

ETIPWind kick-off event

How targeted R&I in wind energy
contributes to delivering
REPowerEU

Welcome & Introduction

Adrian Timbus

Vice President Portfolio and Market

Strategy

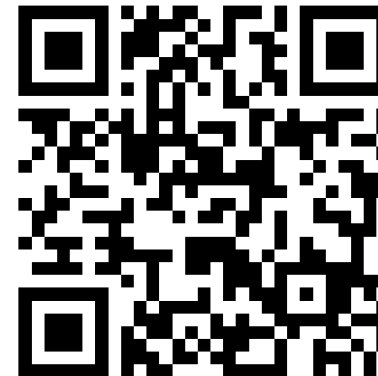
Hitachi Energy

ETIPWind Chair

Welcome & Introduction

- Welcome to the ETIPWind kick-off event launching the 2022-2025 cycle of activities!
- For **online participants**: please mute your microphone. If any technical issue: do not hesitate to write directly in the chat.
- **Questions can be asked on Slido.** But for audience in the room, do not hesitate to speak up!

Join at
slido.com
#etipwind22



Evacuation information



What is ETIPWind

ETIPWind

Steering Committee

36 experts including:

Industry

- Representing the whole wind value-chain

Research



Secretariat

Hosted by WindEurope



Other ETIPs



Implementation
Working Group on
Offshore Wind



CTOs Forum of
WindEurope

- **European Technology & Innovation Platform** established in 2016.
- Funded by the European Commission in the framework of the **SET-Plan** through the **SETIPWind project**.
- Industry and research experts who provide **policy and research recommendations** to the European Commission and advocate for a **faster deployment of wind energy** in Europe.

