The revision of the 2014 Energy & Environment State Aid Guidelines
WindEurope's contribution to the European Commission consultation

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State aid rules are key to creating the conditions for a cost-effective transition to a climate neutral economy. The European Climate Law Impact Assessment shows this will require 1,300 GW of wind power by 2050 (up from 180 GW today) providing more than 50% of the European electricity consumption[1]. In the near term this means doubling the rate of deployment of wind energy. We expect the EU to install 15 GW of wind energy each year between 2021 and 2025. This will need to increase to an annual installation rate of 30 GW if the EU is to deliver on its climate and energy objectives.

The accelerated deployment of wind energy and continued cost reduction necessary to deliver on the European Green Deal are conditional on:

- National Governments being able to continue having technology-specific auctions;
- These auctions allocating well-designed revenue stabilisation mechanisms such as two-sided Contracts for Difference (CfDs) or other market premiums;
- State aid rules facilitating Governments to design competitive auctions that deliver optimal long term solutions for climate neutrality, such as wind energy, over transitional solutions; and
- Clear rules to de-risk technology development allowing the EU companies to maintain their edge over the global competition.

The inclusion of renewables in a broad "Decarbonisation" heading seems to suggest that a one-size fits all approach to decarbonising the EU economy is fit-for-purpose. And decarbonising the power sector and promoting renewables is a secondary objective.

This is incorrect. The EU power system needs to simultaneously fully decarbonise and double in size between now and 2050 as highlighted by the Climate Law Impact Assessment. This requires significant investments and planning. And should be reflected in dedicated section under the new State Aid Guidelines.

The latest Dutch SDE++ auction has shown the limits of a very broad approach to decarbonisation focused on a CO2 abatement criterion. 70% of the €4.6bn budget is going to CCS. €99m is going to 13 onshore wind projects corresponding to a capacity of 107 MW which means onshore wind will have a slower expansion from this round.

The decarbonisation of the economy and the roll-out of renewables need to work in conjunction. Not be made to artificially compete with one another. The design of such auctions is unnecessarily complex and bound to yield sub-optimal outcomes. The EU must instead focus on rolling out renewable-based technologies that are readily available and can ramp up quickly in the short and medium term across all

[1] Data refer to the European Commission's Impact Assessment underpinning a 55% GHG reduction target for 2030.

sectors of the economy. The new Climate, Environment and Energy State Aid Guidelines must be designed to deliver a sustained and cost-effective deployment of renewables. Failing to do this would fundamentally undermine the ability of the EU to deliver climate neutrality by 2050.

In developing the new State Aid Guidelines, the European Commission should:

1. PRIORITISE THE ACCELERATION OF RENEWABLE ENERGY INVESTMENTS

- **Ensure technology-specific competitive bidding processes take place. They're crucial to market and energy system balance** (ref. to footnote 54 & paragraph 91 of the draft new Guidelines)

  Technology-specific auctions are the best way to provide visibility to investors including predictability on supply chain development, are tailored to the generation specificities of different power sources (e.g. daytime/nighttime generation) and maximise the value of renewable electricity to the power system. Technology-specific auctions (e.g. for onshore, offshore, floating offshore) are core elements in the transposition and implementation of the Renewable Energy Directive (in particular its Art. 4) and the Governance Regulation.

  Technology-neutral auctions often fail to ensure that technologies compete under the same conditions given the market differences amongst them (e.g. taxes, tariffs, construction deadlines). And they often result in a single technology winning the entire auctioned volume[2] therefore, not exploiting the complementarities of the different power generation profiles across technologies. For example, the complementarity between wind whose generation is higher in winter months and at night, and solar energy whose generation is higher during summer months and during the day. This complementarity is essential to a cost-effective system integration that can deliver climate neutrality by 2050.

  By running technology-specific auctions Governments provide a much better visibility for grid planning and for the identification of grid optimisation needs. This in turns facilitates the deployment of demand-side solutions and storage where needed the most, reducing overall costs to electricity users. Thus, well-designed technology-specific auctions help ensure cost-effective energy system integration.

  Footnote 54 reads:

  > *"Eligibility in such a case should only be limited in line with relevant definitions where available in the sectoral legislation. For example, renewable energy sources--specific schemes should be open to all technologies that meet the definition of 'renewable energy sources' in Directive (EU) 2018/2001 of the*

[2] One of the most recent examples (January 2021) is the 1GW technology-neutral auction in Spain where the entire volume has been allocated to solar PV.

