

## **EWEA response to public consultation Preparation of a new Renewable Energy Directive for the period after 2020**

February 2016

### **Executive summary**

The European Union has played a key role in brokering a historic climate agreement in Paris and needs to demonstrate climate leadership back home. The COP21 commitments agreed in December will require Member States to review and update the collective EU pledges in the near future and step up efforts on renewable energy deployment

In that context, EWEA strongly believes that the post-2020 Renewable Energy Directive should set up an ambitious regulatory framework if the EU is to live up to its goals of fulfilling the Energy Union vision and being the world number one in renewables.

Higher policy ambition in the post-2020 period makes clear economic sense. Under an ambitious, enabling and robust regulatory framework, wind will deliver the following benefits to the European economy in 2030<sup>1</sup>:

- €87 bn. of gross value added;
- additional €13 bn. GDP compared to business-as-usual scenario;
- 18.7% in cumulative fossil fuel savings, amounting to €11.5 bn.;
- 36.3% of CO<sub>2</sub> emissions reduction over 1990 levels, removing an extra 111.6 Mt CO<sub>2</sub> compared to business-as-usual scenario;
- a total of 366,000 direct and indirect jobs in the wind industry alone.

The post-2020 Renewable Energy Directive will be the key policy instrument to deliver the binding EU renewable energy target for 2030, ensure that the EU capitalises on its first-mover advantage in wind energy, and is on track to meet its long-term decarbonisation objectives.

The following key enablers should be covered in the Commission's legislative proposals for the post-2020 Renewable Energy Directive, national planning and reporting obligations and market design:

- 1) Enshrining in legislation the Energy Union governance provisions relevant to renewables, namely:
  - binding template for national energy and climate plans;
  - a concrete timeline for finalising the first post-2020 national plans;
  - clear safeguard measures and enforcement tools for the European Commission to oversee and ensure target delivery.
- 2) Setting up a regional approach to renewable energy deployment based on:
  - A regional approach to power system management;
  - An EU-level financing facility granting support to projects of regional relevance;
  - A clear political commitment to convergence of national regulatory frameworks for offshore wind in view of bringing down deployment costs.
- 3) Enabling the cost effective deployment of wind energy thanks to an upgraded market design:
  - providing investors with a stable regulatory framework including revenue stabilisation measures and avoiding any retroactive measures;
  - maintaining priority dispatch provisions and balancing responsibility exemptions as long as market failures are not addressed;

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<sup>1</sup> Data modelling: [Pöyry](#), Cambridge Econometrics

- increasing transparency to limit curtailment and guarantee that renewable production is not constrained to the benefit of thermal power production;
- using Capacity Remuneration Mechanisms (CRMs) as a last resort option and only after standardized system adequacy analysis;
- improving the cooperation between system operators and further grid reinforcements both at transmission and distribution levels;
- increasing liquidity and cross-border trading in all market time frames to re-establish adequate price signals;
- maximising trading opportunities for wind power generators by ensuring their full participation in intraday and balancing markets (e.g. short bidding periods, separate procurement energy/capacity);
- establishing a proper market for ancillary or grid support services that would provide additional revenue streams to wind power producers.

## Consultation questions

1. To what extent has the RED been successful in helping to achieve the EU energy and climate change objectives?

Very successful	Successful	Not very successful	Not successful	No opinion
	x			

Comments: To what extent did implementation measures for the RED as well as external factors (technological development, financial crisis, security of supply concerns and related market interventions) affect the effectiveness and efficiency of achieving the objectives? Please identify and ideally also quantify the direct and indirect costs and benefits such as macroeconomic effects, competitiveness effects, innovation, cost and cost reductions, environmental and health effects of the RED.

The clearly defined European regulatory framework agreed in co-decision, with binding national targets for renewables and concrete planning and reporting obligations, was decisive in fostering national policies and attracting private investment in renewable energy assets. Enabling measures such as priority access to the grid, priority dispatch and national support mechanisms for renewables underpinned this development.

Driven by supportive frameworks, wind power is today a mainstream industry covering 11% of the EU's electricity demand and providing a cost-effective solution to climate and energy challenges. The scalability of wind energy (141 GW by end 2015), underpinned by regulatory continuity in major markets (e.g. Germany), has incentivised technological innovation and cost reductions. In terms of LCOE, onshore wind is the cheapest power generation technology in Europe <sup>2</sup>.

Wind energy provides substantial net benefits to the European economy. In 2014 alone, the sector generated an annual turnover of more than €67 bn<sup>3</sup> and avoided 190 Mt CO<sub>2</sub> emissions entailing CO<sub>2</sub> cost savings of €2.8 bn. to €7.6 bn<sup>4</sup>. The industry currently represents more than 260,000 jobs.

While clearly successful, the RED has lacked adequate tools to follow through the EU renewable energy objectives. Since 2011, several Member States have questioned the appropriateness of renewable support mechanisms and have proceeded with abrupt cuts and retroactive changes thus undermining the viability of existing projects.

The European Commission's inability to safeguard the rule of law principle underpinning investor protection has demonstrated the limits of the current regulatory framework. Leading European wind markets (e.g. Spain) stalled whilst some Member States (e.g. UK) are at risk of not meeting their 2020 obligations. The lack of visibility on penalties for non-fulfilment of the 2020 national targets adds to investors' uncertainty.

In a letter addressed to the European renewables industry, Mr Jyrki Katainen, Vice-President of the European Commission, highlights that: "[...] Under EU law as it stands today, the Commission cannot go further than that [provide guidance to Member States]. The [RED] gives Member States discretion to decide on the design and the level of support for renewables. EU State aid rules allow Member States to grant aid, but do not impose any obligation to do so"<sup>5</sup>.

Stable frameworks remain crucial for sustaining investment flows and cost reductions. EWEA calls on the European Commission to propose ambitious post-2020 regulatory framework with the appropriate safeguard

<sup>2</sup> 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.

<sup>3</sup> Pöyry analysis, 2015

<sup>4</sup> Pöyry analysis, 2015

<sup>5</sup> Response from Mr. Jyrki Katainen, Vice-President of the European Commission, to the European renewable energy industry letter on investor protection, 18 November 2015, Ref. Ares(2015)5211058

measures, enforcement tools and investment protection mechanisms to secure the fulfilment of the 2030 renewables target.

2. How should stability, transparency and predictability for investors be ensured with a view to achieving at least 27% renewable energy target at EU level? Please indicate the importance of the following elements:

	Very important	Important	Not very important	Not important	No opinion
Forward looking strategic planning of RES development is required by EU legislation	x				
Best practice is derived from the implementation of the existing Renewable Energy Directive		x			
Regional consultations on renewable energy policy and measures are required		x			
Member States consult and adopt renewable energy strategies that serve as the agreed reference for national renewable energy policies and projects		x			
The Commission provides guidance on national renewable energy strategies	x				

Box: Any other view of ideas? Please specify. What are the lessons from the RED (mandatory national targets, national plans, progress reports, etc.)?

The mid-term evaluation of the RED<sup>6</sup> clearly concluded that the RED owes its effectiveness to binding national targets, national renewable energy action plans (NREAPs) and biennial reporting. In the absence of 2030 national targets, EWEA believes that a *robust governance system is key to providing investors certainty for the post-2020 period and ensuring that investments remain within the EU.*

Wind investors are currently faced with a regulatory vacuum and lack of visibility over markets growth due to the lack of national renewable energy plans for the post-2020 period in 22 out of 28 Member States. This prevents timely investment decisions and endangers the bankability of renewable energy projects.

