



EUROPEAN TECHNOLOGY & INNOVATION  
PLATFORM ON WIND ENERGY

# Executive Committee meeting minutes

By ETIPWind secretariat

17 June 2019

[etipwind.eu](http://etipwind.eu)



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## 1 Meeting details

Venue: University College Cork, College Rd, Cork, Republic of Ireland.

Date & time: Monday 17 June 2019, 13:30 – 18:30.

## 2 Welcome

ETIPWind chair Aidan Cronin welcomed the group and thanked University College Cork and the organising committee of the Wind Energy Science Conference (WESC) for their support in hosting the meeting. The EAWE conference has become the nursery for the future of innovation and the success of the wind industry.

Mr Cronin was pleased to see a good number of industry representatives travelling to Cork and joining the academic conference. He hoped that in future more people working in industry could join these conferences as part of their training curriculum.

## 3 Executive Committee input to the Advisory Group meetings

The Executive Committee (EXCO) agreed that high level agreement in the wind industry will be essential to develop robust European research and industrial policies for wind energy.

The EXCO will contribute to a strategy document to be developed by the Advisory Group (AG). This document should lead to the adoption of a declaration of common interest by the AG, which would set out the direction of the wind industry through the identification of flagship projects (max 5).

The intentions for the strategic document are to :

- Set big and ambitious objectives for the wind industry with cross-sectoral benefits.
- Focus on pre-competitive and transnational challenges.
- Identify specific opportunities for standardisation.

Potential topics for flagship projects are:

- Turbine circularity (including a strong focus on recycling of blades, towers and foundations).
- Carbon neutral transportation and installation of wind turbines.
- Electrification and sector coupling.
- Preparing turbines for smooth operation under the most extreme conditions (e.g. typhoons).

The strategic document should also highlight how the sector can overcome challenges to acceptance (both by public and other industries).

**ACTION:** The ETIPChair will collect input from the AG group to build the document. The EXCO will then have a chance to add their comments. To draft document will be sent the AG in September (2 months before their meeting in November in Copenhagen).

#### 4 Technology Roadmap state of play

The Secretariat presented the state of play on the 2019 Technology Roadmap. The consultation of the wider wind energy research community was extensive, but resulted in only a limited amount of substantial comments and 7 new proposed topics. This could be due to conflicting schedules and an already inclusive feedback loop in the creation process.

The table below shows the EXCO decisions regarding the 7 new proposed topics.

TOPIC	DECISION	MOTIVATION
<b>Harmonics &amp; resonance</b>	PARTIALLY ACCEPTED	To be integrated in the power quality topic.
<b>Wind Farm digital twin</b>	PARTIALLY ACCEPTED	Both digital tools/solutions will incorporate a wind farm outlook.
<b>Load case selection flexibility</b>	ACCEPTED	
<b>Materials durability and protection</b>	PARTIALLY ACCEPTED	Protection measures for corrosion follow a too strict regulation. Better-lasting protection is a last resort solution. Durable materials to be integrated in material topics.
<b>New towers construction</b>	NOT ACCEPTED	No consensus, concrete towers are more carbon intensive, lattice towers too tricky to industrialise.
<b>Probabilistic design</b>	PARTIALLY ACCEPTED	To be integrated in the design topics on floating wind.
<b>Floating substation</b>	NOT ACCEPTED	Not a research priority. Demonstration projects are already ongoing.

Following the consultation process, the secretariat noted that some of the research priority ID kits are still in need of further refining. More details should be added in close collaboration with the Task Force leaders.

The EXCO decided that the research priority ID kits should go into an online and living repository.

- This would ease the collection of contributions of the community.
- The EXCO can extract and comment on the findings of the entire community on a regular basis.
- The ETIPWind online repository could be linked with existing repositories (EAWC, IEA TCP...).
- The online repository should include a visualisation of the importance/prioritisation of the research priorities. Ranking methods are still to be defined.

**ACTION:** The Secretariat will explore the development of an online repository for the whole wind energy community.

**ACTION:** The secretariat will reach out to Task Force leaders to ensure all research priority kits have enough substance.

**ACTION:** The Secretariat and chair will share and work on the remaining priorities on offshore balance of plant. ORE Catapult offered to help out on “Site conditions”.

## 5 Technology Roadmap messaging

With regard to the role of the research priority ID kits in publication the EXCO decided that they will not be part of the printed publication. They should form an annex and made available online.

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- The ETIPWind online repository could be linked with existing repositories (EAWE, IEA TCP...).
- The online repository should include a visualisation of the importance/prioritisation of the research priorities. Ranking methods are still to be defined.

