EWEA response to public consultation: Towards a new Energy Strategy for Europe 2011-2020

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EWEA welcomes the public consultation on a new Energy Strategy for Europe 2011-2020 given that Europe faces tough challenges over the coming years: climate change, depleting indigenous energy resources, increasing fuel and carbon costs and the threat of supply disruptions. EWEA's response is structured along the following lines:

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Introduction

The new Energy Strategy for Europe 2011-2020 must have as its objective the construction of a new, modern power system capable of meeting the energy and climate challenges of the 21st century, while enhancing Europe's competitiveness.

At the same time, Europe's power plants and electricity infrastructure are ageing. Over the next 12 years, 360 GW of new electricity capacity – 50% of current EU electricity generating capacity - needs to be built to replace ageing power plants to meet the expected increase in demand[i].

Wind power contributes to all of the EU's energy policy objectives – increased competitiveness, energy security and fighting climate change. From 2002 to 2007 the wind energy sector created more than 60,000 new direct jobs in the EU, equal to 33 new jobs every day of the year. In 2008, European manufacturers had a 60% share of the €36 billion global market for wind turbines.

More new wind power capacity was installed in the EU in 2009 than any other electricity-generating technology. 39% of all new capacity installed in 2009 was wind power, followed by gas (25%) and solar photovoltaics (16%). Europe decommissioned more coal, fuel oil and nuclear capacity than it installed in 2009. Taken together, renewable energy technologies account for 62% of new power generating capacity in 2009. It was the second successive year that renewable energies have accounted for the majority of new investments, with wind power accounting for 35% of all newly installed capacity in 2008. The total wind capacity installed by the end of 2009 will, in a normal year, produce 163 TWh of electricity, meeting 4.8% of total EU power demand[ii].

Wind - an indigenous power source that comes at a knowable, stable cost because the wind itself is free - is powerful protection against fuel imports from third countries at fluctuating, increasing and unpredictable costs. It also provides jobs and creates export opportunities for Europe, the global leader in wind energy technology.

There is still a vast untapped wind potential in Europe. The European Environment Agency[iii] states that the economically competitive potential of wind energy in 2020 is three times greater than expected electricity demand, and in 2030 is seven times greater than expected electricity demand.

The European Wind Energy Association raised its own 2020 targets in 2008, following the recent adoption of the EU Renewable Energy Directive. EWEA thinks that 230 GW of installed wind energy capacity – including 40 GW offshore - could be installed in the EU by 2020, providing 14-17% of our electricity.

Key issues for the new Energy Strategy:

1. A strong focus on implementing agreed policies

EWEA agrees that as a starting point for making further progress, Member States and the Commission must ensure that the rules adopted since the 2007 Energy Action Plan are properly implemented. To this end it is important that both the 3rd internal energy market package and the 2009 Renewable Energy Directive are fully implemented.

Implement the 2009 Renewable Energy Directive

The 2009 Renewable Energy Directive sets the EU a renewable energy target of 20% by 2020, which means that over a third of our electricity will come from renewable sources by then. Wind power will be the biggest contributor to this target, benefitting EU competitiveness, reducing greenhouse gas emissions, improving energy security, increasing technology exports and creating jobs. EWEA welcomes that "The Commission is committed to work with the Member States where appropriate to ensure maximum compliance, including infringement procedures if needed". A new Energy Strategy for Europe 2011-2020 should therefore ensure:

- Prompt and effective implementation by the Member States of the 2009 Renewable Energy Directive;
- Strict and early enforcement by the European Commission of the 2009 Renewable Energy Directive.

Implement the 3rd internal energy market package

The consultation paper rightly states that the third internal energy market package has laid out new framework conditions for a fully functioning and competitive internal market. It should be noted, however, that the 3rd Package only outlines institutions and regulatory tools such as Framework Guidelines and Network Codes, with no detailed indication on which policy options should be taken when developing these regulatory tools. Therefore, the debate now needs to tackle the obstacles to achieving a single European market, and which policy options are necessary when implementing the 3rd Package. Regarding grid infrastructure the 10 Year Network Development Plan (TYNDP) can be regarded as the most important new task given to TSOs and ENTSO-E by the 3rd Package.

