

Non price criteria as sustainability and social measures in offshore wind prequalification and auction design

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Summary and recommendations

The EU Commission clearly states that Member States should make use of non-price criteria in offshore wind auctions as prequalification and award criteria in order to pursue objectives that cannot be captured by the price only dimension. They exemplify that these policy objectives could include environmental protection and restoration of the ecosystem, or aspects related to the recyclability of the products used.

The Commission further recommends that Member States should use non-price criteria as prequalification criteria when they establish a minimum threshold of the pursued objective that all bidders in the auction must meet, and as award criteria when they want to incentivize a better achievement of a given objective¹, (driving innovative solutions).

The EU State Aid Guidelines for Climate, Energy and Environment, which came into force in January 2022, allow Governments to use non-price criteria for up to 30% of the evaluation in their renewable energy auctions. In addition, the Net Zero Industry Act now states that Member States should follow the state aid guidelines and mandate Governments to apply non-price criteria in renewable energy auctions when they are supporting projects financially.

WWF Norway call on Governments to set down sustainability and social criteria in the prequalifications that define minimum thresholds, and to make full use of the 30% allowed for non-price award criteria in the auctions.

The Commission further underlines the importance of transparent, objective and non-discriminatory methodologies to assess bids. Wind Europe also underlines that clarity, and measurability is key for non-price criteria to work well, that they should be scalable and scorable, and that criteria where bidders answer either "yes" or "no" only may work in the prequalification. They express that France and the Netherlands have been successful with this, and that their experiences show that non-price criteria can work².

While the Netherlands and France have developed quantifiable auction criteria to award bidders in OSW auctions, they have not yet applied non-price criteria as prequalification criteria to establish a minimum threshold that all bidders in the auction must meet. In fact, while different countries have used very different criteria, no country so far seems to have developed a comprehensive set of criteria that corresponds to the mitigation hierarchy, which is widely acknowledged as the tool to consider the environment when developing offshore wind both by developers, scientists, and NGOs.

¹ See the <u>Commission recommendation on auction design for renewable energy</u> from 130524

² See the *WindEurope intelligence platform* and https://windeurope.org/wp-content/uploads/files/policy/position-papers/20240301-WindEurope-response-design-elements-of-renewable-energy-auctions.pdf

WWF Norway call on Governments to set comprehensive sustainability criteria in the prequalification and auction that addresses measures corresponding to all parts of the mitigation hierarchy (i.e measures to avoid damage, to reduce damage and to restore and regenerate ecosystems), placing emphasis on avoidance first. In this report inspiration can be drawn from criteria already set by a number of European Governments, presented at the corresponding level of the mitigation hierarchy.

To avoid damage the choice of siting is crucial. A list of siting that should be avoided through criteria in the prequalification, e.g. Marine Protected and Conserved areas, (MPCAs), and other areas of valuable and sensitive nature, is included in the report. (However good siting also is dependent on proper nature mapping and marine spatial planning, which should be conducted before site allocation.)

To reduce damage at site developers should show that they will use relevant mitigation measures according to best practice in the prequalification. To define what actually is best practice and should be considered <u>a</u> <u>data base listing these</u> such as the one set up by <u>The Offshore Coalition for Energy and Nature – OCEaN</u> – could be used.

While it should be a minimum threshold to use relevant mitigation measures that are already in use, award criteria should be used to foster innovative solutions. Such criteria already used by European Governments are presented in the report.

Mitigation measures also need to be taken to reduce damage from a global life cycle perspective. This includes measures to reduce material and mineral use through recycling, potential pollution such as micro plastic waste, and the climate footprint. It also entails decommissioning that reduces damage as far as possible. Criteria for this already used by European Governments are also presented. Nowadays 85-90% of the windfarms can be recycled³, and the most progressive companies are aiming at 100% in a few years. This should be rewarded. Also, to use the wind industry as a motor driving demand and establishing a circular economy, the use of recycled materials as an input-factor in the wind park would be important to reward.

Within the offshore renewables sector, there is currently no consistent, science-based and credible approach for companies to contribute to nature-positive impacts, particularly regarding nature restoration and regeneration efforts. Therefore, investments to increase scientific knowledge in this field should be awarded. A number of criteria already in use by Governments to do so is included in the report.

Further criteria should be set up to ensure and develop environmental monitoring and information sharing, and criteria already in use for this are presented.

Social minimum and award criteria in prequalifications and auctions are a crucial part of a just energy transformation and key to upholding human rights. They furthermore hold the potential for local ownership and generating socio-economic benefits to the affected local communities.

Attention must be given to ensuring participatory planning and approval processes where indigenous peoples are affected, including implementation of the UN principles for free, prior and informed consent.

Social criteria all have in common that they greatly impact local or national support, and further development of offshore wind. This report presents social criteria used for these purposes in European countries.

³ Non-price criteria in offshore wind auctions: Expert Input Paper for the NSEC Support Group 3, Prepared for Bundesministerium for Wirtschaft und Klimaschutz, Submitted by Fraunhofer Institute for Systems and Innovation Research ISI and Guidehouse Germany, Authors Vasilios Anatolitis, Julia Panny, Pia Weckenbrock, and Malte Gephart, november 2023

In order to improve the use of non-price criteria, and make them feasible and less cost some to apply, WWF Norway also encourage countries to coordinate and standardize non-price criteria that still allows for regional or local specificities and needs.

Background and objective of the briefing

In May 2024 The EU Commission published its <u>recommendations on auction design for renewable energy</u>. They clearly state that "*Member States should make use of non-price criteria in auctions as pre-qualification or award criteria, or both, in order to pursue objectives that cannot be captured by the price only dimension*"⁴.

Further they promote both the use of minimum criteria, and award criteria to drive progress and innovative solutions. "Member States should use non-price criteria as pre-qualification criteria when they establish a minimum threshold of the pursued objective that all bidders in the auction must meet. Member States should use them as award criteria when they want to incentivise a better achievement of a given objective"⁵. This could also be described as pre-selection criteria, which are requirements that allow bidders to participate in a tender, and weighting criteria, which (partly) determine which project is selected between multiple valid bids.