European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 8). "

It thus promotes technology-neutral auctions as the best way forward in contrast with Member States' right to design their renewable energy support schemes to fit national market conditions. The principle of technology-specific auctions (e.g. wind-specific auctions; geothermal-specific auctions, etc.) must be clearly spelled out in the body of the Guidelines. National Governments need to have the confirmation that these technology-specific auctions are consistent with the EU framework – in particular with the Renewable Energy Directive. This coherence is critical to investor visibility underpinned by a clearly defined auction schedule (with timings, technology-specific volumes and budget).

Moreover, the draft new Guidelines allow Member States to place a cap on the aid if they decide to let different technologies with different costs compete against one another, so to avoid that the most cost-competitive technology gets overcompensated. Organising rounds of technology-specific tenders avoids the risk of overcompensation and maximises the ability of the market to drive real "price discovery" in line with spirit of the Guidelines.

- Ensure Governments provide long-term visibility on wind energy volumes in auctions (ref. to paragraph 83 of the draft new Guidelines)

  Competitive bidding processes should be organised on a regular basis, at reasonable notice and should provide visibility on the size and overall budget to be awarded over multiple years. This is key to project planning and further industrialisation, which enable further cost reductions. It allows the wind industry to realise long-term investments in factories, infrastructure (e.g. Europe's ports alone need €6.5bn of investment by 2030 to deliver the EU Offshore Renewable Energy Strategy), skills development, test facilities, research and innovation, and provides Governments with the required timeline to develop ancillary infrastructures, such as transmission lines. Investments create jobs and deliver revenues to national budgets. All of this contributing to a swift economic recovery post COVID-19.

  The European Commission should ensure that Member States respect the Clean Energy Package rules on at least 3-year upfront visibility on auctions and that they deliver the auction pledges via the monitoring and review of their 2030 National Energy & Climate Plans.

- Ensure price remains the lead criterion for allocating public support in a tender or auction (ref. to paragraph 49 of the draft new Guidelines)

  The draft new Guidelines suggest 25% of the selection criteria of a competitive bidding process could be non-price criteria. The industry recommends that, where non-price criteria are used, they serve as "pre-selection criteria". Auction processes must be as fair, transparent, and auditable as possible. The price criterion is the most effective way to achieve this.

Adding non-price criteria brings complexity to the auction design. This complexity means additional risks which need to be priced in by bidders. Non-price criteria therefore lead to higher bids. Transparency, simplicity and clarity of design and support allocation (e.g. price-finding mechanisms) rules are essential to attracting bidders and cutting costs.

Basing auctions on quantitative criteria also eliminates the risk of court appeals.

- **Ensure national auctions allocate well-designed revenue stabilisation mechanisms** (ref. to paragraph 103 of the new draft Guidelines)

  Revenue stabilisation mechanisms are indispensable to deploy the necessary wind volumes, and to do so at the least cost for society. Wind is a capital-intensive investment: it has high upfront costs but very low running costs. This makes financing a very significant share of the overall cost. Having a predictable income from reliable revenues is the most important way a wind farm can minimise its finance costs. Government auctions that offer reliable revenues with market prices – such as two-sided Contracts for Difference (CfDs), or other market premiums - are crucial to attract investments and to provide low-interest capital to wind energy projects and deliver lower electricity costs to all users.

- **Avoid arbitrarily reducing the auctioned volume when auctions are undersubscribed. This artificially increases competition but fails to address the root cause of under supply – slow and cumbersome permitting of renewable energy projects** (ref. to paragraphs 48 & 92 of the draft new Guidelines)

  Competitive bidding processes can deliver more renewables at the lowest cost for citizens if sufficient projects can participate. But this is only possible if the market is healthy and does not suffer from administrative or regulatory barriers. **Permitting** of renewable energy projects is the top bottleneck in all EU markets. Burdensome and lengthy permitting procedures, lack of sites due to e.g. tip/hub height restrictions, often result in undersubscribed auctions. Those barriers decrease the level of confidence in project realisation leading to lower project development pipelines.

  Competition in auctions cannot be increased by decreasing the auctioned volumes as this further undermines investor confidence and decreases visibility on auction rounds. Competition should rather be increased by removing all existing regulatory barriers to renewable energy deployment (such as administrative delays and regulations preventing fast & efficient permitting).

