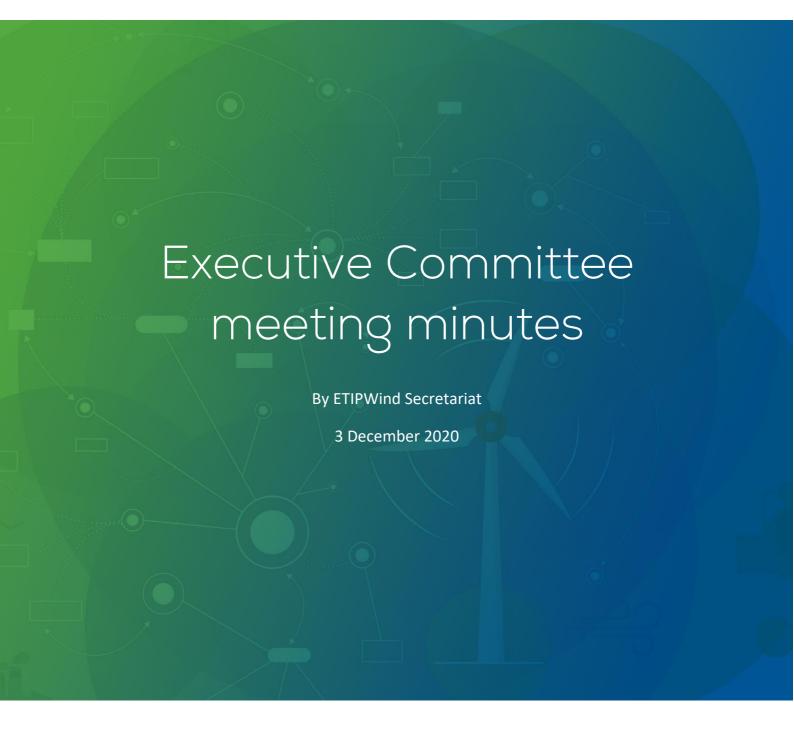


EUROPEAN TECHNOLOGY & INNOVATION PLATFORM ON WIND ENERGY





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 826042

This report has been produced with support of the European Commission. The views represented in the report are those of its authors and do not represent the views or official position of the European Commission.



Table of contents

1	Int	trodcution and Welcome	.3	
_				
2	Up	pdates from the ETIPWind secretariat	. 3	
	2.1	Recap EXCO meeting 8 September	. 3	
	2.2	2021 work programme		
	2.3	ETIPWind communication		
	2.4	ETIPWind Flagship report 2021	. 5	
3	Re	esearch and Innovation messaging on wind energy	. 5	
4	Fe	edback from the Advisory Group (AG)	. 5	
5	Wind turbine noise propagation: Noise study for easing onshore permitting			
6	Offshore Wind Research Lighthouse Initiative			
7	AC	AOB		
8	Clo	Closing remarks		
9	Lis	st of participants	. 8	



1 Introdcution and Welcome

Adrian Timbus, Chair of the Executive Committee (EXCO), opened the meeting and presented the agenda.

2 Updates from the ETIPWind secretariat

2.1 Recap EXCO meeting 8 September

ETIPWind secretariat and Executive Committee (EXCO) members discussed the action points from the previous EXCO meeting (September 8).

- **Flagship report**. Secretariat has already organised meetings, together with WindEurope and ETIPWind members, to discuss the different chapters of the flagship report.
- **Communication**. Secretariat set up the ETIPWind Communication Task Force. The first meeting took place on Thursday, October 15. Moreover, some EXCO members have already shared relevant materials on wind energy R&I.
- **Outreach**. Secretariat asked EXCO members to reach out national ministries to discuss national and EU policies related to wind energy.

2.2 2021 work programme

ETIPWind secretariat presented the indicative ETIPWind 2021 work programme (see figure 1). This includes:

ETIPWind Flagship Report

Secretariat and EXCO members are working on ETIPWind's next big report. It will be delivered during the WindEurope Electric City event in April.

ETIPWind Factsheet 2021

Secretariat and members agreed to postpone the publication of the factsheet due to the work on the Electric City report. The next ETIPWind factsheet will be published in October 2021. Members confirmed the topic of the factsheet (electrical infrastructure and balance of plant) in a survey conducted in January 2020.

ETIPWind high-level event

This event will take place between end June beginning of July. Secretariat aims for a physical event.

Workshops (2)

The topic of the first workshop will focus on materials and sustainability (e.g. recycling blades, but also looking at other challenges such as lead or rare earth). For the first workshop, secretariat will collaborate with WindEurope working group on Sustainability. The first workshop will take place in Q2

The second workshop will support the development of the factsheet. Secretariat would like to involve the grid technology suppliers. This workshop will take place in Q3.