It is expected that "the inclusion of non-price criteria should result in a net contribution to the policy objective relative to what is already required under existing legislation."⁶. As an example "those policy objectives could include environmental protection and restoration of the ecosystem or aspects related to the recyclability of the products used and more generally product life circularity"⁷.

However, while it is clearly stated that member states should include non-price criteria in their offshore wind auctions as soon as possible⁸ there are no further concrete instructions to what the criteria could look like to achieve the objectives in an efficient manner. Instead, Member States are encouraged to discuss best practice in different forums.

This briefing intends to help identify best practice of non-price-criteria, (NPC), - and recommend how implementation can be concretized in line with the EC-recommendations - through looking at previous experiences from Member states and stakeholders such as Wind Europe.

Experiences from practices in Member States

Many Governments in Europe have already adopted non-price criteria for their offshore wind auctions and run their first auctions using non-price criteria - for example France, Belgium, the Netherlands, Germany, Scotland, and Poland. Other countries are about to run their tenders or are working on preparing auctions using non-price criteria - for example Spain, Portugal, and the UK.

There is a wide range of different criteria being considered and deployed. This briefing only intends to cover the sustainability/environmental and social criteria. Environmental conditions are tightly interlinked with social justice, and support from the public to develop wind power necessary to halt climate change is heavily dependent on how the environment/sustainability is considered⁹.

⁴ Page 4 § 6

⁵ Page 5 § 7

⁶ Page 5 § 8

⁷ Page 5 § 13

⁸ Page 5 § 12

⁹ For example, an <u>opinion poll in Norway April 2024</u> financed by Renewable Norway showed that the most decisive condition for support from the public to develop wind power was how nature was considered. 70% of those that were negative to wind power stated that they would be positive if nature was better considered in the development of it.

The EU State Aid Guidelines for Climate, Energy and Environment, which came into force in January 2022, allow Governments to use non-price criteria for up to 30% of the evaluation in their renewable energy auctions. In addition, the Net Zero Industry Act now states that Member States should follow the state aid guidelines and mandate Governments to apply non-price criteria in renewable energy auctions when they are supporting projects financially.

According to the <u>Net-Zero Industry Act</u>, authorities must evaluate the auction's contribution to sustainability and resilience, cybersecurity, responsible business conduct, and ability to complete projects on time. These criteria must apply to least 30% of the renewable energy volume auctioned annually in each EU country, or 6 gigawatts, respectively¹⁰.

Further, in their <u>recommendations on auction design</u> the EU Commission states that "*Member States should define a transparent, objective and non-discriminatory methodology to assess bids against the selected non-price criteria, in particular through a quantitative assessment of the criteria based on a scoring method set up and published in advance of the bidding process*"¹¹.

The North Sea Energy Cooperation published an expert paper on non-price criteria at the Ministerial Summit in Den Haag in November 2023¹². This also underlines that non-price criteria must be translatable into objective scores to ensure fairness and comparability, and that it is essential to translate policy objectives into specific indicators that measure quality.

The expert paper describes prequalification criteria as minimum standards that bidders must meet to participate in an auction, while award criteria incentivize higher performance and must allow for differentiation between projects. Further award criteria can be implemented without a minimum requirement given, or as award criteria with a minimum requirement. It is advised that non-price criteria that are too general or too inclusive in nature are unsuitable as award criteria since they lack the capacity for adequate differentiation between bids. Also, when industry standards and a sufficient knowledge base regarding the effectiveness of non-price criteria have been established, they should no longer serve as award criteria but instead be considered as prequalification criteria, according to the expert paper.

Wind Europe also underlines that clarity and measurability is key for non-price criteria to work well. They state that non-price criteria should be scalable, measurable, and therefore scorable, and that criteria where bidders answer either "yes" or "no" only may work in the prequalification¹³.

Wind Europe support the use of non-price criteria, stating that "non-price criteria encompass prequalification and award criteria are an important component of wind energy auction design to reflect the value of projects rather than evaluating projects on price only." Further they conclude that "non-price award criteria allow to reward projects bringing wider societal benefits and should be factored in the auction design. Non-price award criteria often entail higher investments by project developers and by their supply chain to improve performance on e.g. sustainability¹⁴."

They suggest that the EU-commission establish a catalogue of suitable criteria, to ensure needed harmonization of award criteria, while still allowing countries to decide which focus area to choose based on their national priorities. This guidance, and governments, must also clarify how they intend to differentiate the scoring of the bids.

¹⁰ See <u>The Net-Zero Industry Act (europa.eu)</u>

¹¹ Page 5 § 9

¹² Non-price criteria in offshore wind auctions: Expert Input Paper for the NSEC Support Group 3, Prepared for Bundesministerium for Wirtschaft und Klimaschutz, Submitted by Fraunhofer Institute for Systems and Innovation Research ISI and Guidehouse Germany, Authors Vasilios Anatolitis, Julia Panny, Pia Weckenbrock, and Malte Gephart, november 2023

¹³ 20240301-WindEurope-response-design-elements-of-renewable-energy-auctions.pdf

¹⁴20240301-WindEurope-response-design-elements-of-renewable-energy-auctions.pdf

In addition, Wind Europe suggest that Member States can use expert committees to address the lack of commonly agreed quantitative-based methodologies, and that they should perform public consultation on concrete criteria design and assessment methodology, and thereby increase transparency over optimization targets. Sustainability and biodiversity/ecological innovation award criteria are encouraged provided that a clear scoring methodology is given, (in case of quantitative criteria), or the review is done by an expert panel¹⁵.

According to Wind Europe French criteria have been clear and quantifiable, and the Dutch have been able to score bidders against theirs as well. They mean that the Dutch and French experience shows that NPCs work, since both countries have run successful auctions using NPCs with clear winners, and (apparent) acceptance of the results among the losers¹⁶.

The Netherlands and France also seem to have applied the best practice so far in relation to criteria considering nature, environmental aspects and sustainability. Therefore, they deserve specific attention as quantifiable starting points and examples when developing future and more comprehensive standards. In the Annex you find a full description of them and schedules where their specific environmental and social criteria are marked in yellow.

