Accelerating offshore wind deployment in a nature friendly way

THE ROLE OF NON-PRICE TENDER CRITERIA • 08/2022

INTRODUCTION

To tackle the climate emergency and the current energy security crisis, drastic reductions in the demand for fossil fuels are urgently needed. Meeting the Paris Agreement limit of 1.5°C of warming requires **cutting the EU's energy demand in half by 2050** compared to 2015 levels and shifting demand to renewable electricity in all sectors (notably electrification in industry, transport and buildings). This requires a massive expansion of renewable electricity generation: approximately a 6-fold increase by 2045, compared to 2021 levels[1]. On this basis WWF is calling for renewable energy to meet 50% of the EU's final energy consumption by 2030[2].

To align climate change mitigation with the EU's Biodiversity Strategy targets for 2030, WWF is advocating for the **deployment of offshore renewable energy to be done in a space-efficient and nature-friendly** way. To that end, tenders for offshore renewable energy projects should shift away from being based principally on price and move towards a broader framework that gives priority to environmental and social criteria. In this document, WWF outlines how the use of non-price criteria to assess and select tenders can help address the twin crises of climate and biodiversity.

RECOMMENDATIONS

- **Member States (MS) must apply an ecosystem-based approach (EBA) to Maritime Spatial Planning (MSP),** which includes a robust Strategic Environmental Assessment (Directive 2001/42/EC) that considers the cumulative impacts of all maritime activities, climate change, the precautionary principle, sensitivity mapping, active stakeholder engagement, and aligns with the EU Green Deal climate and biodiversity goals. **EBA-MSP acts as a foundation to a centralised approach to tendering** and, when successfully applied, it will include areas for new renewable energy projects that are accompanied by appropriate mitigation measures and monitored for their environmental and social impacts.

- MS should use a **central approach** in their tender procedures, i.e. they should pre-select the sites which are least sensitive for nature (which are identified via an EBA-MSP process, see above) and organise site-specific tenders. A centralised approach

[1] Climate Action Network Europe (CAN-E) and European Environmental Bureau (EEB), 2022, Paris Agreement Compatible Scenarios for Energy Infrastructure (PAC scenario), https://www.pac-scenarios.eu/pac-scenario/scenario-development.html

[2] Among renewable energy sources mentioned in the European Commission Offshore Renewable Energy Strategy, wind and solar are the ones with the lowest impact on nature, the ones with the lowest cost of electricity generation, and the two technologies which can deliver the biggest contribution to emission cuts (see e.g. IPCC, 2022, p 42). Other technologies, too, have the potential for a nature-friendly expansion at sea, including wave and tidal energy. Their short-term potential is however limited, with the Commission expecting "at least 1 GW" of installed capacity by 2030 (compared to 60 GW of offshore wind), which should be expanded to 3.36 GW (see PAC scenario above).

WWF European Policy Office, 123 rue du Commerce, 1000 Brussels, Belgium.

can ensure that the sites selected take into consideration economic, environmental and social impacts, which is necessary for nature-friendly renewable energy deployment.

- **MS should make full use of the option given by the European Commission to include 30% of non-price criteria** in their tenders for offshore wind projects. This will reduce the environmental impact of future offshore wind farms and improve the engagement of and benefits for coastal communities.

- To give guidance to MS, the European Commission should, after consulting with the scientific community, environmental organisations, renewable energy associations, local community' representatives and other stakeholders, **publish guidelines on how Member States should best make use of non-price criteria** in tenders for offshore renewable projects. These guidelines will help harmonise the environmental and social criteria available for MS to choose from, which will increase the projects' comparability across borders.

- If MS want to base public support of offshore renewable energy on two-sided Contracts for Difference (CfDs)[3], they should make sure that **competition on non-price criteria still plays a decisive role in selecting winning bids**. This will ensure the goal of shifting competition away from purely price-based factors is not undermined.

[3] See below.

WWF European Policy Office, 123 rue du Commerce, 1000 Brussels, Belgium.

