



WindEurope's response

Design elements of renewable energy auctions

Europe needs to build around 30 GW of new wind farms every year up to 2030 to reach its climate and energy security goals. But the European wind supply chain has been struggling with inflationary pressures, increased interest rates uncertainty on wind expansion volumes and poor auction design. All of which have undermined its ability to plan and invest in new manufacturing sites to deliver on the EU's energy security and climate targets. Bottlenecks are particularly acute for offshore wind, while overcapacities persist in onshore wind.

To deliver Europe's ambitions, Governments must help decrease the investment risk and provide adequate frameworks for the wind sector to scale up while maximising value for Governments and societies.

This paper gathers the European wind industry input to the European Commission's consultation Design elements of renewable energy auctions.

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General principles

Non-price criteria encompass pre-qualification 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. Whatever criteria are applied, whether pre-qualification or award criteria should:

- Reflect EU guidance.
- Technology specific; including differentiating between onshore wind, and floating and bottom fixed offshore wind.
- Be clear, transparent, measurable, and verifiable.
- Harmonised at the EU level.
- Not result in unnecessary administrative burden and artificial cost inflation.

There must be a clear distinction between pre-qualification criteria (pass or fail) and non-price award criteria. There also needs to be a distinction between onshore wind and offshore wind.

- Onshore wind projects are smaller, Governments need to handle a large volume of projects to deliver on the 2030 renewable energy targets. For onshore wind it is therefore key to max out on pre-qualification.
- For offshore wind, it is important for national Governments to be able to use non-price award criteria, to differentiate between projects. This is particularly critical as the alternative approach to uncapped or exorbitantly negative bidding, which is particularly detrimental to the supply chain.

Due to the nature of pre-qualification criteria, it is suggested that opt out clauses (like art 20.3 of NZIA).

Pre-qualification criteria

*Action 4 of the Wind Power Action Plan (WPAP) refers to proposing a set of non-discriminatory, objective and transparent **pre-qualification criteria** related to **cyber security** (compliance with the NIS 1 and NIS 2 Directives) and **international data transfer**, in line with EU law and international obligations, as well as other criteria such as **sustainability / environment / sea basin protection, and ability to deliver**.*

Ability to deliver

Until now, pre-qualification criteria seek to ensure that only companies or consortia with the necessary capabilities, experience, and resources are allowed to bid. To achieve this, three requirements are commonly used in wind energy tenders:

- **Technical capability:** Companies must demonstrate technical capabilities and relevant experience in wind projects. A minimum experience in developing wind project is often required. But this should not prevent new entrants into the market. For example, experience is often evaluated at consortium-level for offshore wind projects.

- **Financial stability:** Companies must demonstrate financial stability and capacity to undertake the project. This element refers to the ability of the consortium to take on such a project. For instance, provide last 3 years of audited accounts and demonstrate ability to finance large energy projects, raise debt, experience in raising funds, etc. At the same time, it is critical that financial criteria do not limit the potential for new entrants, who may not have large balance sheets, to access markets and improve competitive dynamics.
- **Bid bonds** are the most used financial prequalification requirements - level and design shall be defined based on local market conditions. It is recommended to foresee a return of the bid bond to unsuccessful bidders very soon after the winning announcement and to automatically transform the bid bond of winning bids into a realization bond (to be paid back upon proof of project realization with pro-rata withhold for partial project realization).

Importantly, **technical capability should favour sufficient experience in a broad range of countries over single-country experience only and should avoid providing undue advantage to specific technologies in particular countries.** For offshore wind, similar experience in other infrastructure or energy projects – not directly linked to offshore wind – could also be accounted for. **Differentiation between onshore and offshore requirements is essential**, with stricter criteria for offshore projects due to their higher technical complexity and financing capacity required.

While additional factors like a track record of timely delivery may be considered, they present challenges in tracking and could further limit new entrants. **Auctions should include realistic delivery timelines.** Too ambitious timelines may reduce competition due to the associated costs and risks. Time between bidding and award announcement should be shortening to de-risk projects and ensure deliverability.

