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**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

European Wind Power Action Plan

1. INTRODUCTION

Wind energy is renewable, abundantly available in the EU and secure. It is pivotal to meeting the EU's decarbonisation objectives and delivering clean, affordable and secure electricity to our households, our industry and increasingly our transport sector. The expansion of wind energy and the wind industry across the EU will create quality jobs and enhance our energy security.

The projections for EU and global deployment of wind are bright. The EU target of at least 42.5% of renewables by 2030 will require the installed capacity to grow from 204 GW in 2022 to more than 500 GW in 2030¹. Globally, annual wind capacity additions should reach at least 329 GW per year until 2030 to achieve net-zero emissions by 2050, more than quadrupling today's deployment levels (75 GW)².

Yet, the European wind industry has recently faced difficulties in operating its business. All largest wind turbine manufacturers reported significant operating losses in 2022³. And with 16 GW of new wind projects installed in 2022⁴, we are nowhere near the 37 GW/year needed as cost-effective contribution to achieving the EU 2030 targets.

This situation calls for immediate action. The EU cannot double the pace of wind energy deployment without a healthy, sustainable and competitive wind supply chain. And the wind industry cannot be healthy without a clear and secure pipeline of projects, attracting the necessary financing and competing on a level playing field globally.

Furthermore, the energy crisis following Russia's full-scale invasion of Ukraine has underscored the risks stemming from over-reliance on a dominant foreign fossil-fuels supplier and has demonstrated the importance of wind and other renewable energy sources for the stability and security of the energy system. In a world going through a fast green and digital transition, clean technologies are central to European open strategic autonomy. With this in mind, in her State of the Union speech on 13 September 2023, President von der Leyen recognised that the EU wind industry faces a unique mix of challenges and she announced a European wind power package. The objective of this action plan is to support EU companies in the wind sector and improve their competitiveness to ensure that EU wind industry can continue to play a key role in the green transition.

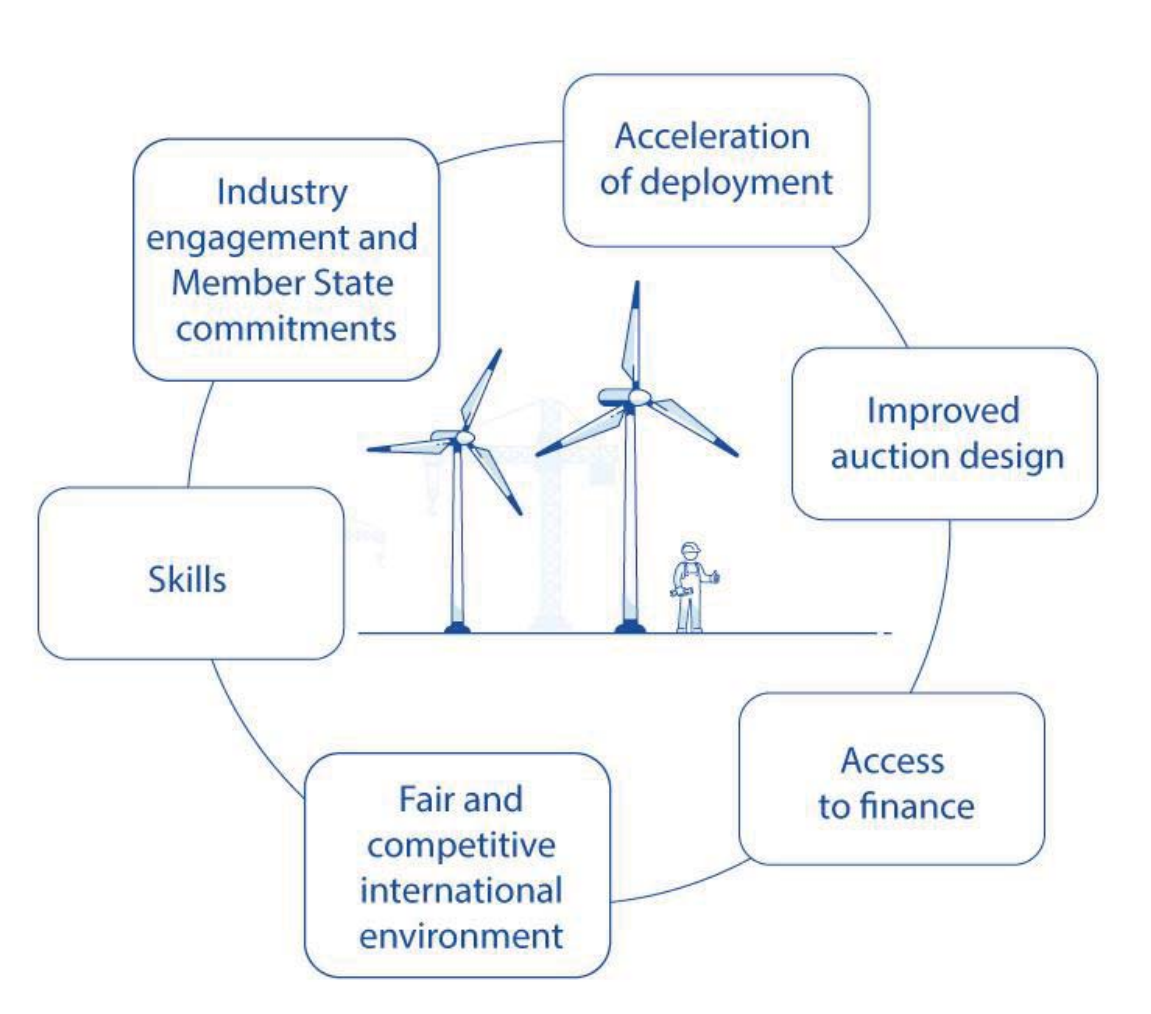
The action plan sets out measures that should be urgently taken to achieve this objective. The action plan will also indirectly support other clean power sectors, including the solar industry, given that several of the proposed actions are of relevance to all renewable sources. It is structured into **six main pillars of concerted action by the European Commission, Member States and the industry**: (i) acceleration of deployment through increased predictability and faster permitting; (ii) improved auction design; (iii) access to finance; (iv) creating a fair and competitive international environment; (v) skills; and (vi) industry engagement and Member State commitments.

¹ MIX scenario in the policy scenarios for delivering the European Green Deal (available at https://energy.ec.europa.eu/data-and-analysis/energy-modelling/policy-scenarios-delivering-european-green-deal_en)

² IRENA World Energy Transition Outlook 2023

³ Rystad Report (2023) The State of the European Wind Energy Supply Chain

⁴ WindEurope (2023) Wind Energy in Europe-2022 Statistics and the outlook for 2023-2027



2. STATE OF THE WIND INDUSTRY IN EUROPE

Wind energy, both onshore (92% of installed wind capacity) and offshore, is already a central pillar in our electricity system. In 2022, it provided on average 16% of electricity consumed in the EU and often reaches more than 30% per day⁵. The technologies to harness wind energy developed and scaled up in Europe have become significantly cheaper over the last 10 years, thanks to innovation and economies of scale⁶. In many parts of Europe, wind energy is the cheapest source of electricity⁷.

