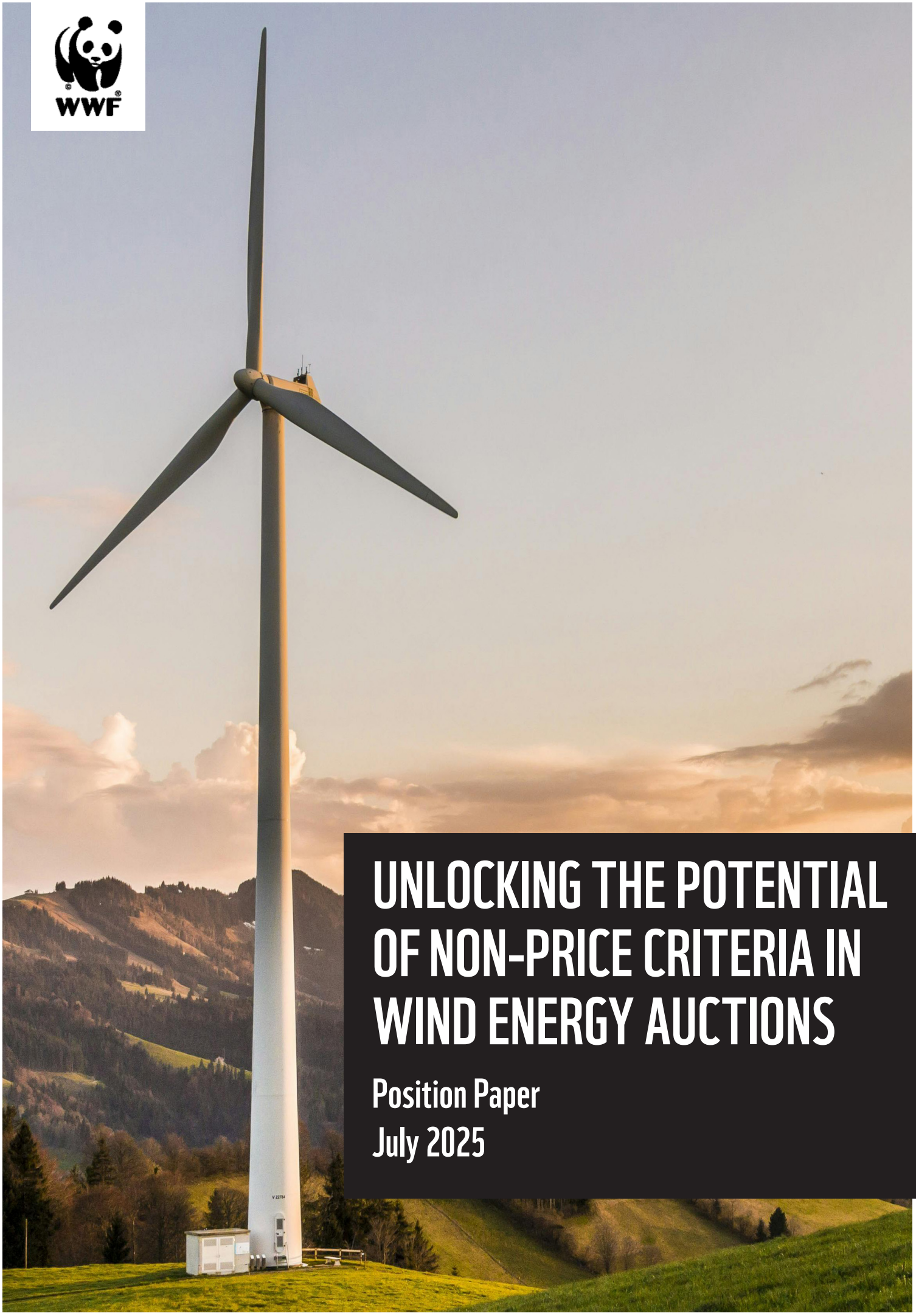

UNLOCKING THE POTENTIAL OF NON-PRICE CRITERIA IN WIND ENERGY AUCTIONS

Position Paper

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INTRODUCTION: STATE OF PLAY FOR NON-PRICE CRITERIA

Auctions for renewable energy projects - in which governments issue tenders inviting developers to submit bids to build projects providing electricity and choose winners based on the price per KWh offered and on the performance of the projects against certain other (non-price) criteria - are increasing in Europe. Non-price criteria are more often used for offshore wind projects than for onshore ones, because the former are typically larger scale, and the bigger the project, the more impact it is likely to have on the environment and communities. In recent years, countries such as Belgium, Denmark, France, Germany and the Netherlands have included non-price criteria in offshore wind auctions;[1] and other countries such as Spain, Norway, and Poland are expected to follow suit in the next few years. To be eligible to bid, developers must comply with prequalification criteria, and once the developers meet those criteria, they compete for the projects based on award criteria.

The Net-Zero Industry Act (NZIA) introduced mandatory non-price criteria in renewable energy auctions for the first time. These criteria cover both the prequalification and award requirements of the auction process. Under the NZIA, EU Member States have to apply non-price criteria to at least 30% of the annual volumes of renewable energy being auctioned.[2] Meanwhile, under the 2022 State Aid guidelines for climate, environmental protection and energy, the share of non-price criteria in each individual auction can only count up to 30% to the overall weighted score. However, for auctions not covered by State Aid rules,[3] countries are free to exceed the 30% limit, as the Netherlands did for the IJmuiden Ver Wind Farm Site Alpha, and as WWF recommends.[4]

Subsequently, in May 2024, the European Commission published new recommendations on how to design auctions for renewable energy,[5] in which it stated that: "Member States should make use of non-price criteria in auctions as prequalification or award criteria, or both, in order to pursue objectives that cannot be captured by the price-only dimension". Article 26 of the NZIA had required the Commission to provide a list of specific pre-qualification and award criteria, and this list was included in an Implementing Act that was approved by EU Member States in April 2025.