Table 1: An overview of the offshore renewable energy development process

Timeline	State of Play (until July 2022)		As soon as possible			Offshore project life cycle
Activity	**MS develop national maritime spatial plans in line with the MSP Directive (MSPD)**	**MS develop' 10-year national energy and climate plans (NECPs) for 2021-2030**	**EBA-MSP is implemented at national level, and plans are improved to align with new EU legislation and revision of the Marine Strategy Framework Directive (every six years)**	**Site designation and centralised tendering for areas designated for renewable energy production in national MSP**	**Permitting and Final Investment Decision (FID)**	**Offshore renewable energy projects are built, monitored and decommissioned**
Challenges	Six MS (Croatia, Cyprus, Greece, Italy, Romania and Spain) have yet to finalise their MSP.	NECPs don't consider the new targets of the 'Fit for 55' legislation and the REPowerEU plan (including 'go-to areas' for offshore renewable energy). MS need to update them by mid-June 2023 (draft) and June 2024 (final version).	MS are not required to update their MSP before the current plan is due (defined at national level).	The EU has left it to Member States to decide which non-price environmental and social criteria (up to 30%) to include in their offshore tenders.	Small administrative capacity at national level; lack of digitisation and knowledge exchange between MS.	Monitoring data collection is decentralised and collected by different national agencies; lack of plans for decommissioning offshore energy infrastructure at a project's end.
Opportunities	Late MSP must follow an EBA, which includes robust Strategic Environmental Assessments (SEA), sensitivity mapping, active stakeholder engagement, and aligns with the EU Green Deal climate and biodiversity goals, as well as NECPs.	NECPs consider more than just the power sector transition, and can therefore give a picture of the future overall electricity demand as a result of electrification and fossil fuel phase out.	Some MS, such as Belgium, Denmark, France and the Netherlands, are currently updating their MSP.	MS adopt non-price environmental and social criteria that align with EU nature legislation, with the circular use of materials and are harmonised/ comparable across borders.	Adopt a one-stop shop approach with designated national authorities and timelines for project approval.	Develop a centralised monitoring system that evaluates the long-term cumulative impacts of all maritime activities at sea. In Belgium, for example, the monitoring system is funded by the industries, which reduces the financial burden for governments and improves the likelihood of the monitoring system being adopted.
WWF position	Position paper EBA-MSP (2020) Guidance paper on how to assess EBA-MSP (2021)	Reaction on NECPs (2019)	Maritime Spatial Planning in the Baltic (2022)	*See below*	Briefing on EU energy policy (2022) - see p. 10 on permitting and 'go-to areas'	

WWF European Policy Office, 123 rue du Commerce, 1000 Brussels, Belgium.

The need for robust MSP in offshore site selection

In 2021, WWF published two papers detailing how an **ecosystem-based approach to Maritime Spatial Planning**[4] (EBA-MSP) is the best solution for deploying offshore renewable energy infrastructure[5] in a way that is compatible with the restoration, protection and resilience of marine ecosystems. A successful EBA-MSP is based on a spatially-specific **Strategic Environmental Assessment (SEA)** (Directive 2001/42/EC) that thoroughly considers the cumulative impacts of all maritime activities, land-sea interactions, and aligns with the mitigation hierarchy (avoid, compensate, restore). Spatial designations based on robust impact assessments allow activities, such as offshore wind, to be allocated to areas where impacts on nature are minimal and can be monitored over time. Tools such as **sensitivity mapping** and **ecosystem valuation** help identify and avoid particularly sensitive habitats, which require safeguarding from human pressures.

Since the publication of the Maritime Spatial Planning Directive (MSPD) in 2014 (Directive 2014/89/EU), MS have been tasked with developing national maritime spatial plans that designate space for traditional maritime sectors such as fisheries and vital new industries like offshore renewables. The deadline for completing the first iteration of the plans was March 2021. Six MS (Croatia, Cyprus, Greece, Italy, Romania and Spain) have since been targeted with infringement procedures by the European Commission for failure to deliver their plans.

However, simply publishing a plan is not enough. To be effective and deliver on the objectives of the MSPD, national planning exercises must also fulfil a number of key mandatory requirements. National plans available to date show that MS are falling short of this obligation. For instance, WWF's assessment of the implementation of MSP in the Baltic Sea[6] reveals significant discrepancies between national plans, and misalignments with EU Green Deal biodiversity goals and MSPD requirements. **Integrating marine protection, limiting the expansion of at-sea activities, and considering the cumulative effects of human activities on the carrying capacity of marine ecosystems was not a priority for the majority of Baltic MS in their maritime spatial plans**.

