourism, while boosting sequestration of carbon in marine life and in the seabed. Unfortunately, this effective management is often absent in how MS manage their MPAs: many lack implemented management and restoration plans or remain without action for conservation and/or active nature restoration to deliver actual protection, while continuing to allow environmentally-harmful activities to take place. However, as part of commitments to the UN 2030 Agenda and the EU Biodiversity Strategy, the EU and its Member States are aiming to protect at least 30% of marine and coastal areas by 2030, with 10% strictly protected (i.e. where human visitation, activities and impacts are strictly controlled and limited).⁵

As a planning tool to support these objectives, an EBA to MSP helps MS better balance the MSPD's ecological and socio-economic objectives, thus delivering on EU policies that put nature at the forefront of economic recovery from Covid-19, including NextGenerationEU.⁶

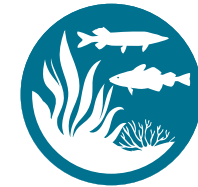
Furthermore, an EBA to MSP helps achieve the sustainable management of ecosystem goods and services, and maintains ecosystem integrity in the face of growing maritime sectors, such as offshore renewable energy. As part of achieving climate neutrality by 2040 as per the European Green Deal, the European Commission is planning to increase offshore renewable energy capacity by 500% and 2500% by 2030 and 2050, respectively, in comparison to 2020 levels.⁷ However, such tremendous growth depends on finding suitable space and compatibility with multi-sector usage in waters that are already crowded with other maritime activities. One solution lies in reappropriating sea areas currently designated for fossil fuels - including gas - as these activities must be completely phased out and replaced by renewable energy to comply with the 2040 climate neutrality targets. Moreover, any infrastructure development must be considered within the broader context of degrading marine health due to overexploitation of resources, pollution, acidification and habitat destruction, to name a few causes. Failure to adopt an EBA would put offshore renewable energy developments at risk of further damaging marine ecosystems and thus exacerbating the climate crisis, despite being intended as a solution to help tackle this issue.



EFFECTIVE MANAGEMENT OF MPAs DELIVERS DIRECT BENEFITS TO INDUSTRIES LIKE FISHERIES AND TOURISM

MEASURING THE SUCCESS OF MSP

Since the establishment of the MSPD, WWF has been working with MS to ensure that the Directive's implementation aligns with an EBA. A core element of this work has been the translation of the MSPD's requirements for MSP into 33 indicators that, when all achieved, would successfully deliver an EBA to MSP. These indicators fall under four categories, each assessing a key domain of sound MSP in national maritime spatial plans:



INCLUSION OF NATURE

The plan accounts for integrating marine protection, limiting the expansion of at-sea activities, and considers the cumulative effects of human activities on the carrying capacity of marine ecosystems as essential components of securing a sustainable blue economy



SOCIO-ECONOMIC CONSIDERATIONS

The plan takes diverse at-sea human activities and socio-economic factors into consideration, including the Principles for a Sustainable Blue Economy⁸



GOOD OCEAN GOVERNANCE

The plan aligns with other EU policies and designates competent authorities to manage and enforce a high-standard EBA to MSP



COMPREHENSIVENESS OF THE COMPLETE MSP PROCESS

The MSP process is based on the robust management of all maritime activities, including transboundary cooperation between national authorities for long-term sustainability, as well as an adaptive approach to monitoring and future planning

METHODOLOGY

The analysis presented in this report is based on data compiled by the WWF European Policy Office in partnership with WWF-Belgium, WWF-Denmark, WWF-France, WWF-Germany, WWF-Sweden and the North Sea Foundation, the latter of which assessed the MSP of the Netherlands. The data used was up to date at the time of analysis in July 2022 and was gathered from the nationally-adopted maritime spatial plans, which are available on the European Commission's [European MSP Platform](#) and official government digital portals. Detailed scores for each EU country assessed are available in the Technical Annex that accompanies this report.

In the Netherlands, the MSP plan 'The North Sea Program 2022-2027', including the annex Marine Strategy Part 3 (MSFD program of measures) is an integral part of the National Water Program (NWP) 2022-2027. While some aspects to the MSP scoring fall under different policy documents which may have led to lower scoring, WWF believes a truly successful EBA to MSP follows an integrated policy approach that supports the implementation of other EU Directives (e.g. the Birds and Habitats Directives) and commitments (e.g. Nature Restoration Law), which not only impact how space is allocated at sea, but are fundamental to secure a sustainable blue economy. As such, WWF is advocating for improved policy alignment and coherence between the different maritime processes in the Netherlands.

