Post-2020 Renewable Energy Directive

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INTRODUCTION

With an annual turnover of more than €67 bn, the wind energy sector is of strategic importance to the European economy. European manufacturers hold a 39% global market share for wind turbines and the industry currently employs more than 255,000 people. Due to its strong industrial footprint, wind energy is today a competitive and mainstream power source delivering renewable and reliable energy supply to European businesses and citizens.

The Paris climate agreement gives the EU an unprecedented opportunity to lead the global energy transition by providing a scalable climate change mitigation technology to the world. To that end, the EU must stay firm in the face of tougher international competition.

More than 70 countries highlighted wind energy in their national action plans (INDCs) submitted ahead of COP21 and several countries spelled out concrete targets and deployment volumes. China and India accounted for the most ambitious wind targets, 200 GW and 60 GW respectively, in view of consolidating their domestic wind industries and championing their national turbine manufacturers.

In contrast, European wind investors are currently faced with uncertainty over EU markets growth due to the lack of well-defined national renewable energy commitments and enabling policies for the post-2020 period in 22 out of 28 Member States. This prevents timely investment decisions and puts the steady cost reduction path of the industry at risk.

A vibrant home market, based on transparent and reliable long-term project pipeline, will be crucial in sustaining the European industry's competitive edge and technology innovation efforts. This market should be underpinned by a robust post-2020 renewables framework able to secure the EU's position as the world's number one in renewables and maximise the benefits of wind deployment to the European economy. WindEurope therefore believes that Member States will need to raise ambition towards a collective EU renewables target of at least 30% to match international competition.

Higher policy ambition in the post-2020 period makes clear economic sense. Under a robust, coherent and stable regulatory framework, wind will be the backbone of the EU's power system estimated to cover 23% of the EU's electricity demand in 2030 and will contribute €86 bn. of gross value added and a total of 334,000 jobs to the European economy¹. Early and enabling policies for the post-2020 period will also ensure cost-effective transition to a renewables-based economy.

The following proposals will allow the EU to tap into the economic benefits of wind deployment beyond 2020, namely:

- A binding EU-wide renewables target of at least 30% by 2030;
- Binding national plans to provide early visibility over EU-28 2030 renewable energy commitments;
- Clearly defined roll-out of a gap-filler instrument to incentivize early ambition from Member States;
- Concrete legal tools for the European Commission to oversee and ensure target delivery;
- Priority dispatch and balancing responsibility exemptions as long as market failures persist;
- Revenue stabilisation mechanisms to provide long-term investment signals.

¹ EWEA, <u>Aiming High</u>, November 2015

SHOWING RENEWABLES AMBITION BEYOND 2020

1. UNLEASHING THE FULL POTENTIAL OF WIND BY 2030 MAKES ECONOMIC SENSE

Wind energy is today a mainstream power source covering 11,4% of the EU's electricity demand. The sector is strategic for the European economy with over €150 bn invested since 2010.

Wind energy has emerged as a viable and competitive alternative to conventional generation. In terms of LCOE, onshore wind is the cheapest power generation technology in Europe² and wind power accounted for the bulk (44.2%) of total power capacity installations in 2015³. The EU is leader in offshore wind with 92% of global installed capacity now in European waters and a record \leq 13bn⁴ investments in 2015 alone.

Under a robust post-2020 regulatory framework, wind will be the backbone of the EU's power system accounting for 23% of the EU's electricity demand in 2030 and will deliver the following benefits to the European economy⁵:

- €86 bn. of gross value added;
- 334,000 jobs in the wind industry.

2. POLICY COHERENCE IS KEY TO MAINTAINING A VIBRANT HOME MARKET

To bring visibility on the investment pipeline in EU Member States, the EU Climate and Energy policies for 2030, namely the ETS, renewable energy and energy efficiency, need to be coherent and calibrated against each other. They will also have to be re-aligned with the increased international ambition level and the agreed five-year revision cycles under the Paris climate agreement.

The European Commission's legislative proposal for the post-2020 revision of the ETS provides the possibility to conduct a root and branch reform and address the structural overhang of surplus allowances, which continues to depress the carbon price.

Renewable energy policies will, however, remain critical in ensuring a solid business case for wind energy beyond 2020 and – in the long term – a cost-effective transition to a renewables-based economy by 2050. Raising the target for renewables to at least 30% by 2030 could reduce the marginal cost of revising the linear reduction factor of the ETS to match an increased ambition level.

In the European Commission's own calculations, a coherent approach to renewables and energy efficiency results in mutually reinforcing benefits to the European economy. Scenarios with a 30%

³ EWEA, <u>Wind in power, 2015 European Statistics</u>, February 2016

² BNEF, Levelised Cost of Electricity Update – H2 2015. In Germany, onshore costs \$80/MWh compared to gas at \$118/MWh and coal at \$106/MWh. In the UK, onshore costs \$85/MWh compared to \$115 for CCGT and \$115 for coal-fired installations.