Guarantees should therefore be in place to ensure well-defined national commitments to renewable energy deployment beyond 2020 and efficient oversight of the European Commission over target delivery. In a letter to the sustainable energy sector, Vice-President Šefčovič and Commissioner Cañete *shared our views whereby the*

<sup>6</sup> [Mid-term evaluation of the Renewable Energy Directive](#), April 2015

*“governance framework for the Energy Union has to be credible, strong, resilient and robust, building on existing planning and reporting mechanisms and rooted in the EU rule of law”<sup>7</sup>.*

EWEA has identified three priorities to address this.

### **Planning**

*The European Commission should set benchmarks for each Member State, which aggregated, amount to the 27%. Based on the benchmarks, Member States should define the renewable energy component of their national climate and energy plans, building upon the 2020 national target. These plans should be finalised well ahead of 2020 to ensure a seamless transition into the post-2020 period. This is particularly important for offshore wind energy projects which typically have a lead time of five years.*

*National plans should be based on a uniform, binding template to ensure coherence and comparability between Member States contributions to the 27% target. The renewable energy components of national plans' template should be duly enshrined in horizontal legislation and referenced in the new Renewable Energy Directive.*

Member States that go beyond the Commission's proposed growth path should receive additional incentives in proportion to their ambition such as increased and facilitated access to structural funds, NER400 funding and financing from the European Investment Bank for renewable energy projects.

### **Monitoring**

The European Commission should have a reinforced oversight over Member States' progress and should be able to intervene in case of counter-productive measures (e.g. negative impact on existing/future investments) to national regulatory framework. The new Directive should clearly outline the circumstances requiring intervention and the legal tools at the Commission's disposal.

As under the *European Semester*, the Commission should make official policy recommendations on national renewable energy policies.

### **Legal basis**

The governance system needs to be agreed in co-decision ensuring equal involvement from Member States and the European Parliament to ensure democratic legitimacy. The European Commission should table its governance provisions relative to renewable energy in horizontal legislation and reference them in the new Renewable Energy Directive.

3. Please rate the importance of the following elements being included in Member States' national energy and climate plans with respect to renewable energy in ensuring that the plans contribute to reaching the objective of at least 27% in 2030.

	Very important	Important	Not very important	Not important	No opinion
Long term priorities and visions for decarbonisation and renewable energy up to 2050	x				
In relation to national/regional natural resources, specific technology relevant trajectories for renewable energy up to 2030	x				

<sup>7</sup> Response to the clean energy industry, 15 September 2015, ARES(2015)3807163

Overview of policies and measures in place and planned new ones		x			
Overview of renewable energy trajectories and policies to 2050 to ensure that 2030 policies lie on the path to 2050 objectives	x				
Qualitative analysis	x				
Trajectories for electricity demand including both installed capacity (GW) and produced energy (TWh)		x			
Measures to be taken for increasing the flexibility of the energy system with regard to renewable energy production		x			
Plans for achieving electricity market coupling and integration, regional measures for balancing and reserves and how system adequacy is calculated in the context of renewable energy.		x			

Energy and climate planning is crucial to mitigate policy uncertainty and enable the cost-effective deployment of renewables by 2030. In November 2015, the EU Energy ministers recalled that long-term planning “will enhance the stability and predictability of the investment climate”<sup>8</sup>.

Plans should be developed well in advance of 2020 to inform wind energy investors of future market growth potential and ensure a smooth transition towards the 2030 period. Finalising the first national plans by the end of 2019 is too late for investors to prepare the post-2020 investment cycle and to ensure that the projects necessary to deliver the 2030 target will be executed in time.

To be reliable, national plans should be developed based on a binding, standardised template decided in co-decision and rooted in the EU rule of law. This could be done in horizontal legislation and should be duly referenced in the new Renewable Energy Directive.

National plans should also incorporate the revision of relevant sectorial legislation (e.g. Renewable Energy Directive, Energy Efficiency Directive) in order to allow Member States to develop coherent and stable policy frameworks and deliver their 2030 renewable energy contributions.

A lesson learned from the current regulatory regime is that national plans became outdated and progress reports failed to address key regulatory challenges to the deployment of renewables. The European Commission should therefore have a reinforced oversight over Member States’ progress and the ability to make country-specific recommendations at every biennial reporting cycle in order to address challenges in meeting national objectives.

National plans should be updated once, in 2024, in order to take stock of changing circumstances and to ensure that the EU is on track to reach the target of at least 27%. If that is not the case, such an early indication will allow for the Commission to undertake the necessary corrective measures.

National plans should include:

<sup>8</sup> Energy Council, Conclusions on the governance system of the Energy Union, 26 November 2015



- **Targets and objectives for 2030 and 2050:** to ensure that Member States are in line with the EU's long-term decarbonisation objectives and map market growth potentials;
- **Sectoral targets and trajectories:** Member States renewable energy commitments should be broken down in sectoral targets and trajectories (electricity, heating and cooling, transport). For maturing technologies, such as offshore wind, the 2030 national commitments need to indicate specific deployment volumes planned, including in cooperation with neighbouring States, and deliver cost reductions through scalability;
- **Indicative trajectories and intermediate targets:** to ensure a linear progress towards the 27% renewable target and to give an early indication of potential deviation;
- **National measures for the deployment of renewables** including support mechanisms, infrastructure development and streamlining of administrative procedures;
- Indicative measures adopted by Member States in renewable energy-related areas (e.g. taxation, environmental requirements, etc.) to ensure coherence among different policy streams.

The general elements and concrete details of national plans should allow Member States to aim higher than the 27% renewable energy target by 2030 and demonstrate their commitment to delivering on the long-term EU decarbonisation objectives.

#### 4. What should be the geographical scope of support schemes, if and when needed, in order to drive the achievement of the 2030 target in a cost-effective way?

Harmonised EU-wide level support schemes

Regional level support schemes (group of Member States with joint support scheme)

National support schemes fully or partially open to renewable energy producers in other MS

#### X Gradual alignment of national support schemes through common EU rules

National level support schemes that are only open to national renewable energy producers.

The objective of the wind industry is to be competitive in a liberalised electricity market characterised by a level playing field. While market integration and liberalisation progress, national wind energy support mechanisms should be designed to deliver more convergence while taking into account varying renewable potentials, grid access costs, administrative costs, cost of capital and national fiscal frameworks. With increasing wind energy penetration levels, support mechanisms should also encourage greater market responsiveness resulting in gradually decreasing support levels.

Convergence will strongly depend on the elimination of structural barriers preventing the completion of the internal energy market (e.g. regulated prices, subsidies for conventional power generators, etc.) and should also be adapted to renewable energy technology maturity.

Even a fully-revamped power market framework may not be sufficient to guarantee an adequate return on investments especially for low marginal cost and CAPEX-intensive power generation technologies such as wind energy. Revenue stabilisation mechanisms that help finance new power generation capacity should consequently be developed<sup>9</sup>.

<sup>9</sup> EWEA, [Market design position paper](#) and [Response to public consultation on a new energy market design](#), 2015

### **Onshore wind**

In the post-2020 period, onshore wind incentives should come in the form of market-compatible instruments such as premiums. 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 premium level may result from a competitive bidding process provided that it is developed in consultation with the industry. 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.