THE NORTH SEA CONTEXT

The North Sea is simultaneously one of the most biologically productive seas⁹ and one of the most disturbed marine areas in the world.¹⁰

Bordered by six MS (Belgium, Denmark, France, Germany, the Netherlands and Sweden), and two non-EU countries (Norway and the United Kingdom), approximately 184 million people reside in the North Sea's catchment areas. A wide variety of habitats, including estuaries, fjords, mudflats, sandbanks and rocky bottoms sustain diverse marine ecosystems including cold-water reefs, kelp forests and seagrass meadows. These are inhabited by a mosaic of species including approximately 230 fish species, 31 seabird species, 16 whale species and three seal species.⁹

In 2019, while it was estimated that 22% of North Sea waters were designated as MPAs, fewer than half of these areas (47%) had management plans for implementing and monitoring protection. Further, there were clear gaps in protection, particularly with respect to seabed habitats and species in deeper and/or offshore areas.¹¹

As a result of being surrounded by some of the largest world economies, the North Sea has become one of the most disturbed and traversed seas in the world. Multiple and overlapping maritime activities - including fisheries, aquaculture, shipping, oil and gas extraction, wind energy development, sand and gravel extraction, harbours and coastal development - compete for limited marine space and resources, from the surface to the seafloor, putting enormous pressure on marine ecosystems. Few areas of the seabed remain in their natural state,¹² compromising the very resources on which these industries depend. Its coast is the site of three of the world's largest ports, Rotterdam, Antwerp and Hamburg.

Evidence from the Netherlands and Belgium further uncover the extent to which North Sea ecosystems are unhealthy.¹³ For example, intensive trawling, which occurs at least once a year in every square metre of the sea, jeopardises the populations of commercial fish species who rely on the seabed for nutrition.¹³ Additionally, the concentration of marine litter and pollutants in assessed Belgian areas, such as nutrients from agriculture and sewage, exceeds the quality standards established by the MFSD to secure healthy seas. These high levels of contamination result in eutrophication (excessive nutrient concentrations in water, potentially leading to algal blooms and oxygen deficiency), which can cause dead zones at sea where no organism can survive.



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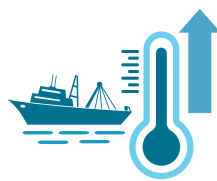
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MSP IN THE NORTH SEA

The North Sea region has partly succeeded in applying an EBA to MSP, achieving a 45% regional average. Among all four categories, “Inclusion of nature” and the “Comprehensiveness of the complete MSP process” were the lowest (38%) and highest scoring (54%), respectively.



CLIMATE CHANGE-RELATED WARMING OF THE SEA BASIN WILL MOST LIKELY AFFECT THE DISPERSION OF COMMERCIAL-IMPORTANT FISH SPECIES



AS MSP IS A LONG AND COMPLEX PROCESS, TIME IS NOT ON NATURE'S SIDE WHEN IT COMES TO MSP AND NATURE PROTECTION

While Sweden has the highest scores across all categories, its exclusive economic zone (EEZ) occupies only a small area in the Kattegat/ Skagerrak region of the North Sea. Sweden's scores are therefore a stronger reflection of its MSP in the Baltic Sea and the influence of its MSP in the North Sea should be weighed accordingly, particularly in the first two categories where it has a notably strong performance.

The lowest score across all MS was for the indicator under “Good Ocean Governance” assessing whether temporal and spatial uncertainties of climate change were addressed in the national plans, with a regional average score of just 8%. Climate change-related warming of the sea basin will most likely affect the dispersion of commercially-important fish species and increase existing eutrophication effects, including low oxygen concentrations that lead to dead zones. The oversight of this reality in the national plans could jeopardise the future of important sectors such as fisheries, which were mapped in only three of the six MS – France, Germany and Sweden.

Positively, all MS designated enough space to fulfil the EU's climate-neutrality commitments for 2030 (i.e. space for offshore renewable energy development) and are now looking into ways of expanding these areas further. The North Sea Agreement in the Netherlands also provides one of the best examples for how to develop offshore renewable energy in EU seas, if executed to plan. This is a unique accord between the national government and stakeholders on how the Dutch

North Sea could be sustainably managed until 2030, and possibly beyond.

It's alarming, however, to see no country delivering on all the goals of the EU Biodiversity Strategy at the time of this assessment. This includes failure by all MS to designate adequate and effective MPAs covering at least 30% of national waters, when the deadline to achieve this level of protection is eight years away. As MSP is a long and complex process which delivers a national plan that usually stays in place for at least six years, time is not on nature's side when it comes to MSP and nature protection. The climate and biodiversity crises are intertwined and need to be jointly addressed, and effectively managed MPAs are essential to increase the ocean's resilience against human pressures and climate shocks.