⁴ EWEA, <u>The European offshore industry – key trends and statistics 2015</u>, February 2016

⁵ EWEA, <u>Aiming High</u>, November 2015

renewables target add a substantially higher net benefit of 568,000 jobs and €260 bn savings on fossil fuel imports compared to a 27% case⁶.

MEETING THE 2030 RENEWABLES TARGET THROUGH A ROBUST GOVERNANCE SYSTEM

1. PROVIDING VISIBILITY OVER THE GOVERNANCE MECHANISM MAKES WIND DEPLOYMENT COST-EFFECTIVE

The lack of national renewable energy commitments and operational policies for the post-2020 period in 22 out of 28 Member States currently contributes to investors' uncertainty. The governance system of the Energy Union should feature a reliable planning process to attract the necessary investments for the timely and cost-effective delivery of the 2030 EU binding renewables target.

The post-2020 renewable energy legislative package should therefore incentivise Member States to make ambitious renewable energy pledges. Member States that indicate their 2030 renewable contributions from the onset and enact enabling regulatory frameworks providing visibility to investors should be rewarded, for instance by receiving facilitated access to structural funds, NER400 and financing from the European Investment Bank.

To that end, the European Commission should set benchmarks for each Member State, which aggregated, amount to the overall binding target. Member States should define their 2030 contributions based on the benchmarks and using 2020 national targets serving as a starting point. National plans should be based on a uniform, binding template enshrined in legislation. The plans should be finalised well before 2019 to allow investors to prepare the post-2020 investment cycle.

The European Commission should also define a course of action in case national contributions do not add up to the EU-wide target. A complementary instrument (gap-filler), financed by all Member States, should be deployed as a measure of last resort but needs to be clearly set out in legislation and actionable as of 2020.

Member States that enact early renewable energy plans and go beyond their 2030 benchmarks should receive "contribution credit". This would translate into a substantially smaller financial contribution to the gap-filler instrument compared to under-achievers.

⁶ European Commission, 2030 climate and energy package impact assessment, SWD(2014) 15 final

2. ENSURING ACCOUNTABILITY FROM ALL MEMBER STATES PROVIDES INVESTOR CERTAINTY

Stable regulatory frameworks and investor protection remain crucial to sustain investment flows. Retroactive changes in key European markets in recent years have undermined the ability of some Member States (such as the UK and Spain) to meet their 2020 objectives. The lack of visibility on penalties for non-fulfilment of the 2020 national targets currently adds to investors' uncertainty.

A grandfathering principle for existing plants should be established in the post-2020 legislation to prevent retroactive changes to renewable energy support mechanisms and guarantee the economic viability of existing assets.

The post-2020 framework should clearly affirm the European Commission's task to ensure target delivery through the provision of concrete legal tools. The Commission should intervene in case of counter-productive measures (e.g. negative impact on existing/future investments) to national regulatory frameworks and should make official policy recommendations on national renewable energy policies.

3. FOSTERING REGIONAL COOPERATION CONTRIBUTES TO TAP INTO EXISTING POTENTIAL

A regional approach to wind deployment should result from voluntary cooperation by Member States with the European Commission acting as a facilitator. A regional approach to planning and operating the power system and market as well as regional impact assessments, system adequacy analyses and costbenefit analyses should be developed in order to provide an equitable and transparent evolution.

Wind energy is well suited to implement the regional approach promoted by the European Commission. To that end, regulatory cooperation and streamlining administrative procedures should be prioritised as a means to minimise project costs.

The North Seas Offshore Grid and the Baltic Energy Market Interconnection Plan (BEMIP) should feature among the long term priorities for regional cooperation under the Energy Union.

DEPLOYING WIND ENERGY IN NEW MARKET REALITIES

1. TOWARDS A POWER SYSTEM WITH HIGH SHARES OF VARIABLE RENEWABLES

In the post-2020 period, market rules need to be adjusted to value and reward renewable and flexible power production and consequently provide long-term investment signals. Future regulatory frameworks and market design can consider increased exposure of wind generators to market signals provided that a level playing field exists. This could be tested against the following cumulative criteria:

- Existence of a fully functioning intraday and balancing market;
- A satisfactory level of market transparency and proper market monitoring mechanisms;
- Removal of priority dispatch for conventional generation and all other forms of non-RES power;
- Adequate transmission and distribution infrastructure is in place;
- Removal of inflexible and carbon-intensive power capacity to restore meaningful long-term price signals. Capacity Remuneration Mechanisms should be considered as a last resort option and only after standardised system adequacy analyses⁷.

Provisions on priority dispatch beyond 2020 need to factor in the existence of suitable market rules and should be maintained as long as market failures persist and the safeguards to reward flexibility across the system are not in place. Priority dispatch, in particular, has been and remains an important tool to facilitate renewable energy integration into the power system.