The EXCO reaffirmed that for sector coupling the sector's objective is to electrify heating & cooling, transport and industrial processes. Electricity should be the primary energy vector of the future. Power-to-X solutions could help offset the seasonality in wind energy and help decarbonise hard-to-abate industries, but they are not a primary objective for the wind energy sector.

Furthermore, ETIPWind should not push for public funding towards research and development on any particular energy carrier. Indirect electrification is not the most efficient use of energy and resources.

The EXCO decided that the report should be as short and easy to read as possible. Facts and headlines are needed. In particular, following benefits of wind energy should be highlighted in the report:

- Electrification through high shares of wind power is the best choice for decarbonising the energy system and European economy, as wind energy has a small environmental footprint (measured in CO<sub>2</sub>) and a low societal impact (measured in Euro).
- A rapidly increased roll-out of wind energy will be vital for the success of the energy transition.
- Wind energy can provide hundreds of thousands of jobs and wider economic benefits across Europe.
- The large scale roll-out of wind energy needs to be underpinned by an ambitious research and industrial policy.
- Wind energy is now a global market and while European industry is still in the lead new players are building up their competitiveness vis-à-vis the European industry.

**ACTION:** the Secretariat will explore the development of an online repository for the whole wind energy community.

**ACTION:** the secretariat will rework the research priority ID Kits to better reflect the electrification agenda.

**ACTION:** the secretariat will share another version of the Technology Roadmap before end of July.

## 6 Technology Roadmap evaluation & impact criteria

The EXCO decided that evaluation/impact criteria will not add additional value to the research priority ID kits. A more robust ranking and prioritisation should be carried out next year to identify the 5 big ticket issues (1 per pillar).



## 7 Fact-sheet on blade recycling

The Secretariat presented the latest version of the fact-sheet on blade recycling.

The EXCO agreed that for each of the technologies and solutions discussed, the fact-sheet should spell out specific Research & Innovation recommendations (more research, demonstration...) from the wind industry perspective.

The wind energy sector will take a frontrunner role to drive the development of recycling technologies for composite materials. Further development of these technologies will help large spill over benefits and help improve the sustainability of many sectors (e.g. aerospace) that use a lot more composite materials than the wind energy sector.

Blade recycling is a first step towards the overall aim of establishing a fully circular value chain in wind energy.

The EXCO decided that the fact-sheet should incorporate the following elements:

- Blade lifetime description including manufacturing, logistical difficulties and operational conditions (load extremities, lightning, corrosion...);
- Where possible the positive lifetime contributions of existing blades (e.g. emissions avoided);
- Clear recommendations for large scale and European wide demonstration of blade recycling in the short term with the aim to establish a cost competitive European supply chain;
- Good comparison of “composite waste” volumes in other sectors;
- A comparison in costs of recycling versus landfill and how to boost the economic attractiveness of recycling;
- An outlook on the future split between GFRP (Glass Fibre Reinforced Polymers) and CFRP (Carbon Fibre Reinforced Polymers) if available

**ACTION:** the Secretariat will circulate a first designed version of the fact-sheet by mid-July.

## 8 Next meetings

The secretariat suggests to meet again on Monday 23 September (afternoon) in Brussels.

The last meeting of the year will be in November during the WindEurope Offshore event in Copenhagen.

## 9 Participants list

Organisation	Representative
<b>ABB</b>	Adrian Timbus
<b>DNV GL</b>	Lars Landberg
<b>EAW E (TUM)</b>	Carlo Bottasso
<b>EAW E (Oldenburg University)</b>	Stephan Barth
<b>EDF</b>	Eve Dufossé
<b>EERA JP Wind (DTU)</b>	Lena Kitzig
<b>EERA JP Wind (DTU)</b>	Mattias Andersson
<b>EERA JP Wind (Fraunhofer)</b>	Arno Van Wingerde
<b>EERA JP Wind (ORE Catapult)</b>	Paul McKeever
<b>EERA JP Wind (TNO)</b>	Peter Eecen
<b>ENEL Green Power</b>	Giancarlo Potenza
<b>Equinor</b>	Hanne Wigum (joined online)
<b>GE Renewable Energy</b>	Jaco Nies (joined online)
<b>Iberdrola Renovables Energía</b>	César Yanes Baonza
<b>LM Wind Power</b>	John Korsgaard
<b>Ørsted</b>	Jørn Scharling Holm (joined online)
<b>Siemens Gamesa</b>	Aidan Cronin
<b>WeAmecc</b>	Florent Vince
<b>Vestas A/S</b>	Agnar Gudmundsson
<b>WindEurope</b>	Sabina Potestio
<b>WindEurope</b>	Alexander Vandenberghe