In this Implementing Act, the Commission rightly highlights the importance of tackling biodiversity loss and ecosystem collapse via environmental sustainability criteria. The Act states that "it is appropriate to design criteria in auctions that help maintain the diversity of species, ecosystems and their reproductive capacity" and that "the criterion should require net-positive contributions to biodiversity." It further states that criteria related to carbon and environmental footprint, circularity, and pollution levels from renewable technologies are also relevant.

However, the Implementing Act does not require Member States to apply such criteria to all renewables projects. Moreover, social criteria are not included in the Implementing Act at all, which is a missed opportunity to make renewable projects more resilient and connected to local needs. Ecological and social criteria should not be seen as a nice to have, but rather as a must have for all renewable energy projects, in order to maximise their contribution to an environmentally-friendly and community-positive energy transition.

In Europe, the total installed wind power capacity has reached 285 GW, with 248 GW (87%) onshore and 37 GW (13%) offshore. In 2024, a total of 36.8 GW of new wind power capacity was awarded across 12 European countries, including 17 GW for onshore wind and 19.9 GW for offshore wind. This represents a 35% increase compared to 2023. Nevertheless, for offshore wind, the implementation of auctions has been slower than expected for various reasons (e.g. grid deployment delays, geopolitical context).[6] In this context, building robust auction design is essential to ensure stability to the market.

In this position paper, WWF highlights the importance of including robust ecological and social criteria in wind tenders, with a particular emphasis on offshore projects. WWF believes that by setting such prequalification and award criteria, countries will reward projects with the lowest impact on biodiversity and that have the strong involvement of the local community, thereby in turn boosting support for the rapid expansion of the sector.

