

EWEA position paper on support mechanisms

The European wind industry is committed to a sustainable growth of wind energy through innovation and continuous investments, thereby creating sustainable employment, contributing to the fight against climate change, and to Europe's energy security. Renewable energy support mechanisms have played an important role in deploying wind power. Ultimately, the objective of the industry is to be competitive in a fully liberalised electricity market, and to deliver the benefits of wind energy in the most cost-effective way.

In the current context, it is essential that any change of support mechanisms only occurs in a way that does not destabilise the market. Stop-go policies, abrupt changes and in particular retroactive changes, significantly increase investment risk and undermine investor confidence. This adds costs to the consumer through higher risk premiums and consequently a higher cost of capital. This is a major obstacle to achieving competitiveness. The availability of finance – attracting a wide portfolio of investors and lenders – is one of many key challenges to increasing wind energy supply, especially in light of the current financial and economic situation.

The industry is committed to bringing down the cost of wind energy and already has a positive track record in this respect, namely thanks to improved turbine design and increased efficiency of blades and other components. The trend toward larger and more cost-efficient turbines has led to a significant decrease in the costs of wind power onshore while increasing full load hours, turbine lifetime as well as improving grid stability. In addition, economies of scale and improved concepts for transportation, operations and maintenance are expected to play a major role in making wind energy more competitive. The learning curve for onshore wind measured by the industry (i.e. the decrease in capex every time cumulative installed capacity doubles) is historically on average between 8 and 10%. The industry is committed to keeping this trend going towards 2020 and beyond depending on market scale and regulatory stability

The European Commission, in its 2050 Energy Roadmap, expects that wind energy will be the key electricity generating technology, providing between 31.6% and 48.7% of electricity production by 2050, more than any other technology. The wind industry considers this expectation entirely feasible, and aims to continue delivering renewable energy solutions in an affordable way.

EWEA anticipates that the success of onshore wind in bringing down costs will be replicated offshore in the coming years. In comparison with other power generating technologies, particularly nuclear and fossil fuels, onshore wind energy is rapidly improving its competitiveness and is the lowest cost zero-carbon technology available for large-scale deployment in Europe. Industry is constantly improving its technology, thereby making the utilization of new sites onshore and offshore more efficient.

Investments made possible by well designed support mechanisms help drive down costs and will enable lower support levels. Nonetheless, the need and rationale for support mechanisms remains today. In the absence of an EU mechanism fully internalising environmental costs, support mechanisms are the best tool to counteract market failures, which include subsidies to fossil fuels and nuclear, the lack of a level playing field at regulatory level, and the lack of internalisation of



external costs in the electricity sector.

EWEA thus considers that there are 10 main requirements that any mechanism must meet in order to create a sound investment climate for renewables:

- 1. Compatibility with the polluter pays principle;
- 2. High investor confidence, in particular to attract additional funding sources to the sector;
- 3. Simplicity and transparency in design and implementation;
- 4. High effectiveness in deployment;
- 5. Encouraging technology diversity;
- 6. Encouraging cost reduction through innovation and technology development;
- 7. Compatibility with the power market and with other policy instruments;
- 8. "Grandfathering" to safeguard current investments, and to maintain investor confidence in future development;
- 9. Encouraging local and regional benefits, public acceptance and site dispersion;
- 10. Transparency and integrity: protecting consumers, avoiding fraud and free riding.

Reaching 2020 targets cost-efficiently

In 2004 the European Commission highlighted that the compatibility of support mechanisms are "concerns which are secondary to the main objective of ensuring a certain level RES production in each Member State on the basis of individual national targets". The rationale for support mechanisms is still valid. In the absence of a well-functioning and harmonised EU electricity market, and without taxation fully internalising environmental costs, support mechanisms remain the best tool to counteract market failures in the electricity sector. Such renewable energy support mechanisms can be financed through the earmarking of ETS auction revenues.

The European wind energy sector is committed to meeting the 2020 renewable energy targets. Regulatory certainty is critical to achieving this in the most cost-effective way, as unexpected changes in support mechanisms seriously undermine investment levels and thereby the ability of Member States to reach their binding objectives. Prior to 2020, the wind power industry and Member States should also make full use of the cooperation mechanisms as set out in the 2009 Renewable Energy Directive (statistical transfer, joint projects and joint support mechanism). EWEA supports the scope of the 2014 review of the Directive, including using those mechanisms to enable Member States to achieve their national targets, as this could encourage innovation and increased efficiency.

Successful mechanisms that will enable the ambitious 2020 targets to be met need to ensure transparency and inclusiveness. They must be formulated and implemented to provide long-term visibility and certainty, be carefully designed to reduce regulatory risk and attract finance. Support mechanisms for wind energy also need to take account of the fact that the wind resource varies, and site-specific costs vary, from project to project, region to region and country to country.