Criteria in relation to the mitigation hierarchy

While the Netherlands and France have developed quantifiable auction criteria to award bidders in OSW auctions that we should learn from, they have not yet applied non-price criteria as pre-qualification criteria to establish a minimum threshold that all bidders in the auction must meet - as recommended by the Commission. In fact, while different countries currently use very different criteria, no country so far seems to have developed a comprehensive set of criteria that corresponds to the mitigation hierarchy, which is widely acknowledged as the tool to consider nature when developing offshore wind both by developers, scientists, and NGOs.

In the following section we therefore present the different levels of the mitigation hierarchy, and suggest criteria corresponding to them, to form a comprehensive set of criteria in line with the recommendations from the EU-Commission. We've looked at criteria applied in France, Belgium, the Netherlands, Germany, Denmark, Scotland, Poland, and Norway, and where we've found loopholes in relation to the mitigation hierarchy, we have suggested additional criteria to cover these.

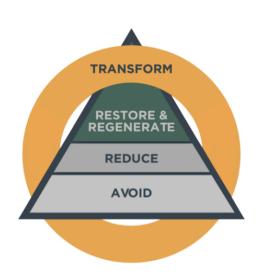
Below you find the mitigation hierarchy as an <u>action framework laid out by the Science-Based Targets Network</u>, providing a valuable framework to guide companies to plan for and address project-level impacts on biodiversity and include proactive, positive steps to enhance nature (see Figure 1). The mitigation hierarchy should be applied sequentially, (starting with taking all possible actions to avoid, before moving on to the next step and so forth). Notably, actions to transform broader systems can be taken at any time.

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¹⁵ <u>20240301-WindEurope-response-design-elements-of-renewable-energy-auctions.pdf</u>

¹⁶ WindEurope Intelligence Platform

Figure 1: Science-Based Target Network Action Framework



Avoid: adopt measures to prevent impacts from happening in the first place;

Reduce: adopt measures to minimize impacts that cannot necessarily be eliminated;

Restore: adopt measures to initiate or accelerate the recovery of an ecosystem with respect to its health, integrity and sustainability, with a focus on permanent changes in state;

Regenerate: adopt measures to increase the biophysical function and/or ecological productivity of an ecosystem or its components, often with a focus on nature's contributions to people;

Transform: adopt measures to contribute to system-wide change, notably to alter the drivers of nature loss; these are additive to the other elements of the framework.

Source: AR3T Action Framework, Science Based Targets for Nature, Science Based Targets Network, 2020

Criteria to avoid damage

The most important measure in the mitigation hierarchy is to avoid damage. To achieve this the choice of siting/location is crucial. Therefore, well planned nature mapping at an early stage is necessary to be able to apply effective criteria for siting to avoid damage to ecosystems.

In the cases where the state has selected and opened an area for offshore wind-production, hopefully proper nature mapping has already been done of the area, and general avoidance of sensitive and valuable nature has already been secured. However, micrositing within a selected area can also be crucial to avoid damage of especially valuable and vulnerable nature within that area. Therefore, it is important to apply criteria in the prequalification process where developers show how they will avoid siting in valuable and sensitive nature as listed below. If data that is detailed enough to do so isn't secured by the state at this stage, developers should have to present how they will secure this data and plan siting accordingly to avoid damage in line with the list. Since avoidance is the most important measure in the mitigation hierarchy it must be applied as a minimum threshold criterion, no matter if placed in a prequalification or auction.

Offshore wind should not be placed within:

• Marine Protected and Conserved areas (MPCAs) or in other areas of particular importance for biodiversity, ecosystems, and ecosystem services such as sites defined as Key Biodiversity Areas, (KBAs), Ecologically or Biologically Significant Marine Areas, EBSA, and ecological corridors. Governments, companies, and investors have a responsibility to conserve and restore nature, by delivering on all the targets of the Kunming-Montreal Global Biodiversity Framework (GBF), including the global commitment to protect at least 30% of the ocean by 2030. This means that areas considered as a priority for designation as MPCAs should similarly be considered off-limits for offshore renewable energy infrastructure until they have been properly mapped and evaluated for protection. Identifying and securing these areas prior to designation of renewable

energy zones will be vital to conserve critical habitats and species, reduce anthropogenic pressures, and build resilience to a changing climate. In the Norwegian case this means that there should be no new activity in areas that are defined as particularly valuable and vulnerable (SVOs), before these have been properly mapped and assessed considering marine protection in accordance with the Nature Diversity Act or the Marine Environment Act.

- Spawning and rearing areas for fish
- Migration routes and important habitats for seabirds
- Migration routes for marine mammals
- Important habitats for threatened species
- Areas with high natural carbon uptake and storage

Any damage to or degradation of these areas will have greater impacts on ocean ecosystems and thus on stakeholders outside of the energy sector. This could also bring reputational risks and social resistance to the deployment of renewables.

The only criteria applied in relation to siting so far has been by **France**, who used a criterion for *optimization* of the occupation of the zone in terms of the right way of the installation as an environmental award criterion in the auction for Brittany floating. The same auction also had a criterion for the minimum amount that the applicant undertakes to allocate to ERC measures (i.e., measures to avoid negative environmental impacts, reduce them when it is not possible to avoid them and compensate for them as a last resort). See Annex 1

Criteria to reduce damage

At site

There are a number of **mitigation measures** widely used by developers today **to reduce damage at site**. For example bubble curtains¹⁷ and only drilling during specific seasons to reduce damage from noise, blackpainting rotorblades or curtailment¹⁸ to reduce collisions with birds, or designs that reduce damage on the sea bed floor. **In the prequalification developers should show that they will use the best available mitigation technologies where relevant according to best practices**.

To define what actually is best practice and should be considered <u>a data base listing these</u> such as the one set up by <u>The Offshore Coalition for Energy and Nature – OCEaN</u> – could be used. (OCEaN is set up by 36 European wind industry actors, transmission system operators, and NGOs to advance knowledge in the field. Currently their data base is listing and evaluating the effect and relevance of around 90 measures.)

While it should be a minimum threshold to use best available mitigation measures that are already in use, award criteria should be used to foster innovative solutions - which are developing fast in the field where rewarded.