So far, wind installations deployed in the EU have been provided mainly by the domestic wind manufacturing sector. The main European manufacturers accounted for 85% of the EU wind energy market (94% in the offshore sector)⁸. Manufacturing of turbines and their components (blades, nacelles and towers, gearboxes, foundations, substations, generators, etc.) spans across the EU. This makes the wind manufacturing sector an important job provider: it is estimated that the whole wind sector sectors offers between 240 000 and 300

⁵ ENTSO-E data.

⁶ Irena (2023) Renewable power generation costs in 2022.

⁷ Georgakaki, A et al. (2022) - Clean energy Technology Observatory Overall Strategic Analysis of Clean Energy Technology in the European Union – 2022 Status Report.

⁸ SWD(2023) 68 final of 23 March 2023.

000 direct and indirect jobs in the EU, and about 45 000 (28% of direct jobs) are located at turbine and component manufacturers⁹.

European companies hold a significant share of the expanding global wind equipment market. However, this share fell from 42% in 2020 to 35% in 2022¹⁰. To a large extent, this is due to the rapid deployment of wind energy in China which relies primarily on its growing domestic manufacturing sector. Out of the world's 10 largest wind turbine manufacturing companies (covering over 80% of demand for wind turbines globally), 4 have their headquarters in the EU, while 4 are located in China.

European wind project operators and developers are also active globally, but in contrast to wind equipment manufacturers they recorded significant profits in 2022 and in previous years. However, the problems of EU manufacturers increasingly weigh on the performance of EU wind operators, resulting in, for example, project delays or abandonment. Furthermore, EU manufacturers are all increasingly facing access barriers in foreign markets.

The wind industry is also confronted to a problem of access to raw materials, such as copper, rare earth minerals, steel, nickel, fiberglass or silicon. Europe is dependent on third countries on the supply of these materials, for which the demand increases with the development of the sector worldwide, and for which prices are subject to volatility.

3. MAIN DRIVERS BEHIND THE DIFFICULTIES OF THE EU WIND MANUFACTURING INDUSTRY

Despite the overall positive development in the past, the European wind industry currently faces major problems. The drivers behind the difficulties of the EU wind equipment manufacturers in operating their business can be divided into five main categories.

First, under-utilisation of production capacities driven by **insufficient and uncertain demand for wind turbines** in the EU. Currently, manufacturers do not have an adequate overview of the planned wind deployment by Member States, leading to difficulties in planning production and investments. In addition, the transport of wind turbine parts and components require special permitting, which vary across Member States leading to delays in transporting them from their production site to the planned wind farms

The under-utilisation is also mostly caused by **slow and complex permitting** for renewable energy projects. The industry estimates that 80 GW of wind energy capacity is going through permitting procedures across the EU, i.e. five times more than the total wind deployment last year. Much of that capacity has been in the permitting process for years due to slow and inefficient permitting procedures.

Second, **access to raw materials, high inflation and commodity prices**¹¹, combined with limited hedging by wind equipment manufacturers against input price volatility, have eroded manufacturers' financial standing. This was compounded by increasing interest rates and difficulties to access financing.

⁹ Telsnig, T. et al. Clean Energy Technology Observatory: Wind Energy in the European Union – 2022 Status Report on Technology Development, Trends, Value Chains and Markets, Publications Office of the European Union,

¹⁰ SWD(2023) 68 final of 23 March 2023

¹¹ Rystad Report (2023) The State of the European Wind Energy Supply Chain

Third, the **design of national tenders** for the development of renewable energy often does not appropriately reward the high environmental and social standards of European products, nor takes into account the need for supply chain resilience, as these tenders are based solely or mostly on price criteria. This is the case for most auctions, though some Member States, e.g. the Netherlands or France, have started to introduce non-price criteria. Some tenders for offshore wind, such as those organised on the basis of ‘uncapped negative bidding’, lead to very high bids from operators. This, coupled with cases where there are no sufficient penalties for non-execution of projects, increases the risk for the full and timely delivery of projects. Furthermore, there is high heterogeneity in the design of auctions across the EU. Altogether, this complicates investment planning by manufacturers, affects the stability of production lines, and reduces the benefits of economies of scale¹².

Fourth, **pressure from international competitors** on the EU wind manufacturing sector has increased. For example, the EU’s trade balance with China in the wind sector has been negative with a record deficit of EUR 462 million in 2022¹³. China is an important supplier of raw materials and components to EU and global manufacturers but is also becoming a serious competitor in third country markets, which are important for European companies. Thanks to prices on average 20% lower than those of their European and US counterparts¹⁴, sometimes, according to the industry, backed by attractive deferred payments, the presence of Chinese companies abroad has been steadily increasing. While competition stimulates innovation and product improvements, an unlevel playing field could negatively affect EU wind equipment manufacturers and could even reduce their competitiveness on the EU market.

Chinese manufacturers have also benefited from vertically integrated business models with shorter supply chains owing to China’s dominance in steel production and raw materials, as well as possibly from highly attractive financial conditions. All this severely undermines EU companies’ ability to compete on a level playing field.

And fifth, **availability of skilled workers** in the wind manufacturing sector may affect the speed of increasing European production capacity¹⁵. In offshore wind in particular, skilled operators of vessels, cranes or heavy lifts are hard to find. The industry will require more workers, including engineers and tradespeople.

It is estimated that European manufacturing can cover most of the current demand for wind turbines in the EU¹⁶. But in order to maintain their competitiveness in a growing market driven by EU’s onshore and offshore wind ambitions, European wind manufacturers would need to rapidly scale up their capacities. If this does not happen, supply bottlenecks could soon materialise leading either to slower deployment or to an increase in imports to fill the gap.

¹² A typical example is the rapid growth of wind turbines, which obliges manufacturers to adapt continuously their production lines with new investments.

¹³ JRC, Clean Energy Technologies Observatory Report 2023, forthcoming.

¹⁴ BloombergNEF data (2023) <https://about.bnef.com/blog/cost-of-clean-energy-technologies-drop-as-expensive-debt-offset-by-cooling-commodity-prices/>

¹⁵ See 2023 Annual report on the competitiveness of clean energy technologies (to be published on 25 October 2023).

¹⁶ According to the Global Wind Energy Council (GWEC), Europe as a whole has around 30 GW of wind turbines manufacturing capacity.

4. ACTION TAKEN SO FAR BY THE COMMISSION

The Commission has already put forward initiatives addressing some of the key issues the EU wind manufacturing sector is facing.