  If tenders are undersubscribed, the **non-awarded volumes should be incorporated into later auctions** so that the projected deployment path could still trigger investment decisions.

- Ensure current State aid schemes are not modified retroactively (reference to paragraphs 399-402 of the draft new Guidelines)

  The draft new Guidelines introduce new ex-post evaluation requirements in the case of schemes when the State aid budget or accounted expenditures exceed €150 mln in any given year or €750 mln over the total duration of the schemes. These rules are applicable to schemes from January 2022 that last more than 3 years.

  Though we welcome the clarification that the immediate successors of the existing aid schemes will be waived from this obligation, the industry recommends that the final Guidelines spell out clearly there would be no retroactive effects to State aid schemes already in place that continue allocating support after January 2022. And that the State aid rates that have already been allocated would remain stable overtime regardless of ex-post evaluations.

  This is critical to investment security and predictability for project investments.

- Ensure corporate Power Purchase Agreements (PPAs) and market-based support mechanisms (such as Contracts for Difference) coexist as revenue stabilisation mechanisms (ref. to paragraph 103 of the new draft Guidelines)

  Renewable energy investors need stable revenues. Market premiums e.g. CfDs and PPAs are the best way to minimise finance and project costs. Whereas regular State-led auction rounds granting market premiums will remain the cornerstone of allocating support to renewable energy projects, Governments must be able to experiment combining the two models for the same project - where part of the capacity would meet the demand of an offtaker under a PPA and, the remaining capacity would bid into an auction. Developers being able to combine corporate renewable PPAs and revenue stabilisation allocated in a Government-run auction accelerate the pace of decarbonisation as required by the 'Fit for 55' package.

  Europe already has over 15 GW of renewable energy capacity contracted though PPAs. Companies in chemicals, steel, ICT, aluminium, transport, pharma and food/drink are now sourcing power directly from wind farms on long-term supply agreements. Allowing the combination of PPAs and CfDs will help drive the shift to a demand driven energy transition, linking renewable generation with consumption thereby also supporting grid stability.

  The traceability and proof of green credentials of the power supply brought in by Guarantees of Origin (GOs) underpinned these PPA volumes and should be maintained going forward.

2. ENABLE THE UPTAKE OF RENEWABLES-BASED ELECTRIFICATION

It is reasonable to assume from the European Climate Law Impact Assessment that electricity will directly cover 57% of the EU's final energy use by 2050[3]. And another 18% indirectly through renewable hydrogen and its derivatives. Maxing out the contribution of renewable-based electrification is critical to delivering climate neutrality. Renewable-based electrification in many sectors like transport, heating/cooling and industry will require a significant increase in investments and the new Guidelines should provide the appropriate framework to create a business case for these technologies.

- **Rectify rewarding CO2 savings at the expense of renewable capacity** (ref. to paragraphs 74 & 100 of the draft new Guidelines)

  The new draft Guidelines prioritise a technology-neutral approach in rewarding CO2 savings rather than capacity by putting all guidance on different support scheme design under a generic chapter of "Decarbonisation". This approach could undermine the appropriate allocation of public spending into the technologies that will drive a sustainable decarbonisation in the power sector.

  The scale of the EU decarbonisation challenge calls for the Guidelines to provide tailor-made support scheme design toolbox for EU Member States. EU-27 wind energy capacity is expected to grow from 180 GW today to 1300 GW in 2050 – making wind the leading delivering technology towards climate neutrality. Meeting the newly proposed 40% renewable energy target for 2030 requires doubling of the annual installation rates for wind from 15 GW today to 30 GW p.a. by 2030.

  A dedicated chapter on "Aid for renewable energy sources" should therefore remain at the core of the Guidelines and underpin the right regulatory framework that delivers this necessary volume expansion driving further cost reductions to the benefit of end users.

  This would also enable a bespoke approach for smaller renewable energy projects, which should continue benefitting from the exemptions e.g. from having to compete in auctions, spelled out in the current Energy and Environment guidelines. Delivering 1,300 GW of wind energy towards climate neutrality will require building projects of all sizes. De minimis rules remain essential in this context.