The TYNDP should be not only a compilation of national grid development plans, but an overall grid development strategy for Europe. Time is of the essence in grid development in order to meet the 2020 targets. In order to make best use of the TYNDP as a key tool for a truly EU grid planning, it must outline a clear set of priority projects together with a traceable timetable for implementation and monitoring to serve as a concise implementation plan for transmission projects.

European Energy Regulators, organised in the forthcoming Agency for the Cooperation of Energy Regulators (ACER) as of March 2011, will have the crucial task to provide regulatory oversight at EU level with regards to the 3rd Package implementation. Their advice on the TYNDP and its implementation will be crucial to achieve a joint European approach to overcome planning and administrative barriers for infrastructure as well as lack of economic incentives for TSOs to invest and finally to ensure fair and unbiased access to the grid for wind power.

In this context, European Energy regulators should recognise that the benefits of developing a truly European grid network would lie not only in overcoming the present congestions on some of the main transmission lines, but would also provide for savings in balancing and system operation costs and enabling a functioning internal market.

Furthermore, full unbundling is necessary to ensure that any contractual arrangements such as grid codes, connection agreements and network charges are transparent and equitable between different generating technologies, and do not discriminate against wind power generation. The overall aim should be therefore to remove any discriminatory practices and market distortions which wind may still face and create a level playing field for all power generators in a future internal electricity market.

Regarding the current state of implementation of European Energy legislation, EC actions against Member States for failing to implement the second Liberalisation Package from 2003 substantiate how far the EU actually is from the creation of a functioning Internal Market. However, the emergence of European electricity markets is certainly a positive outcome of over a decade of successive European Energy Liberalisation Packages. What is needed now are market rules that lead to an efficient allocation of wind and other renewable generation capacity. The provisions given for this in the 3rd Liberalisation Package must be now transferred by the newly established bodies ENTSO-E and ACER into clear and targeted Framework Guidelines and Network Codes. Importantly, the development of cross-border day-ahead and intraday, as well as balancing/reserves markets must be accelerated as it will contribute positively to resolving congestion, facilitating free electricity trade and integrate RES in the most economically sound way.

2. Full integration in the longer term perspective

EWEA welcomes that the consultation paper refers to the European Council objective of 80-95% economy-wide greenhouse gas reductions by 2050. This objective necessitates zero greenhouse gas emissions from Europe's energy sector by 2050, an objective best delivered by a renewable energy economy. The proposed "Decarbonisation of Energy Roadmap to 2050" should therefore outline the path towards a 100% renewable power system with zero greenhouse gas emissions.

EWEA agrees that the new strategy for energy policy for the period 2011-2020 should be fully compatible with the longer term decarbonisation objective, and take into account in particular the long-term investment periods in the energy sector. EWEA agrees fully that "As certain elements of the longer term future are inevitably uncertain, such as possible technological breakthroughs or failures, it is important to avoid lock-in." It is therefore critical that a new Energy Policy ensures that it is investors – and not

consumers or taxpayers – who are fully exposed to carbon-price risks (as well as fuel-price risks). Policies for achieving this – such as a properly functioning electricity market, and an Emissions Performance Standard – should therefore be central policies of a new Energy Policy.

On 7 October 2009, the European Commission published its Communication on "Investing in the Development of Low Carbon Technologies (SET-Plan)"[iv]. The European Commission stated that, were the wind industry's research needs fully funded, wind power would be "capable of contributing up to 20% of EU electricity by 2020 and as much as 33% by 2030." EWEA agrees with the Commission's assessment. With additional research efforts and significant progress in building the necessary grid infrastructure over the next ten years, wind energy could meet one fifth of the EU's electricity demand in 2020, one third in 2030 and half by 2050.