The **revised Renewable Energy Directive (RED)**¹⁷ lays down a minimum binding target of 42.5% share of renewables by 2030 with an aspiration to reach 45%. It sets the course for a rapid acceleration of renewable energy deployment, while taking into account other policy considerations such as multiple use of land. It will require a massive scale-up of renewables projects, driving demand for *inter alia* wind equipment.

In order to accelerate the deployment of renewable energy in the short-term, the Commission put forward an **emergency regulation on permitting**¹⁸ that simplifies and shortens permitting procedures for renewables, including repowering as well as grids. The regulation has been in force since the end of 2022 and is due to expire by mid-2024. The Commission has also taken steps to simplify and streamline the permitting procedures for transporting wind turbine components, which currently require several authorisations to use highways even within the same Member State¹⁹.

The implementation of the Regulation has varied across Member States, but is already bringing first results. For example, following the entry into force of the regulation, in Germany a record volume of new permits was issued in 2023 and the repowering rate rose to 34%, the highest in nine years. The revised **RED**, when implemented, will simplify and shorten permitting procedures in a more comprehensive and structural manner. Almost all Member States are accompanying this regulatory overhaul with permitting reforms included in their Recovery and Resilience Plans, including in the recently adopted REPowerEU chapters. The **Technical Support Instrument (TSI) Regulation**²⁰ provides that Member States can receive, through either stand-alone or multi-country projects, technical expertise for accelerating permitting for wind energy. Six Member States have already taken advantage of this instrument for support in permitting acceleration. The adopted revision of the **Trans-European Networks for Energy (TEN-E) Regulation**²¹ also contains streamlining permitting provisions for cross-border infrastructure projects, such as offshore hybrid interconnectors. The TEN-E framework also helps to implement or kick-start key cross-border electricity infrastructure projects with the financial support from the Connecting Europe Facility for Energy.

The **Electricity Market Design (EMD)**²² reform proposal aims to provide stable investment signals to renewable energy investments by promoting long-term contracting via contracts for difference (CfDs) and power purchase agreements (PPAs). At the same time, the proposal lays down rules to create a more flexible power system that can accelerate the integration of variable renewable energy sources, such as wind.

¹⁷ Proposal for a Directive of the European Parliament and of the Council (COM/2021/557).

¹⁸ Council Regulation (EU) 2022/2577 of 22 December 2022 laying down a framework to accelerate the deployment of renewable energy, OJ L 335, 29.12.2022, p. 36–44.

¹⁹ Proposal to amend Directive 96/53/EC on maximum permitted weights and dimensions (COM (2023) 445).

²⁰ Regulation (EU) 2021/240 of the European Parliament and of the Council of 10 February 2021 establishing a Technical Support Instrument, OJ L 57, 18.2.2021, p. 1–16.

²¹ Regulation (EU) 2022/869 of the European Parliament and of the Council of 30 May 2022

²² COM (2023)148 final of 14 March 2023.

Looking specifically at the manufacturing sector of net-zero technologies, including wind, the Commission substantially supported its resilience with the **Green Deal Industrial Plan** and the proposals for a **Net-Zero Industry Act** (NZIA) and a **Critical Raw Materials Act** (CRMA)²³. The NZIA proposal, in particular, introduces sustainability and resilience criteria in public procurement and auctions to support renewable energy. Furthermore, it will accelerate permitting for setting up manufacturing facilities, will enhance upskilling and reskilling and foster innovation and better coordination between Member States. The CRMA proposal aims to strengthen the value chain of critical raw materials, a number of which are used by the wind industry, promoting circular economy – an essential approach to reduce dependence on raw materials – while minimising environmental impacts.

The revised EU maritime security strategy²⁴ addresses threats against critical maritime infrastructure, including offshore wind installations, improve surveillance, protection and resilience of infrastructure from conventional, hybrid and cyber-attacks.

To support the investments needed, the Commission, in addition to the possibilities for support under the Regional aid Guidelines has also introduced a new section in the **Temporary Crisis and Transition Framework** (TCTF) that allows until 31 December 2025 for investment aid in the manufacturing of strategic equipment for the transition towards a net-zero economy, including among others wind turbines and their key components and related critical raw materials²⁵. On the basis of this new section some Member States are setting up support schemes for clean-tech manufacturing expansion. Since March 2023, the Commission has approved schemes set up by several Member States for a total budget of around EUR 6.9 billion and is currently assessing additional ones.

In addition, Member States can also support the wind sector under the General Block Exemption²⁶, the RDI Framework²⁷, the Climate, Environmental protection and Energy Guidelines²⁸ and the Regional aid Guidelines²⁹.

In June 2023, the Commission proposed the **Strategic Technologies for Europe Platform** ('STEP') to support investment in critical and emerging technologies relevant to the green and digital transition³⁰. STEP would allow directing both existing and additional EU funding under a number of EU programmes towards technology fields that are crucial for Europe's leadership, in particular in clean technology manufacturing, thus contributing to a level playing field for investments throughout the single market.

EU spending programmes offer opportunities of support to the wind industry. The **Innovation Fund**, which can support scaling up innovative manufacturing projects, has selected since

²³ Respectively: COM(2023) 62 final of 1st February 2023, COM(2023) 161 of 16 March 2023 and COM(2023) 160 of 16 March 2023

²⁴ JOIN/2023/8 Joint communication on the update of the EU Maritime Security Strategy and its Action Plan: An enhanced EU Maritime Security Strategy for evolving maritime threats

²⁵ Communication from the Commission 2023/C 101/03

²⁶ Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty.

²⁷ Communication from the Commission Framework for State aid for research and development and innovation 2022/C 414/01.

²⁸ Communication from the Commission – Guidelines on State aid for climate, environmental protection and energy 2022 C/2022/481.

²⁹ Communication from the Commission Guidelines on regional State aid 2021/C 153/01.

³⁰ COM/2023/335 final of 20 June 2023

2020 six wind projects for total support of EUR 150 million. The last large-scale call³¹ included a specific window for clean-tech manufacturing and further calls are planned. A number of Member States are making use of the Recovery and Resilience Facility to support the build-up of industrial capacity for renewable technologies

The existing RRP foresees measures for the deployment of up to 15.9 GW of additional wind and solar power capacity³², earmarking up to EUR 5.6 billion for wind and solar related projects. The measures focusing specifically on wind power include the construction of offshore or onshore wind energy farms and associated infrastructure such as energy islands or offshore terminal infrastructure.

Furthermore, investment in manufacturing and deployment can be supported by the **InvestEU** programme, under which more than EUR 1.8 billion of loans from the European Investment Bank (EIB) for wind projects have been approved so far. The **Horizon Europe** research programme provided about EUR 250 million to wind-related topics. **The Cohesion Fund, the European Regional Development Fund and the Just Transition Fund** support innovation, build-up of industrial capacity, in particular in SMEs, and deployment in the field of wind energy, on the basis of national and regional Cohesion Policy programmes. Cohesion Policy support to deployment alone is expected to be more than EUR 580 million in the 2021-2027 period, reaching a total of EUR 819 million including also national contributions.