With current technology, wind power plans can also provide grid-support services including balancing energy. However, only a limited number of Member States currently have balancing markets and ancillary services products whose rules take into account the intrinsic characteristics of wind generation. The post-2020 renewables framework should foster increased participation of wind power generators into balancing markets to allow them to compete on equal footing with conventional generators⁸.

2. PROVIDING APPROPRIATE SUPPORT MECHANISMS ENSURES COST-EFFECTIVE TARGET DELIVERY

In a well-functioning power market, supply choices – and the corresponding investment decisions – are driven by price signals. Today, the energy-only market provides insufficient long-term investment signals for renewable capacity due to depressed wholesale power prices and chronic overcapacity of the power generation fleet. For the foreseeable future, the EU ETS will not deliver long-term price signals that impact investment decisions due to modest carbon price growth beyond 2020⁹.

⁷ EWEA, <u>Market design position paper</u>, June 2015

⁸ EWEA, <u>Balancing responsibilities and costs of wind power plants</u>, September 2015.

⁹ Several analysts (BNEF, Energy Aspects, Thomson Reuters Point Carbon) have lowered their carbon price forecasts for 2020 from €18-20 to €10-15.30. Due to the lack of substantial supply and demand fundamentals modification beyond 2020, the strongest carbon prices growth is now expected in the next five years rather than in the next decade.

Revenue stabilisation mechanisms that provide reliable revenue streams and bring down the cost of capital¹⁰ will be therefore needed beyond 2020 to ensure cost-efficient target delivery. The post-2020 Renewable Energy Directive should affirm the role of renewable energy support mechanisms and outline how they should be designed and reformed to provide investor certainty. Support instruments should be tailored to specific risk profiles and technology maturity and should be designed to encourage greater market responsiveness.

Support for large-scale installations should be granted through market-compatible instruments designed to deliver more convergence between national support mechanisms. The level of the premium would vary between Member States to reflect the specific development costs in the different countries (cost of capital, grid connection costs, administrative costs, etc.). The Commission should come forward with a common methodology for the calculation of cost components used to set up renewable energy support levels.

The premium level may result from a competitive bidding process provided that it is developed in consultation with the industry and allows for effectiveness (deployment), efficiency (cost) and investor profile diversity. Member States should maintain enough flexibility in applying the State aid guidelines exemptions in case national market structure cannot provide for effective tendering¹¹.

The European Commission should assess the success of competitive bidding as a support mechanism allocation tool prior to setting up the post-2020 State aid guidelines.

The partial opening EU Member States' support mechanisms could also be promoted in the post-2020 period as a tool of optimising resource use on the condition that the system is voluntary for the Member States and there is a physical flow of the electricity to the Member State providing the support. The impact on the public acceptance of national renewable energy policies should, however, be carefully considered.

3. REMOVING ADMINISTRATIVE BARRIERS FACILITATES WIND ENERGY INVESTMENT

Administrative and permitting procedures are amongst the most important obstacles to the development of renewables. To that end, the post-2020 renewable energy legislative framework should reinforce existing provisions on administrative and permitting procedures, information and training, spatial and environmental planning to allow for more harmonized EU rules.

Fair and shorter permitting and connection procedures would significantly reduce project development costs. The European Commission should table a one-stop-shop principle in the post-2020 Directive to ensure streamlining of administrative and permitting procedures.

In addition, approximately 76GW of onshore and offshore wind energy capacity will come to end of life between 2020 and 2030. Repowering beyond 2020 offers a clear opportunity to harness higher share of wind energy at the best wind sites to the benefit of European consumers.

¹⁰ The EU-funded DiaCore Project compared cost of capital in renewable energy sector in the EU-28. As a result of stable revenue mechanisms, the cost of capital for onshore wind is lower in the Norht/West EU (e.g. 3.5%-4.5% in Germany) compared to East/South EU (12% in Croatia, 10% in Spain).

¹¹ EWEA, <u>Design options for wind energy tenders</u>, December 2015

Repowering of existing wind plants should have streamlined authorization processes compared to greenfield projects and the possibility of extension of licenses and connection rights. Dedicated mechanisms should be introduced to allocate support for re-powered wind farms.

4. ELECTRIFICATION ACROSS SECTORS WILL SIGNAL NEW INVESTMENTS IN RENEWABLES

The EU should prioritise the electrification of other sectors (e.g. transport) to increase power demand and signal new investments in renewable technologies. Synergies across the entire energy sector should be exploited in order to maximise cost-efficient solutions for decarbonisation.

In the long run, increased electrification could sustain a level of power demand that contributes to decarbonisation of the economy and while being supplied by technologies that contribute to further clean energy investments. Electricity storage should be incentivised to allow for balancing variable renewable energy, particularly at the local and regional level.