POLICY RECOMMENDATIONS

Auction design:

- For auctions developed under the EU State Aid Guidelines on Climate and Energy[7], countries should make full use of the 30% threshold for non-price criteria in the award phase, and focus on ecological and social dimensions. For auctions that do not receive public financial support, and are therefore not subject to the 30% threshold, the share of the overall score dedicated to non-price criteria should exceed this benchmark.
- States should use ecological and social non-price criteria as prequalification criteria, setting a minimum threshold that all bidders must meet in order to participate in the auction.
- Non-price criteria in auctions should be measurable and scorable, and should incentivise the best possible achievement of a given objective (eg, mitigate negative impacts on ecosystems, foster local community engagement).
- The criteria should require the applicants to ensure the environmental and social impacts of the projects are monitored and that information is shared with the competent authorities.
- States must designate the competent authorities responsible for monitoring the implementation of the measures committed to. If requirements are not met there should be consequences, such as penalties.
- For offshore wind tenders, Member States should work together at sea basin level in order to agree on a common list of non-price criteria, with some flexibility depending on the specificities of each wind farm's location, which might include factors such as topology, size or local ecosystems.

Ecological criteria:

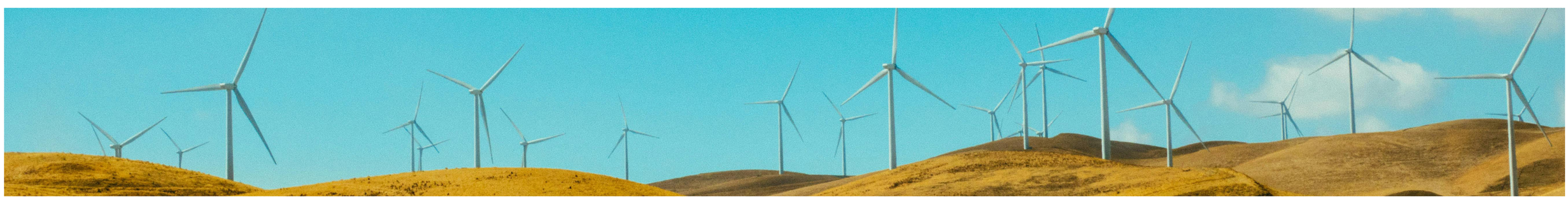
- States should set comprehensive ecological criteria in the prequalification and award phases. These should address all parts of the mitigation hierarchy (i.e. measures to avoid impacts, to reduce impacts and to restore and regenerate ecosystems)[8], placing emphasis on avoiding impact first. These should also cover environmental and climate impacts throughout the whole lifecycle of the project.
- Criteria should require a net-positive contribution to biodiversity, in line with the EU Implementing Act on non-price criteria.

Social criteria:

- Member States should include social criteria in tenders that guarantee human and Indigenous Peoples' rights and local community engagement. Those criteria should also support local and regional competitiveness by promoting short supply chains and the involvement of local workers.
- The European Commission should include social criteria in the forthcoming Citizens Energy Package to incentivise Member States systemically to apply the most effective criteria in auctions.

7. Communication from the Commission – Guidelines on State aid for climate, environmental protection and energy 2022.
8. See more explanation on the mitigation hierarchy on page 6.

1. See Annexes for examples of non-price criteria included in offshore wind auctions.
2. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401735
3. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022XC0218(03)
4. https://english.rvo.nl/news/permit-results-ijmuiden-ver-alpha-en-beta
5. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=PI_COM:C(2024)2650
6. WindEurope, Wind energy in Europe 2024 Statistics and the outlook for 2025-2030, https://windeurope.org/intelligence-platform/product/wind-energy-in-europe-2024-statistics-and-the-outlook-for-2025-2030/



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BUILDING STRONG TENDERS VIA ECOLOGICAL AND SOCIAL CRITERIA

The criteria used in auctions for renewable energy should be clear, specific, and leave no room for misinterpretation. They should be based on verifiable data and not on subjective judgements, so that bids can be directly compared and decisions made fairly. All criteria must be designed in a way that enables full implementation by the winning bid of the environmental and social measures committed to. They should be part of a transparent and measurable framework facilitating the assessment by the responsible authority. Non-compliance should lead to penalties, and the authority responsible for checking compliance with the criteria must be designated.