Webinar

Secretariat proposes a webinar in Q4. The aim is to launch the latest factsheet during the webinar.



Video

ETIPWind promised to deliver a video by April 2021. Secretariat and members will decide the messages, scope and format in January 2021. It could be an option to link the video to the Electric City report and event.

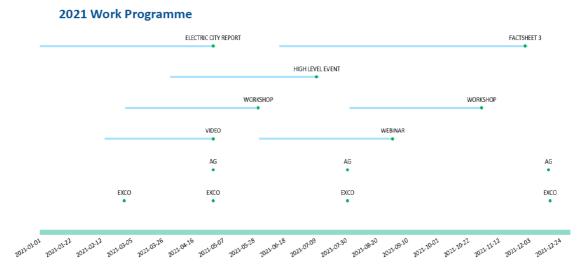


Figure 1. 2021 indicative work programme

2.3 ETIPWind communication

Since June, ETIPWind attracted significantly more followers on social media, especially on LinkedIn (from 60 followers to 800). These promising results show that ETIPWind is reaching a larger and wider audience. Secretariat is publishing, on average, two news pieces per month on R&I and EU policies/strategies.

The EXCO discussed additional ways to strengthen the communication of the ETIPWind recommendations. These include creating additional audio-visual content and creating synergies with other stakeholders from the energy R&I community.

Action: Secretariat to explore feasibility of developing short videos and audio-content (mini-podcasts).

Action: Secretariat to strengthen relation with the IEA Wind Executive Committee in support of Europe's R&D messages.

Action: Secretariat to review how to engage with ETIPSNET in a constructive dialogue.

Action: Members to share relevant materials on wind energy R&I with the secretariat. These can be disseminated through the ETIPWind channels.



2.4 ETIPWind Flagship report 2021

The report is split into five chapters:

- 1. Wind Technology as the main energy source by 2050.
- 2. **Electrification** is the key to decarbonisation. Putting the customer at the centre of the energy transition a) Industry, b) Transport, and c) Buildings.
- 3. The **power grid** as the backbone of the energy system.
- 4. **Flexibility** is the key for the system to provide reliable and low-cost renewable power.
- 5. Advancing technology through **policy innovation**.

EXCO members agreed the report should also address materials and sustainability. But place it in perspective too. The benefits of wind are still immense and outweigh any adverse material dependencies. The sector remains committed to even more sustainability and circularity. R&I will play an important role to achieve this goal.

The EXCO suggested several metrics to demonstrate the value of wind energy beyond LCOE. These include low environmental footprint, zero-emissions, reduced energy dependency, ultra-low carbon footprint, and economic benefits of wind energy deployment.

The EXCO agreed wind technology will develop to a) reduce costs, b) maximise value and c) increase social acceptance.

The ETIPWind task Force will meet on **Monday 7 December** to hammer out the details on costs, values and technology developments.

The ETIPWind Flagship report will have three phases:

- 1. Data collection (November-February).
- 2. Drafting (February-March).
- 3. Finalisation (April).

3 Research and Innovation messaging on wind energy

The secretariat opened the floor to discuss the actions taken to engage national governments in view of upcoming EU funding programmes (i.e. Horizon Europe). Few EXCO members actively promoted ETIPWind recommendations at national level.

To keep the EXCO informed on all the latest developments, Secretariat proposes to send frequent updates to the group. These will also include specific action points.

Action: Secretariat to share how it has engaged with national wind energy associations to deliver ETIPWind recommendations to Horizon Europe.

Action: Secretariat to send a monthly email with updates on EU R&I policies.

4 Feedback from the Advisory Group (AG)

Mike Anderson, Chair of the Advisory Group and EXCO member gave a recap of the previous AG meeting (November 26). During the meeting the AG discussed how the industry could accelerate blade recycling. AG members said that recycling and achieving circularity are two distinct steps in a wider sustainability process.



The short/medium-term priority is blade recycling. However, there are no real, cost-competitive and sustainable recycling technologies ready. The wind sector must team up with other sectors to generate demand for composite recycling.

The long-term priority is to achieve more circularity in the design of blades. This will require R&I in new materials.

The AG also talked with the European Commission about their <u>European Competitiveness Report</u>. The report shows that Europe plays a leading role in wind technology. But that public R&D is dropping. The AG asked the Commission to align the findings of the report with the priorities of the new EU programmes.

5 Wind turbine noise propagation: Noise study for easing onshore permitting

Noise regulation is a barrier to large-scale onshore deployment. Current regulation is often over conservative and does not reflect technical state of art regarding noise emission, propagation, ambient conditions and background noise. Moreover, regulation varies widely from one country to another. This greatly hinders project development and turbine optimisation.