With four of the six MS working on updating their national maritime spatial plans at the time of this assessment, it's crucial that they consider the findings and recommendations presented in this report, with particular focus on the need for further investment in nature and vulnerable communities to restore the North Sea's health. To this extent, developing a dedicated working group on an EBA to MSP under OSPAR would ensure that neighbouring MS and non-EU countries jointly align in their commitments to address the climate and biodiversity crises, and safeguard maritime livelihoods for generations to come. This would also facilitate the inclusion of OSPAR red-listed species and habitats in national protection planning.

TABLE 1: Average Member State score for each Maritime Spatial Planning assessment category

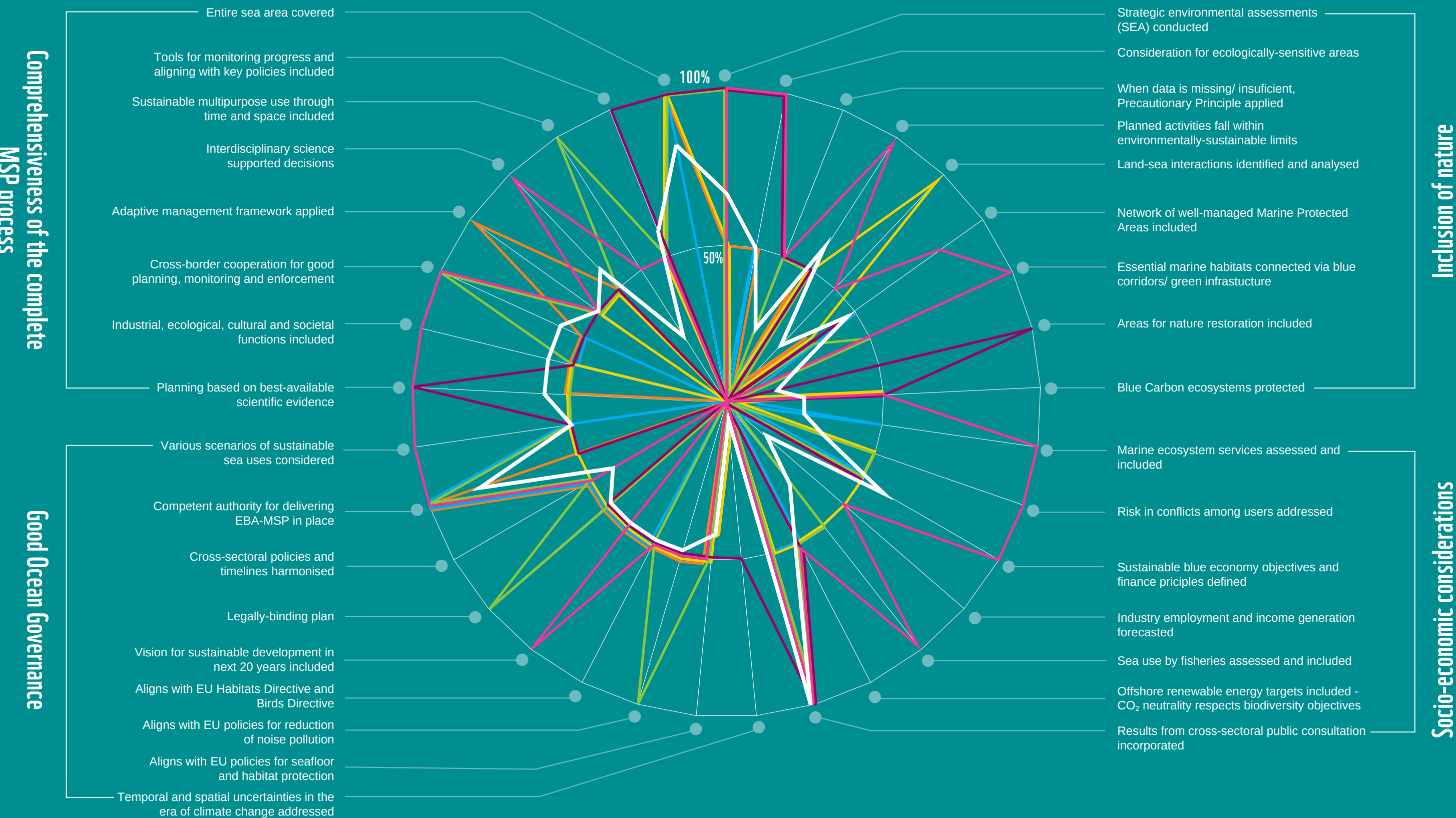
For each Member State, the worst and best scores for each category are highlighted in red and green, respectively. A high percentage score denotes a positive performance, while a score below 50% denotes a negative performance.