Meeting the European Commission's ambitions for wind energy would require meeting EWEA's high scenario of 265 GW of wind power capacity, including 55 GW of offshore wind by 2020. The Commission's 2030 target of 33% of EU power from wind energy can be reached by meeting EWEA's 2030 installed capacity target of 400 GW wind. A total of 600 GW of wind energy would be needed in 2050 to meet 50% of the EU's electricity demand: 250 GW would be onshore and 350 GW offshore[v].

EWEA welcomes that the Commission highlights the phasing-out of fossil fuel subsidies. However, EWEA considers that this should be a short term objective of the new Energy Policy, rather than a consideration for the longer term.

3. Priority areas for the future strategy

Modern integrated grids

Building and operating modern integrated grids should be the key priority issue for the EU's future energy strategy.

New electricity infrastructure and 'smart grids'

European electricity infrastructure is ageing and grid development has not kept pace with RES investments. Meanwhile, new grid technology is available that enables the power sector to link generation and consumption of electricity irrespective of distance and without the substantial power losses that characterises today's electricity infrastructure. A new Energy Strategy for Europe 2011-2020 should therefore ensure:

- Grid extension – both at the transmission and distribution level – is necessary for future RES;
- An intelligently managed smart grid using demand-side management techniques, flexibility, and storage capacities;
- that grid rules do not discriminate against wind energy and removal of technical requirements and procedures that are not technically justified;
- Reforming the TEN-E instrument to enable the "EU Energy Security and Infrastructure Instrument" to ensure that infrastructure is planned, financed, developed, upgraded and operated with large-scale wind energy in mind;

- Structural funds, and dramatically increased TEN-E financing, should be actively promoted as financing solutions for developing grid infrastructure;
- Developing improved ways of financing the building of new grids, based on regulated returns for interconnectors and offshore grids;
- Accelerated authorization procedures for electricity infrastructure;
- Common grid codes across the EU.

Building a European offshore power grid

We must stop thinking of electrical grids as national infrastructure and start developing them to become European corridors for electricity trade. A future European offshore grid would contribute to building a well-functioning single European electricity market that will benefit all consumers, with the North Sea, the Baltic Sea and the Mediterranean Sea leading the way. It would provide grid access to offshore wind farms, smooth the variability of their output and improve the ability to trade electricity within Europe, thereby contributing dramatically to Europe's energy security. A new Energy Strategy for Europe 2011-2020 should therefore ensure:

- Implementation of European Commission President José Manuel Barroso's manifesto statement that "one of the next great European projects is to give Europe a new European supergrid for electricity…";
- By 2020, the initial stages of an offshore supergrid are constructed and operating with an agreed plan developed for the grid's expansion to accommodate the 2030 and 2050 ambitions;
- Effective spatial planning;
- A regulated rate of return on infrastructure investments;
- Harmonisation of grid operating procedures and legislation.

Making progress towards a low-carbon energy system

EWEA agrees with the Commission that to decarbonise the EU's electricity supply "massive expansion of renewable energy will be needed". EWEA therefore welcomed the Communication from the Commission "Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage" and urges the EU to agree to 30% domestic GHG reductions by 2020. EWEA is disappointed that the Communication falls short of recommending an immediate unilateral EU move to 30% reduction given that the Communication highlights numerous benefits of moving to 30%.

The benefits of moving to 30% outweigh the costs: the Communication highlights the International Energy Agency's estimate that "every year of delayed investment in more low-carbon sources adds €300-400 billion in the price tag". In addition, remaining at 20% does not put us on a path to 2°C by 2050, but results in a much higher, more expensive effort post-2020, and significant risks of irreversible changes in emission trends.

Wind energy is a real alternative to emission producing fossil fuels and, crucially, can be deployed and begin reducing CO2 emissions immediately. Wind energy is already fighting climate change: in 2009, wind power in the EU avoided the emission of 106

million tonnes (Mt) of CO2. In 2020, 230 GW of wind power would avoid the emission of 333 Mt of CO2, equivalent to 29% of the EU's 20% greenhouse gas reduction target for 2020, or 19% of an EU target of 30%. Including other renewables, and potential efficiency reductions, makes it clear that a 30% reduction is achievable, even without including international offsets, as GHG reductions delivered by wind power are domestic EU reductions.