The Commission also supported the creation of the **Large Scale Partnership on Skills**. This partnership is driven by stakeholders and aims to gather information on skills needs in the renewable energy sector, contribute to the provision of appropriate skills and provide guidance and recommendations to public authorities.

Alongside this action plan, the Commission is adopting a communication on delivering on the offshore renewable energy strategy that includes a set of actions specifically dedicated to offshore renewable energy.

5. A WIND POWER ACTION PLAN

However, more should be done to support the European wind sector. Therefore, this European wind power action plan, which builds upon the actions already taken by the Commission, includes additional actions to address the challenges identified. These measures are structured into 6 key pillars: (i) acceleration of deployment through increased predictability and faster permitting, (ii) improved auction design, (iii) access to finance (iv) creating a fair and competitive international environment, (v) skills and (vi) industry engagement and Member State commitments.

³¹ https://climate.ec.europa.eu/eu-action/eu-funding-climate-action/innovation-fund/calls-proposals/large-scale-calls_en

³² Most of the supported measures under the RRP have shared deployment targets that cover both solar and wind with no disaggregation per technology type.

I. ACCELERATION OF DEPLOYMENT THROUGH INCREASED PREDICTABILITY AND FASTER PERMITTING

Unlocking existing projects in the authorisation phase and accelerating new projects requires more efficient and transparent permitting processes, better staffing and training of the national permitting authorities and faster implementation of the new regulatory framework on permitting. To address these obstacles, the Commission will focus on rolling out the digitalisation of the permitting process across all the EU Member States. Better exchange between Member States on existing practices to gain acceptance of local communities will also bring additional value to the process.

Overall, under the Recovery and Resilience Facility Member States have proposed measures to support the national permitting authorities of an amount equal to EUR 31 million. This is expected to be further strengthened by additional measures via the RepowerEU chapters in the Recovery and Resilience Plans in Member States.

Additionally, despite the specific legal provisions in force³³, detailed planning of auctions for renewables is either unreliable or lacking in many Member States. The Commission will work more closely with Member States to ensure transparent planning of auctions for renewables and if this is not sufficient, take action to ensure proper implementation of the relevant provisions in the Renewable Energy Directive.

Finally, policies to facilitate wind deployment through renewable power purchase agreements are missing. Unclear perspectives on the deployment volumes in the coming years make EU manufacturers hold back on expansion of production and capacities. More comprehensive and granular auction planning will give the industry greater confidence about short- and mid-term business opportunities.

Action 1: Commission and Member States to work together in order to accelerate permitting. ‘Accele-RES’ - frontloading transposition and implementation of the revised RED. Temporary emergency regime

The Commission will launch the “Accele-RES” initiative consisting inter alia of the following specific actions:

- **The Commission will prioritise the acceleration of permitting** by putting a strong emphasis on **digitalisation** of national permitting processes across the EU as well supporting the roll-out of **training** for national permitting authorities. This action will be supported in selected Member States by the RepowerEU chapters of their Recovery and Resilience Plans. The Commission will encourage Member States to use the **Technical Support Instrument (TSI)**³⁴ to further support fast implementation of permitting provisions in RED.
- Before the end of the year, the Commission will launch **a dedicated online tool to support Member States in the permitting process**. The tool will, among other things, provide answers to frequently asked practical questions from Member States related to the implementation of the revised permitting provisions.

³³ Art. 6.3 in the Renewable Energy Directive.

³⁴https://commission.europa.eu/funding-tenders/find-funding/eu-funding-programmes/technical-support-instrument/technical-support-instrument-tsi_en

- To support fast implementation of the permitting rules, the Commission will urge all Member States to set up detailed **implementation plans** for the revised RED.
- By April 2024, the Commission will **update the Recommendation** on speeding up permit-granting procedures for renewable energy projects³⁵ and the **Guidance** on good practices to speed up permit-granting procedures for renewable energy projects and on facilitating power purchase agreements³⁶ that accompanies it, with further guidance on topics such as repowering, simplification of environmental procedures or permitting for grids, as necessary. The Commission will also issue guidance to the Member States on the designation of the renewables acceleration areas³⁷.
- The Commission will **upgrade the informal expert group on permitting** to a dedicated forum to regularly exchange best practices and identify remaining obstacles, including regulatory barriers, that require further action at EU level. Other cooperation fora with Member States, such as the **Concerted Action on the RED (CA-RES)** and the **Single Market Enforcement Task Force (SMET)** will be mobilised to support the implementation of the new legislation³⁸.

The Commission is currently carrying out a review of the Emergency Regulation on permitting in the context of the ongoing assessment on the need to prolong the validity of the emergency regulations. The Regulation is already speeding up the permitting procedures in the Member States, before the provisions of the revised RED are effectively transposed (Member States are obliged to transpose some of these provisions by 1 July 2024). We see that the energy market has stabilised compared to 2022, but the EU is still facing the consequences of the energy crisis. While our preparedness and security of supply architecture has been reinforced, risks, such as disruption to our energy imports, remain. Electricity prices are at a high level and continue to be volatile. The need to accelerate deployment of renewables, in particular wind energy, across the EU is higher than ever as it helps to address security of supply risks, displace fossil fuels from the energy mix and achieve our ambitious 2030 targets.

By November, the Commission will present the report on the main findings of this review and consider proposing an extension of a temporary emergency regime. Such a temporary regime, would bring concrete benefits to renewables and would send a strong signal to the industry and Member States about the need to urgently accelerate deployment of wind and other renewable energy sources. In order to ensure that the favourable conditions created by the Emergency Regulation are preserved seamlessly in a structural manner, the Member States are urged to frontload the transposition of the provisions of the revised RED.

³⁵ Commission Recommendation C/2022/3219 final

³⁶ Commission Staff Working Document Guidance to Member States on good practices to speed up permit-granting procedures for renewable energy projects and on facilitating Power Purchase Agreements Accompanying the document Commission Recommendation on speeding up permit-granting procedures for renewable energy projects and facilitating Power Purchase Agreements, SWD/2022/0149 final

³⁷ Member States must designate renewables acceleration areas for at least one renewable energy technology pursuant to Article 15.c of the revised RED.

³⁸ SMET will continue its work on eliminating process-related barriers to permitting for wind and solar energy projects. It will also support the exchange of good practices for one-stop shop, digital permitting, and clear information and deadlines.