SCORE IN % ● 0-10 ● 11-20 ● 21-30 ● 31-40 ● 41-50 ● 51-60 ● 61-70 ● 71-80 ● 81-90 ● 91-100					
CATEGORY AVERAGE	INCLUSION OF NATURE	SOCIO-ECONOMIC INDICATORS	GOOD OCEAN GOVERNANCE	COMPREHENSIVENESS OF THE COMPLETE MSP PROCESS	
North Sea Average	38%	43%	47%	54%	
Belgium	20.4%	28.6%	44.4%	56.3%	
Denmark	16.7%	28.6%	38.9%	37.5%	
France	31.5%	42.9%	44.4%	43.8%	
Germany	31.5%	42.9%	55.6%	68.6%	
Netherlands	55.6%	28.6%	44.4%	62.5%	
Sweden	70%	86%	56%	54%	

NB: The indicators in each assessment category are included in Figure 1 on page 12. The North Sea regional score corresponds to the average of all Member States' scores. For the scores, “100%” corresponds to the complete achievement of indicator goals in that category, “50%” represents a partial achievement, and “0%” corresponds to zero achievements.

Implementation of Maritime Spatial Planning in the North Sea region

Key: — North Sea average — Belgium — Denmark — France — Germany — Netherlands — Sweden



NB: The North Sea regional score corresponds to the average of all Member States' scores. For the scores, "100%" corresponds to the complete achievement of indicator goals in that category, "50%" represents a partial achievement, and "0%" corresponds to zero achievements.



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Denmark's MSP: back to the drawing board

In March 2021, Denmark published its first maritime spatial plan and a six-month period of public consultation to review it commenced. At the same time, proposals for new MPAs (including strictly-protected areas, where direct physical impacts would be prohibited) entered a 12-week public consultation process.

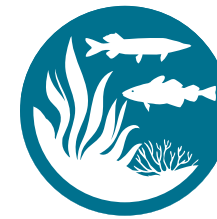
Both the national plan and the MPAs were very heavily criticised by a wide range of stakeholders including NGOs, industry, coastal municipalities and various universities. The main arguments included critical shortcomings regarding the use of an EBA, inadequate assessment of cumulative impacts to nature, lack of inclusion of ecosystem services and lack of stakeholder engagement. Many of these issues were also highlighted in WWF's assessment of MSP in the Baltic.⁷ The Danish national plan included a proposal to designate 4.1% of the marine area to be strictly-protected and claimed that the target to protect 30% of marine and coastal areas had been achieved. Critics, however, claimed that the 4.1% was insufficient to support nature recovery and protection, that site selection was based on poor data and that proposed sites were deliberately placed in areas that are unattractive for commercial activities. In addition, the claim that 30% of the marine area was covered by MPAs was contested due to the sites consisting mainly of very large bird and/or marine mammal protection areas, whose scope of protection does not include measures for the highly-disturbed Danish seafloor.

In response to this massive criticism, in December 2021, the government announced that the submitted maritime spatial plan would, for the first time, be opened for broad political negotiations among all parties in Parliament in order to "ensure an ambitious and sustainable direction for the Danish marine space, including a stronger focus on protection of nature".¹⁴

Another element of the December announcement was to establish a large, trawl-free area in the Danish Belt Sea to aid the ailing cod population. Further, the government made direct reference to the benefits for fish populations and marine habitats in the case of the long-term closure of Øresund - the strait which forms the Danish-Swedish border - to all trawl fisheries. The proposed closure is primarily due to the high-density of shipping traffic in this area and bottom trawling representing a high risk to the sector; however, it has signalled a potential change in the approach to maritime management, shifting focus away from only considering commercially-valuable fish species to including recovery of the habitats that underpin the health of fish populations.

In the wake of the war in Ukraine, Europe has committed to radically accelerate its clean energy transition and decrease its reliance on Russian fossil fuels. As part of EU efforts in this vein, in late April 2022, the Danish minority government announced¹⁵ that its previous national maritime spatial plan would be discarded altogether and a new one developed. In it, the area allocated for offshore renewable energy would be doubled with the goal of allocating 30% of the Danish marine area to help achieve EU renewable energy targets.¹⁶ The new plan is also expected to focus more on nature protection, one of the biggest shortcomings pointed out by civil society in the previous plan.