For example the **Netherlands** awarded how far the project will limit negative effects on the conservation of birds, or promote positive effects on the conservation of marine habitat in the Dutch North Sea, and how far innovation is based on current scientific insights at the moment of submitting the application, plausible to execute and measurable, in the auction for Hollandse Kust West Site VI in 2022. Both of these were subcategories under the criterion *Contribution to the ecology of the North Sea*.

The Netherlands also will award taking measures in the wind farm area and determining their effectiveness to reduce negative ecological effects on locally occurring birds and marine mammals, and contribute to knowledge development to reduce negative ecological effects and strengthen positive ecological effects in

¹⁷ For example, in Germany invention of the following technique has been driven by non price criteria to reduce under water noise: Ørsted successfully pilots new technology that further optimises offshore wind monopile installation (orsted.com)

¹⁸ Curtailment Report Digital Spreads.pdf (birdlife.org)

the wind farm area in IJmuiden Ver Wind Farm Zone Site Alpha auctioned in 2024. Both of these are subcategories under the criterion *Contribution of the wind farm to the ecosystem of the Dutch North Sea*. See the Annex.

For Site IJmuiden Ver Beta the Netherlands also has a specific criterion to award *measures that contribute* to reducing harbor porpoise disturbance days during the construction phase of the wind farm.

Germany also has a specific qualitative criterion for noise levels where *the bid that includes the most turbines drilled without heavy-weight foundations or impulse drilling as a share of all the turbines to be installed* will receive the maximum points. All other bidders receive a proportional score¹⁹. (In Germany, Denmark, and the Netherlands, projects in addition must adhere to a noise level threshold²⁰).

France awards reduction of damage through the previously mentioned ERC-criterion, which award the minimum amount that the applicant undertakes to allocate to ERC measures (i.e., measures to avoid negative environmental impacts, reduce them when it is not possible to avoid them and compensate for them as a last resort) See the Annex.

Recycling, pollution, climate footprint and decommissioning

Mitigation measures also need to be taken to reduce damage from a global life cycle perspective. This includes measures to reduce material and mineral use through recycling, potential pollution such as micro plastic waste, and the climate footprint. It also entails decommissioning that reduces damage as far as possible. Design and choice of materials are crucial in this field.

While a minimum threshold should be set for this, development is moving fast and improvement through innovation should also be awarded. **The Netherlands** has a criterion for *circular design, construction, operation and decommissioning of the wind farm* for the IJmuiden Ver Wind Farm Zone Site Alpha auctioned in 2024, where the following is measured and awarded:

- a) the circular design of the wind farm (including the following components: wind turbine foundation; transition piece; tower; nacelle; rotor blades; and interarray cables)
- b) the use of alternative (circular) materials and critical and strategic raw materials, including rare earth metal
- c) the greenhouse gas footprint of wind turbines production through its lifetime

France has rewarded *blade recycling or reuse rate* and *permanent magnet generators recycling or reuse rate* in the Mediterranean and Brittany floating, (See the Annex), targeting a recycling rate between 80 and 100%. In addition they have set a hard requirement for the developers to commit to a carbon footprint below 2,000 kg CO2/kW (of installed capacity)²¹.

Denmark will require sustainability and social measures for the upcoming 6 GW of offshore wind projects—Kriegers Flak II, Kattegat, Hesselø and North Sea I. These will not be competitive and will probably include:

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¹⁹ See the details from the German Government at this link:

<a href="https://www.bgbl.de/xaver/bgbl/start.xav?startbk=Bundesanzeiger_BGBl&start=%2F%2F%2A%5B%40attr_id=%27bgbl122s1325.pdf%27%5D#_bgbl %2F%2F*%5B%40attr_id%3D%27bgbl122s1325.pdf%27%5D _ 1660906922577

[19] See the details from the German Government at this link:

<a href="https://www.bgbl.de/xaver/bgbl/start.xav?startbk=Bundesanzeiger_BGBl&start=%2F%2F%2A%5B%40attr_id=%27bgbl122s1325.pdf%27%5D#_bgbl %2F%2F*%5B%40attr_id=%27bgbl122s1325.pdf%27%5D#_1660906922577

²⁰ Non-price criteria in offshore wind auctions: Expert Input Paper for the NSEC Support Group 3, Prepared for Bundesministerium for Wirtschaft und Klimaschutz, Submitted by Fraunhofer Institute for Systems and Innovation Research ISI and Guidehouse Germany, Authors Vasilios Anatolitis, Julia Panny, Pia Weckenbrock, and Malte Gephart, november 2023

²¹ See the expert paper from NSEC above.

- Environmental Product Declarations: Applicants must submit documentation and comply with the environmental performance of the central components of the offshore wind farm by developing Environmental Product Declarations (EPD).
- Recyclable Turbine Blades: Applicants must submit documentation for the Environmental Technology Verification (ETV) by the construction start-up deadline, which is December 2029 for most areas, except for Hesselø, which is December 2028.
- Obligation to decommission the Offshore Wind Farm: The applicant must, at its own cost and risk, dismantle and decommission the offshore wind farm following any approvals, licenses, and permits needed to comply with country laws²².

Norway has required that the *the applicant must endeavor to minimize the project's carbon footprint*, and that *the project shall contribute to good waste management, with a particular emphasis on recycling* in the prequalification for Sørlige Nordsjøen II which was auctioned in 2024. However, no minimum threshold was defined for this, and it was not used as an award criteria²³.

The **UK** Department for Energy Security and Net Zero (DESNZ) has proposed the introduction of non-price criteria as a CfD Sustainable Industry Reward – as opposed to prequalification or evaluation of offers. This means in practice that if the developer shows meaningful actions to increase the economic, environmental and social sustainability of bottom fixed and floating wind projects, they will receive a compensation on top of their CfD. Two of the four proposed criteria are:

- Decarbonisation output: to reward projects with the least carbon intensive supply chains, encouraging them to reduce the environmental footprint of their business via standardized methods for measuring carbon emissions through life cycle assessment (LCA).
- Decarbonisation inputs: to reward projects which use a higher proportion of suppliers operating with sustainable manufacturing and procurement practices, via business commitments in line with the Paris Agreement²⁴.