Relevant authorities in each country should gather independent experts to evaluate bids, as the latter can be complex, difficult to evaluate, and are subject to information gaps and uncertainty. Finally, having well-defined guidance on how to compare and score different kinds of measures against the criteria (e.g. measures to avoid and reduce environmental impacts, measures to increase public participation) will improve predictability and transparency for everyone involved in the process.

Ecological criteria

The ecological criteria used in renewable energy auctions should fully reflect the 'mitigation hierarchy', which is widely acknowledged by developers, scientists, and NGOs as the tool to use when considering impacts on nature when developing offshore wind. The Science-Based Targets Network has set out the mitigation hierarchy as a step-by-step framework to help companies plan for and reduce their impacts on nature (see Figure 1). This framework not only

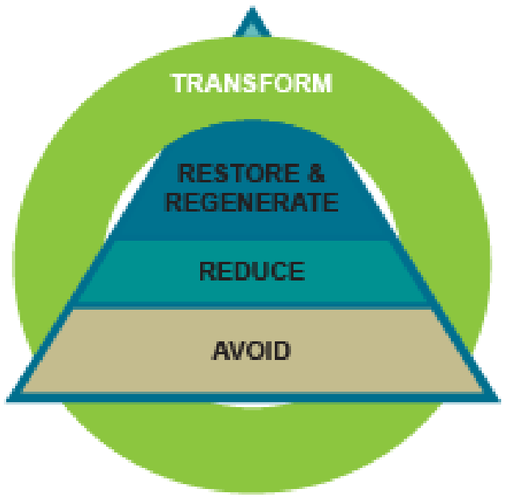
helps avoid and reduce harm, but also encourages proactive steps to restore ecosystems and enhance nature. WWF has published a report "Towards Nature Positive for the Ocean: Pathways for Corporate Contributions", that helps companies operating in marine and coastal environments to take meaningful steps toward halting and reversing biodiversity loss.[9] The actions identified follow the mitigation hierarchy and are organised around the "AR3T action framework": Avoid, Reduce, Restore & Regenerate, and Transform.

The mitigation hierarchy should be applied from the bottom up, starting with all possible actions to avoid negative impacts, before moving on to the next step, namely to reduce impacts, and as a last step to restore and regenerate degraded habitats. The action ('Transform') on broader system change can be taken at any time in the process, not just at the end of it.

The criteria listed below should help ensure that wind projects are developed in a nature-friendly way. For offshore wind, the positive spillover effects for the wider regional marine ecosystem should also be considered, where data is available.

9. https://www.worldwildlife.org/projects/towards-nature-positive-for-the-ocean-pathways-for-corporate-contributions

The AR3T Action Framework



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

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

Restore: adopt measures 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 measure 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 after the drivers of nature loss; these are additional to the other elements of the framework.

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

1. Planning principles and prequalification criteria to avoid negative impact

To protect irreplaceable biodiversity features, wind energy projects must be planned in a way that avoids unnecessary pressure on nature. Choosing the right location is the first and most important step. WWF strongly recommends that States exclude the following areas when carrying out spatial mapping on where they will issue tenders:

- Natura 2000 sites and protected areas designated under national or regional protection schemes;
- Important habitats for threatened species, identified bird and marine mammal migratory routes and spawning and rearing areas for fish; Areas with particularly high natural carbon uptake and storage;
- Other areas identified as biologically or ecologically valuable and that are vulnerable to the activity based on sensitivity mapping and other scientific tools.

During the prequalification phase, bidders should demonstrate where, within the area designated by the State, the wind farm site will avoid negative impact on biodiversity (micro-siting). To enable this, governments must provide high-quality environmental data ahead of the prequalification stage. For smaller, clearly defined sites, this level of detail may not be necessary.