Steering Committee

• INDUSTRY



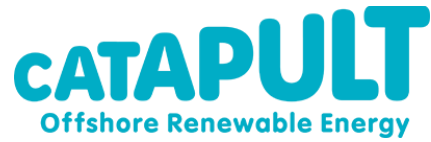
GE Renewable Energy



etipwind.eu

Steering Committee

• RESEARCH



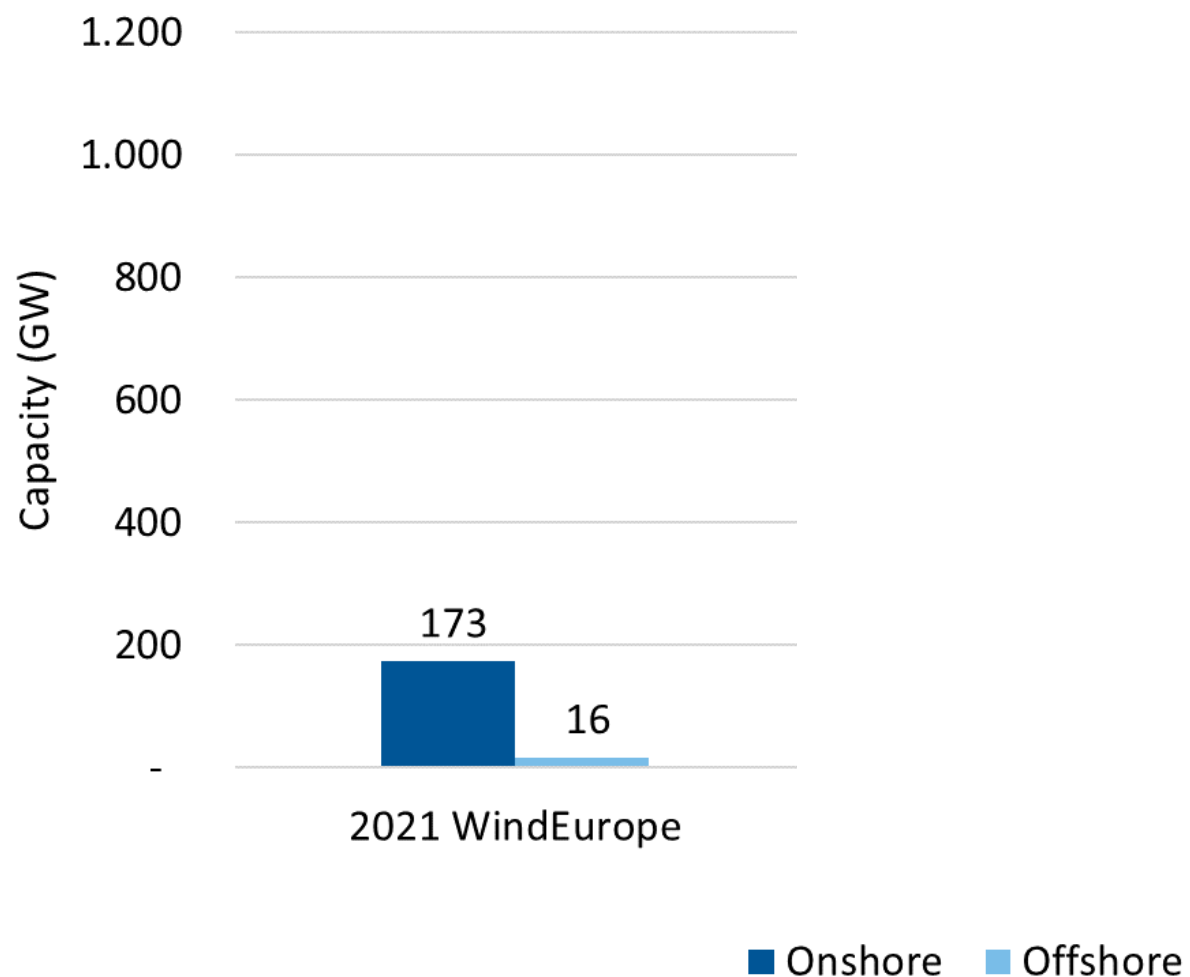
SOFIA UNIVERSITY
ST. KLIMENT OHRIDSKI



• OBSERVER

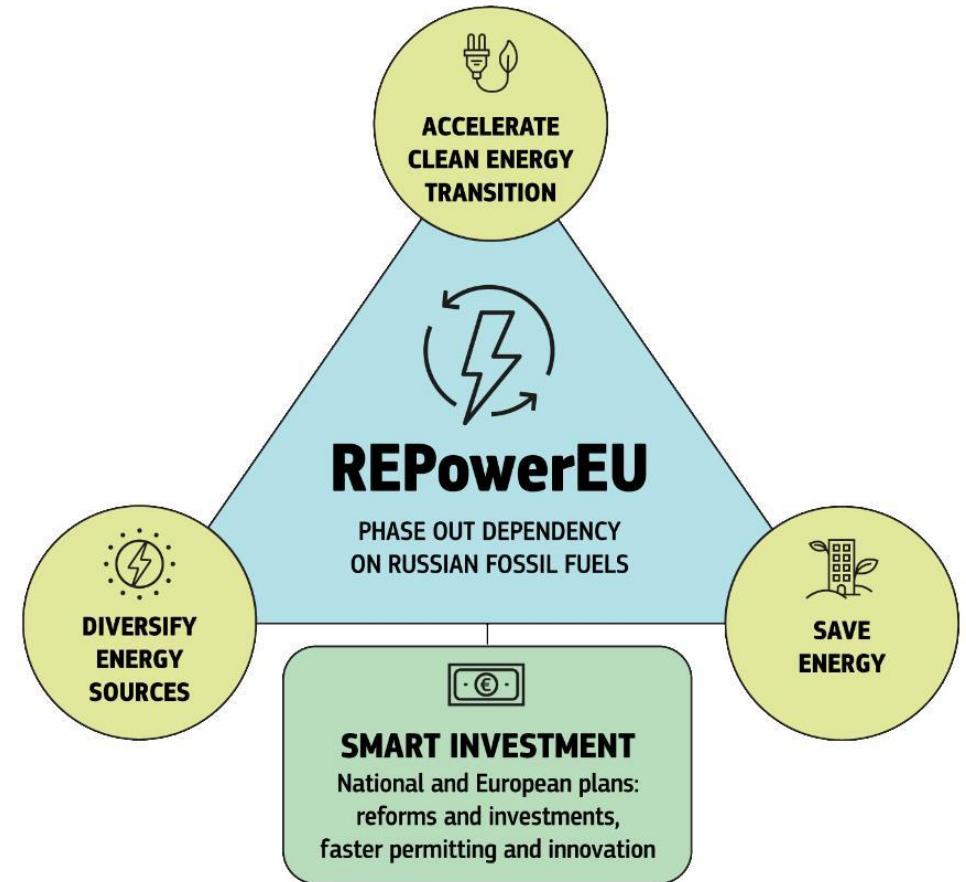


Huge increase in wind capacity coming



Policy Context

- **REPowerEU:**
 - **New 2030 targets:** 45% renewable energy (+5%), 13% energy savings (+4%)
 - New measures: **Accelerate permitting for RES**
- **Ending Russian gas imports before 2030**
- **National Energy and Climate Plans (NECPs) revision:** 10-year plan for the period 2021-2030. Member States must update their plans by June 2023.