Action 2: Member States to increase visibility of the wind projects pipeline through wind pledges, publication of mid-term auction schedules, long-term plans for renewables deployment

Under the RED, Member States already have an obligation to publish a long-term schedule on the expected allocation of support for renewables covering at least the following five years and to introduce measures to ensure that power purchase agreements will also contribute to the required deployment of renewables³⁹. In cooperation with the Member States, the Commission will ensure the visibility and predictability of national plans for renewables deployment, by ensuring the implementation of the relevant RED provisions and deploying transparent digital tools. This would help industry better plan their investments in manufacturing capacity, increase their bankability and bolster their business case. Some Member States, such as Denmark or Poland, are already working on concrete tendering programmes for large offshore investments.

To this end:

- The Commission will set up an interactive **EU digital platform** on which the auction planning of the Member States will be published. This will ensure higher visibility of upcoming auctions and expected deployment volumes and allow companies to have a **single point of information** for all auctions planned in the EU.
- The Commission calls on the Member States to commit to specific, concrete **pledges on wind energy deployment volumes** for at least the period 2024-2026, providing a clear and credible overview of wind energy deployment in the next years, to be formalised by the end of 2023. These pledges should complement the ambitious commitments on offshore energy that amount to 111 GW across all EU sea basins by 2030.
- The Commission will reinforce cooperation with Member States, project promoters and grid operators in the context of the regional high-level groups⁴⁰ to identify concrete ready-to-go projects for wind and other renewables, including cross-border projects, and to support their rapid implementation. One good example is the North Sea Energy Cooperation (NSEC), which adopted a joint statement⁴¹ setting ambitious new aggregate targets of reaching at least 260 GW of offshore wind energy by 2050, with intermediate targets of at least 76 GW by 2030 and 193 GW by 2040. The Commission will also use regional cooperation fora to coordinate planning for offshore wind and other renewable projects with regional impacts as also explained in the Offshore Communication.
- In December 2023, following the assessment of the draft national energy and climate plans (NECPs), the Commission will **issue recommendations related to permitting**

³⁹ Article 6.3 of the Directive (EU) 2018/2001: “Member States shall publish a long-term schedule anticipating the expected allocation of support, covering, as a reference, at least the following five years, or, in the case of budgetary planning constraints, the following three years, including the indicative timing, the frequency of tendering procedures where appropriate, the expected capacity and budget or maximum unitary support expected to be allocated, and the expected eligible technologies, if applicable. That schedule shall be updated on an annual basis or, where necessary, to reflect recent market developments or expected allocation of support”.

⁴⁰ BEMIP, CESEC, South-Western and NSEC

⁴¹ https://energy.ec.europa.eu/system/files/2022-09/220912_NSEC_Joint_Statement_Dublin_Ministerial.pdf

and long-term planning of renewables development. In their updated NECPs, going beyond the current legal obligations, Member States should develop **comprehensive 10-year plans** for the deployment renewables, in particular wind, with an outlook to 2040. The plans should include targeted installed capacities and/or volumes or production, profile of the projects, spatial distribution and energy system integration aspects. This will give visibility to the manufacturing industry as well as to grid operators to timely develop the necessary grids to integrate renewables (through network development plans).

Action 3: Commission to adopt an action plan to facilitate grids build-out

Following the High-Level Electricity Grids conference in September 2023, the Commission will adopt **an action plan for grids** in November 2023, including both transmission and distribution levels. Building on the framework for trans-European energy networks (TEN-E), the action plan will in particular help accelerating key cross-border electricity infrastructure projects to be included in the first list of projects of common interest and projects of mutual interest following the adoption of the revised regulation on the Trans-European Energy Networks. These projects will be crucial to integrating increasing volumes of renewables and advancing energy system integration.

The action plan will include measures to address bottlenecks hampering grid reinforcement and expansion, including cross-border cost sharing, and manufacturing, which are crucial to help to unblock a larger number of onshore and offshore wind projects, trigger investment in wind projects in coastal Member States and transport infrastructure towards landlocked regions in Europe and in this way create additional demand for wind equipment. The grids action plan will also facilitate anticipatory investments to ensure the necessary grid development. It will aim to both accelerate the deployment of new infrastructure by addressing permitting bottlenecks, as well ensure better use of the existing grid, for example by increasing visibility of existing capacities.

II. IMPROVED AUCTION DESIGN

The way Member States design their auctions to support renewables impacts renewables deployment and investment signals sent across the value chain. Well-designed objective, transparent, non-discriminatory pre-qualification and non-price award criteria that reward higher value added products and promote industrial scale-up can better support an innovative and competitive wind manufacturing industry. Criteria like longer life-time of installations, carbon content or circular-economy measures reduce the environmental footprint of wind farms, and help to reduce our dependency on critical raw materials. Addressing the risk of project delays or non-execution provides higher predictability and certainty to companies and investors. More generally, further harmonisation of Member States' auction design principles would reduce transaction costs and could go a long way to ensure that auctions are fit-for-purpose, while leaving sufficient scope for flexibility and innovation at Member State level. The use of these elements in auction design should take into consideration the budgetary impact for Member States and the need for simplicity.

Action 4: Member States to include in their auctions objective, transparent and non-discriminatory qualitative criteria and measures to maximise the execution rate of the projects, supported by Commission recommendation and guidance

Immediately after the adoption of the action plan, the Commission, will **launch a dialogue** with Member States and stakeholders **to improve, simplify and provide consistency in the design of renewable energy auctions** in order to address shortcomings resulting in project delays or abandoning. This uncertainty harms European wind market players and Member States and undermines the achievement of the EU target for renewables. The dialogue will lead to the adoption as soon as possible of a **Commission recommendation and guidance** that aim to provide suggested standard elements to auctions, in full complementarity with the NZIA, as well as making auction design more uniform and efficient. In the longer term, the Commission would be ready to ensure a more uniform auction design by making these provisions legally binding via an Implementing Act in the NZIA.

This action will include:

- proposing a set of non-discriminatory, objective and transparent pre-qualification criteria related to cyber security (compliance with NIS 1 and NIS2) 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;
- 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;
- exploring the development of a European business conduct code that promotes, among other things, supply chain transparency and could be recommended for future wind auctions;
- reinforcing the cyber-resilience of wind installations and of the infrastructure to which they are connected;
- ensuring the full and timely execution of projects through appropriate incentives. This should include penalty clauses for non-execution of projects and price indexation to help industry to better cope with cost increases due to inflation;
- assessing the consequences of negative bidding and exploring solutions to avoid a negative impact on the speed and scale of deployment and on the value chain.
- In collecting the Member State pledges for wind energy deployment volumes between 2024-2026 and beyond, the Commission will request Member States if they intend to use negative bidding, especially uncapped negative bidding which may lead to very high bids for wind projects and increase the risk for full and timely delivery of such projects. Where relevant the Commission will launch a dialogue with Member States on whether such bidding structure can be avoided; and
- addressing bid ceilings leading to undersubscription in auctions.