EWEA would like to highlight the most recent Eurobarometer which concluded 'EU citizens prefer renewable energy sources in general and wind and solar in particular'. The survey shows that 71% of EU citizens are "very positive" about the use of wind energy in their country. Only solar power reaches a slightly higher acceptance level (80%), whereas gas is supported by 42%, coal by 26% and nuclear power by just 20%[vi]. The Commission should be reassured by this level of public support when promoting renewable energy, particularly wind power, as key to fighting climate change.

EWEA supports the Commission's view that "as the primary tool to drive emission reductions, the Emission Trading System (ETS) should be the starting point for options for going beyond 20%." The financial crisis has clearly undermined the effectiveness of the ETS as a tool to shift Europe away from fossil fuels towards a renewable, non-GHG emitting power sector, and instead created windfall profits for heavy industry and cheap Business-As-Usual solutions for the power sector.

Moving to 30% is the most effective way to tighten the emissions cap and establish the high and stable carbon price, necessary to make the shift to a renewable energy economy. EWEA agrees with the Commission that "the greatest potential for emissions reductions comes from the electricity sector". EWEA therefore supports the Commission idea to reduce auctioning rights by setting aside allowances. This would place the emphasis on the sector where it is cheapest to reduce emissions: the electricity sector.

As highlighted by the Communication the CDM has often provided "very cost effective reductions", for example wind power projects in China or India. But EWEA agrees that after the economic crisis, and without a further reduced cap, "a generous and prolonged stream of such low-cost reductions into the EU ETS slows down innovation in the EU". Domestic targets are essential and international credits should only be used as part of an international agreement calling for a 40% target, in line with scientific requirements.

Leadership in technological innovation

The race for green jobs has started. EWEA agrees with the Commission that "there is now a widespread consensus that the development of resource-efficient and green technologies will be a major driver of growth". Both China and the US are making very significant investments today in renewable energy, in particular wind power. But Europe has a first mover advantage.

The EU has been the cradle of renewable energy innovation, particularly wind power, and the European wind industry represents a growing number of jobs (192,000 direct jobs), significant and growing export opportunities, as well as increased energy security and competitiveness. For Europe to keep its first mover advantage, the EU needs to maintain its momentum in support of its most promising industries.

The European Wind Initiative (EWI), launched by the Spanish Presidency on 3 June 2010, is the high-tech roadmap to reduce the cost of wind energy[vii]. Its implementation will pave the way for the large-scale deployment of wind energy worldwide, and secure long-term European technological and market leadership.

The EWI will take the European wind industry to the next stage. It will develop the wind energy technology of the future, the necessary testing facilities, and streamlined manufacturing processes. The European Commission has highlighted that "more than 250,000 skilled jobs could be created" in the wind industry as a result. The strategic objectives of the EWI are:

- To maintain Europe's technology leadership in both onshore and offshore wind power;
- To make onshore wind the most competitive energy source by 2020, with offshore following by 2030;
- To enable wind energy to supply 20 % of Europe's electricity in 2020, 33 % in 2030, and 50 % in 2050.

To reach these objectives, the EWI focuses on four main technology areas:

- New turbines and components;
- Offshore technology;
- Grid Integration (with coordination with the Grid Initiative);
- Resource assessment and spatial planning.

The timely implementation of the EWI is vital to enable the EU to maintain its global leadership in wind power technology. It is therefore critical that the European Commission's proposed EU annual budget line for SET-Plan activities contains sufficient funding to ensure the European Wind Initiative is implemented and that in the next financial perspective, post 2014, and FP8, sufficient money is allocated to finance the European Wind Initiative.

Education, qualification and training is also vitally important to ensure that skills shortages do not restrict the growth of the wind power sector.