Wind industry facing challenges

RAW MATERIALS
DEPENDENCY &
SUPPLY-CHAIN
BOTTLENECKS



PERMITTING RULES

RES-BASED
ELECTRIFICATION



Mega trends in wind energy technology

1

Scaling up offshore wind



Multi-GW wind farms



Connected to several countries – saving space & money, optimising power trading



Very large turbines (+15MW)

2

Industrialising floating offshore wind



Tapping into massive wind resources in areas with deep waters



Moving to serial production of substructures, dynamic cables and anchors.



Offshore hydrogen production

3

Happy co-existence with the onshore environment and society



Minimising impacts with birds



Reducing noise



Optimising land use

4

Repowering onshore wind



Making the most of the best wind sites



Leveraging state-of-the-art technology.



More power output with fewer turbines

5

Wind is going 100% circular



Recycling wind turbines for other sectors



Using recycled materials in new turbines



New easy-to-recycle blade materials.

What does ETIP do?

MEETINGS



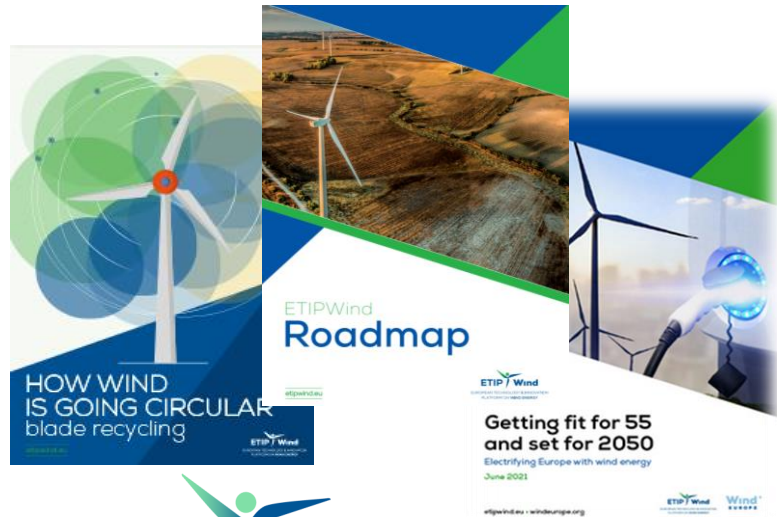
COLLABORATIONS



WORKSHOPS & EVENTS



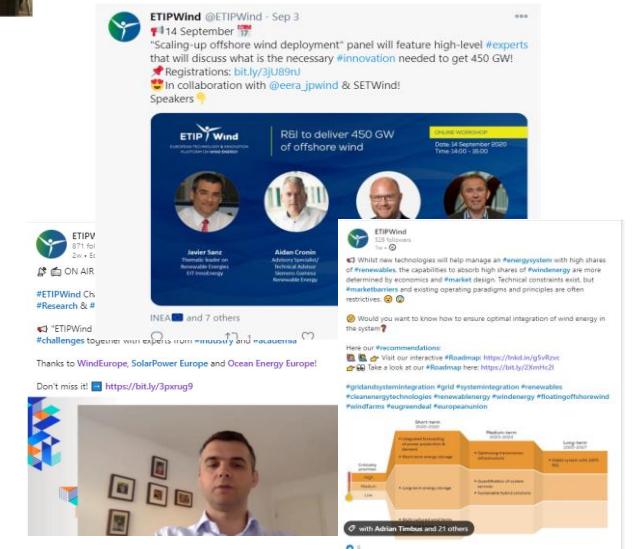
PUBLICATIONS



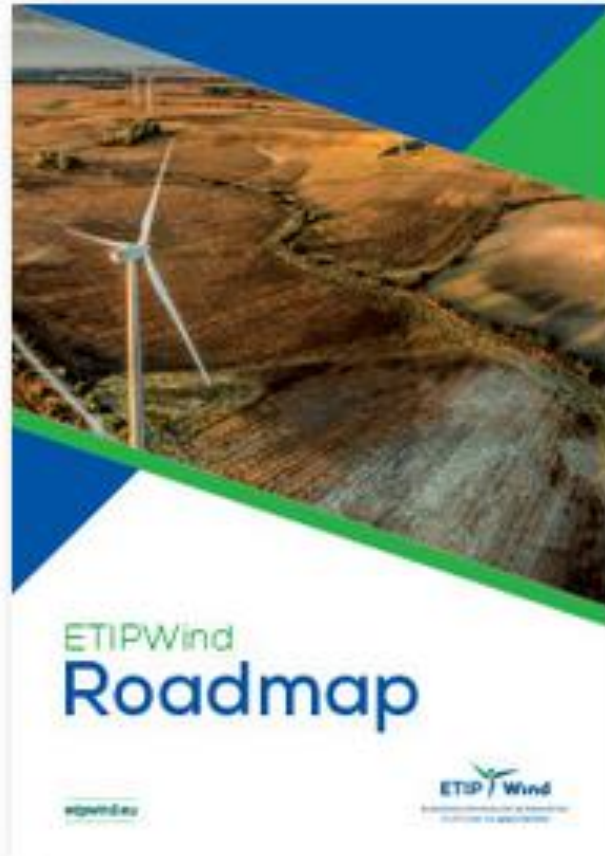
ETIP Wind
EUROPEAN TECHNOLOGY & INNOVATION
PLATFORM ON WIND ENERGY



COMMUNICATION ON INDUSTRY'S PRIORITIES

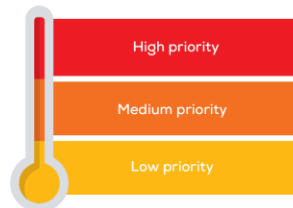


What does ETIP do?



Research & Innovation priorities 2020-2027

Technology Roadmap



- Grid & system integration
- Operations & maintenance
- Next generation technologies
- Offshore balance of plant
- Floating offshore wind
- Skills & human resources

Short-term 2020-2022

- Integrated forecasting of power production & demand
- Short-term energy storage
- Lifetime assessment and condition monitoring
- Digital tools for control and monitoring
- Development and validation of components & materials
- Blade recycling demonstration
- Integrating wind energy in the surrounding natural and social environment
- Lean production
- Validation of design tools
- Mooring and anchors
- Dynamic electric cables
- Control methods
- Expand and harmonise wind energy teaching in Europe

- Long-term energy storage
- Robotic inspection and repair methods