Wind Europe suggests that so long as there is no common assessment methodology for circularity and carbon footprint criteria - such as CO2 emissions, share of recycled or green materials, and, crucially, LCA - Governments could also consider asking for "Commitments" as part of the prequalification criteria to meet certain minimum requirements²⁵.

Criteria to restore and regenerate ecosystems

Restoration entails adopting measures to initiate or accelerate the recovery of an ecosystem with respect to its health, integrity and sustainability, with a focus on permanent changes at state.

Regeneration on the other hand includes increasing the biophysical function and/or the ecological productivity of an ecosystem or its components. For example, nature inclusive design, (NID), of bottom foundations could form artificial reefs that increase populations of different species. However, since this also could lead to invasive species that damage local ecosystems, and could attract more predator species (e.g. seabirds) to the area due to an increase in availability of prey, it should be applied with care and under surveillance.

²² See Notat (kefm.dk)

²³ The criteria are found in the following link:

https://www.regjeringen.no/contentassets/bd4d260de2c242beb661494550b8d7a3/appendix-4-description-of-pregualification-criteria-for-the-first-phase-of-sorlige-nordsjo-ii.pdf

²⁴ See the details from the UK Department for Energy Security at:

https://assets.publishing.service.gov.uk/media/655531e3046ed4000d8b99b2/cfd-sustainable-industry-reward-consultation.pdf

²⁵ <u>20240301-WindEurope-response-design-elements-of-renewable-energy-auctions.pdf</u>

Within the offshore renewables sector, there is currently no consistent, science-based and credible approach for companies to contribute to nature-positive impacts, particularly regarding nature restoration and regeneration efforts. Therefore, investments to increase scientific knowledge in this field should be awarded.

The **Netherlands** awarded how far the project will limit negative effects on the conservation of birds, or promote positive effects on the conservation of marine habitat in the Dutch North Sea" in the auction for Hollandse Kust West Site VI in 2022.

In the IJmuiden Ver Wind Farm Zone Site Alpha in the Dutch North Sea the Netherlands will award strengthening and restoring underwater nature, marine ecosystems and naturally occurring diversity of benthos in the wind farm area, and to contribute to knowledge development to reduce negative ecological effects and strengthen positive ecological effects in the wind farm area. See the Annex.

In the auctions for Centre Manche 1, Brittany floating, and Mediterranean floating, **France** had a criterion for the minimum amount that the applicant undertakes to allocate both:

- a) to ERC measures (i.e., measures to avoid negative environmental impacts, reduce them when it is not possible to avoid them and compensate for them as a last resort) and the environmental monitoring of the project (excluding dismantling) and
- b) the Fund intended to finance actions to preserve the biodiversity potentially impacted by the project, and going beyond the actions implemented under the ERC measure, and to improve knowledge of this biodiversity

In the upcoming offshore wind tenders Kattegat and North Sea I **Denmark** will require that *applicants must develop and complete nature positive initiatives, and provide the Danish Energy Agency (DEA) a proposal for a plan for competition of the initiatives within 6 months of the concession's signing date. These wind parks must be established with nature inclusive design, (NID), adapted to the local area²⁶.*

France has a criterion for *the minimum amount that the applicant undertakes to allocate for monitoring* in the environmental criterion for the auctions for Centre Manche 1, Brittany floating, and Mediterranean floating (see the full ERC criterion in the section above).

Environmental monitoring and information sharing

Environmental monitoring and information sharing are both crucial to produce knowledge about the impact of offshore wind on marine ecosystems, to develop solutions that improve it, and to create trust among impacted stakeholders and the public that will benefit offshore wind development.

While there must be a minimum threshold to develop and maintain an environmental impact monitoring program for the offshore wind farm, and to share information from it publicly, competitive criteria could be set up to award the best options.

The **Netherlands** awarded the extent to which knowledge and experience are shared to contribute to knowledge gaps (including EIA), and the extent to which knowledge and experience are shared about the innovations being demonstrated in the auction for Hollandse Kust West Site VI in 2022. Both of these were subcategories under the criterion *Contribution to the ecology of the North Sea*.

In the IJmuiden Ver Wind Farm Zone Site Alpha in the Dutch North Sea the Netherlands will award developers that contribute to knowledge development to reduce negative ecological effects and strengthen positive ecological effects in the wind farm area. They also will award that the permit holder shares public

²⁶ Notat (kefm.dk)

information about its commitments to measures applied and the investigation conducted of the wind farm. See the Annex.

In relation to circular economy, they will award that the *permit holder shares public information about its* commitments to circular design of the wind farm in this section.

In the upcoming 6 GW of offshore wind tenders – Kriegers Flak II, Kattegat, Hesselø and North Sea I in **Denmark** applicants must develop and maintain an environmental impact monitoring program for the offshore wind farm as a minimum requirement for the execution of the project.

In the prequalification for Sørlige Nordsjø II in **Norway** the applicants were required to *have a plan for* nature and environment, aiming to maintain considerations during project implementation and contribute to knowledge and innovation for environmental impact reduction.

Coexistence and marine spatial planning

It is well acknowledged that marine spatial planning is key to optimize locations for different activities at sea such as fisheries, shipping, offshore wind and protection of marine areas, as well as securing good coexistence. In addition, it is crucial to give an overview of the cumulative effects from all activities on marine ecosystems.

In the EU this resulted in the Maritime Spatial Planning Directive in 2014, where proper implementation is to pave way for good coexistence. Therefore, it seems like coexistence has not been prioritized as a criterion in EU-countries auctions.

However, **Poland** has a tender procedure criterion which includes *compatibility with Maritime Spatial Plan* base and additional function defined for site area, and possibility of coexistence with other sea area functions (points allocated per each additional function)²⁷.

In Norway, where there are management plans for all Norwegian ocean areas in place, marine spatial planning does not exist for offshore wind, or any other industry other than oil & gas. However, a criterion was set for coexistence in the prequalification for Sørlige Nordsjø II which required that *the project must facilitate good co-use and coexistence within the project area and with affected stakeholders*²⁸.

In addition, The Netherlands has a system for making "Area passports" for multi-use within offshore wind areas²⁹.