In the longer-term perspective, EWEA encourages the European Commission to increase public funding for wind energy technological innovation through the use of existing, and setting up new innovative, financial instruments to address the barriers of market failures and to stimulate private investment in this field.

A strong and coordinated external energy policy

Energy Security

The new Energy Policy should clearly acknowledge the contribution of wind energy to Security of Supply in Europe. The EU stands out as an energy intensive region heavily reliant on imports (more than 50% of the EU's primary demand) and additionally, the use of fossil fuel fired power plants exposes consumers and society as a whole to the risk of volatile fuel and carbon prices. EWEA therefore welcomes that the Commission identifies "the need of a fresh look at our indigenous energy sources and the role they can play in the security of our energy supplies."

European Energy Community

The European Energy Community is an important tool for the EU's external energy policy. Through the EEC, the non-EU members will be encouraged to develop and increase their share of renewables. Directive 2009/28/EC on the promotion of the use of energy from renewable sources, as for EU Member States, should be adoptedby the non-EU EEC members. However, it should be ensured that adopted of the Directive across the EEC does not dilute the EU's own 20% renewable energy target. Furthermore, the promotion of renewable energy technologies to third countries will also provide an interesting opportunity for the EU's world leading renewables industry.

Trade Policy

The European Commission should continue its work in identifying the economic interest and trading opportunities of European companies in the wind power sector, and should take the lead in pursuing an international trade agreement on environmental goods and services (EGSA), focused on renewable energy technologies. Should the WTO's Doha negotiations not progress, an EGSA should be pursued by the EU as a multilateral trade agreement and, regardless, in all plurilateral and bilateral negotiations with key non-EU wind power markets.

The removal of non-tariff barriers should be considered as critical as removal of tariff barriers, including local content requirements and other trade restricting practices, and the removal of EU import duties should take place as part of an international agreement by all relevant players to simultaneously remove import duties and non-tariff barriers.

Continued support from the EU in terms of the 2020 Strategy, ambitious climate targets, maintaining the EU's technological leadership through the European Wind Initiative, and national government support remain vital for the European wind industry to maintain its global market share.

Protecting the EU citizens

Improved competition in the Internal Electricity Market

A single European grid and effective competition in the European power markets are essential elements, not only for the integration of large-scale wind power and other renewables, but also to ensure that European consumers have access to affordable electricity and that our future electricity supply is less exposed to supply risk, carbon price risk and fuel price risk. A new Energy Strategy for Europe 2011-2020 should therefore ensure:

- Full ownership unbundling and a well-functioning and effective power market where investors are fully exposed to carbon and fuel price risk;
- Ensuring that gate-closure times are reduced to one or two hours through the development of intraday markets, regulating power markets and balancing markets throughout Europe;
- Balancing rules which pool wind farms to minimise the overall balancing costs and the cost to individual operators;
- A real price on pollution through an Emissions Trading System with full auctioning in the power sector and through domestic greenhouse gas reduction targets.

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The European Wind Energy Association (EWEA) is the voice of the wind industry, actively promoting the utilisation of wind power in Europe and worldwide. It now has over 650 members from 60 countries, including manufacturers with a 90% share of the world wind power market, plus component suppliers, research institutes, national wind and renewables associations, developers, electricity providers, finance and insurance companies and consultants. This combined strength makes EWEA the world's largest and most powerful wind energy network.

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[i] European Commission, 13 November 2008; SEC(2008) 2871

[ii] According to the latest figures from Eurostat, final electricity consumption in the EU-27 was 3,372 TWh in 2007.

[iii] EEA. Europe's onshore and offshore wind energy potential. Technical report No 6/2009

[iv] COM (2009) 519

[v] See Pure Power. EWEA. 2009. http://www.ewea.org/fileadmin/ewea_documents/documents/publications/reports/Pure_Power_Full_Report.pdf

[vi] http://ec.europa.eu/research/energy/pdf/energy_tech_eurobarometer_en.pdf

[vii] http://www.ewea.org/fileadmin/ewea_documents/documents/publications/EWI/EWI_2010_final.pdf