The prequalification criteria for offshore wind projects should include:

- No wind turbines in Marine Protected Areas (MPAs) or other areas of particular importance for biodiversity, [10]ecosystems, and ecosystem services, such as ecological corridors, and buffer zones around these areas.
- No wind turbines in spawning and rearing areas for fish, migration routes and important habitats for seabirds and bats, migration routes for marine mammals, important habitats for threatened species, important areas for feeding, breeding and haul-out, and "carbon-rich" coastal and marine ecosystems.

The prequalification criteria for onshore wind projects should include:

- A prioritisation of brownfield areas and degraded land, where this has been defined, unless these areas are already designated for nature restoration and/or for carbon sequestration. The latter areas should in all cases be avoided.

As regards circularity of the materials used, although metals such as copper, nickel, manganese, chromium, and zinc are essential for wind energy infrastructure, a project cannot be considered nature-positive if these materials are sourced through environmentally destructive practices. Therefore, during the prequalification phase, bidders should demonstrate that the materials that will be used are not sourced from mining practices that damage critical habitats or high conservation value areas, as well as any deep-sea mining.[11]

2. Prequalification and award criteria to reduce negative impact

To reduce the negative impacts of projects, auctions should include prequalification criteria that mandate bidders to showcase how projects will contribute to the conservation of ecosystems and species on site (in-situ). While this is an evolving field, a list of the best available mitigation measures exists for offshore wind, such as the one set up by the Offshore Coalition for Energy and Nature (OCEaN). Currently their database lists and evaluates the effect and relevance of around 90 measures and can be used by bidders.

Both prequalification and award criteria should aim to reduce negative impact from a global lifecycle perspective, minimise pollution, and reduce the climate footprint of projects. This includes measures to reduce material and mineral use, notably through choice of materials and recycling. It also entails decommissioning that reduces harmful impacts as far as possible. The design of infrastructure and the materials chosen are especially important here.

Award criteria should also be used to promote innovative measures. Environmental measures are on the increase in the wind power sector, and by rewarding such practices in tenders, measures will become increasingly beneficial for ecosystems. Once these measures prove successful, they can be adopted as prequalification criteria in future tenders (depending on the specificities of the site), helping to raise the bar for the whole sector.

Finally, WWF encourages governments to assess the possibility of including a prequalification criteria requiring wind developers engaged in fossil fuel activities to have a decarbonisation strategy and/or a commitment to cease all fossil fuel activities in the future. The Science Based Targets initiative (SBTi) could serve as a basis for assessing this prequalification criteria.

10. This includes areas of high value for benthic habitats, birds, and cetaceans, areas of high value for species of community interest, and areas of high value for cetaceans.
11. Science Based Targets Network (2023). Step 3: Measure, Set, Disclose: LAND (Version 0.3), https://sciencebasedtargetsnetwork.org/wp-content/uploads/2023/05/Technical-Guidance-2023-Step3-Land-v0.3.pdf

Prequalification or award criteria, or a comination of both:

1. **Criteria protecting ecology and the ecosystem of the sea basin should include specific mitigation measures that:**

- Limit the impact on migration patterns of birds, fish, turtles and marine mammals during all phases of the project. Solutions for this purpose exist, such as the installation of camera systems and implementation of local curtailment where there are risks of collisions, the painting black of rotor blades (in some cases), and the use of best available technology to reduce the impacts of pile driving. Depending on the size of the foundation, the use of signal lights should be minimised and tailored to the specific weather conditions, in accordance with the principle "as much lighting as necessary, as little lighting as possible".
- Avoid construction, land conditioning, levelling and maintenance works at times of the year that may be harmful to the identified local species (e.g. during the breeding and reproduction season).
- Keep underwater sound levels during construction and operation phases below the threshold established by Member States in response to Descriptor 11 of the Marine Strategy Framework Directive,[12] for example by using bubble curtains.
- Ensure that the levels of toxic substances during the construction and maintenance phases remain below the Member States threshold for Descriptors 8 and 10 of the MSFD.
- Limit electromagnetic field impacts, for example by insulating cables and placing them deep enough.
- Consider other renewable energy projects in the area (multiuse of the space) that minimises impacts of the project.