Wind Europe suggests rewarding projects enhancing co-existence between species and with other economic sectors³⁰.

Criteria for coexistence in the form of interaction with and ownership from local communities is described in the section below about social criteria.

https://www.regjeringen.no/contentassets/bd4d260de2c242beb661494550b8d7a3/appendix-4-description-of-prequalification-criteria-for-the-first-phase-of-sorlige-nordsjo-ii.pdf

²⁷ See details from the Polish Government at: https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20210002203

²⁸ See the details from the Norwegian Government at:

²⁹ Borssele wind farm zone - Noordzeeloket UK

³⁰ 20240301-WindEurope-response-design-elements-of-renewable-energy-auctions.pdf

Social criteria

Social minimum and award criteria in prequalifications and auctions are a crucial part of a just energy transformation and key to upholding human rights. Tehy furthermore hold the potential for local ownership and generating socio-economic benefits to the affected local communities.

Engaging in meaningful stakeholder and rights-holders consultations along all renewable energy development processes and throughout project monitoring must be a requirement in the licensing process. Consultation is of particular importance in areas with fragmented or contested ownership, or situations where the community has not been sufficiently consulted during the marine spatial planning process.

Attention must be given to ensuring participatory planning and approval processes where indigenous peoples are affected, including **implementation of the UN principles for free, prior and informed consent.** Effective stakeholder consultation can also help facilitate local value creation, including in the form of job creation and potential co-ownership.

Social criteria all have in common that they greatly impact local or national support, and further development of offshore wind. According to the expert paper on non-price criteria from The North Sea Energy Cooperation the acceptance, and in some countries, the legality of RE deployment, has become increasingly interconnected with environmental concerns, and non-price criteria can act as a "stepping stone" towards gradually more ambitious implementation.

The expert paper also notes that "non-price criteria may potentially increase the number of new players involved in bids. This means that bidders may form and enter new cooperations and coalitions with NGOs, research organisations, universities, companies or other stakeholders. This also strengthens the innovation potential of the industry and may lead to the deployment of novel technologies and approaches as well as increase cross-fertilisation and synergies."³¹.

In **Denmark** the tenders and realization of the individual offshore wind projects in Kriegers Flak II, Kattegat, Hesselø and North Sea I are carried out with an *indirect state co-ownership of 20%*.

In addition, the following social requirements will be included in the prequalification:

- The employment of a given number of trainees
- Protections against social dumping
- Compliance with human rights and international conventions
- Ensuring that subcontractors also comply with the social clauses

In the auction for IJmuiden Ver Wind Farm Zone Sites Alpha and Beta the **Netherlands** will award compliance with the International Responsible Business Conduct, (IRBC), principles for the Renewable Energy Sector through a criterion for participation in the IRBC Agreement and having due diligence policies focusing on human rights, environment, and recovery and redress. (See the Annex)

Belgium will use the following award criteria for *citizens' participations* in the auctions for the Princess Elisabeth Zone:

- Financial participation amounting to 3% of the project's CAPEX
- Communication and active engagement included in the action plan

³¹ Non-price criteria in offshore wind auctions: Expert Input Paper for the NSEC Support Group 3, Prepared for Bundesministerium for Wirtschaft und Klimaschutz, Submitted by Fraunhofer Institute for Systems and Innovation Research ISI and Guidehouse Germany, Authors Vasilios Anatolitis, Julia Panny, Pia Weckenbrock, and Malte Gephart, november 2023

- Access for renewable energy communities amounting to 2% of the project's CAPEX (See the Annex)

France has used the following criteria defined as *social and territorial development issues* for the auctions for Centre Manche 1, Brittany floating, and Mediterranean floating:

- Minimum share of the study and work services that the candidate commits to have carried out by Small and Medium Enterprises ("SMEs")
- Proportion of upkeep, maintenance and operation services that the candidate undertakes to have carried out by SMEs
- Amount of financing or equity investment proposed for the installation
- Commitments to the professional integration of people experiencing particular social or professional difficulties (See the Annex)

Germany has a social criterion in auctions for centrally pre-developed areas awarding the *contribution to* workforce development through investment in training, the hiring of apprentices and the percentage of the workforce that are apprentices³². However, the way in which this criterion has been operationalized and measured has been criticized for being unclear and non-stringent, potentially producing unwanted competitive disadvantages. (E.g. on what basis shall the employees be counted? Some companies are global players and count young employees in vocational training globally, while others have a much smaller number of young employees because they're not active globally. On the other hand, these smaller companies may have specific offshore wind expertise in the local market.)

Norway set down the following criteria in the prequalification for Sørlige Nordsjø II:

- The project will contribute to competence development in the supply industry and provide incentives for the use of skilled workers and apprentices.
- The applicant must have a plan for how the project will contribute to SMEs gaining experience in deliverables or services within the offshore wind in the following segments: studies, fabrication, installation, operation and maintenance. In this context, SMEs are defined as companies with up to 100 employees.
- The applicant must have in place a plan for how the project will contribute to developing the supply chain industry in an economically sustainable manner that will help Europe and Norway³³

The **UK** Department for Energy Security and Net Zero (DESNZ) has proposed the introduction of non-price criteria as a CfD Sustainable Industry Reward – as opposed to prequalification or evaluation of offers. This means in practice that if the developer shows meaningful actions to increase the economic, environmental and social sustainability of bottom fixed and floating wind projects, they will receive a compensation on top of their CfD. Two of the four proposed criteria have a social dimension:

- Deprived areas: reward a projects' investment in areas near deployment zones where there are greater socio-economic deprivation. The goal is to incentivise projects to deploy critical infrastructure (manufacturing facilities and ports) through the NSEC region.
- Small and medium-sized enterprises: to strive towards a minimum share of project spend on SMEs, i.e. businesses with less than 250 employees and turnover under €50m ³⁴.