Auction should also allow for some flexibility in view of the supply chain ramping up and unexpected delays due to externalities. Please see further information in the dedicated chapter on Penalties under *“Measures to incentivise full and timely project completion”*.

Cybersecurity

As it stands there are various EU laws under development or implementation that address cybersecurity and data exchange in the energy sector. These include the Network and Information Directive (NIS 1 and NIS 2 Directive), the EU Cyber Resilience Act (EU CRA), the EU Data Act, and the Network Code for Cyber Security. The European Commission will need to provide guidance on how the suggested pre-qualification criteria should be applied concretely, considering this regulatory framework, at national level.

Our recommendations for this implementation are listed below:

- To be pre-qualified for bidding in a wind energy auction, asset developers should be required to demonstrate and formulate how they have applied risk assessment for their processes at entity level with adequately addressing cybersecurity and data security risks that also cover their supply chains, including grid connection, in compliance with recognised international standards such as ISO, IEEE, and IEC or equivalent.

- In this risk assessment, asset developers should also demonstrate that they prioritize technology suppliers that store, analyze and share data with significant impact in the EU Region or within third party countries that are signatories of the GPA. A commonly agreed data classification scheme at EU level will be necessary to classify such data as also foreseen for the implementation of the EU Data Act. This scheme will need to be fit for purpose for the wind energy sector.
- Member States should identify the relevant national authorities that will be responsible for evaluating the risk assessments conducted by asset developers at the stage of bidding into a wind energy auction.
- The evaluation methodology might vary among different countries. To ensure a level playing field among countries, the European Commission or relevant EU agencies should provide technical guidance and training of the relevant national authorities on how to evaluate the credibility of cyber risk assessment and cyber risk quantification methodologies.

Responsible Business Conduct

In this regard, the OECD has produced [a due diligence guidance](#) which provides *six steps for a due diligence process* to provide a common framework for business operators to demonstrate their responsible business conduct, namely:

- 1) Embed responsible business conduct into policies and management systems.
- 2) Identify & assess adverse impacts in operations, supply chains and business relationships.
- 3) Cease, prevent or mitigate adverse impacts.
- 4) Track implementation and results.
- 5) Communicate how impacts are addressed.
- 6) Provide for or cooperate in remediation.

The OECD due diligence process minimum steps are today similarly included in the EU's Corporate Sustainability Due Diligence Directive which has not been formally adopted yet. The same principles are also introduced as qualitative award criteria in the recent auction for the wind farm IJmuiden Ver.

The European Commission's guidance should recommend that responsible business conduct prequalification in future renewable energy auctions mirrors an existing and well-established supra-national framework, to make a minimum and harmonized set of principles mandatory and consolidated across the EU market. A direct reference to the six OECD due diligence process steps would allow for coherence and avoid redundancy of requirements and accompanying extra administrative burden.

Non-price award criteria

*In relation to non-discriminatory, objective and transparent award criteria, Action 4 of the Wind Power Action Plan refers to strengthening the clarity of **non-price award criteria** that are critical to rewarding **sustainability, innovation, energy system integration, high-quality products and the contribution to a resilient supply chain.***

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. sustainability. This reflects the incompatibility of non-price criteria with high concession payments and/or uncapped negative bidding.

Auctions with one specific focus are preferred over tenders with multiple scoring criteria. By establishing a catalogue of suitable criteria in close collaboration with the industry, the EU Commission can ensure the needed harmonisation of award criteria while still allowing countries to decide which focus area to choose based on their national priorities. **Excessive complexity might bring lower competition**, especially in a period when large volumes are offered into the market at (potentially) better or simpler conditions.

Crucially, **Commission's guidance and governments must clarify how they intend to differentiate the scoring of the bids. In fact, non-price award criteria must be designed to avoid ties among applications.** If all bidders are only able to achieve a relatively low score, or if all of them achieve a relatively high one, the non-price award criteria are rendered irrelevant, and the price criterion – if any - becomes the most important (either strike price or concession payment). The benefits of making the industry compete to provide the best solutions for society, environment, energy system integration, and supply chain would be completely redundant if this is not addressed.