Action 4 aims to bring quick and tangible improvements and more harmonisation to the design of renewable energy auctions. Some of the issues that it intends to tackle are addressed in a structural manner in the proposals for the **Electricity Market Design (EMD)** and **Net-Zero Industry Act (NZIA)**. With this in mind, **the Commission calls on the co-legislators to arrive swiftly at an agreement on the EMD (by end 2023) and Net-Zero Industry Act (by March 2024).**

The Commission will support the co-legislators in introducing in the NZIA provisions related to objective, transparent and non-discriminatory pre-qualification criteria for auctions and strengthening the use of the non-price award criteria, including notably considerations related to business conduct, cybersecurity and data security as well as ability to deliver the project fully and on time.

Furthermore, if decided so by the co-legislators, the Commission stands ready to swiftly propose **an implementing act** to the NZIA to incorporate best practice on the design of auctions for renewables into European legislation, and further streamline of auction design.

The provisions of the EMD on the use of contracts for difference and power purchase agreements could, when adopted, support revenue stability in the wind industry.

Action 5: Tackling cybersecurity risks and addressing data protection aspects

The Commission will identify cybersecurity risks relevant to wind energy installations and related infrastructure, including data protection aspects, in view of assessing whether these could be exploited to damage economic security or the security of electricity supply in the EU. This identification and assessment will be carried out in the context of the risk evaluation exercise currently led by the Commission with the High Representative and the NIS Cooperation Group, as referred to in the Council Recommendation of 8 December 2022 on a Union-wide coordinated approach to strengthen the resilience of critical infrastructure⁴². For this specific analysis, and to feed into the wider risk evaluation, the Commission will also use expert groups such as the newly established Smart Energy Expert Group and its working group on cybersecurity, with representatives from industry, including vendors and electricity undertakings. The work on the risk assessment may draw on the experience with 5G and would complement the existing security infrastructure and notably the **Network Code on the cybersecurity of cross-border electricity** flows planned for adoption in Q1 2024. The results could support procurement processes and auction design, further policy making as well as the screening of foreign direct investments.

The analysis of cybersecurity risks will be broad in scope and include also installations.

Action 6: Commission to increase the use of strategic procurement in the context of the Global Gateway

In December 2021, the Commission launched the Global Gateway strategy through which the EU invests, in a ‘Team Europe’ approach, in clean energy and infrastructure projects around

⁴² Council Recommendation of 8 December 2022 on a Union-wide coordinated approach to strengthen the resilience of critical infrastructure, (2023/C 20/01), (OJ C 20, 20.1.2023, p. 1)

the world, including for wind energy. The Commission will propose to increase the use of strategic procurement in the context of the Global Gateway. This will ensure that projects are up to high environmental, social and governance standards and will allow contractors and producers who meet these standards to find a viable business case, while promoting sustainable development in emerging markets and developing economies. For projects involving the deployment of strategic net-zero technologies like wind renewable technologies, criteria such as those included in the NZIA, once adopted, will serve as a reference for engaging with international partners. Furthermore, the Commission will look into the possible application of similar requirements to procurement by private promoters in Global Gateway projects.

III. ACCESS TO FINANCE

The inflationary environment with raw material price hikes, the interest rate increase and the frequent need to provide upfront guarantees in order to secure contracts have deteriorated the wind sector's access to finance, for both manufacturing and deployment. However, to achieve the NZIA targets, the wind industry needs an estimated EUR 6 billion of investments into manufacturing capacity. Within the Capital Markets Union (CMU) and the EU framework for sustainable finance, the Commission has worked to deliver capital market rules that are attractive to investment from long-term investors, as well as measures to mobilise private finance towards environmentally sustainable activities and opportunities of the European Green Deal. The Commission realises fully that private investment will be crucial to meet the ambitions of this action plan and will take action in this field, alongside the mobilisation of EU and other public investment sources.

Action 7: Commission to facilitate access to EU financing

The Commission will expand the possibility for support for wind energy manufacturing under the **Innovation Fund**, namely by doubling the budget for financing clean technology manufacturing projects to EUR 1.4 billion, including projects for the manufacturing of wind turbines and their components, in the next call for proposals on 23 November 2023.

The Innovation Fund has a total of EUR 40 billion for the period 2020-2030⁴³. In the overall budget of the Innovation Fund this year, of EUR 4 billion, in addition to the dedicated clean-tech manufacturing topic, innovative wind energy production and pilot projects will also be eligible under the other topics in the upcoming call for proposals on 23 November 2023. At equal merit, priority will be given to wind energy projects under this call.

To support project developers and ensure that a solid pipeline of innovative projects is being built, wind energy projects should also get priority for the EUR 90 million of Innovation Fund project development assistance that will be provided in cooperation with the European Investment Bank over the next 3 years. Tailored advisory support is also available from the InvestEU Advisory Hub. Furthermore, combination of funding from the Innovation Fund and financing delivered by the EIB and other international financial institutions and national promotional banks and institutions, including under the **InvestEU programme** can also support awarded projects to help reach a final investment decision.

⁴³ At an average carbon price of EUR 75EUR per tonne

By end of this year, the Commission will also strengthen wind-related activities under **the revised Strategic Energy Technology Plan (SET Plan⁴⁴)**, along with increased support for research and innovation in the wind manufacturing sector, so that relevant European technologies keep their competitive edge, in particular on issues linked to circularity and sustainability, improving industrial processes and digitalisation.

The STEP will also open new opportunities for supporting investment that aims to scale up the EU's manufacturing of clean technologies, including wind power, which could particularly benefit transition and less-developed regions as well as developed regions in Member States with a GDP/capita below the EU average. These regions will benefit from financial incentives and higher flexibility in using the **Cohesion Fund, European Regional Development Fund** and **Just Transition Fund** allocations for offering support to productive investments in large companies for investments in the strategic sectors contributing to the STEP objectives.

Action 8: EIB to provide de-risking tools and guarantees for EU wind companies

In July 2023, the European Investment Bank approved its second REPowerEU package. The Bank announced its ambition to nearly double its lending contributing to the Green Deal Industrial Plan and the NZIA, to mobilise around EUR 150 billion cumulatively in 5 years. This plan will be partially underpinned by the InvestEU guarantee mechanism. The European manufacturers of strategic net-zero technologies, associated upstream components and strategic raw materials will be one of the priority/action areas of this effort. It will include EU manufacturing capacity in the onshore and offshore wind industry.

The Commission and the European Investment Bank are jointly working with high urgency on a **dedicated instrument to counter-guarantee commercial banks' credit exposures** to key wind industry suppliers, increasing access to advance payment and performance guarantee lines. The common objective of the Commission and the EIB is to launch the new facility in the coming 3 to 6 months. This will alleviate the financial pressure resulting from a growing order book exacerbated by macroeconomic challenges, including rising inflation, interest rates as well as significant supply chain disruptions.