³² See the details from the German Government at this link: https://www.bgbl.de/xaver/bgbl/start.xav?startbk=Bundesanzeiger_BGBl&start=%2F%2F%2A%5B%40attr_id=%27bgbl122s1325.pdf%27%5D#_bgbl %2F%2F*%5B%40attr_id%3D%27bgbl122s1325.pdf%27%5D 1660906922577

³³ See the details from the Norwegian Government at: https://www.regjeringen.no/contentassets/bd4d260de2c242beb661494550b8d7a3/appendix-4-description-of-pregualification-criteria-for-the-first-phase-of-sorlige-nordsjo-ii.pdf

³⁴ See the details from the UK Department for Energy Security at: https://assets.publishing.service.gov.uk/media/655531e3046ed4000d8b99b2/cfd-sustainable-industry-reward-consultation.pdf

Compliance mechanisms

It should also be noted that to make sure that sustainability and social criteria work well there is a need for firm compliance mechanisms. The EU Commission put specific weight in their guidelines on that "*Member States using non-price criteria should put in place mechanisms to ensure they are complied with.*Appropriate penalties should be put in place to identify and act on non-compliance. These penalties should be sufficiently high to deter bidding strategies pursuing the non-respect of non-price criteria which are only verified ex-post"³⁵. Further "*Member States should ensure the availability of administrative resources needed for effective and efficient verification of compliance with non-price pre-qualification and award criteria"*³⁶.

35 Page 5 § 10

³⁶ Page 5 § 11

Annex

The information in the annex is from the WindEurope Intelligence Platform.

The Netherlands

The Netherlands were the first country to use non-price criteria: in their 2019/20 Hollandse Kust North & South auctions. However, the criteria used were perceived as general and mostly hard-to-quantify. In 2022 the Netherlands then ran two further auctions using more detailed and measurable criteria: for the Hollandse Kust West sites (HKW, 2x 700 MW). Both of these auctions used non-price criteria for 90% of the evaluation. One of the HKW auctions focused on ecology (Site VI), the other on energy system integration (Site VII). The other 10% of the evaluation was price: specifically, how much up to a maximum of €50m the bidders were willing to pay to the Government.

The Dutch Government auctioned a further 4.6 GW of offshore wind capacity in 2024 for two sites of the wind farm IJmuiden Ver (Alpha and Beta) of 2.3 GW each. Both used the following non-price criteria: (i) the level of compliance with the principles of an International Responsible Business Conduct (IRBC) Agreement for Renewables which the Dutch Government have recently signed with industry; and (ii) the degree of circularity into the design, construction, operation and decommissioning of the wind farm. Additionally, The Government has massively increased the maximum payment offer to €420m per year during the permit period of 40 years. In addition, the Alpha auction also had criteria on the contribution of the wind farm to the ecosystem of the Dutch North Sea, and the Beta auction will have criteria on system integration and measures to reduce harbour porpoise disturbance during the construction of the wind farm.

THE NETHERLANDS

Hollandse Kust West Site VI - Focus on Ecology. Auctioned in 2022

Criterion	Max Points	Description
Financial offer	20	 20 points: how much up to a cap of €50m is the bidder offering to pay. The points are granted according to a predefined table based on the financial offer.
Certainty of realisation of the wind farm	40	 10 points: the knowledge and experience of the parties responsible for supplying, installing and maintaining the wind farm. 15 points: the percentage of the investment covered by the bidders' equity. The points are granted according to a predefined table based on the percentage of equity. 15 points: the project guarantee offered up to a maximum of €500m. The points are granted according to a predefined table based on the offered guarantee.
Contribution to energy supply	40	 40 points: the contribution of the wind farm to the energy supply, with capacity factors between 45-51%. The points are granted according to a predefined table based on the MWh/year offered.
Contribution to the Ecology of the North Sea	100	 30 points: how far the project will limit negative effects on the conservation of birds, or promote positive effects on the conservation of marine habitat in the Dutch North Sea. 10 points: the extent to which knowledge and experience are shared to contribute to knowledge gaps (including EIA). 50 points: how far innovation is based on current scientific insights at the moment of submitting the application, plausible to execute and measurable. 10 points: extend to which knowledge and experience are shared about the innovations being demonstrated.
TOTAL POINTS	200	

The non-price ecology and system integration sub-criteria (which add to 100 points in total) are scored for every applicant using the system above. The scores for the sub-criteria were used to calculate an overall detailed score, which allowed the differentiation of applications which are otherwise tied.

indicative intermediate values on a continuous scale	
Excellent, value-added	100%
Very good, with some added value	90%
Well	80%
Ample space	70%
Sufficient	60%
Mild	50%
Insufficient	40%
Ample space	30%
Bad	20%
Very bad	10%

The original details in the Government Official Gazette are available at the following link.

IJmuiden Ver Wind Farm Zone Sites Alpha and Beta. To be auctioned in 2024

Criterion	Max Points	Notes	
Sites Alpha and Beta	<u> </u>	1	
Financial offer	60		60 points: The amount of the financial bid that will be guaranteed annually during the permit period of 40 years. A financial offer of €420 million or more (to be paid each year) achieves the maximum number of points.
Security of completion of the wind farm	40		40 points: the knowledge, experience and financial strengths of the parties responsible for supplying, installing, operating and maintaining the wind farm.
Contribution to energy supply	40		40 points: the contribution of the wind farm to the energy supply, with capacity factors between 45-49%. The points are granted according to a table based on the MWh/year offered.
Compliance with IRBC Agreement	40		40 points: Participant in the International Responsible
for the Renewable Energy Sector's		1	Business Conduct (IRBC) Agreement for the Renewable
principles		1	Energy Sector and having due diligence policies focusing on
Circular design, construction,	40		human rights, environment, and recovery and redress. 23 points: the circular design of the wind farm (including
operation and decommissioning	40		the following components: wind turbine foundation;
		1	transition piece; tower; nacelle; rotor blades; and inter-
of the wind farm of the wind farm		1	array cables),
		-	14 points: the use of alternative (circular) materials and
			critical and strategic raw materials, including rare earth
		1	metals,
			1 point: the greenhouse gas footprint of wind turbines production through its lifetime, and
		1	2 points: permit holder shares public information about its
			commitments to circular design of the wind farm in this
		1	section.
Site Alpha only		•	
Contribution of the wind farm to	180	-	124 points: Taking measures in the wind farm area and
the ecosystem of the Dutch North			determining their effectiveness to reduce negative
Sea		1	ecological effects on locally occurring birds and marine
		1	mammals.
			27 points: Strengthening and restoring underwater nature,
		1	marine ecosystems and naturally occurring diversity of benthos in the wind farm area.
			28 points: Contribute to knowledge development to reduce
			negative ecological effects and strengthen positive
		1	ecological effects in the wind farm area.
		1	1 point: permit holder shares public information about its
			commitments to measures applied and the investigation
			conducted of the wind farm in this section.