More objectivity and speed to the evaluation processes may be achieved by ensuring greater quantifiability of the assessment criteria – quantitative criteria –rather than qualitative. However, we currently lack cross-industries agreed methodologies to apply quantifiable non-price award criteria that are objective, robust, and truly differentiating. We also lack **clear definitions, which also help ensuring** fair comparison of bids (everybody should understand the same by "recycling" or "reuse" for example). When applying qualitative criteria, Member States can use **expert committees to address the lack of commonly agreed quantitative-based methodologies.**

Crucially governments should publish tender criteria and auction rules well in advance to allow for sufficient preparation lead time. And they should perform public consultation on concrete criteria design and assessment methodology and thereby increase transparency over optimization targets.

The Commission and Member States should work towards a set of standardised criteria to avoid 27 different sets of standards and requirement to comply with.

Sustainability

Sustainability is at the core of the European wind industry. Building upon industry's strengths, sustainability non-price award criteria would be important to drive forward the energy transition. In this area, it will be important to build a level playing field across different wind energy actors and gain practical experience of innovation in these fields.

Sustainability 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 panel** (in case of qualitative criteria). Any prescribed methodology should be aligned with industry standards.

In fact, industry-specific methodologies are being developed. For example, the wind industry is helping to develop a common methodology through initiatives such as the Carbon Trust' Sustainability Joint Industry Programme and the IEA wind energy Technology Collaboration Platform to further standardise wind energy Lifecycle Assessment (LCA).

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 pre-qualification criteria.**

In practice, Governments could call for commitments to meet certain minimum requirements (e.g., a project LCA carbon footprint equal to or lower than the those calculated by the UN) or to follow industry-specific methodologies. In this case, Commitments should only be requested at project level, not at company level (considering consortia bids).

Please see WindEurope’s Discussion Paper [“Lifecycle Assessment in wind energy auctions”](#)

The wind industry supports the use of the qualitative “biodiversity/ecological innovation” criteria.

Non-price criteria on **biodiversity** could:

- Reward projects with lowest biodiversity impact.
- Reward projects that contribute to habitats and species conservation and restoration and deliver a net-positive impact.
- Reward projects enhancing co-existence between species and with other economic sectors (e.g. organic agriculture or mussels’ farms).

[Energy system integration and innovation,](#)

The wind industry supports the use of non-price criteria on system integration & innovation as part of the selection criteria in an auction, when duly justified by the System Operator and for demonstrated system needs, following a proper consultation with all relevant stakeholders, including grid users and technology suppliers. These can include:

- Reward projects that increase a wind farms’ capacity factor through e.g. co-location with electricity storage and/or solar, renewable hydrogen production or demand.
- Reward projects that secure cost-efficient integration of wind energy into the energy system through direct and indirect renewables electrification.
- Reward projects that deliver ancillary services.
- Reward projects that apply and invest in the development of new technology solutions e.g. testing new (composite) materials or technologies (different floating foundations and moorings).

While the industry supports the use of energy system integration award criteria, in the short term this might complicate the business case of projects due to e.g., market uncertainties for renewable hydrogen”. Also, the application of this criterion must non lead to the need to add battery storage or electrolyzers to each single project.

[Contribution to a resilient supply chain](#)

Art.20 of the final text of NZIA establishes that resilience can be either used as prequalification or as award criteria. Art. 20 also establishes that the contribution to resilience will take into account the proportion of the technology OR specific main components used to produce that technology that originate from a third country for more than 50%. NZIA recognized that definition of main components will be made by means of a Delegated Act (DA) (Art. 35.4c), while explanation of the

criteria will be made through an Implementing Act (IA) (Art. 20). Furthermore, Art.22 of NZIA establishes that the Commission will adopt an implementing act listing all net zero technology and their main specific components.

Before the DA and IA are approved, it is crucial that the European Commission engages and consults the European industry to seek input on the list of technologies and their main specific components based on a sound analysis of the full value chain, as well as on the definition and applicability of resilience. The use of this prequalification or award criterion may impact the delivery of ambitious renewable energy objectives in the coming years and thus requires proper calibration with the other sustainability European Green Deal objectives.