It is, therefore, not possible to evaluate the quality of a final Danish MSP at the time of this writing (August 2022) and the assessment presented in this report has examined the existing national plan, which will remain in effect until the new one is agreed. WWF-Denmark will closely follow the negotiations, contributing whenever and however possible to achieve ecosystem-based MSP that effectively addresses the current biodiversity crisis, encompasses the EU Biodiversity Strategy and integrates best available scientific knowledge about the ecosystem and its dynamics.



INCLUSION OF NATURE

The indicators in this category reflect formal requirements of the MSPD, measure marine nature conservation, consider approaches for re-establishing ocean resilience and assess whether appropriate Strategic Environmental Assessments were conducted in line with measures based on the mitigation hierarchy (avoid, compensate, restore).

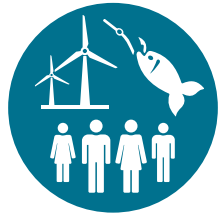
Overall, the North Sea region scores poorly on nature protection, with a regional average of 38%. Denmark is the worst-performing country in both of WWF's assessments of MSP in the North Sea and Baltic Sea.¹⁷

The indicators with the lowest scores include the use of the Precautionary Principle in the absence of data (25%), identification and analysis of land-sea interactions (25%), identification of blue corridors (25%) and protection of blue carbon ecosystems (25%). Even though science is still catching up on understanding the potential of marine ecosystems to sequester and store carbon dioxide from the atmosphere, without a careful approach to maritime planning to counterbalance the current absence of data on this topic, policymakers risk jeopardising the contribution of nature-based solutions to mitigating climate change.¹⁸ Additionally, no nation in the region currently fulfils the EU Biodiversity Strategy target to adequately protect at least 30% of their marine areas, which is essential to simultaneously address the climate and biodiversity crises.

France is one of the few MS in the EU that took on the challenge of planning its maritime activities in line with the requirements of the EU Marine Strategy Framework Directive (MSFD) to minimise human pressures on marine ecosystems with the goal of improving their overall health. The resulting national plan considers how coastal activities, such as beach tourism and agriculture, impact marine environments, and includes mitigation measures in light of those facts; thus, France is the only country to score 100% on this indicator. Nonetheless, France's commitment did not translate into actions to address the findings of MSFD assessments in the region. This includes the omission of appropriate mapping of sensitive ecological areas and failure to establish management plans for damaged ecosystems that require urgent restoration.

Regarding nature restoration, the Netherlands was the only North Sea nation to explicitly designate areas for restoration activities (e.g. 100 square kilometres of flat oyster reef restoration within an MPA), however concrete steps towards achieving this target have not yet been laid out. The poor regional result on nature restoration resulting from the performances of the other MS for this indicator highlights the importance of ensuring that the forthcoming EU Nature Restoration Law, whose proposal by the European Commission is currently under revision by the European Parliament and Council of the EU, includes binding targets for marine restoration and will hold countries accountable to address the health of marine ecosystems in their MSP.

Belgium and Germany, which are countries with long MSP traditions, failed to assure connectivity between their MPAs (scoring 0% for this indicator). MPA connectivity is essential to ensure nearby human activities do not dilute conservation efforts, as it allows marine wildlife to successfully navigate to other protected sites. Belgium also failed to apply the Precautionary Principle when planning marine areas for different maritime sectors. For example, the current plan allows offshore wind farms to be expanded into MPAs that were being considered to support the 10% strict-protection target of the EU Biodiversity Strategy. Worryingly, Germany appears to be closely following Belgium's example, having published plans¹⁹ to build offshore wind farms in the Dogger Bank, which includes Natura 2000 sites protected under the Habitats Directive.²⁰ Building such large infrastructure contradicts the conservation efforts associated with MPAs, which focus on reducing human pressures and improving ecosystemic resilience to climate change.



SOCIO-ECONOMIC CONSIDERATIONS

Socio-economic considerations were assessed by measuring how different maritime activities and ecosystem services were translated into a national plan's spatial measures. Additionally, the indicators score the plan's ability to address conflicting sector requirements, stakeholder inclusiveness and various social and economic scenarios affecting the state of the sea.

This category is the second worst scoring one in the North Sea (43%), immediately after “Inclusion of nature”. It is both the category in which the difference between the highest and lowest scoring MS is most stark, and the category in which most MS have the same low score (Belgium, Netherlands and Denmark all score 28.6%). The low scores reflect that EU countries, whose economies heavily depend on the North Sea, were unsuccessful in considering all industries and stakeholders in their national plans, both in terms of allocating space to different maritime sectors and in preparing a forward-looking vision that steers those sectors towards more sustainable models that include circular approaches to production and improved long-term job security.