The Commission has also proposed as part of STEP to increase the EU guarantee by EUR 7.5 billion through a dedicated window of InvestEU, which would increase the capacity of the EIB Group and other implementing partners to support investment in development and manufacturing of the clean and other technologies, including for the wind sector.

The work on enhancing coordination between external financial tools – with Member States' export credit agencies working alongside development finance providers, notably in the context of the Global Gateway – will support i.a. renewable projects, including wind.

Action 9: Member States to make full use of flexibility provided under State aid rules for EU wind value chain

Member States should fully use the opportunities provided by the TCTF rules in support of the wind manufacturing in the EU. As concerns certain crisis-related sections of the TCTF that are due to expire by the end of the year, the Commission has consulted Member States and will soon take a decision on their possible prolongation, taking into account the need to

⁴⁴ Communication from the Commission on revising the SET Plan (to be adopted in October 2023)

ensure a level playing field within the EU. Other sections intended to support the transition to a net-zero economy that enable Member States to accelerate the roll-out of renewable energy, including wind power, and support strategic investments for the manufacturing of equipment necessary for the transition to net-zero, including wind turbines, their key components and related critical raw materials, are available until the end of 2025.

Action 10: Commission to strengthen the dialogue with investors to foster the attractiveness of investments in the EU's wind sector

The Commission is actively engaging with stakeholders, in particular long-term capital investors in the context of the Investors Dialogue, on solutions to make the EU wind industry more competitive at attracting investment at a global level. This will help to reduce the need for public support. The focus is on the opportunities and vulnerabilities in the sector – operational, financial and competitive – and ways to enhance Europe's strengths and addressing our weaknesses.

Still within 2023, the Commission will organise dedicated meetings with long-term investors to better understand the main obstacles hindering the attractiveness of investment in the EU's wind sector and the best ways to address them. This will cover opportunities to ensure quicker access and deployment of private finance, as well as discussions on the investment climate in Europe including an effective and where possible simplified regulatory environment for investments into the wind sector.

IV. ENSURING A FAIR AND COMPETITIVE INTERNATIONAL ENVIRONMENT

The EU wind manufacturing industry has demonstrated that, under fair conditions, it is highly competitive both in its home market and in foreign markets. The EU should create a propitious environment for the EU industry to compete, innovate, invest and export to foreign markets in compliance with international commitments.

Action 11: Commission to facilitate EU manufacturers' access to foreign markets

The Commission will continue to use its large network of trade agreements to strengthen the competitiveness of the EU wind industry, including through effective implementation and enforcement⁴⁵. The Commission equally attaches high importance to **ongoing trade negotiations** with a view to concluding robust chapters on energy and raw materials, as well as other relevant provisions for the wind industry. These agreements help the wind industry diversify and de-risk their supply chains as well as address strategic dependencies, notably on raw materials and other intermediate products. Therefore, the Commission will further **intensify negotiations on trade agreements** that would strengthen the position of EU companies, including in the wind sector, and ensure undistorted access to foreign markets. The Net-Zero Industrial Partnerships will additionally support the presence of European companies in key markets. In addition, the Commission will seek more strategic cooperation and initiatives in this sector in the EU neighbourhood.

⁴⁵ EU trade agreements contain provisions prohibiting import and export restrictions, local content requirements as well as opening access to public procurement.

The EU will equally work with its partners in the World Trade Organisation (WTO) to develop the **rulebook on subsidies**, with a view to increasing transparency on state intervention and avoiding the subsidy race that increases trade conflicts and undermines the cooperation necessary to achieve the global climate objectives. The work is planned to start in the February 2024 WTO Ministerial Conference.

The **International Procurement Instrument (IPI)**⁴⁶ provides the EU with leverage to persuade its trading partners that do not yet have commitments in the area of public procurement (in the WTO Agreement on Government Procurement (GPA) or in bilateral free trade agreements) to open their procurement markets to EU businesses. If there are substantiated allegations by the EU industry about restricted access to wind power related goods and services in a non-EU country in the area of public procurement, the Commission may launch an IPI investigation with a view to opening that market to EU operators via consultation with the non-EU country concerned. The IPI also allows the EU to restrict access to its public procurement markets by imposing respective IPI measures in case the consultation mentioned above does not lead to the expected market opening of the non-EU country's market.

Action 12: Protect the internal market against trade distortions and threat to security and public order

The Commission, in partnership with the European wind industry, will closely **monitor possible unfair trade practices** which benefit foreign wind manufacturers. This will involve close scrutiny of potential subsidisation of wind-related products imported into the EU. If justified, the Commission will activate its trade defence instruments. To the extent that foreign distorting subsidies allow wind manufacturers receiving them to be successful in public procurement procedures or in concentrations involving EU target companies, the **EU will also use the measures provided for by the Foreign Subsidies Regulation. The European wind industry is encouraged to submit further evidence.** The Commission will assess all evidence of alleged unfair practices put forward by the industry or from other independent sources .

The Commission will encourage Member States to take fully into account risks to **critical energy infrastructures** when implementing their screening mechanisms on grounds of security or public order. The Commission will make full use of the cooperation mechanism **under the Foreign Direct Investments Screening Regulation**⁴⁷ to prevent possible threats to security and public order related to foreign investments in the EU wind industry.

Action 13: Enhancing standardisation in the wind energy sector

In the current stage of the wind industry development, technical standards are a key instrument to ensure interoperability, reduce costs and speed up the market deployment of onshore and offshore wind energy technologies onshore and offshore. While the International Electrotechnical Commission (IEC) has adopted a broad range of standards, which are adopted as European standards by CENELEC, additional standards could contribute to help further enhance the efficiency and the sustainability of wind energy equipment and remove

⁴⁶ Regulation (EU) 2022/1031 on the access of third-country economic operators, goods and services to the Union's public procurement and concession markets entered into force on 29 August 2022.

⁴⁷ Regulation (EU) 2019/452 of the European Parliament and of the Council of 19 March 2019 establishing a framework for the screening of foreign direct investments into the Union, OJ L 79I , 21.3.2019, p. 1–14

barriers to its roll-out across the EU. In particular, circular economy is important to ensure strategic autonomy in a key sector like the wind industry, while reducing its environmental impact in line with European Green Deal. They could also strengthen the industrial ecosystem, especially if combined with the parallel work on renewable energy auction design. Promoting the standardisation process at international level and ensuring the EU's active participation will also support the ability of the European wind industry to better compete on quality with global competitors.

To **promote the adoption of EU and international standards for the wind sector**, by the end of 2023, the following actions will be taken:

- as part of the established High-Level Forum on European Standardisation, a special working session on wind technology will identify the main European and international standardisation needs, identify any existing barriers and raise awareness among Member States and the industry to ensure the participation of their experts in standard-setting activities; and
- the Commission will request the European Standardisation Organisations to draft European standardisation deliverables in support of the objectives of the NZIA.