Site Beta only		
Contribution to integration into the Dutch energy system	160	 139 points: Stimulating onshore investments for integration of the electricity produced by the wind farm into the Dutch energy system. 20 points: Stimulating investment in electricity production at sea using solar energy. 1 point: permit holder shares public information about its commitments to system integration of the wind farm in this section.
Reducing harbour porpoise disturbance	20	 20 points: Measures that contribute to reducing harbour porpoise disturbance days during the construction phase of the wind farm.
TOTAL POINTS	400	

France

France has completed its first auction using non-price criteria: Centre Manche 1 wind farm (1 GW bottom-fixed). It is in the process of running a second: the south Brittany floating wind farm (250 MW), and has recently published the rules for the next two floating wind auctions in the Mediterranean Sea (250 MW each). The three auctions use two sets of non-price criteria. One set focuses on social and territorial development issues, while the other focuses on environmental issues. In all auctions non-price criteria are 25% of the total evaluation. The other 75% is price: France uses CfDs. All auctions use six identical non-price criteria. The floating sites use two further criteria, one for each area, with a different environmental factor on each auction.

FRANCE

and financial value of the offer	7E mainte		(2 x 250 MW)
	75 points	75 points	75 points
Value of the reference tariff	70	70	70
Robustness of the contractual and financial arrangement	5	5	5
territorial development issues	10 points	13 points	12 points
Minimum share of the study and work services that the candidate commits to have carried out by Small and Medium Enterprises ("SMEs")	5	4	4
Proportion of upkeep, maintenance and operation services that the candidate undertakes to have carried out by SMEs	3	3	2
Amount of financing or equity investment proposed for the installation	2	2	2
Commitments to the professional integration of people experiencing particular social or professional difficulties	N/A	4	4
Environmental issues		12 points	13 points
Maximum number of wind turbines in the installation	2	2	1
Minimum amount that the applicant undertakes to allocate (a) to ERC measures (i.e., measures to avoid negative environmental impacts, reduce them when it is not possible to avoid them and compensate for them as a last resort) and the environmental monitoring of the project (excluding dismantling); and (b) the Fund intended to finance actions to preserve the biodiversity potentially impacted	5	4	8
	Minimum share of the study and work services that the candidate commits to have carried out by Small and Medium Enterprises ("SMEs") Proportion of upkeep, maintenance and operation services that the candidate undertakes to have carried out by SMEs Amount of financing or equity investment proposed for the installation Commitments to the professional integration of people experiencing particular social or professional difficulties ental issues Maximum number of wind turbines in the installation Minimum amount that the applicant undertakes to allocate (a) to ERC measures (i.e., measures to avoid negative environmental impacts, reduce them when it is not possible to avoid them and compensate for them as a last resort) and the environmental monitoring of the project (excluding dismantling); and (b) the Fund intended to finance actions to	territorial development issues Minimum share of the study and work services that the candidate commits to have carried out by Small and Medium Enterprises ("SMEs") Proportion of upkeep, maintenance and operation services that the candidate undertakes to have carried out by SMEs Amount of financing or equity investment proposed for the installation Commitments to the professional integration of people experiencing particular social or professional difficulties ental issues 15 points Maximum number of wind turbines in the installation Minimum amount that the applicant undertakes to allocate (a) to ERC measures (i.e., measures to avoid negative environmental impacts, reduce them when it is not possible to avoid them and compensate for them as a last resort) and the environmental monitoring of the project (excluding dismantling); and (b) the Fund intended to finance actions to preserve the biodiversity potentially impacted	territorial development issues Minimum share of the study and work services that the candidate commits to have carried out by Small and Medium Enterprises ("SMEs") Proportion of upkeep, maintenance and operation services that the candidate undertakes to have carried out by SMEs Amount of financing or equity investment proposed for the installation Commitments to the professional integration of people experiencing particular social or professional difficulties ental issues 15 points 12 points Maximum number of wind turbines in the installation Minimum amount that the applicant undertakes to allocate (a) to ERC measures (i.e., measures to avoid negative environmental impacts, reduce them when it is not possible to avoid them and compensate for them as a last resort) and the environmental monitoring of the project (excluding dismantling); and (b) the Fund intended to finance actions to preserve the biodiversity potentially impacted

	implemented under the ERC measure, and to improve knowledge of this biodiversity			
(ii)	Blade Recycling or Reuse Rate	8	4	2
(iii)	Optimization of the occupation of the zone in terms of the right-of-way of the installation	N/A	2	N/A
(iv)	Permanent Magnet Generators Recycling or Reuse Rate	N/A	N/A	2

See page 14 of the respective state aid notifications: <u>Centre Manche 1</u>, <u>Brittany floating</u> and <u>Mediterranean floating</u>.

Belgium

Belgium has decided to use one single non-price criterion for the auctions they will run in the coming years for the Princess Elisabeth Zone (up to 3.5 GW). They call it "innovation in the business model" and it will be 10% of the total evaluation. The other 90% will be price: Belgium will use CfDs. The "innovation in business model" criterion aims at promoting citizenship participation. The Belgian Government had actually consulted on a wider set of non-price criteria including also local benefits for society, sustainability, nature preservation, and innovation and system integration³⁷.

BELGIUM

Princess Elisabeth Area- 0.7 GW lot (Q4 2024 - Q1 2026 tender) and up to 1.4 GW lots (Q1 2026 - Q2 2027)

Criterion	Weight
2-sided CfD Strike price	90 points
Innovation in business model	10 points
The following forms of citizens participations are eligible:	
 financial participation amounting to 3% of the project's CAPEX; 	
 communication and active engagement included in the action plan; and 	
access for renewable energy communities amounting to 2% of the project's CAPEX.	

³⁷ See