The EXCO agreed we need more harmonisation on noise regulation. A core group of turbine manufacturers identified three approaches:

- 1. The European Commission (DG ENVI) finances a study by a widely accepted noise consultancy in the short term to a) improve public acceptance, b) avoid industry bias, and c) initiate "immediate" discussion on review of national permitting.
- 2. **Industry finances investigations together with research partners** to a) answer basic technical questions of EC and b) reach minimum level of neutrality by research partners with academic reputation.
- 3. **An EU-funded research project with a long-term perspective** related to a) wind, environment, social acceptance or b) Onshore. Also, invest in broad noise understanding with regard to prognostic planning methods, validation measurements, review of rules for permitting regulations.

The EXCO expressed its support for approach one and three. The first requires a mapping of existing regulation across Europe and provide the latest state of the art at turbine level. It should also lead the way to clear EU guidelines. The other will require a more cross-sector effort. It should involve the research community, developers and key consultants (i.e. the ones that help with siting/permitting). Pending the latest developments, Horizon Europe could already support a long-term project already in 2021 or 2022.

Action: The Secretariat will explore how ETIPWind could contribute to approach one. This will require close collaboration with WindEurope.

Action: Andree Altmikus to keep the EXCO informed on the WindEurope discussion.

Action: EERA will provide an overview of the latest noise research from the research community.

Action: The Secretariat will see how a large joint research project could be set up and funded.



6 Offshore Wind Research Lighthouse Initiative

To succeed in bringing wind energy towards its full potential we need an interdisciplinary research approach. We need to consider the wind power plant, together with the surrounding nature (wind, water, etc) and electric grid, as part of the same system. And to understand the complex interactions of these parts in detail.

A lighthouse initiative aims to develop one or more large European research projects. They will address the grand scientific and technical challenges that are crucial for the further advancement of offshore wind energy. Moreover, they will provide new knowledge and basis for innovation.

This may be a grand science and engineering challenge and a big opportunity for industrial development, new jobs and value creation. The idea is to take an interdisciplinary approach and to closely link research with industry.

The projects should be presented as Research and Innovation Actions (RIA) call in the upcoming Horizon Europe programme. They should be 100% funded by European Commission but will be enhanced through coordination with national projects.

The EXCO agreed to support the development of the lighthouse initiatives. Members discussed whether they should break up the lighthouse initiatives into smaller, more manageable segments. This would allow for specific impacts to be defined in a certain timeframe.

The EXCO members will support the drafting of specific topics proposal to be suggested for the 2023-2024 work programme of Horizon Europe. This action will take place in Q2-Q3 of 2021.

Action: the secretariat will work out a timeline for drafting the lighthouse proposal texts with EERA.

7 AOB

EXCO members discussed the revision of the European Commission's Energy and Environmental Aid Guidelines (state aid). The rules on operating aid for the promotion of electricity from renewable sources could be outdated in view of recent industry trends. The issue is of particular importance in Germany.

Action: Secretariat will look into the state aid guidelines and will follow up bilaterally with the interested parties.

8 Closing remarks

No closing remarks.



9 List of participants

Organisation	Representative
EXCO Chair – Hitachi ABB Power Grids	Adrian Timbus
DNV GL	Lars Landberg
EAWE	Johan Meyers
EDF	Anastasiya Shapockina
EERA (DTU)	Nicolaos Cutululis
EERA (DTU)	Peter Hauge Madsen
EERA (DTU)	Mattias Anderson
EERA (Forwind)	Stephan Barth
EERA (Fraunhofer IWES)	Arno van Wingerde
EERA (ORE Catapult)	Paul McKeever
EERA (Sintef)	John Olav Tande
EERA (TNO)	Peter Eecen
ENEL Green Power	Giancarlo Potenza
ENERCON	Andree Altmikus
Equinor	Hanne Wigum
European Commission	Carlos-Eudardo Lima da Cunha
GE Renewable Energy	Jaco Nies
Iberdrola Energía Renovables	César Yanes Baonza
InnoEnergy	Javier Sanz
LM Wind Power	John Korsgaard
MHI Vestas Offshore Wind	Anders Bach Andersen
Ørsted	Jørn Scharling Holm
RES	Mike Anderson
RWE Renewables International	Victoria Dahmen
Shell Energy Europe (observer)	Wouter Haans
Siemens Gamesa Renewable Energy	Aidan Cronin
UL	Thomas Neumann
WEAMEC (observer)	Florent Vince



WindEurope	Alexander Vandenberghe
WindEurope	Raquel Alemañ
ZF	Bert Verdyck