Areas selected for marine protection often focus on birds and their migratory routes, paying very limited attention to marine ecosystems, such as subtidal sandbanks. Furthermore, not one MS plan currently sets aside space for nature restoration activities in the Baltic, and only two have partially considered how climate change will impact the productivity and resilience of marine ecosystems over space and time. Where national plans have designated space for offshore renewable energy, which is necessary for achieving climate neutrality by 2040, most countries failed to consider the impacts of offshore renewable energy infrastructure on ecosystems and wildlife, both within and outside protected areas.

[4] WWF European Policy Office, 2021, Ecosystem-based Maritime Spatial Planning in Europe and how to assess it, https://www.wwf.eu/?4076441/Ecosystem-based-Maritime-Spatial-Planning-in-Europe-and-how-to-assess-it
[5] WWF European Policy Office, 2021, Nature protection and offshore renewable energy in the EU, https://wwfeu.awsassets.panda.org/downloads/wwf_epo_position_paper_offshore_renewable_energy_and_nature.pdf
[6] WWF European Policy Office, 2022, Maritime Spatial Planning in the Baltic, https://www.wwf.eu/?6106591/Baltic-countries-lead-EU-for-sustainable-sea-space-management-but-still-put-nature-at-risk

WWF European Policy Office, 123 rue du Commerce, 1000 Brussels, Belgium.

A similar trend persists regarding nature protection in other regions, where the political will to expand offshore wind development, reflected in areas designated at sea for these activities, is not being mirrored with marine areas being designated for restoration and protection activities. A notable exception is the Netherlands, where an agreement[7] between the government and stakeholder parties excludes Marine Protected Areas from sites available for renewable energy deployment.

The situation is particularly alarming in the Mediterranean, where six MS are currently under infringement procedures by the European Commission for not delivering their MSP on time. In these countries, the absence of carefully selected sites for offshore renewable energy has led to a situation where industry stakeholders are coming forward with proposals that disregard biodiversity, mainly because it has not yet been mapped or protected by governments.

Speeding up the MSP process and guaranteeing that it is based on robust assessments as well as consideration for marine biodiversity and the cumulative impacts of human pressures is essential to realise the deployment of offshore renewable energy at a rate compatible with targets to meet both the Paris Agreement and the EU's biodiversity goals.

A crucial aspect of how MSP is developed in Europe is the focus on **adaptive management**. Maritime spatial plans are not meant to be fixed indefinitely and set in stone, but rather to be regularly updated based on data collected through monitoring and to better incorporate important EU legislation. While the plans must be updated at least once every ten years, MS can start the process sooner. For example, the Danish government has recently agreed to kickstart the process again,[8] following broad negative feedback of the national plan it adopted in 2021 and new plans for more offshore renewable energy following the Energy crisis. Its new plan is already expected to include a much larger area for offshore renewable energy and additional designations for marine conservation, but it is as yet unclear how specifically designated and effectively managed the latter will be. Belgium, France and the Netherlands are also in the process of updating their MSP. These are crucial steps to align national priorities with EU climate and biodiversity goals.

[7] Dutch House of Representatives, 2020, North Sea Agreement, https://www.noordzeeloket.nl/en/policy/north-sea-agreement/

[8] Finans, 2022, Stort slag om havbunden: Regeringen vil fordoble pladsen til havvindmøller for at komme ud af Putins kløer [Big battle for the seabed: Government to double space for offshore wind to get out of Putin's clutches], https://finans.dk/politik/ECE13941082/stort-slag-om-havbunden-regeringen-vil-fordoble-pladsen-til-havvindmoeller-for-at-komme-ud-af-putins-kloeer/

Tenders for offshore wind: Prioritise nature when choosing projects

A centralised approach to tendering

When organising tenders for offshore renewable energy projects, **most MS are currently using a 'central model', whereby public authorities define the sites available for offshore wind projects and organise site-specific tenders.**[9] This is different from a 'decentral model' or 'open door' procedures, where project developers can develop new projects by selecting and developing sites on their own and apply for site-independent support schemes, which would mean that site-selection is done separately from Maritime Spatial Planning.[10]

WWF advocates for **EBA-MSP to act as a foundation to a centralised approach to tendering**, as this enables the consideration of economic, environmental and social impacts when planning the allocation of maritime activities within oceanic boundaries. A successful ecosystem-based national maritime spatial plan will include areas for new renewable energy projects, with any such project to be accompanied by appropriate mitigation measures and taking the impact of offshore wind on coastal communities into account.