All North Sea MS performed well on stakeholder engagement, with four of the six scoring 100% and the other two scoring 50%. Five nations scored 50% in the inclusion of clear economic objectives, while Sweden scored 100%, with a focus on sustainable development and aligning with the Sustainable Blue Economy Finance Principles. This means that, while measures for delivering a long-term vision contributing to the EU Green Deal have been established, these are neither comprehensive nor the result of transboundary cooperation, which is necessary to deliver particular goals such as increasing energy production and MPA connectivity.

Further, numerous maritime activities were inadequately reflected and accounted for in national maritime spatial plans. For example, Belgium, Denmark, Germany and the Netherlands all failed to consider how income and labour would change as new maritime sectors (e.g. offshore renewable energy) grow and/or others are decommissioned (e.g. oil and gas). The MS that did not consider how

employment would change over time are also the ones who failed to designate exclusive fishing areas that align with the requirements stipulated in the EU Common Fisheries Policy and MSFD. As offshore wind farms are developed in sites which were previously occupied by fisheries (see case study on page 17), additional considerations should be taken to ensure that offshore wind energy development does not jeopardise the wellbeing of coastal communities that directly depend on marine resources.¹³

The lack of spatial measures to support the implementation and objectives of the EU Common Fisheries Policy (CFP) in national plans is a particularly striking oversight by MS. For instance, low-impact fishing could be incentivised by designating areas only accessible to low-impact fishers. Improving how fisheries management is reflected in national MSP processes would support coherence between the MSPD, CFP and other key EU environmental legislation, such as the upcoming EU Nature Restoration Law, securing win-wins for both nature and people.

Finally, all countries successfully designated space for offshore renewable energy development in line with EU wind and energy targets in place before March 2021, the MSPD deadline for all MS to submit their national plans to the European Commission. Since then, greater awareness of the need for energy security and the accelerated shift to renewables in the EU has made reviewing spatial designations for energy, including at sea, a priority to ensure EU ambitions for climate neutrality by 2040 can be achieved. However, WWF advocates that accelerating deployment of offshore renewable energy infrastructure must be done with due consideration for the health of marine ecosystems. The North Sea Agreement, explored on the next page, is an excellent example of how this can be achieved.



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Balancing nature, food and energy in the Dutch North Sea

The North Sea is currently going through three interwoven nature, food and energy transitions. On one hand, the North Sea is expected to accommodate the largest share of offshore wind generation in the EU,²¹ which is essential to achieve climate-neutrality by 2050. On the other hand, increasing pressure on marine ecosystems with infrastructure developments like offshore wind energy will make it more difficult to restore nature and achieve good environmental status as per the EU Biodiversity Strategy and the MSFD, respectively.

When it comes to managing conflicts between maritime sectors, steps taken by NGOs, industry and government in the Netherlands as part of the North Sea Agreement (NSA) - which addresses offshore renewable energy, fisheries and marine protection - serve as positive examples upon which other MS can build. For instance, as part of Dutch commitments to maritime sustainability, good collaboration between stakeholders (including the fishing sector) has resulted in areas being designated and timelines established to reduce bottom-contacting fisheries by 15% by 2030. Other NSA elements include raised ambitions for nature inclusiveness within sectoral developments, such as identifying and implementing best-available techniques and best environmental practices. Crucially, the Dutch government has also agreed that no wind farms will be placed within either Natura 2000 or MSFD areas, i.e. areas where the negative impacts of human activities already require addressing.

Also part of the NSA is the establishment of an overarching programme for increased ecological monitoring and research. The aim is to provide scientific information to the NSA governing board to ensure that the evolution of maritime activities in the North Sea remain within the carrying capacity of its ecosystems.

These approaches could be replicated by other MS in the North Sea as well as by other MS with large maritime areas, such as Portugal and Spain, to ensure transboundary harmony across sea basins.

However, another area of the Agreement, focused on regulating fisheries within MPAs and offshore wind sites, faces opposition from fishing stakeholders which has resulted in NSA deadlines not being met. This emphasises the importance of top-down processes (e.g. European Commission criteria and guidance for designating protected areas) to align with bottom-up ambitions (e.g. MSFD requirements to achieve good environmental status being applied by MS).



GOOD OCEAN GOVERNANCE

Good Ocean Governance seeks to understand if a competent authority is in place to deliver legally-binding and forward-looking MSP, and how a national plan contributes to the fulfilment of EU policies, including the objectives of the MSFD for good environmental status of the sea and the 2030 Biodiversity Strategy targets. This category also takes into consideration how the MSPD interacts with other important national and regional legislation, and includes specific goals for policy integration.