V. **SKILLS**

It is estimated that about 100.000 additional jobs will be needed in the wind sector by 2030, while the associated investment in skills could amount to about EUR 850 million⁴⁸. In March 2021 and March 2023, renewable energy trade associations, representatives of installers of clean technologies, education and training providers, research centers and regional networks, including stakeholders from the wind energy industry, with the support of the Commission, set up large-scale skills partnerships for the renewable energy industrial ecosystem under the Pact for Skills. The partnerships are working but need further development to deliver on its objectives.

Action 14: Large scale skills partnerships for renewable energy to design projects that support skills development for the renewable energy sector, including wind

The large scale skills partnerships for renewable energy and for offshore renewable energy are encouraged to identify as soon as possible those EU programmes and skills initiatives that offer the best framework for the implementation of projects that enable mapping of the skills needs in the sector, review job profiles, elaborate and operate new labour-market relevant training modules and related material and/or support the development of skills urgently needed in the renewables sector, targeting in particular women, young people (not in education, employment, or training) and older people. With a particular focus on sustainability and circular economy practices. This could include the application to the Erasmus+ call for a blueprint for sectoral cooperation on skills. The partnership can also

⁴⁸ Commission report on "Employment and Social Developments in Europe. Addressing labour shortages and skills gaps in the EU", <https://ec.europa.eu/social/BlobServlet?docId=26989&langId=en>

benefit from existing initiatives like the European Alliance for Apprenticeships and the Centers of vocational excellence⁴⁹.

In addition, NZIA will facilitate the launch of European net-zero industry skills academies designed to support Member State actions to upskill and reskill workers. The academies will develop learning content and materials that they make available to education and training providers in the Member States to meet the demand for skilled workers in net-zero industries. The academies, each focussing on one net-zero industry technology, including one to be launched dedicated to the wind sector, will aim to train 100.000 learners each within three years of establishment.

VI. INDUSTRY ENGAGEMENT AND MEMBER STATES COMMITMENTS

In addition to measures taken by the EU and Member States, actions by the European wind industry itself will also contribute to a more stable and profitable business environment. This concerns, among other things, more actively hedging against inflation and price volatility of its main inputs, such as raw materials, developing further long-term partnerships between wind manufacturers and wind operators which can be of mutual benefit.

Action 15: EU wind charter

To scale up wind deployment and manufacturing capacity in the EU, the Commission invites Member States and wind industry representatives to sign up, before the end of 2023, to voluntary commitments as part of a wind charter. Following up on the Investors Dialogue, the Commission will seek to include financial investors in the wind charter or to extend the charter to those players as soon as it becomes feasible.

The objective of the charter, which builds on this action plan and on its policies, is to align and swiftly implement the actions of the Commission, Member States and industrial stakeholders, while demonstrating a common and coordinated effort to improve the enabling conditions for the European wind industry. The Commission will work closely with Member States and industrial stakeholders to develop the precise commitments of the charter, in consultation with social partners. The reassurances that this action plan and the charter will provide should allow industry to step up investments and ensure the expansion of its manufacturing capacity, in order to meet the expected increased demand for wind projects in the years to come.

6. CONCLUSIONS AND WAY FORWARD

The wind industry is a pride for Europe. The EU has a solid manufacturing base and many robust wind farm developers with global reach. The sector has great innovating power and ingenuity and is a fertile ground for developing new skills. European companies active in the wind sector are crucial actors in the ongoing transformation of our energy system and

⁴⁹ For example, the Erasmus+ funded Centre of Vocational Excellence “Technical Skills for Harmonised Offshore Renewable Energy” (T-shore) aims to develop training programmes and resources to provide workers with the skills and competencies they need to succeed in the offshore wind industry.

reaching our ambitious climate and energy targets. Alongside other net-zero industries, the wind industry makes the EU well-equipped for transforming towards the clean and circular economy of tomorrow. The EU's wind sector thrives on competition and as a result is a global leader. It is a trend- and standard-setter for the world. European cooperation on wind energy with international partners creates new markets and provides global solutions to replace fossil fuels.

This is why the European wind industry must scale up and invest now to let the EU industry and citizens seize the opportunities of the European Green Deal and decarbonisation efforts worldwide. To make this possible, the industry needs more predictability and a clearly visible, solid project pipeline. It requires a robust business model that ensures appropriate profitability and access to finance to grow and attract investors. It needs expanded and strengthened grids to integrate its energy. And it requires fair competition.

There is no time to lose. This action plan therefore aims to concrete results already in the coming months. Implementation of this action plan by the EU, Member States and industry will support the European wind manufacturing sector in overcoming the difficulties and improve its competitiveness to ensure that this sector fully contributes to the ongoing energy transition.

The action plan provides the European wind industry with the reassurance that its business case in the EU is strong, sustainable and long term. Therefore, **the Commission calls on Member States and the industry to endorse this action plan** and implement the actions according to their respective roles. The Commission invites **the Parliament, the Council, and other EU institutions** to contribute to this work supporting the objective of this action plan.

ANNEX I – THE EUROPEAN WIND POWER ACTION PLAN IN A NUTSHELL

Category	Actions/instruments	Timeline
Acceleration of deployment through increased predictability and faster permitting	1. Commission and Member States to work together in order to accelerate permitting. ‘Accele-RES’ - frontloading transposition and implementation of the revised RED. Temporary emergency regime	Starting Nov. 2023
	2. Member States to increase visibility of the wind projects pipeline through wind pledges, publication of mid-term auction schedules, long-term plans for renewables deployment	Starting Nov. 2023
	3. Commission to adopt an action plan to facilitate grids build-out	Nov. 2023
Improved auction design	4. Member States to include in their auctions objective, transparent and non-discriminatory qualitative criteria and measures to maximise the execution rate of the projects, supported by Commission recommendation and guidance	as soon as possible
	5. Tackling cybersecurity risks and addressing data protection aspects	Start beginning 2024
	6. Commission to increase the use of strategic procurement in the context of the Global Gateway	As of adoption
Access to finance	7. Commission to facilitate access to EU financing	By end 2023
	8. EIB to provide de-risking tools and guarantees for EU wind companies	Q4 2023
	9. Member States to make full use of flexibility provided under State aid rules for EU wind value chain	As of adoption
	10. Commission to strengthen the dialogue with investors to foster the attractiveness of investment in the EU’s wind sector	By end 2023
Creating a fair and competitive international environment	11. Commission to facilitate EU manufacturers’ access to foreign markets	As of adoption
	12. Protect the internal market against trade distortions and threat to security and public order	As of adoption
	13. Enhancing standardisation in the wind energy sector	Start by end 2023
Skills	14. Large Scale Skills Partnerships for Renewable Energy to design projects that support skills development for the renewable energy sector, including wind	By mid-2024
Industry engagement and Member States commitments	15. EU Wind Charter	Dec. 2023