- **Support the development of a business case for renewable hydrogen** (ref. to paragraph 18 & section 4.1 of the draft new Guidelines)

  Renewable-based indirect electrification will be the key driver to reach deeper decarbonisation in the hard-to-abate sectors (heavy-duty transport, heavy industry, maritime and aviation). The new

[3] WindEurope/ETIPWind report, Getting 'Fit for 55' and set for 2050: Electrifying Europe with wind energy

Guidelines should align the allocation of support with the EU Hydrogen Strategy. It clearly states that renewable hydrogen is "the most compatible option with the EU's climate neutrality".

The draft new Guidelines should not treat low carbon and renewable hydrogen the same. They should instead replicate a clear and simple definition of hydrogen and hydrogen derivatives, where renewable hydrogen is the reference baseline (i.e. the hydrogen produced through electrolysers using 100% renewable electricity). A robust methodology for counting the CO2 emitted during the production of the various hydrogen types will be crucial in this respect as will the monitoring and recording of C02 and methane leaks in relevant plants. This definition should go beyond greenhouse gas emissions (GHG) reduction which fails to address the multifaceted value of renewable hydrogen to the energy system and economy including: contributing to energy security, helping balance the energy system, and driving growth-spurring innovation, alongside its best-in-class environmental footprint.

Renewable hydrogen is not yet competitive with other forms of hydrogen. To reach the European Commission's target of 6 GW of renewable hydrogen by 2024 and 40 GW by 2030, we need to close the cost gap between fossil and renewable hydrogen while accelerating the scaling up of electrolysers. On the one hand important investment will be needed to reach these targets. On the other hand, the main operational costs of electrolysers are the use of electricity representing 65-80% of these costs.

So renewable hydrogen should be supported both by investment aids and operating aids. Carbon Contracts for Difference (CCfDs) can be a useful tool to support industrial decarbonisation and promote renewable hydrogen. CCfDs can support the introduction of renewable hydrogen in hard-to-abate sectors with the most emissions potential reduction. Nevertheless, it needs to be carefully designed in order to have no impact on ETS prices.

- Retain the electric mobility provisions (ref. to section 4.3 of the draft new Guidelines)

  Electric mobility and industrial applications (e.g. industrial electric boilers and industrial heat pumps) will play a key role towards Europe's Climate & Energy goals. On electric mobility, we welcome the additions made in the new draft Guidelines including a section on 'Aid for the deployment of recharging or refueling (in the case of e-fuels) infrastructure'. Zero-emission fuel vehicle fleet, especially electric vehicles (EVs), are rapidly increasing. There is a need to increase the number of electric charging points in all Member States.

- Provide a level-playing field between fossil fuel and electricity taxes (reference to paragraph 95 of the draft new Guidelines)

  European State aid and competition rules should factor in the need for a shift in the national tax structures and levies which have historically favored fossil fuels to the detriment of electricity.

They should actively encourage adjustments to national levies that support renewable electricity sourcing as a driver for climate neutrality. This would also greatly support the deployment of renewable hydrogen (see previous section), as electricity represents up to 80% of the levelised cost of hydrogen over its lifetime. The revision of the Energy Taxation Directive will be crucial in this respect.

- **Do not place EIUs with high ambitions to decarbonise at a competitive disadvantage** (ref. to section 4.11 of the draft new Guidelines)

  Section 4.11 of the new draft Guidelines for aid in the form of reductions from electricity levies for energy-intensive users should provide more incentives for industry to decarbonise in line with the new provisions of the 'Fit for 55' package from 14 July 2021.

  While we welcome requirement for beneficiaries to conduct an energy audit (paragraph 364) and take at least one step towards decarbonisation (paragraph 365), we believe that there is a lack of differentiation between ambitious and less ambitious individual EIU companies that qualify for levy reductions (i.e. listed in Annex 1). This could distort competition because EIUs with high ambitions to electrify might be placed at a competitive disadvantage.

  For example, a chemical company that is considering replacing fossil fuel equipment with heat pumps for low-temperature industrial processes might need reductions from electricity levies to make the business case work. However, given that the entire sector qualifies as an EIU, a competing chemical company that does not show such ambition to electrify would receive the same levy exemptions. We therefore suggest that that the allocation of aid to EIUs should also consider ambitions for decarbonisation, which could be measured with concrete investment plans.