This is the category in which MS scored most similarly across all indicators. Albeit imperfectly, this reflects that MS did strive to align sectoral and national regulations with EU environmental legislation. Achieving this harmony is crucial to delivering on the EU's environmental goals, as achieving good environmental status of the EU's marine waters is urgently needed to support ecosystem and community abilities to adapt to climate change. France's focus on implementing the MSFD and the Netherlands' commitment to protecting Natura 2000 sites under the Birds and Habitats Directives from further economic activities are two positive examples of how MSP can align with EU environmental policies.

Conversely, this is also the category with the lowest scoring indicator out of all 33 assessed, with the region scoring a mere 8% average for its assessment of climate change-related uncertainties. This is an alarming outcome, both for the North Sea and wider marine ecosystems with which it connects, as research shows that climate change will likely lead to the continued decline of important marine ecosystems that cannot physically adapt to warmer sea temperatures, and the increased migration of cold-water fish.²² Therefore, keeping space free for adaptation to climate change is essential to minimise MS' exposure to climate-related risks such as extreme weather events and income losses in communities whose livelihoods are directly tied to the sea.



THE COMPREHENSIVENESS OF THE COMPLETE MSP PROCESS

The comprehensiveness of MSP relates to the completeness of data used, interdisciplinary science to support decisions, cross-border cooperation, tools to measure progress and the extent of sea area covered in establishing each national plan.

MS performed the best across all indicators of this category, achieving a 54% regional average, which reflects a science-based and adaptive approach to their planning – central pillars of an EBA.

Encouragingly, all MS used the best-available science as a foundation for their MSP and included a set of concrete indicators to measure how well they performed in achieving their different goals compared to the status-quo established at the beginning of the process. However, it is noteworthy that not all countries favour using models such as those estimating the carrying capacity of ecosystems to accommodate human pressures in a specific site. This

may point to the need to reconsider how cultures perceive the act of planning maritime activities differently in future assessments.

Denmark was the only country that didn't make explicit provisions for updating its MSP in response to identified changes in the marine environment or new information about how human activities are changing ocean ecosystems. For example, in Belgium, this can occur either via a six- or eight-year plan revision cycle, or by ministerial order. Monitoring of marine ecosystems should be encouraged as a way to develop knowledge that can contribute to improving plans over time.

France was the only country that didn't establish mechanisms to harmonise its MSP procedures with those across its border, such as monitoring standards. This may be one of the instigators behind the legal conflict between France and Belgium regarding a French offshore wind farm off the coast of Dunkirk.²³ This example stresses the importance of strategies and procedures that foster cross-border cooperation, as climate-induced ecosystem changes will become more frequent, unpredictable and impactful over time.

Finally, while the entirety of the North Sea area has been covered in the six national maritime spatial plans, not all countries have a single document for all their waters. In Sweden, for example, the planning responsibilities are shared between the State and 85 municipalities, which increases the complexity of delivering an EBA to MSP, particularly for indicators that require joint planning such as ensuring MPA connectivity. This is further detailed in WWF's assessment of MSP in the Baltic Sea.¹⁷



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OSPAR and the need for a regional approach to MSP

Sweden's MSP is an outlier in the North Sea regarding the inclusion of nature and socio-economic categories: when Sweden is removed from the equation, the regional average of these two categories drops by 7% and 9%, respectively. Much of this success can be traced back to discussions held under the Regional Sea Convention HELCOM, which fostered a community of practice where policymakers, scientists and NGOs could collaborate on innovative regional solutions to MSP, whose measures would eventually come to be reflected in national maritime spatial plans.

Unlike the Baltic, the Regional Sea Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) has not taken the spatial planning issue on board, despite its extensive work areas that focus on different aspects of an EBA to MSP. For example, OSPAR works to tackle marine litter and yet fails to recognise that good planning of maritime and coastal activities is essential to minimise harmful land-sea interactions such as agricultural runoff. Equally important, robust spatial planning is vital to ensure that the expansion of offshore wind in the North Sea, which is expected to be the largest in the EU,¹⁶ is accompanied by robust impact assessments and monitoring.