Where competitive bidding does not provide an efficient and cost-effective tool for support allocation, the Commission should develop a methodology for feed-in premiums to be used in all Member States. This method will identify the different cost components to calculate a premium level and suggest a common duration (in years or full load hours) of the support mechanism. The methodology would be based on the approach presented in the Commission November 2013 guidance on support mechanisms, and enable market incentives in the different countries to be compared.

### **Offshore wind**

EWEA favours the development of a voluntary framework to support offshore wind in Europe to be agreed through a bottom-up process in the context of existing cooperation structures (e.g. NSCOGI / BEMIP) involving government, industry and TSO representatives.

First, relevant Member States would agree on a framework for environmental and technical requirements and a development plan for infrastructure to enable offshore wind development. This would help create the conditions for determining a common incentive system, possibly leading to joint voluntary targets for offshore wind, adding on existing national commitments. Member States may facilitate the deployment of offshore wind volumes by coordinating the timing and size of offshore wind auctions and identifying common projects that could be up scaled or developed regionally so as to maximise benefits for consumers and the industry.

5. If EU-level harmonised/regional support schemes or other types of financial support to renewable energy projects would be introduced:
  - What hinders the introduction at the EU wide/or regional scale?
  - How could such mechanism be activated and implemented?
  - What would be their scope (what types of projects / technologies / support mechanisms could be covered?)
  - Who would finance them?
  - How could the costs of such measures be shared in a fair and equitable way?

### **Convergence versus harmonisation**

EWEA considers that bottom-up convergence of support mechanisms, as spelled out in question 4, is more appropriate to allow for the cost-effective deployment of renewables in the EU. Convergence implies the alignment of certain support mechanism elements across several Member States and could be explored in the framework of cooperation mechanisms.

Partial opening of national support mechanisms could be done on a voluntary basis and through bilateral agreements to optimise resource use and ensure a cost-efficient transition of the energy system. However, the impact on the social acceptance of national renewable energy policies should be carefully considered.

An EU-level support mechanism could be envisaged only as an instrument of last resort to fill a potential gap towards the EU-wide renewables target.



### **Regional approach**

EWEA considers that regional renewable energy targets should not be imposed by the European Commission. They would only replicate the difficulty of breaking down an overarching target into concrete commitments (as for the EU-wide target), and assigning accountability for non-delivery. Top-down, binding regional targets would add a second layer of complexity for investors who are already struggling with an unclear 2030 governance mechanism.

Instead, 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 will underpin renewable energy support mechanism convergence. Regional impact assessments, system adequacy analyses and cost-benefit analyses should be developed in parallel in order to provide an equitable and transparent evolution.

Furthermore, financial support to renewable projects of regional relevance could be granted through a newly established EU-level financing facility. A guarantee fund, similar to the European Fund for Strategic Investments (EFSI), targeting renewable energy projects could help unlock investments in green assets and facilitate the delivery of the collective 27% renewable energy target. Whereas the main capital would be provided by the European Investment Bank (EIB), regional cooperation could be further strengthened through financial incentives and increased cooperation with other regional development and/or green banks. The Connecting Europe Facility could be the vehicle for this new instrument.

Offshore wind is well suited to implement the regional approach promoted by the European Commission. In this context, regulatory convergence should be prioritised as a means to support the cost-effective deployment of offshore wind. Different national standards (e.g. health & safety, operation and maintenance, environment) needlessly drive up costs and should be addressed as part of a regional dialogue. The launch of a shared testing and verification facility for offshore wind would also boost efforts towards cost reduction.

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

6. The current Renewable Energy Directive gives Member States the possibility to enter into various cooperation mechanisms (statistical transfer, joint projects and/or joint support schemes). Please expand on the possible new legislative and non-legislative measures that could be introduced to foster the development of cooperation mechanism in the period beyond 2020.

EWEA considers that cooperation mechanisms have a role to play in meeting the 2030 targets cost-effectively.

Given that the 2030 renewable energy target is binding at the EU level, cooperation mechanisms should be further exploited in order to facilitate the creation of cross-border markets for renewables.

The Commission should also create additional incentives that make cooperation economically attractive. For instance, EWEA considers that the European Commission should set benchmarks for each Member States as part of the Energy Union governance mechanism. Aggregated, the benchmarks would amount to 27% and serve as a basis for Member States to define the renewable energy component of their national climate and energy plans.

Member States that go beyond the Commission's proposed growth path, including through cooperation mechanisms, should receive incentives in proportion to their ambition. For example, ambitious Member States should benefit from increased and facilitated access to structural funds earmarked for renewable energy and related projects. The ambitious Member States would also benefit from facilitated access to funds from the NER400 programme for renewable energy projects.

Furthermore, the success of cooperation mechanisms beyond 2020 will largely depend on the completion of the internal energy market. The market design reform should prioritise the deployment of intraday and balancing

markets to foster liquidity and cross-border integration in all timeframes. Cross-border trading of renewable energy will also require enhancing grid infrastructure at national, regional and EU level.

7. The use of cooperation mechanisms has been limited to date. Which of the below factors do you consider important in explaining the limited recourse by Member State to cooperation mechanisms so far?

	Very important	Important	Not very important	Not important	No opinion
Unclear legal provisions		x			
Administrative complexities		x			
Lack of cost-effectiveness / uncertain benefit for individual Member State	x				
Government driven process, not market driven			x		
Member States reluctant to see their taxpayers / consumers' money used for investments outside their country	x				

The reasons behind the limited use of cooperation mechanisms under the 2020 framework have been well documented in literature. The lack of clarity from the European Commission as to the penalties that would be imposed on the Member States failing to meet their 2020 target has prevented them from making a proper cost-benefit analysis justifying cooperation mechanisms. Other elements include:

#### **Political barriers**

Under the current framework, cooperation mechanisms are considered as a measure of last resort to achieve national targets. Due to the difficulty of predicting whether national targets will be reached and whether there would be a surplus/deficit in national renewable energy shares, Member States have been reluctant to resort to flexibility options. It has also proven difficult to quantify the exact costs (e.g. grid infrastructure upgrade) and benefits (e.g. employment) of cooperation mechanisms, and their distribution among host and buying Member State. Public opposition to exploiting the best domestic renewable energy sources (for the host country) or financing renewables deployment (for the buying country) have also been difficult to address by public authorities. Moreover, cooperation mechanisms are set up between Member States without consultation with the industry thus creating little incentive for developers to proceed with relevant projects.

#### **Technical barriers**

A major technical barrier is the uncertainty about the specific design of cooperation mechanisms. Agreeing on a common support mechanism when countries have divergent renewable energy potentials and technology preferences, different power market regulation and design have represented a challenge for the creation of joint support mechanisms. The lack of sufficient infrastructure capacity has been a key obstacle in the development of joint projects requiring physical transfer of electricity between the host and the buying country. The insufficiently interconnected power market was a key obstacle in the development of joint support schemes. Further market

and grid integration is necessary to allow for physical cross-border trading of renewable energy and incentivise the use of cooperation mechanisms.

### Legal barriers

A major concern is the unclarity of how State aid guidelines provisions will apply to cooperation mechanisms. The administrative set-up and the distribution of responsibilities between the host and buying state are also believed to create an additional burden to national administrations and further disincentivise cooperation.