Moreover, successful frameworks require not just a good payment mechanism. Effective policies must be put in place to facilitate grid development, to remove all discriminating practices, including barriers to grid access (through, for example, priority connection, priority or guaranteed access to the grid, no capacity caps). They must also ensure system adequacy, remove barriers in the form of



onerous administrative procedures, and encourage public support, planning guidance and acceptance. Crucially, lower barriers reduce costs and the need for support.

Support mechanisms for renewable energy should not be discussed in isolation. In January 2011 the European Commission highlighted that "fossil fuels [are] still receiving four times the level of subsidies [as renewable energy]". In this context, the industry supports an early phase-out of subsidies still received by fossil fuels, nuclear and other supposedly commercially viable technologies.

Better electricity market design and infrastructure will also be instrumental in improving the affordability of wind energy. The so-called EU target model² sets out the way forward for market integration at all timescales. Next to enhanced and more integrated forward and day-ahead markets, the introduction of well-functioning intra-day markets both at national as well as on cross-border level (which will help the large scale integration of wind power in the electricity market) is essential. Furthermore, the scoping work on cross-border balancing markets is of vital importance and must be continued and coordinated at EU level.³

Enhancing the affordability of wind energy beyond 2020

The investments required for the industry to continue driving down the cost of onshore and offshore wind energy will need to be supported by a reliable legislative framework.

An ambitious, yet credible, long term renewable energy target is critical to ensure that the industry can develop a sustainable economic model and business case going forward. In order to deliver this competitiveness an ambitious 2030 renewable energy target of 45% should be agreed. Renewable energy support mechanisms should be designed to deliver more convergence, or made more compatible, as well as being highly effective and adapted to technology diversity and maturity.

With increasing wind energy penetration levels, support mechanisms should encourage greater market responsiveness. In a well-designed and functioning market, producers should be exposed to price signals in order to ensure that they take an active part in making the market as efficient as possible. With a secure investment climate created by a stable legislative framework, wind energy can meet 28.5% of the EU's electricity consumption in 2030.4

Tools such as a well-functioning Emission Trading System can play a role in supporting Europe's more direct and effective renewable energy policy, namely renewable energy targets. Renewable

http://www.ewea.org/fileadmin/ewea documents/documents/publications/reports/Pure Power III.pdf

¹ Commission Communication: "Renewable Energy: Progressing towards the 2020 target" 31.01.2011.

² The EU-wide target model for the integration of electricity markets across Europe was elaborated by the European Commission, energy regulators, TSOs and Member States representatives in the framework of the European electricity regulatory forum. The target model covers main design features of forward, day-ahead, intraday and balancing markets as well as capacity calculation and governance issues.

³ See: EWEA. <u>2050: Facilitating 50% Wind Energy - Recommendations on transmission infrastructure, system operation and electricity market integration.</u>

⁴ EWEA Pure Power III



energy targets, together with stable legislative frameworks, are key to Europe's energy security, reducing GHG emissions, and improving the EU's competitiveness.

In conclusion, EWEA highlights the following points on support mechanisms for wind energy:

- Changes to existing frameworks are necessary in order to reflect cost reductions and technical improvements, but experience shows that these changes need to be foreseeable and transparent for the investor and not be undertaken as a sudden shift or retroactive cut. A dramatic shift in national frameworks undermines investor confidence, leads to a halt in investments and thus jeopardises national and European renewables targets.
- EWEA welcomes the EU's initiatives to create a well-functioning Internal Electricity Market before 2015. Furthermore, EWEA supports the intention to eventually adopt support mechanisms for renewable electricity that are compatible with an undistorted Internal Market and to reduce and eliminate support for specific technologies once competitiveness and a free and fair power market have been achieved.
- Any shift to an EU-wide mechanism must be well prepared, and follow effective competition
 of the Internal Electricity Market. However, greater convergence (such as the joint SwedishNorwegian certificate market or joint feed-in) and compatibility of support mechanisms
 should be considered in the context of a post-2020 framework for renewable energy centred
 on an ambitious 2030 renewable energy target. This, however, must be properly planned and
 retroactive changes for operating plants must be avoided.
- Grandfathering is required to safeguard current investments, and to maintain investor confidence in future development.
- Successful frameworks require not just a transparent and secure payment mechanism, but also effective policies to remove barriers to grids access and barriers in the form of administrative procedures, while encouraging public support.
- Finally, the industry is committed to making wind energy as cost-effective as possible with further investments and dedicated efforts towards innovation.