It should be noted that, globally, the 'open door' approach remains much more common in tenders for offshore renewables. **MS governments, seeking to accelerate the expansion of offshore wind, might be tempted to increasingly rely on 'open door' procedures**, as these allow them to 'skip' the lengthy process of site selection by national or subnational authorities. However, WWF believes a truly sustainable Blue Economy must rely on science-based and inclusive planning that takes into consideration both people and nature. As such, **the 'open door' approach should not be pursued for offshore renewables in the EU**.

Environmental and social criteria

As the technology has scaled up in the EU, the costs of offshore wind electricity generation have rapidly fallen. Analyses of previous tenders for offshore wind development in European countries have shown underlying revenue expectations decreasing by around 6% annually since 2009 (reflecting generation costs and profit margins).[11] Costs of projects in the development phase (i.e. expected to be built in the coming years) are even lower.[12] Further price decreases are expected (-44% in levelised costs of electricity by 2030 for bottom-fixed offshore wind turbines, compared to 2020 levels).[13]

Until now, the focus on the lowest price has overshadowed the necessity to consider the social and environmental impacts of projects. In the context of further expanding renewable energy

[9] First Offshore Wind Project of India, 2017, Procedures for Offshore Wind https://mnre.gov.in/img/documents/uploads/c559f581eaba4983820e5f012779594d.pdf, p. 10.
[10] See e.g. Danish Energy Agency, 2021, Procedures and Permits for Offshore Wind Parks, https://ens.dk/en/our-responsibilities/wind-power/offshore-procedures-permits
[11] Jansen et al, 2020, https://orbit.dtu.dk/en/publications/offshore-wind-competitiveness-in-mature-markets-without-subsidy
[12] Adelphi, 2022, https://www.adelphi.de/de/system/files/mediathek/bilder/Offshore_wind%282%29.pdf
[13] ETIPWind, 2021, https://etipwind.eu/publications/getting-fit-for-55/, p. 18. For floating wind turbines, costs of electricity generation are substantially higher (currently at 180€ LCOE per MWh), but are also expected to fall over time (-65% by 2030).

at sea, particularly offshore wind, this risks increasing pressure on already-degraded marine ecosystems without sufficiently considering cumulative impacts over time. WWF is therefore calling for a **shift away from a purely price-based competition between potential developers of offshore wind projects towards a selection process that gives due consideration to environmental and social impacts**, i.e. giving preference to projects that include appropriate mitigation and restoration measures to reduce negative impacts on marine ecosystems. In its new state aid guidelines for climate, environmental protection and energy (CEEAG), the **European Commission allows for non-price criteria to make up to 30% of the weighing by which tenders are decided.**[14] These criteria can include environmental and social aspects.

Non-price criteria can be included in tenders in different ways. One important differentiation exists between **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. The European Commission allows MS to select projects based on both options to make best use of the possibility of qualitative criteria (such as environmental, social and cultural impacts) under their specific conditions. When using weighting criteria (such as point allocation), it is important that MS provide clear indications on how they standardise the assessment of bids to ensure fair competition.[15] Examples of existing non-price criteria can be found below. WWF favours issuing EU-level guidance on all environmental and social criteria that can be chosen by national authorities, taking into consideration the local and regional specificities of each tender. These criteria should align with environmental requirements already established in EU legislation (Directives 85/337/EEC[16], 92/43/EEC[17], 2001/42/EC[18] and 2008/56/EC[19]).

Previous use of non-price criteria in offshore wind tenders

- **Denmark** uses multiple pre-selection criteria, particularly with the aim of certifying the financial solvency of the project developer. While this limits the amount of potential bidders (and can therefore reduce inclusiveness and competition), it increases the likelihood that wind farms are actually realised.

- **France** allocates points to the multiple bids based on different criteria. While it has recently shifted to a more price-dominated process, prior tenders used to weigh 40% to quality/jobs, 40% to the price and 20% to the environment. Those criteria included robustness of the contractual and financial arrangements, the size of the area occupied by the wind farm (i.e. more points for smaller area), distance to the shore (i.e. more

[14] European Commission, 2022, https://ec.europa.eu/commission/presscorner/detail/en/qanda_22_566, p. 33.
[15] See footnote 44 (p. 33) of the CEEAG (footnote 14 of this document)
[16] Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
[17] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora
[18] Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
[19] Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)

points for greater distances), number of wind turbines (i.e. more points for less turbines), budget for environmental measures (i.e. more points for higher budget).