8. How could renewable electricity producers be fully or partially eligible for support in another Member State? Which elements would you include in a possible concrete framework for cross-border participation in support schemes? Any other consideration? Please explain.

EWEA supports cooperation between Member States, including the opening of national support mechanisms to non-national projects, on 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 Partial opening EU Member States' support mechanisms could be promoted as a tool of optimising resource use. The impact on the public acceptance of national renewable energy policies should be carefully considered.

The eligibility of renewable energy projects for support in another Member State should be based on a set of predefined conditions including:

- the off-taking Member State should accept the permitting, and grid-connection rules of the host country;
- the off-taking Member State remuneration scheme should apply.

The completion of the internal energy market is a necessary prerequisite for the cross-border participation in support schemes. Cross-border trading of renewable energy will require enhancing grid infrastructure at national, regional and EU level and the removal of existing bottlenecks as well as the deployment of intraday and balancing markets to foster liquidity and cross-border integration in all timeframes<sup>10</sup>.

9. Please assess what kind of complementary EU measures would be most important to ensure that the EU and its Member States collectively achieve the binding at least 27% EU renewable energy target by 2030.

	Very important	Important	Not very important	Not important	No opinion
EU-level incentives such as EU-level or regional auctioning of renewable energy capacities		x			
EU-level requirements on market players to include a certain share of renewables in production, supply or consumption			x		
EU-level financial support (e.g. a guarantee fund in support of		x			

<sup>10</sup> EWEA, [Market design position paper](#) and [Response to public consultation on a new energy market design](#), 2015

renewable projects)					
EU-level support to research, innovation and industrialisation of novel renewable energy technologies		x			
Enhanced EU level regulatory measures	x				

EWEA believes that a robust, reliable and transparent governance system with a reinforced oversight of the European Commission over Member States' progress towards the 27% target is key to providing investors certainty for the post-2020 period and ensuring that investments will remain within the EU.

#### **Safeguard measures (gap-avoiders)**

The new Renewable Energy Directive should provide incentives for Member States to raise renewable energy ambition from the onset and avoid a gap between national contributions and the 27% EU-wide target. Gap-avoiding measures may include:

1. Additional incentives for Member States that go beyond the Commission's benchmarks such as increased and facilitated access to structural funds, NER400 funding and financing from the European Investment Bank for renewable energy projects;
2. Financial support from existing funds (e.g. ETS Modernisation Fund) to be only granted on the condition that Member States comply with their RES pledges and thus give their fair share in achieving the common 27% target.

The European Commission should define, as part of the post-2020 Renewables Directive, a course of action in case national contributions do not add up to the EU-wide target. Complementary instruments (gap-fillers) should be deployed as a measure of last resort but need to be clearly set out in the new Renewable Energy Directive and actionable as of 2020. The Directive should also outline the concrete conditions under which such measures will be activated.

#### **Trigger mechanisms**

If the national contributions were not to add up to the EU wide objective, the Commission should engage with Member States, in particular those with contributions below the level originally suggested, and make proposals to ensure the EU-wide renewable energy target is met:

1. The Commission should actively broker cooperation and provide guidance on the use of cooperation mechanisms in the post-2020 period;
2. If the Member State commitments to cooperation mechanisms are insufficient to cover the gap between the sum of the national contributions and the EU-wide target, the European Commission should be able to activate an EU-level gap-filler instrument to meet the target.

The gap-filler could take the form of EU fund supporting renewable energy projects whereby the support would be distributed through a well-designed EU-wide tender system. As additional incentive, the awarded projects could also count on preferential terms for loans (e.g. grace period at the beginning of the loan, longer maturity).

#### **Financing the gap-filler instrument**

1. Member States contributions

All Member States should contribute to this instrument taking GDP into consideration. In order to incentivise early-movers, a smaller financial contribution should be imposed on those Member States who have enacted ambitious renewables frameworks at the national level.

## 2. Contributions from under-achievers

The Member States with national contributions below the benchmarks would be required to make an extra contribution to the EU fund promoting the development of renewable energy projects.

### 10. The Energy Union Framework Strategy sets the ambition of making the European Union the global “number one in renewables”. What legislative and non-legislative measures could be introduced to make/strengthen the EU as the number one in renewables? Has the RED been effective and efficient in improving renewable energy industrial development and EU competitiveness in this sector?

Through well-defined mechanisms for renewable energy deployment, the current Directive cemented the EU's position as a global industrial hub for onshore and offshore wind energy. The new Renewable Energy Directive should provide a similar level of market certainty to capitalise on the EU's early-mover advantage and maintain its leadership position.

While the EU still leads in innovation, other parts of the world are rapidly catching up in wind energy deployment. Within the UNFCCC framework, 70 countries outlined wind in their INDCs as a cost-effective decarbonisation tool. In the post-2020 period, ambition from policy makers will still be required to drive the sector forward in the face of increasing international competition. To date only six EU Member States have operational policies supporting the deployment of renewables for the post-2020 period.

Maintaining global leadership in wind energy requires a strong home market with clear growth perspectives. A robust governance system for the 2030 target is key to providing long-term predictability to investors and maintaining a vibrant home market. The governance mechanism needs to be set in legislation, provide clarity over Member States concrete contributions to the 27%, outline safeguard measures and provide enforcement tools for the European Commission to oversee and ensure target delivery.

The EU also needs to show leadership by upgrading its energy system to accommodate large shares of renewables. Efforts in making the internal energy market fit for renewables should prioritise the deployment of intraday and balancing markets to foster liquidity and cross-border integration in all timeframes. Completing the internal energy market will also require grid reinforcements at national, regional, EU level as well as institutional strengthening of ACER and ENTSO-E.

The EU should prioritise the electrification of heat and transport sectors in order to increase power demand and signal new investments in zero-carbon technologies such as wind energy. Moreover, EU policies in the areas of taxation, finance, environmental legislation, etc. should all be aligned with the long-term decarbonisation objectives of the Union and act as enablers for low-carbon technologies deployment.

The European Commission should maintain a clear focus on research and innovation for wind energy to assert the EU as a pioneer in ground-breaking wind technologies. R&I measures and EU financial instruments should be directed towards first-of-a-kind projects and specifically close-to-market demonstration projects.

Increased communication, coordination and collaboration between stakeholders should be ensured within the framework of the SET-Plan Steering Group and the European Technology and Innovations Platform on Wind energy. Test and demonstration facilities for innovative technologies need to be made available for renewable technology producers.

## Empowering consumers

11. How would you rate the importance of the following barriers for consumers to produce and self-consume their own renewable energy?

	Very important	Important	Not very important	Not important	No opinion
Self-consumption or storage of renewable electricity produced onsite is forbidden					
Surplus electricity that is not self-consumed onsite cannot be sold to the grid					
Surplus electricity that is not self-consumed onsite is not valued fairly					
Appliances or enabler for thermal and electrical storage onsite are too expensive					
Complex and/or lengthy administrative procedures, particularly penalising small self-consumption systems					
Lack of smart grids and smart metering systems at the consumer's premises					
The design of local network tariffs					
The design of electricity tariffs					

12. In general, do you think that renewable energy potential at local level is

- Highly under-exploited
- Under-exploited
- Efficiently/fully exploited
- Over exploited

13. How would you rate the importance of the following barriers that may be specifically hampering the further deployment of renewable energy projects at the local level:

	Very important	Important	Not very important	Not important	No opinion
Lack of support from Member State authorities		x			
Lack of administrative capacity and/or expertise/ knowledge/information at the	x				



local level					
Lack of energy strategy and planning at local level	x				
Lack of eligible land for projects and private property conflicts			x		
Difficulties in clustering projects to reach a critical mass at local level			x		
Lack of targeted financial resources (including support schemes)		x			
Negative public perception				x	

European mechanisms should be aimed at increasing technical skills and knowledge from Member State governments in dealing with the design, planning and administration of renewable energy projects at local level.