2. **Criteria minimising the impact of onshore wind projects should include specific mitigation measures that:**

- Limit the construction of new roads and paths during the construction phase.
- Limit the impact on migration patterns of birds during all phases of the project: see similar solutions for offshore wind above.
- Avoid construction, land conditioning, levelling and maintenance works at times of the year that may be harmful to the identified local species, such as during the breeding and reproduction season.
- Consider other renewable energy projects in the area (multiuse of the space) that minimises impacts of the project.
- Create passageways for birds, bats and terrestrial fauna.

3. **Criteria minimising the carbon footprint and pollution, and improving the circularity of onshore and offshore wind projects, should include:**

- A robust framework for circularity: Member States should incentivise developers to use more circular resources during the production and construction phase. For instance, non-price criteria can encourage wind developers to use low carbon steel, recycled materials, and nature-based solutions for wind turbines if they are included in the prequalification phase. The European Commission should draw up an EU-wide standard to establish a circular economy for wind turbines.
- A waste management and discharge plan during the construction phase.
- A decommissioning plan to be implemented by the project developer.
- For offshore wind, a plan to reduce the impact of service traffic: In light of the EU's target to install more than 300GW of offshore wind capacity by 2050, the traffic to build, maintain and decommission wind turbines will increase significantly. Developers should present a robust plan to optimise and thereby minimise service traffic. Moreover, developers should commit increasingly to use ships that run on non-fossil fuels or that are battery powered.

https://eur-lex.europa.eu/eli/dec/2017/848/oj/eng

3. Award criteria to restore and regenerate ecosystems

Restoration refers to the active or passive process of helping an ecosystem recover in order to improve its structure and functions and to conserve or enhance biodiversity and ecosystem resilience. This can include restoring an area of a particular habitat type to good condition, re-establishing a favourable reference area, and improving the habitat of a species to sufficient quality and quantity.[13] As defined in the mitigation hierarchy, regenerating ecosystems means adopting measures increasing the biophysical function and/or ecological productivity of an ecosystem or its components.

The European Commission should develop an EU toolbox incorporating both qualitative (guiding principles) and quantitative (metrics-based) methods for implementing net-positive contributions to biodiversity. The toolbox developed by the Rich North Sea[14] and the WWF paper on nature-positive frameworks for oceans would serve as a strong basis for such a toolbox.[15]

Within the offshore renewables sector, there is currently no consistent, science-based and credible framework to enable companies to contribute to nature-positive outcomes, particularly regarding nature restoration and regeneration efforts. Additional efforts will be required to integrate scientific recommendations into operational strategies and practices. Monitoring, evaluating, and learning from the tools assessing impacts of measures is also essential. Therefore, investment to increase scientific knowledge and science-based practice in this field should be rewarded. Research and innovation are also needed, including around restoration practices, new technologies, and social engagement. Allocating points in auctions for such activities will help speed up this process.

WWF recommends that Member States include criteria incentivising the following practices in their tenders:

- Innovative and effective concepts for nature inclusive design: designs that have proven their effectiveness in independent, science-based evaluation processes may be used as prequalification criteria.
- The use of best available technologies to improve knowledge of the restoration of the ecosystem in the area.
- The promotion of R&D projects, for example on the conservation and recovery of species and habitats.
- The allocation of money by developers to finance the above activities, which will help preserve the biodiversity potentially impacted by the project.

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13. Article 3 (3), definitions, REGULATION (EU) 2024/1991 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 June 2024 on nature restoration and amending Regulation (EU) 2022/869
14. https://toolbox.therichnorthsea.com/
15. https://www.worldwildlife.org/projects/towards-nature-positive-for-the-ocean-pathways-for-corporate-contributions

4. Monitoring and information sharing for positive environmental and social impacts

To ensure this rapid development of the wind sector benefits both nature and communities, it is essential to monitor closely how well developers follow through on their environmental and social commitments. This will help assess the success of the energy transition from both an ecological and social perspective.