From environmental monitoring to fishing and shipping, an EBA to MSP is the glue that links all of OSPAR's work. Thus, the Convention must establish structures for discussing and improving collaboration between countries and sectors on MSP. These discussions could happen at various levels and involve a broad set of stakeholders. The end goal would be to support a regional EBA that finds solutions for conflicts between maritime industries, and between industries and nature, to foster a thriving and sustainable blue economy. This will be particularly useful for Belgium, Denmark, France and the Netherlands, which are now updating their national maritime spatial plans and need to account for cross-border impacts on marine ecosystems when allocating space to various activities at sea.

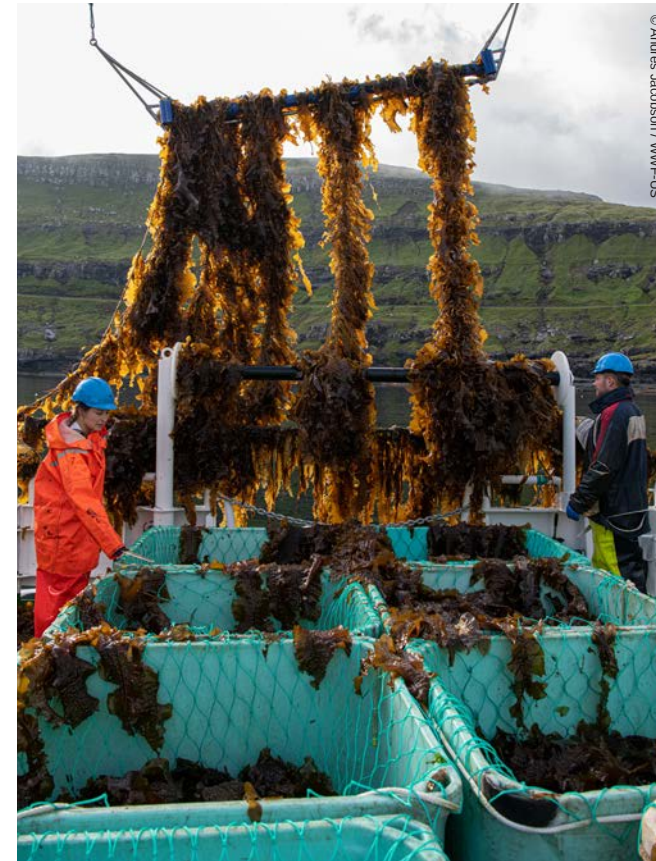
WAY FORWARD

The North Sea is home to some of Europe's most prominent economies and is the main stage for the EU's offshore renewable energy development, with Belgium, Denmark, Germany and the Netherlands committing to deliver at least 150 gigawatts by 2050 in the North Sea's EEZ.¹⁶ The region's efforts to address the climate crisis are essential to minimise both current and anticipated climate-related impacts to marine ecosystems, adding to human pressures already degrading the North Sea's health. Similar efforts are also needed to halt the loss of North Sea biodiversity and ensure the region's maritime activities support a truly sustainable blue economy.

As North Sea MS update their national plans in the coming years, it is crucial that they not only dedicate more space to nature via effectively managed MPAs that cover at least 30% of national waters, with at least 10% of areas under strict protection, but also adopt a regional approach to monitoring the cumulative impacts of all human activities. Transboundary cooperation and collaboration to planning can be developed under the influence of the Regional Sea Convention OSPAR, which includes non-EU states, such as the UK and Norway.

WWF calls on the North Sea Member States to

- In harmony with the targets of REPowerEU, ensure the expansion of offshore renewable energy takes the health of all marine ecosystems into consideration, supports ambitious nature restoration efforts in the region and establishes national compensation schemes for sustainable fishing and maritime activities.
- Designate areas suitable for marine protection and restoration in line with the EU Biodiversity Strategy and the EU Nature Restoration Law to deliver a well-connected network of adequate and effective MPAs covering at least 30% of the North Sea by 2030, with at least 10% of areas under strict protection. These nature restoration and protection sites should coincide with those identified under the MSFD as areas where the harmful impacts of human activities require urgent attention.
- Improve planning authorities' understanding of how labour and income in maritime industries will change over time, and support the just transition of workers from the oil and gas industry, which has no place in a carbon-neutral Europe, into high quality jobs in the renewable energy sector.
- Under OSPAR's Regional Sea Convention framework, establish a working group (similar to the HELCOM-VASAB MSP stakeholder consortium) and a new ministerial North Sea conference to establish solutions for cross-boundary planning issues that consider both EU Member States and neighbouring countries that do not abide by the MSPD, such as Norway and the UK.



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OUR MISSION IS TO STOP THE DEGRADATION OF THE PLANET'S NATURAL ENVIRONMENT AND TO BUILD A FUTURE IN WHICH HUMANS LIVE IN HARMONY WITH NATURE.



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