For example, mature markets for wind energy such as Denmark and Germany have set up agencies and regulations at local level that can be transferable to less developed markets. Incentives for pioneer countries could be set in place to encourage the transfer of skills and best practices in planning, consenting and permitting onshore and offshore wind energy projects.

The setup of regional data sharing platforms for environmental impact assessments, wind resources, marine and subsea bed conditions as well as fauna migration routes are needed for facilitating the deployment of wind energy.

Finally mutual recognition of environmental, health and safety standards and cross-border cooperation between local authorities for reducing red tape and regulatory barriers should be part of regional cooperation mechanisms.

14. Please rate the appropriateness of stronger EU rules in the following areas to remove barriers that may be specifically hampering the further deployment of renewable energy projects at the local level:

	Very appropriate	Appropriate	Not very appropriate	Not appropriate	No opinion
Promoting the integration of renewable energy in local infrastructure and public services		x			
Supporting local authorities in preparing strategies and plans for the promotion of renewable energy			x		
Facilitating cooperation between relevant actors at the local or municipal level		x			
Facilitating access to targeted financing	x				
EU-wide right to generate, self-consume and store renewable electricity	x				

Measures to ensure that surplus self-generated electricity is fairly valued		x			
Harmonized principles for network tariffs that promote consumers flexibility and minimise system costs		x			

Generators are exposed to the following network charges applying to both transmission and distribution tariffs:

- One-off costs: grid connection charges (shallow or deep);
- Variable costs: injection charges (in €/MW or €/MWh) and system service use charges (losses, ancillary services, administrative or metering fees).

Each Member State has its own methodology to design network tariffs, because the costs are dependent on network type, system size, voltage level etc. EWEA believes that such differences could hamper the development of wind energy in areas with high resources and that they tend to distort investment signals.

In some cases, injection charges can be prohibitive, representing an important market entry barriers to new wind energy developers. If the market is to make the most cost-effective use of renewable resources across Europe, charging regimes at transmission level should converge<sup>11</sup>. Such harmonisation could be sought through an EC Guideline as provided for in the Third Energy Package. In the long term, they should be progressively phased out and network costs should be socialised.

Locational pricing is sometimes implemented to incentivise investments in less congested areas, leading to a more efficient network development. However, such charges should be apportioned fairly given the fact that wind energy generation, like many other energy sources, depends mostly on the quality of the resource rather than the proximity to load centres. New generation built close to demand centres could be less cost effective on a life-cycle basis, since the reduced energy yield in a suboptimal location can outweigh any anticipated savings in grid reinforcement costs. The use of locational signals should be avoided for injection charges in order to have a level playing field for all generators.

Finally, while connection charges are always applied to generators, EWEA believes that new generating capacity should not be charged the full cost of overall grid reinforcements emerging from their marginal contribution to the power system in comparison to older, exempted, power plants. Therefore, shallow grid connection charging regimes, both at transmission and distribution level, should be best practice across Europe, notably in Member States where power-based G charges and disproportionate locational signals apply in parallel.

#### 15. Should the current system for providing consumers with information on the sources of electricity that they consume be further developed and improved?

[If not, why? If yes, how? Should the current Guarantees of Origin (GO) system be made the mandatory form of information disclosure to consumers? Should other information, such as e.g. CO<sub>2</sub> emissions be included? Should it be extended to the whole energy system and include also non-renewable sources? Other ideas? To what extent has the current GO system been successful in providing consumers with information on the sources of electricity that they consume? Max 500 words]

<sup>11</sup> 13 countries apply G-charges, out of which 3 apply capacity-based G charges. These tend to discriminate power plants with lower running hours. Also, regulation 838/2010 establishes as a general rule that G charges must be between 0-0.5€/MWh, but allows higher value for several countries without justification. Finally, variable charges related to ancillary services and losses are applied in 4 countries.

Guarantees of origin (GO) and information disclosure can be an important factor to drive demand from a market perspective. Raising consumer awareness on the source of their electricity enables them to make informed choices and potentially request that suppliers provide renewables-based energy. The GO scheme in Europe should be further deployed, continuing to distinguish the specific origin of the source. It should be stressed however that demand for GOs is very unlikely to yield sufficient revenue to support renewable energy deployment.

The influx of low-cost hydro-based GOs from Norway should be addressed, as this has contributed to driving down significantly the value of GOs. It has also led to fragmentation of the various GO products and resulted in low liquidity markets. Furthermore a fragmented GO market opens the door to misleading communication on power procured from undisclosed producers (e.g. coal or nuclear power).

The GO should not only include renewable electricity, but be extended to all sources of energy. Consumers should be properly informed on whether they are purchasing power from nuclear, coal, gas or large hydro energy or renewables.

## Decarbonising the heating and cooling sector

16. Please rate the importance of the following barriers in hampering the deployment of renewable H&C in the EU:

	Very important	Important	Not very important	Not important	No opinion
Real or perceived incoherence in existing EU policies		x			
Lack of administrative capacity and/or expertise/knowledge/information at national level		x			
Lack of energy strategy and planning at the national and local level		x			
Lack of physical space to develop renewable H&C solutions			x		
Lack of requirements in building codes and other national or local legislation and regulation to increase the share of energy from renewable sources in the building sector		x			
Heating and cooling equipment installers lack sufficient knowledge or information to offer renewable energy alternatives when asked to replace fossil fuel heating and cooling equipment		x			
Lack of targeted financial resources and financing		x			



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instruments					
Lack of definition and recognition of renewable cooling		x			
Lack of electricity market design supporting demand response, decentralised energy and self-consumption and thermal storage in buildings and district systems		x			
Lack of mapping tools to identify the resources potential at regional scale with local renewable energy			x		
Lack of tools and information to compare the lifecycle costs of the various alternative heating and cooling alternatives			x		
Negative public perception				x	

The EU should prioritise the electrification of the heating and cooling sector in order to increase power demand and signal new investments in zero-carbon technologies such as wind energy. A comprehensive and coherent heating and cooling strategy should be set in place, including:

- Full implementation of the current renewable energy and energy efficiency legislation;
- Fostering synergies between the heating and cooling sector, circular economy package and energy efficiency and ensuring coherence between sectorial legislation;
- Fostering stricter building standards and setting up 2030 and 2050 renovation targets for the building sector in line with the revision of the Energy Efficiency Directive;
- Strengthening existing provision in favour of on-site/nearby renewable generation in the Energy Performance of Buildings Directive;
- Setting in place a market design that incentivizes consumers to make heating and cooling choices;
- Promoting R&D funding for innovative technologies.