- **The Netherlands** start their selection process with a competition for a zero-support tender (see below), focusing only on qualitative criteria such as technical, economic and financial feasibility, as well as the ability to construct the wind farm within four years. Only if there is no suitable bid for developing the project without state-support (i.e. subsidies) is a second selection round conducted, which includes subsidies.

- **Belgium** held a public consultation based on multiple suggested non-price criteria, including citizen participation, local benefits, sustainability, nature preservation and system integration.[20]

WWF calls on all MS to make full use of the non-price criteria option when selecting offshore renewable energy projects for development, and for this to include environmental and social criteria. WWF supports:

- Designing **environmental criteria that fully support the requirements and objectives of EU nature legislation**, with a focus on minimising anthropogenic pressures and human activities that impact the marine environment, including those impacts and pressures listed under the Marine Strategy Framework Directive (Directive 2008/56/EC) [21] that are obstacles to achieving good environmental status of marine waters.

- Criteria that incentivise the maximisation of **electricity generation per square metre**, for instance by a quantifiable criterion of **expected generation [MWh] per year/square metre** or installed capacity [MW]/square metre. This also incentivises the co-location of multiple renewable energy sources' technologies (such as wind and solar) in one location and reduces the overall space needed for electricity generation at sea.

- Criteria to incentivise **concepts of circular resource use** and **eco-design**. Furthermore, eco-design (an engineering approach that seeks to integrate the infrastructure within the natural environment) should be accompanied by regular monitoring to ensure the proliferation of non native-species is avoided. Eco-design includes systems that take into account the inconvenience caused to migratory species and benthic species, i.e. animals that live on the sea floor, through specific manufacturing processes and proper materials.

- Concrete solutions for **decommissioning offshore renewable installations** after their life cycle.

[20] Belgian Minister of Energy, 2022, Public consultation on the offshore wind tender for the Princess Elisabeth Zone, https://economie.fgov.be/sites/default/files/Files/Energy/public-consultation-on-the-offshore-wind-tender-for-the-princess-elisabethzone.pdf

[21] European Commission, 2017, laying down criteria and methodological standards on good environmental status of marine waters and specifications and standardised methods for monitoring and assessment, and repealing Decision 2010/477/EU https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017D0848

- The use of any **materials for offshore renewable energy projects that stem from deep sea mining activities should be excluded** either by a pre-selection criterion or through the permitting process.

- Criteria to incentivise the **conservation efficacy and social equitability of financial contributions** by offshore project developers **to projects restoring and protecting damaged ecosystems.** The assessment of financial contributions should thereby look beyond a simple quantification of the financial sums, and include factors such as the appropriateness to relevant ecosystems, habitats and species; the involvement of local stakeholders; and expertise. To address cumulative effects of multiple renewable energy installations (and potentially other sectors), contributions could be bundled into funds or projects combining contributions of multiple activities, e.g. at sea basin level.

- Criteria to **increase local benefits** to coastal communities and broader society, including measures provided in the form of a **community benefits package.** This should be driven by local needs, complement socio-economic causes and, ultimately, contribute to building resilient and sustainable coastal communities. These activities can include, for example, apprenticeship schemes, supporting and developing women's empowerment networks, local electricity discounts and funding for cultural or environmental awareness activities (e.g; biodiversity and climate activity centres, exhibitions and tourist awareness campaigns) in the area. For such financial benefits, a Community Benefit Fund could be set up[22] to transparently allocate and manage the funds in a way that maximises communities' wellbeing. The inclusion of local benefits in the tender criteria could be done through a **point allocation for dedicated concepts on relevant issues**.

- **Co-location of offshore renewables with other economic activities** (sustainable fisheries, aquaculture, transportation, nature-based solutions for carbon storage[23], among others) whenever possible and **minimising spatial conflicts between maritime sectors at sea** via conflict-resolution strategies. This will, in turn, help to ensure sufficient space for increasing Marine Protected Areas in line with targets of the EU Biodiversity Strategy for 2030.

