

The implementation of the EWI: state-of-play and next steps

The EWI: implementation so far

- The TPWind impact on EU funding allocations for wind energy R&D is considerable and increasing. However, the limited EU budget and sub-optimal coordination of European and national funds made the implementation of the EWI only partially successful:

Year / EU Programme	FP7, covering R&D	Intelligent Energy Europe (IEE), covering policy issues and studies
2011	Two FP7 topics, out of the seven recommended in the EWI 2011 Work Programme, were included in the 2012 FP7 Energy Work Programme (new materials for large scale turbines and reliability of large scale wind turbines).	One IEE priority, out of the two recommended in the EWI 2011 Work Programme, was partially addressed by the 2011 IEE call for proposal (social acceptance , but without the economic component).
2012	Five FP7 topics, out of the nine recommended in the 2012 Work Programme, were included in the 2013 FP7 Energy Work Programme (advanced aerodynamic modelling for very large rotor blades , new EU wind atlas , grid connection of offshore wind farms , DC power collection and HVDC grids – although the EC grouped the three grid integration topics into a single one).	One IEE priority, out of the two recommended in the EWI 2012 Work Programme, was partially addressed by the 2012 IEE call for proposal (social acceptance , like in 2011, but without the economic component, which will however be covered by the Joint Research Centre in an ad-hoc study).

State-of-play

- ❑ The EWI 2013 – 2015 Implementation Plan and 2013 Work Programme were developed by the Secretariat and are based on the inputs provided by TPWind Working Groups over the past 2 years
- ❑ They were presented to EU Institutions and Member States at the last two Wind EII Team meetings, in October 2012 and January 2013
- ❑ Following these meetings, two rounds of comments were received by the Secretariat. Comments came from the EC, the JRC, Member States, EERA and TPWind members (WGs 1 and 3)
- ❑ The final version of both documents was submitted to the EC on 22/2. The Commission is now checking them and will circulate them within the Wind EII Team soon
- ❑ Following this step the EWI 2013 – 2015 Implementation Plan will be published by the EC on the SET-Plan website, while the 2013 Work Programme will remain confidential
- ❑ The Secretariat will in any case circulate within TPWind as soon as the final green light from the EC will be received

2013 – 2014 EWI funding recommendations (I)

- ❑ EWI Strand 1, new turbines and components, recommendations are (in order of importance):
 - Smarter operation and maintenance (O&M): preventive maintenance and condition monitoring, as well as optimisation of life-cycle costs (EWI Component 1.1.2 - suggested EU budget: €10m).
 - Sensing, algorithms and actuation in control strategies and systems (EWI Component 1.1.1 – suggested EU budget: €10m).
 - Optimisation of turbines to complex terrains and extreme climates (EWI Component 1.1.3 - suggested EU budget: €10m).
- ❑ EWI Strand 2, offshore technology, recommendations are (in order of importance):
 - Design tools for very large, far from shore, deep waters wind farms (EWI Component 2.4.1 - suggested EU budget: €10m).
 - New bottom-fixed substructures (EWI Component 2.1.1 - suggested EU budget: €10m).
 - Cost-effective multi-MW floating platforms (EWI Component 2.1.4 - suggested EU budget: €20m).
 - New life-time extension and decommissioning strategies (EWI Component 2.3.2 - suggested EU budget: €10m).

2013 – 2014 EWI funding recommendations (II)

- ❑ EWI Strand 3, grid integration, recommendations are (in order of importance):
 - Technical options, control methods and operational concepts to provide ancillary services to the power system (EWI Component 3.2.2 - suggested EU budget: €10m).
 - Wind power plant models (EWI Component 3.2.1 - suggested EU budget: €10m).
 - Impact of wind power on market prices (EWI Component 3.3.1 - suggested EU budget: €10m).
 - Control and coordination of wind power plans and HVDC networks (EWI Component 3.1.1 - suggested EU budget: €10m).
 - Optimal configuration of power collection grids (EWI Component 3.1.2 - suggested EU budget: €10m).
- ❑ EWI Strand 4, resource assessment, spatial planning and social acceptance, recommendations are (in order of importance):
 - Wind energy synergies with other economic sectors, including impact on growth (EWI Component 4.4.2 - suggested EU budget: €1m).
 - Analysis of the EU wind power sector competitiveness in the global energy market (EWI Component 4.2.1 - suggested EU budget: €0.5m).
 - Offshore wind power clusters (EWI Component 4.3.1 - suggested EU budget: €1m).
 - Minimisation of underwater noise (EWI Component 4.2.1 - suggested EU budget: €5m).
 - Protection of bats (EWI Component 4.2.4 - suggested EU budget: €2m).

Next steps (I)

- ❑ Nine funding recommendations were put forward in the EWI 2011 Work Programme and eleven in 2012. There are seventeen in 2013 due to:
 - the revision of the R&D priorities for the 2013–2015 cycle (see the new EWI 2013–2015 Implementation Plan)
 - the absence of a new round of EEPR funding, which had a significant impact over the 2010–2012 period (and considerably reduced the budgets of the 2011 and 2012 Work Programmes)
- ❑ Their inclusion in the first Horizon 2020 Energy call (to be published towards the end of 2013 / beginning of 2014) was discussed for the first time between the Secretariat and the EC in January 2013
- ❑ More meetings will follow but the EC already made a preliminary selection of all funding recommendations put forward by TPWind. The Platform will probably be asked to draft the relevant Horizon 2020 topics over the coming weeks

Next steps (II)

- ❑ The initial selection of the EC is the following:
 - Design and testing of new nacelle prototype(s), with a significant lower mass and applicable to several types of large-scale wind turbines
 - Identification of substructure concepts that reduce production, installation and O&M costs while increasing reliability and life-time
 - Sensing, algorithms and actuation in control strategies and systems, including for new and very large rotors
 - Development of innovative integrated offshore systems, with ad-hoc designs and solutions
 - Support to EU wind energy technology development (before and after 2020).
This topic should extend EU funding to TPWind in the years to come
- ❑ The Secretariat will keep TPWind members updated on the contents of the first Horizon 2020 Energy call
- ❑ In 2013, TPWind and the Wind EII Team will focus on the development of the EWI 2014 Work Programme, which will also be based on the new EWI 2013 – 2015 Implementation Plan and should be ready by the end of the year

Ensuring a proper implementation of the EWI

- ❑ TPWind's main goal is to ensure the proper implementation of the EWI
- ❑ This is a key moment, since we are moving from the FP7 (2007–2013) to Horizon 2020 (2014–2020). The conditions for a successful implementation of the EWI up to 2020 are therefore being discussed now
- ❑ Consequently, TPWind is actively lobbying with EWEA and asking for:
 - Dedicated EU funding for the EWI, since the current level of funding is too low: EU Institutions (European Commission and EIB) should invest € 186m per year over the 2014 – 2020 period
 - Reduced time-to-grant (currently too high: approximately one year for the FP7 – it needs to be 6 months max)
 - Simpler EU rules, especially for coordinating European and national funds (the current ERANET+ scheme is too complex)
 - Room for bottom-up activities, instead of top-down only (as it is now with FP7 calls): companies and R&D centres need to be able to submit their own project ideas
 - Extended funding of SET-Plan ETPs in the second half of the decade and a better recognition of their role in the EU energy policy framework

Thank you for your attention!



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