17. Please rate the most effective means of addressing these barriers and advancing the decarbonisation of EU heating and cooling supply:

	Very effective	Effective	Not very effective	Not effective	No opinion
Renewable heating and cooling obligation			x		
Requirement for energy suppliers and/or distributors to inform consumers of the costs of heating and cooling and to offer renewable heating and cooling solutions			x		
Requirement that all urban and municipal infrastructure upgrades (energy infrastructures, and other relevant infrastructure, such as sewage water,		x			



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water and waste chains) make it possible and promote the distribution and use of renewable energy for heating and cooling and hot water generation					
Measures supporting best practices in urban planning, heat planning, energy master planning, and project development			x		
Criteria and benchmarks for promoting district heating and cooling taking into consideration the local and regional conditions			x		
Nearly zero-energy building (NZEB) standards to include a mandatory minimum use of renewable energy		x			
Including systematically renewable energy production in buildings' energy performance certificates		x			
The promotion of green public procurement requirements for renewable heating & cooling in public buildings			x		
Heating and cooling equipment installers should present renewable energy alternatives when asked to replace fossil fuel heating and cooling equipment			x		
Develop best practices for enterprises, including SMEs, to integrate renewable heating and cooling into their supply chains and operations			x		
Requirement to consider renewable energy alternatives in subnational, national, regional or EU security of supply risk preparedness plans and emergency procedures			x		
Targeted financial measures		x			

## Adapting the market design and removing barriers

18. In your view, which specific evolutions of the market rules would facilitate the integration of renewables into the market and allow for the creation of a level playing field across generation technologies? Please indicate the importance of the following elements to facilitate renewable integration:

	Very important	Important	Not very important	Not important	No opinion
A fully harmonised gate closure time for intraday throughout the EU		x			
Shorter trading intervals (e.g. 15 min)		x			
Lower thresholds for bid sizes		x			
Risk hedging products to hedge renewable energy volatility		x			
Cross border capacity allocation for short-term markets (i.e., some capacity being reserved for intraday and balancing)				x	
Introduction of longer-term transmission rights ( > 3 years)			x		
Regulatory measures to enable thermal, electrical and chemical storage			x		
Introduction of time-of-use retail prices		x			
Enshrine the right of consumers to participate in the market through demand response		x			

The cross-border integration of liquid intraday and balancing markets, ensuring full participation of wind generation, is a cornerstone of an efficient operation of the market with large shares of renewables.

Lack of harmonisation of gate closure times ranging from 75 min to 30 min before delivery (e.g. Germany, France and Austria), constrains the possibility of trading wind power across borders. Harmonised intraday gate closure times will allow wind power generators to adjust their balances by trading as close to real time as possible. According to CACM guidelines, the intraday gate closure times “shall be at most one hour before the start of the relevant market time unit”.

Given the intra hourly variability of wind energy, it would benefit from the introduction of more granular products on intraday markets that are integrated across borders. EWEA therefore supports any initiative that would lead to an alignment and shortening of trading intervals. This would also require a consistent imbalance settlement period and calculation method. Such changes have the potential to significantly decrease balancing costs. In addition, TSOs are highly interested in schedule nominations matching actual flows in order to ensure grid stability and security of supply.

Regarding cross-border capacity allocation, EWEA deems necessary that all forms of reservation for balancing purposes are subject to strict regulatory supervision, as this could reduce the integration of day-ahead and intraday markets. All available cross border capacity should be allocated at all timeframes.



The Commission should also seek to improve participation of wind farms to balancing markets. In particular, it should provide:

- Standard detailed characteristics of the products that the balancing service providers will provide to the balancing market: Minimum bid size applying in some Member States for Frequency Restoration Reserve prevents some wind power plant operators from participating in the balancing market and the qualification of these units as balancing service providers. This threshold should be lowered, and aggregation of bids allowed.
- Clear procurement rules: Capacity and energy should be procured in different products, revealing the real cost of each of the services. Joint procurement limits participation of wind power producers because gate closure time for capacity has long lead times that variable renewable plant owners are unable to meet. With separate auctions immediately after the gate closure of the intraday markets variable energy production from wind installations can deliver balancing energy at short notice. Balancing responsible parties could offer balancing energy even if they did not have a capacity contract. Furthermore, there should be a separation between upwards and downwards.
- Validation procedures to demonstrate the delivery of balancing energy adapted to the characteristics of wind power generation.

Importantly, compulsory grid support services requirements that are not remunerated should be minimised or replaced by remuneration schemes. It is neither cost-efficient nor necessary to request services (including the delivery of balancing energy) from all connected generators in most systems.

19. Currently, some exceptions from standard balancing responsibilities of generators exist for energy from renewable sources. In view of increasingly mature renewable generation technologies and a growing role of short-term markets, is time ready to in principle make all generation technologies subject to full balancing responsibilities?

Yes, in principle everyone should have full balancing responsibility

No, we still need exemptions

EWEA believes that balancing responsibility for wind generators is possible and desirable in well-functioning and integrated systems that allow them to compete on a level playing field with conventional generators.

Wind power generators are already balancing responsible in financial or legal terms in 14 Member States where wind power has a share above 2% in annual generation. They are exposed to the same rules as conventional generation<sup>12</sup>.

With current technology, wind power plants can provide ancillary 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. In most cases, wind power is only partly allowed to participate in balancing markets, and often only in providing replacement reserves. Overall, balancing market arrangements are mainly applicable for conventional power generators only.

In the absence of a level playing field for renewable generators, exemptions therefore remain necessary.

Please specify: if exemptions remain necessary, if and in which case and why exemptions would still remain necessary (e.g. small RES producers, non-mature technologies)?

<sup>12</sup> EWEA, [Balancing responsibilities and costs of wind power plants](#), September 2015

A one-size-fits-all solution is rarely the most cost-effective approach. Increased exposure to market risks applied in mature markets should be limited to regions where physical, operational and regulatory preconditions are met. Fundamental difference in power system characteristics (e.g. central vs. self-dispatch) may require different approaches.

Moreover, exemptions should remain for existing plants. There should not be retroactive modification of their operational responsibilities other than on a voluntary basis through incentives. It is not cost-effective to require both market participation and balancing services capability from all generators. Small generation units should be exempted as it would unnecessarily increase the administrative burden for them.

Therefore, all future considerations on balancing responsibilities by wind power generators need to take into account:

- the existence of suitable market rules allowing RES participation to the different balancing and ancillary services markets;
- the penetration level of wind energy (market maturity).

Market-specific boundary conditions under which balancing responsibility by wind power generators can be borne include:

- The full implementation of the EU target model:
  - Day-ahead market coupling throughout the EU and implementation of the flow-based capacity allocation method;
  - Regional (e.g. Nord Pool) or at least national intraday and balancing markets are in place with sufficient liquidity in terms of market participants and amount of transactions.
- Balancing market arrangements providing for the participation of wind power generators (e.g. existence of financial compensation, clear procurement rules and product specifications; see also question 18).
- Market mechanisms that properly value the provision of ancillary or grid support services for all market participants including wind power (e.g. Ireland).
- A satisfactory level of market transparency and proper market monitoring:
  - Balancing market arrangements and corresponding costs are to be assessed in a transparent manner for all stakeholders, and the need for balancing services considered at the appropriate level (system wide and cross-border versus localised needs). Moreover, any last resort decisions such as curtailments must be well explained by the TSO and the calculation method of any corresponding costs must be accessible and clear;
  - An independent market monitoring entity must be set up (e.g. national regulatory authority) in order to prevent and scrutinise any possible market distortive behaviours in the power sector stemming from structural market inefficiencies such as market concentration.
- Best use of sophisticated forecast methods and operational routines by TSOs. Wind power generation forecasts is best suited take place 1 to 4 hours before real time and, ideally, be aggregated from several sites. TSOs should improve their forecasting utilising state of the art methods during operations, while increasing cross-border cooperation to reduce unexpected situations due to forecast errors.
- Ensure a satisfactory level of grid reinforcements at transmission and distribution level.