[22] Scottish Government, 2018, Good practice principles for community benefits from offshore renewable energy development, https://consult.gov.scot/energy-and-climate-change-directorate/onshore-renewable-energy-developments/user_uploads/community-benefits-offshore-gpp.pdf, p. 17.
[23] Royal Belgium Institute of Natural Sciences, 2021, Offshore wind farms increase carbon storage in seabeds – useful knowledge for marine spatial planning and climate change models, https://www.naturalsciences.be/en/news/item/21228/

Addressing uncertainty in wholesale electricity prices

Finally, recent months have shown an unexpectedly high level and degree of volatility in wholesale electricity prices. To account for this uncertainty, some MS are considering designing offshore wind energy support schemes as **two-sided Contracts for Difference (CfDs)**. This type of support scheme allows for payments to come not only from public support funds to the renewable energy operator (in case market prices fall below the revenue expectations determined at an auction), but also the other way around, i.e. payments from renewable energy operators to public support funds (in case of market revenues landing above the determined level, such as in the event of unexpectedly high wholesale electricity prices).

By choosing this type of support scheme, MS can, in the case of high electricity prices at wholesale markets, generate revenue and use those means to either reduce electricity bills for consumers or support additional renewable energy capacity development, such as rooftop solar. However, **two-sided CfDs shift the focus of competition again to price-based competition** and are therefore more difficult to combine with environmental tendering criteria. Thus, if MS want to use two-sided CfDs, they should ensure that **competition on non-price criteria still plays a decisive role in the selection of bids** to not undermine the **goal of shifting away from purely price-based competition**.

If support schemes are not designed as two-sided CfDs, this allows developers to potentially refinance their investments purely through market income - either via wholesale electricity markets or long-term 'power purchase agreements' (PPAs) - without the need for subsidies or financial support from a public authority.[24] This is due to the fact that offshore wind technology has developed so rapidly that costs of electricity generation have fallen drastically (see above).

If developers are confident to refinance their project without public support schemes, they can bid "€0" (instead of a certain amount of remuneration needed per MWh), as a so-called **zero-subsidy bid**. This has happened in the past in Germany[25] and in the Netherlands.[26] **In such situations, competition between multiple zero-subsidy bids can occur purely on the basis of non-price criteria, such as environmental criteria. From WWF's perspective, this is the most favourable option.**

It should be noted, however, that the likelihood of future zero-subsidy bids depends on forecasted wholesale electricity market prices as well as on supply-chain and project-specific conditions**.** Political interventions in wholesale electricity markets, such as price caps on electricity, could reduce the likelihood of zero-subsidy bids, as they can undermine developers' confidence in solely market-based income and therefore push them to opt for a "safety-net" in the form of public support schemes.

[24] Belgian Minister of Energy, 2022, Public consultation on the offshore wind tender for the Princess Elisabeth Zone, https://economie.fgov.be/sites/default/files/Files/Energy/public-consultation-on-the-offshore-wind-tender-for-the-princess-elisabethzone.pdf, pp. 9ff.
[25] Global Wind Energy Council, 2017, The risks of zero-subsidy offshore wind, https://gwec.net/the-risks-of-zero-subsidy-offshore-wind/
[26] WindEurope, 2018, World's first offshore wind farm without subsidies to be built in the Netherlands, https://windeurope.org/newsroom/press-releases/worlds-first-offshore-wind-farm-without-subsidies-to-be-built-in-the-netherlands/

WWF European Policy Office, 123 rue du Commerce, 1000 Brussels, Belgium.

This should be considered by policymakers when deciding on any reform of wholesale electricity markets, as recently proposed by the European Commission.[27] They should also consider how Power Purchase Agreements (**PPAs) might ensure secure remuneration for the electricity generated over a longer time period and thereby increase the likelihood of zero-subsidy bids to enable competition based purely on environmental and social criteria**.

For more information

Helena Rodrigues
Ocean Policy Officer
hrodrigues@wwf.eu

Jonathan Packroff
Climate & Energy Policy Assistant
jpackroff@wwf.eu

[27] Euractiv, 2022, EU chief announces electricity market overhaul amid 'skyrocketing' prices, https://www.euractiv.com/section/electricity/news/eu-chief-announces-electricity-market-overhaul-amid-skyrocketing-prices/