In alignment with the aim of the Net Zero Industry Act as a whole, the resilience criterion should be oriented towards facilitating clean tech manufacturing in Europe while supporting supply chain diversification.

Measures to incentivise full and timely project completion

Penalties for non-execution of projects

Penalties act as a deterrent against project delays or non-delivery, incentivizing developers to adhere to project timelines and commitments. This entails developers being held responsible for meeting project milestones and delivering on their contractual obligations. Penalties also encourage to submit realistic and achievable project proposals.

Too stringent penalties may deter potential investors or developers from participating in auctions due to perceived increased financial risk. **This could limit competition and innovation in the market, but also increase costs, by having to account for potential penalties during the design of the project.**

Realization bonds (bank guarantees) have worked in some countries in ensuring project commitment and could serve as an effective mechanism to mitigate risks associated with non-delivery. However, careful calibration and flexibility are necessary to strike a balance between enforcement and market participation.

To this end, **flexibility should be given in case of *force majeure*** - where unforeseen challenges arise during project execution. Thus, penalties should distribute project risks and differentiate between delays dependent on project developers and those stemming from external factors. In fact, **the time lag between bid submission, financial close, and execution already imposes financial risks to developers.** Changes to the market environment during this period can no longer be reflected in the financial bid. In recent years, these risks have become much severe – inflation, cost of raw materials, and interest rate increases - and dependent on uncontrollable circumstances due to geopolitical instability and tightness in the supply chain.

It is important that timelines for project delivery reflect project maturity at the time of bidding, considering market conditions, government pre-development efforts, and permit requirements. They should also reflect expected shortages in the supply chain, delays in grid connection, or other factors known at the time of the tender.

The distribution of penalties across project phases, e.g. between award and FiD, can help spread risks and incentivize timely progression. And they should consider that different project phases

entail different associated risks. Additionally, the consideration of non-financial penalties, such as rewards for timely delivery, may further incentivize adherence to project timelines.

Price indexation

Offering 2-sided Contract for Difference (CfD) and enabling corporate Power Purchase Agreements (PPAs) creates healthy financing conditions for developers to enter into contractual agreements with supply chain players and speed up financial close (Final Investment Decision – FID) and consequent deployment. This ensures **full and timely project completion of wind energy projects.**

As there are several years between the submission of the bid and the actual installation, fluctuations in commodity prices may occur. **The strike price of the 2-sided CfD must be subject to indexation and accommodate for inflation or changes in raw material prices prior to installation.** This is particularly relevant as demonstrated by last years' remarkable surge in energy, raw materials, and transportation prices, and may result in substantial changes between the time of contract award and the actual delivery.

Developers face inflation risks on capital expenditure (CAPEX) of at least to 2 years between the bid submission of the auction and their final investment decision (FID). After FID they'll normally place a firm purchase order for goods and services which the supply chain must price accordingly to inflation for anywhere 2-3 years in advance of delivery. Construction of offshore wind farms takes between 2 to 3 more years. Once the project enters into operation, there will be between 15-20 years of inflation for operation and maintenance (O&M) costs that the awarded strike price should cover. However, these operational costs (OPEX) are a small fraction of the total costs of an offshore wind project.

Today only four countries index their Contracts-for-Difference (CfD) for offshore wind (France, Ireland, Poland, UK).

- For CAPEX indexation, Government should use a combination of economic indices which reflect prices inflation of the main raw materials used by wind energy such as steel, copper, and cement, as well as any importing and labour costs associated with the manufacturing of components and fuel for road and/or maritime transport. Indexation for interest rates fluctuations is also important for the construction phase of the project.
- For OPEX indexation, Governments should use economic indices that reflect at least labour and transport costs incurred in the operation and maintenance of wind farms.

The consequences of negative bidding

Governments may be tempted to make money from wind projects by running auctions with negative bidding. But **this only imposes additional costs that developers then must pass on**. They are huge in some auctions – over €1.5bn per GW in Germany for example. It adds significantly to the costs of building the wind farm. **Developers will pass these costs on industrial consumers – through higher PPAs prices, and/or to the supply chain by paying less money for components and services.**

This is exacerbated when concession payments are uncapped and asked upfront or capped at exorbitantly high levels as in the Netherlands. It imposes immediate costs on developers during the period of greatest risk - wind farm construction. **This increases the chances of delays and non-delivery**, regardless of the penalties imposed by the State.