Where these conditions are not provided, special temporary conditions should be granted to wind power generators. This would guarantee a level playing field for these new market entrants that otherwise would be disadvantaged compared to conventional generators.

20. Please assess the importance of stronger EU rules in the following areas to remove grid regulation and infrastructure barriers for renewables electricity deployment:

	Very important	important	Not very important	Not important	No opinion
Treatment of curtailment, including compensation for curtailment		x			
Transparent and foreseeable grid development, taking into account renewable development and integrating both TSO and DSO level and smart technologies	x				
Predictable transparent and non-discriminatory connection procedure	x				
Obligation/priority of connection for renewables		x			
Cost of grid access, including cost structure		x			
Legal position of renewable energy developers to challenge grid access decisions by TSOs		x			
Transparency on local grid congestion and/or market-based incentives to invest in uncongested areas		x			

Comments and other ideas, including whether there are any consideration concerning gas from renewable energy sources, for instance expansion of gas infrastructure, publication of technical rules, please explain.

Important barriers faced by wind energy developers when it comes to grid connection are often related to an absence of clear information from system operators on the available grid connection capacity, a lack of planning for future grid extension and reinforcements and insufficient grid capacity. Regarding this latter point, guaranteed or priority access is key to ensuring the development of the grid infrastructure necessary to effectively integrate wind energy in a non-discriminatory way. This is especially the case in the countries without priority dispatch provisions in their national law. There is also an unclear situation with regards to grid code requirements as they are set out at European level (notably NC RfG), especially on the way they will be implemented at national level by the TSOs and the DSOs.

Importantly, curtailment should not be seen as a way of solving network constraints or as a strategy for optimising grid investments. This should result from an ex-ante agreement between the system operator and the generator to reduce generation output in pre-defined situations (e.g. prevent grid congestion or when there is a threat to system security). In this context, curtailment, be it voluntary or stemming from a restriction on operation, has to be understood as a remunerated ancillary service providing downward reserve capacity or balancing energy. This requires system operators to define procedures and compensation schemes in a transparent way. This principle of compensation needs to be enshrined in the new Renewable Energy Directive. Such mechanisms<sup>13</sup> would reduce the volume risk for wind generators as new market entrants (consequently the cost of capital). They should be

<sup>13</sup> As already applied in Croatia, Flanders, Germany, Greece, Romania, Sweden, and Ireland (until 2018).

separate revenue streams from those taken into consideration in the calculation of support mechanisms based on energy output.

Overall, a careful balance between the benefits associated to carbon free production of electricity from low marginal cost wind power and avoided investments in new grid infrastructure must be sought. A socio-economic optimum in grid development planning should not only weigh the amount of curtailed energy against avoided grid investment cost. It should also take into account other factors such as facilitating grid access to future power generation units, safe system operation and overall system efficiency, social acceptance and enabling the creation of the Internal Energy Market.

Regarding cost of grid access, see question 14.

Finally, the deployment of smart grid solutions is important to contain the overall system costs and facilitate the integration of renewables in the long run, compared to the business-as-usual approach of grid reinforcement. European legislation should therefore provide guidance to establish new regulatory approaches that incentivise DSOs to deploy these solutions on a large scale, and implement revenue streams that will cover investment costs related to ancillary services capabilities (e.g. reactive power).

**21. Which obstacles, if any, would you see for the dispatching of energy from all generation sources including renewables on the basis of merit order principles? Should there be any exemptions in some specific cases?**

☒ Yes, exemptions are necessary

☐ No, merit order is sufficient

Priority dispatch for wind and other renewable should be maintained because the adequate safeguards are today lacking to ensure that appropriate use of flexibility across the system, and to incentivise market players to implement innovative practices.

The current lack of transparency in curtailment rules of wind generation (which represent an additional market risk for wind energy generators) makes priority dispatch necessary to ensure the potential of this variable resource is fully exploited. Priority dispatch makes the entire power generation fleet run in a more flexible way by forcing the system operators to adopt more flexible system operation routines and to increase transparency in their operational procedures. Combined with priority or guaranteed access, it ensures the optimal development of the grid infrastructure necessary to effectively integrate wind and other renewables.

Future regulatory frameworks and power market design can consider increased exposure of wind generators to market risk, including progressively phasing out priority dispatch or developing a more market-price responsive mechanism in mature markets with high penetration levels of wind power. This would require at the same time the removal of priority dispatch for conventional generation and all other forms of non-RES power generation<sup>14</sup> in order to have level playing field which can be further tested against the criteria listed in question 19.

Until these cumulative conditions are met, wind energy, as a variable renewable energy source, should continue to benefit from priority/guaranteed access and/or priority dispatch.

Notwithstanding these criteria, priority dispatch should also be granted to 'combined offshore grid solutions' where two or more countries could be connected via offshore wind farms. This would more adequately reflect the increased risks developers face in such novel approaches.

<sup>14</sup> According to article 15(4) of the electricity directive, a Member State may give priority dispatch to power plants using indigenous primary energy fuel sources, such as coal or peat (in a limit of 15% of the overall primary energy necessary to produce the electricity consumed. This happens in Spain and Romania. CHP also benefits priority dispatch according to the energy efficiency directive.

22. Please assess the importance of stronger EU rules in the following areas to remove administrative barriers to renewable energy deployment:

	Very important	important	Not very important	Not important	No opinion
Creation of a one stop shop at national level to allow for more streamlined permitting procedures	x				
Online application for permits		x			
A defined maximum time-limit for permitting procedures, and effective consequences if deadline is missed	x				
Harmonisation of national permitting procedures		x			
Special rules for facilitating small-scale project permitting, including simple notification		x			
Pre-identified geographical areas for renewable energy projects or other measures to integrate renewable energy in spatial and environmental planning		x			

To what extent has the RED been successful in reducing unnecessary administrative barriers for renewable energy projects in the Member States?

Administrative and permitting procedures are amongst the most important obstacles to the development of renewables. They should be harmonized at national level and permitting policy should be coherent with the planning of the territory and the grid developments. Simplified procedures should be adopted for the repowering of the existing power plants – already integrated in the global social/economic and environmental system of a territory.

Fair and shorter permitting and connection procedures would significantly reduce project development costs for wind developers. The Renewable Energy Directive did not measurably help to reduce lead-times.

According to [WindBarriers project conclusions](#), they face average lead times for administrative authorisation and grid connection procedures of respectively 54.8 and 25.83 months. National authorities and network operators should issue consent and connection of renewable generators within shorter and defined time-limits (the project recommends 24 and 6 months respectively).

Another important barrier comes from the fact that onshore wind developers have to deal with nine different authorities on average. As a prerequisite, Member States should streamline procedures and report improvements as foreseen in the current Renewable Directive. In the long run, Member States should appoint a single permitting authority that would be in charge of the coordinating the whole process, as it is the case for TEN-E / PCI projects. (one stop shop solutions incorporating the tasks of all engaged authorities).