3. FOSTER TECHNOLOGY DEVELOPMENT FOR A RENEWABLES-BASED ENERGY SYSTEM

- **Maintain the good definition of offshore power grids** (ref. to paragraph 18 (35 a/v) of the draft new Guidelines)

  Offshore electricity grids serving as interconnector and transmission/distribution asset and interoperability – clearly recognised in the Guidelines definition, will be key for the implementation of the EU Offshore Renewable Energy Strategy. The definition will support the ongoing adjustment of the EU's regulatory framework for offshore hybrid assets in the 'Fit for 55' and TEN-E Regulations by acting as a driver for Member States cooperation in accelerating offshore wind deployment.

- Delete references to risks that renewable stakeholders are not responsible for managing (ref. to paragraph 102 of the draft new Guidelines)

  The draft new Guidelines must make a clear distinction between those risks that renewable energy producers can and cannot be exposed to.

  The draft Guidelines assume that operators can manage the availability of transmission infrastructure. This is not the case since transmission assets' planning, investment decision and build-out depends on Member States, their regulators and TSOs, not on renewable energy producers.

  Furthermore paragraph 102 suggests that operators would not be compensated for curtailment. This goes against the provisions of Article 13(7) of the EU Electricity Regulation.

  Such inconsistencies in paragraph 102 should be deleted.

- Make storage eligible for State aid (ref. to section 2.4, recital 34 of the new draft Guidelines)

  The number of projects seeing a combination of wind farms and storage facilities or the so-called combined renewable power plants (e.g. wind, PV solar, hydro and/or storage) is increasing. Yet, the draft new Guidelines suggest electricity produced as a result of a storage facility should not be granted State aid. This is plain wrong. The integration of storage technologies is complicated and still in its infancy. It requires de-risking in the form of pilot projects. Combined renewable power plants provide huge benefits for the acceleration of renewable-based electrification and system integration based on grid optimisation and sustainability criteria. Renewable electricity stored should qualify for State aid when it is released from the storage system. However, European and national legislation should clearly define energy monitoring and tracing procedures in assets combining different generation technologies and storage so that the energy produced by their renewable generation units, even if stored for a while in a storage system, can still be awarded the respective State aid when released.

  To address regulators' fear that operators claim electricity absorbed from the grid by the storage device as wind power-generated, hence receiving compensation from non-renewable electricity, it is essential for regulators to clarify the rules on metering. And ensure grid-absorbed electricity is distinguished (and not compensated) from the electricity generated and stored by the power plant.

- Allow support for pilot and demonstration projects (ref. paragraph 83 of draft new Guidelines)

  Demonstration projects are vital to de-risk new technologies and new configurations of technologies. They give proof of concept and real-time operation experience which drives investor interest, market and industrial footprint growth.

Exemptions from auctions intended to foster Research & Innovation and enable demonstration and industrial scale pilot projects should not be restricted to maximum size based on the nameplate capacity of a generating unit (e.g. a wind turbine), as technology development is usually faster than regulatory updates.

In Germany, the Renewable Sources Act EEG correctly exempts pilot test turbines and research turbines from having to participate in auctions. A certain number of turbines, namely max. 125 MW per year, can be installed at a certain remuneration outside of the auction system to allow for testing and certification in real conditions. However, the German Government only allows this exemption for turbines with a capacity below 6 MW referring to paragraph 127 of 2014 State Aid Guidelines for Environmental Protection and Energy. This national policy disincentivising innovation results in our view from an incorrect interpretation of paragraph 127 of the guidelines as the 6 MW threshold is not intended to apply to pilot and demonstration projects. As wind turbines get more powerful with the drive for cost reduction, most turbines under development and in need of testing already have a capacity higher than 6 MW.

The new draft Guidelines do not include any thresholds for pilot and demonstration projects. They seem to allow for demonstration projects to receive aid through dedicated (technology-specific) competitive bidding processes (ref. Par. 83) but remove the possibility to receive direct aid (without tenders).

The European wind industry believes that Member States should have the possibility to still allocate direct support to pilot and demonstration projects on fact-based projections of their potential market impacts as this will help enabling testing and prove the operational and market fitness of more powerful turbines that will be critical to the delivery of the EU's Climate and Energy objectives.

The opportunity to test newly developed more efficient and powerful turbines in real conditions and without specific capacity thresholds outside hardly plannable auctions is crucial: to keep the EU as the global hub for technological development and innovation in the wind industry. And to keep Europe's competitive advantage vis- à -vis international competitors.