Environmental monitoring and information sharing are both crucial to generate knowledge about the impact of wind projects on ecosystems, to develop solutions that improve them, and to create trust among stakeholders and the public that will benefit from wind development.

Monitoring is also key to implementing temporary mitigation measures, such as lower turbine speed during migration season. Without available data on the ecosystem, it is impossible to assess the changes that are/will occur during a project's lifetime, and therefore the impacts of the measures implemented. The European Commission should ensure that new findings and approaches on how to reduce ecological impacts and improve social benefits deriving from research and experience are shared between countries and included in the design of future auctions.

WWF proposes to include criteria requiring the following:

- Development and implementation of long-term environmental impact monitoring programmes for wind farms that include the monitoring of species and the extent of any alteration to and/or extension of priority habitats after construction.
- Provision of a transparent and accessible platform for data sharing: developers providing open and transparent data on environmental impacts and the effects of their mitigation measures should be rewarded.
- A contribution to knowledge development to help reduce future negative ecological effects and strengthen positive ecological effects in the wind farm area.
- The sharing by the winner of the bid of public information about its commitments.

Social Criteria

Social criteria in prequalifications and auctions are a crucial part of a just energy transformation and key to upholding human rights. They also hold the potential for enabling local ownership and generating socio-economic benefits for the affected local communities. Social criteria should cover citizen participation, the bidder's employment policies, involvement of other stakeholders, Indigenous People and local people's rights, and due diligence standards.

While gaining national and local support for wind projects is essential, such criteria will also foster the competitiveness of local areas, such as coastal and deindustrialised communities, which may be economically disadvantaged. Promoting shorter value chains and the acquirement and/or improvement of skills contributes to a robust energy transition. Additionally, involving more stakeholders in the process can increase the number of bidders and lead to stronger applications. As regards innovation, the diversity of stakeholders consulted by the bidders during project development is also expected to raise the bar for the wind sector as a whole, including related academia, small and medium-sized enterprises (SMEs) and research organisations.

WWF recommends that Member States integrate local needs and opportunities into project design, and select, from the following criteria, those that will maximise the inclusion and participation of local communities and bring the most benefits to them. WWF also recommends that the European Commission include the following criteria in the forthcoming Citizens Energy Package in order to incentivise Member States systemically to apply the most relevant social criteria in auctions:

1. Citizen participation in the auction:
    - A minimum % of the total investment costs of the project is open to direct and/or indirect citizen participation (equity or financial participation).
    - A minimum financial contribution by energy communities (% of the Capital Expenditure (CAPEX)), allowing renewable energy communities to participate in commercial scale projects.
    - An effective and transparent plan for communication and dialogue with local stakeholders.
2. Criteria on bidder's employment policies:
    - Comprehensive programmes for vocational training, and ongoing education and training programmes for all employees.
    - Use of apprentices and reskilled workers.
    - Promotion of traditional local activities (especially in rural areas to avoid rural exodus).
    - Commitments to the integration into the workforce of people experiencing particular social or professional difficulties, for example by including a minimum share of people that have not been working for a certain period of time.
3. Involvement of other stakeholders in the bid:
    - Measures to ensure that SMEs gain experience from delivering products and/or services (e.g. a minimum share of the work related to the bid should be procured from an SME).
    - Involve other stakeholders in the bid, e.g. academic institutions, research institutes, etc.
4. Responsible business conduct:
    - Fair, safe and competitive working conditions: working in the wind energy industry is highly demanding, both physically and mentally. Qualified and highly motivated staff are an essential precondition to making the energy transition a success. Therefore developers should ensure competitive and fair salaries and collective remuneration agreements, employee participation and the highest standards for health and safety at work.
    - Securing Indigenous Peoples' rights: developers must honour the UN principles of Free, Prior and Informed Consent for Indigenous People, meaning that rightholders in the area must approve the project.

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