Others barriers faced by onshore wind developers relate to compliance with spatial planning, the number of parties / authorities involved. For offshore wind developers, these are rather the administrative bodies' lack of

experience, unclear environmental impact assessment processes, and difficult interaction with other users of the sea.

EWEA's priorities with regards to the streamlining of administrative procedures include:

- More harmonized EU rules in a number of areas, including permitting procedures, spatial and environmental planning and vocational and professional training. The introduction of measures to reduce bureaucracy and increase transparency for example by promoting the use of electronic communication during permitting procedure between investors and public authorities;
- Repowering of RES projects should have streamlined authorization processes compared to greenfield projects and the possibility of extension of licenses and connection rights. Dedicated competitive mechanisms should be introduced to allocate support for re-powered wind farms;
- Dedicated funds for professional conversion programs (training and job placement) towards green jobs

**23. Please identify precise challenges with regard to grid regulation and infrastructure barriers in EU Member States that you are aware of.**

In addition to the barriers identified in question 20 and the potential solutions to address them, EWEA consider the following issues to be of key importance for the sustainable development of wind power in Europe:

- Transparent and predictable transposition of the Connection network codes into national legislation. In particular the Network Code "Requirement for generators", that is expected to enter into force in the Q1 of 2016 will have a significant impact on cost as well as on regulatory certainty. There are a number of areas which are still open for Member States decision, such as test and compliance verification methods. In fact 75% of the requirements within the network code are non-exhaustive, leaving a margin for different interpretation. This creates uncertainty in the planning and design of wind farms that could lead to diverse methodologies based on individual TSOs' interpretation, therefore increasing grid access barriers. In addition, an article in the NC RfG leaves the door open to national TSOs to extend the scope of the requirements to existing generators under certain economic justification and under certain conditions, posing a risk of increased investment and operational costs for existing investments.

These requirements need to be specified within 2 years after NC RfG comes into effect in national regulation. Industry will then have 1 year more for adoption of the requirements into new equipment and power plants specifications. The next 3 years will be crucial to determine whether the national frameworks for grid connection and operation are fit for technology and economic competitiveness of the wind power technology. The way national TSOs and regulators handle this process, and the way they involve industry will be decisive to reduce regulatory uncertainty and to keep technology costs as competitive as possible.

- Acceleration on the development of a Pan-European electricity network. The recently completed EC funded project e-highway project showed that the expected 2030 network is not yet fit for the EU's 2050 energy and climate goals. The project has revealed that benefits of more transmission capacity will outweigh the costs, especially for those scenarios with large penetration of renewable energy source. One of the main challenges lies on the ability to allocate cost among member states for projects of cross-border significance. An EU-wide transparent and clear methodology for cross border cost allocation involving multiple countries is needed. Another important challenge is the lack of a common vision and a stable investment framework for renewables. Long-term renewable targets and a strategically coordinated grid design and planning would ensure a smooth development of the energy system in a cost-effective fashion.



24. How would you rate the administrative burden and cost of compliance with the RED for national, regional and local authorities?

No opinion.

	Very important	Important	Not very important	Not important	No opinion
Administrative burden					
Cost of compliance					

25. Please rate the importance of stronger EU rules in the following areas to remove barriers relating to renewable energy training and certification:

	Very important	important	Not very important	Not important	No opinion
Incentives for installers to participate in certification/qualification schemes					
Increased control and quality assurance from public authorities					
Understanding of the benefits and potential of renewable technologies by installers					
Mutual recognition of certificates between different Member States					

26. How can public acceptance towards renewable energy projects and related grid development be improved?

Social acceptance of wind energy in the EU is generally high with 89% of Europeans being favourable to wind projects<sup>15</sup>. However, local communities sometimes perceive wind farms, their overhead lines and - grid infrastructure, as intrusive and of limited value to the community.

#### **Enhanced public engagement**

The need for a lean planning process and well-defined roles for the bodies involved in planning is crucial. National planning and permitting regulations and strategies are essential to understand the level of public participation and information during wind farm development. Citizens should be engaged in a transparent way, by fully respecting the principles of openness, inclusiveness, responsiveness, accountability and flexibility.

EWEA is currently actively working on social acceptance in the framework of [WISE Power](#), an EU-funded project aiming at improving local engagement and support for wind turbines while enhancing local community

<sup>15</sup> [Eurobarometer survey](#). 2011

participation in the planning and implementation of wind power. The project has strongly focused on local participation and alternative financing measures as methods to enhance social engagement. The measures suggested by the project support stakeholders to design, build, implement and deliver effective and meaningful social engagement strategies in relation to onshore wind farms.

#### **Diversification of alternative financing to support wind power development**

Innovative financing provides an effective strategy to foster public acceptance for wind projects. Several models of alternative financing are used in Europe to develop wind farms. These models aim at securing financing for the projects, thus making the projects more bankable, WISE Power looked into the various types of so- called innovative financing and underlined five main types of models: donation based crowdfunding, private partnership including a citizen cooperative, public private partnership including a public entity, underwriter fund constituted with public bodies and underwriter fund constituted with cooperatives.

Defining one single innovative financing mechanism that contributes to enhancing social acceptance of wind energy, improves bankability of projects, insures successful implementation of wind farms and offers attractive financial conditions is a complex exercise. The challenge comes from the cultural, economic and institutional aspects specific to every project. Nevertheless, the private partnerships which include at least one citizen cooperative offer a good compromise between successful implementation, bankability of the project and social acceptance, this is especially true in the case of the mature wind power markets (e.g. Denmark, UK, Scotland) where the regulatory frameworks in place are supporting these initiatives.

Lack of public support will often result in delays to the selection of adequate sites and development of electricity infrastructure projects, which also stops communities from sharing in the benefits. Promoting acceptance needs to be taken on board by all stakeholders and have a strong political backing. Shared benefits from the construction of onshore wind farms can also help overcome resistance. Boosting local economy, creating local employment, providing revenues from the lease of land, sponsorship of educational and cultural events, construction of associated infrastructure are examples of community benefits from wind power development, which depend on the type of project, region, country, regulatory frameworks and other ad hoc issues.

#### **Increasing the renewable energy use in the transport sector**

28. To what extent has the RED been successful in addressing the following EU transport policy objectives?

	Very important	important	Not very important	Not important	No opinion
Contribute towards the EU's decarbonisation objectives					
Reduce dependency on oil imports					
Increase diversification of transport fuels					
Increase energy recovery from wastes					
Reduce air pollution, particularly in urban areas					
Strengthen the EU industry and economy competitiveness					
Stimulate development and growth of innovative technologies					
Reduce production costs of renewable fuels by lowering the level of investment					



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risk					
Facilitate fuel cost reduction by integration of the EU market for renewable fuels					

29. Please name the most important barriers hampering the development of sustainable renewable fuels and renewable electricity in transport.

30. Please rate the most effective means of promoting the consumption of sustainable renewable fuels in the EU transport sector and increasing the uptake of electric vehicles:

	Very important	important	Not very important	Not important	No opinion
Increased use of certain market players' obligations at Member State level					
More harmonised promotion measures at Member States level					
The introduction of certain market players' obligations at the EU level					
Targeted financial support for deployment of innovative low-carbon technologies (in particular to the heavy duty transport and aviation industry)					
Increased access to energy system services (such as balancing and voltage and frequency support when using electric vehicles)					
Increased access to alternative fuel infrastructure (such as electric vehicle charging points)					