In fact, due to the pressure to compete on price rather than on quality or innovation, suppliers are put in a challenging position. This could lead to less investment in the supply chain. It is critical for Governments to take the offshore wind industry's long-term viability into account and to make sure the supply chain can develop and offer high-quality products and services.

This is particularly relevant in the context of the Net Zero Industry Act, which will provide help to expand manufacturing capacity in the European Union. **Negative bidding would establish an inefficient re-allocation of resources:** developers will have to cut costs in the supply chain to pay concession fees. All EU governments will then have to implement NZIA provisions, which are meant to upscale manufacturing capacity in EU.

Some Governments in mature markets and markets with clear export strategies may still look for models to share revenue and to make profit out of offshore wind projects. Any such approach needs to be developed together with the industry to **ensure the solutions do not slow the delivery of deployment targets, do not undermine the development of the supply chain, and do not bring extra burdens to consumers**. For example, payments could be based on annual settlements per MW or a percentage of revenue sharing over a certain price level (€/MWh delivered) or CAPEX, rather than uncapped upfront payments.

In this context Governments should remember that CfDs can also bring revenue, particularly when electricity prices are high – while at the same time protecting consumers and stabilising revenues for developers. **Regardless of the model, Governments should reinvest lease round fees and other concession payments into supply chain build out and/or grid reinforcements and build out.**

Finally, it must be noted that uncapped negative bidding is not compatible with non-price award criteria. Competition based only on highest concession payment incentivises developers to narrowly focus on how to drive further aggressive cost reductions of the offshore wind technology, which puts additional pressure on the supply chain and leaves less room to invest in project-specific solutions, e.g., positive impacts on biodiversity, innovation and system integration, and social sustainability. When using reasonably capped or fixed financial bid components, then non-price criteria might still apply, but the expected impacts of the non-price criteria will be lower than when paired with CfD or used in zero subsidised bids.

Crucially the European Union wants to strengthen its energy security with competitive and home-grown renewables. The EU needs as much new wind energy capacity as it can get, as fast as it can get it. All the money paid in negative bidding is money companies cannot invest within the sector of for new wind energy projects.

Please see WindEurope's Position Paper "[Key elements for offshore wind auction design](#)".

Considerations around setting bid ceilings

Setting transparent bid ceilings in wind energy auctions with CfD schemes ensure efficiency and fairness in the tender process and are necessary for governments to effectively plan their renewable energy budgets. **It is crucial that governments possess a thorough understanding of market dynamics to set appropriate bid ceilings.**

Bid ceilings should reflect the capital expenditure (CAPEX) and operational expenditure (OPEX), thereby capturing the Levelized Cost of Electricity (LCoE) for each technology. It is essential to recognize that the inclusion of non-price award criteria may increase project costs, necessitating adjustments in bid ceilings to accommodate these factors.

To ensure the accuracy and relevance of bid ceilings, **governments should engage experts to assess the LCoE of each technology accurately.** Collaboration with market experts and industry stakeholders is indispensable in this regard, as their insights can provide valuable perspectives on market trends, technological advancements, and cost considerations. Furthermore, **when assessing bid ceilings Governments should adopt a "lifecycle cost approach," considering all costs associated with the project over its entire lifecycle.** This approach ensures a comprehensive evaluation of project economics and helps align bid ceilings with the true costs of project development, operation, and maintenance. And Governments should ensure greater transparency by **avoid hidden ceilings**, as happened in certain past auctions.

Recently, several auction rounds for renewable energy resulted in high undersubscription. It's key that governments provide transparency on tender rules, including bid ceiling prices.

To avoid undersubscribed auctions, Governments need also to provide forward visibility on auction schedules / volumes, get the permitting pipeline out and running and speed up grid build-out. Governments should also avoid last minute adjustments of already announced auction volumes. This can allow the supply chain to plan manufacturing volumes, facilities expansion, etc.