- New transportation methods for large components
- Data availability & sharing
- Serial production – analysis of substructure production processes

- Multi-cultured wind farms
- Modelling future system needs

Medium-term 2023-2024

- Optimising transmission infrastructure
- Dynamic cable repair solutions
- Digital solutions for smart operations
- Predicting environmental parameters
- Development of sustainable materials
- Standards
- Manufacturing processes
- Cabling and connections
- Boost wind energy higher education

- Quantification of system services
- Sustainable hybrid solutions
- Decommissioning strategies and technology
- Solutions for operating in extreme conditions
- Sensor technologies, diagnostics and response
- Next generation generators
- Noise reduction
- Reliability of components
- Material durability and protection

- Integrated design process in supply chain
- Joint academia-industry educational programmes

- Floating installation, assembly and heavy maintenance

Long-term 2025-2027

- Stable system with 100% RES
- Recycling methods for materials and components
- Cross-industry agreement and standards
- Integrated optimised design plan
- Verification of methods and procedures

- Disruptive technologies

- Park level control

- Supply chain logistics (decommissioning)

What does ETIP do?

Key objectives of the next ETIPWind Work Programme

1. Provide timely and targeted R&I recommendations to the European Commission
2. Engage with national policy makers to ensure measures are implemented at national level
3. Disseminate the industry's R&I priorities and raise awareness about R&I needs for wind
4. Foster collaboration with other SET-Plan bodies and align with other sectors
5. Create a European knowledge hub for wind R&I
6. Widen participation to ETIPWind's governance and ensure representativeness
7. Develop a finance and sustainability plan for the platform

Keynote speech

Rosalinde Van der Vlies

Director Clean Planet

DG RTD – European Commission

Fireside chat

Rosalinde Van der Vlies

Director Clean Planet
DG RTD - European Commission

Adrian Timbus

Vice President Portfolio and Market Strategy
Hitachi Energy
ETIPWind Chair

Made in Europe: What policies are needed today to keep Europe's wind supply chain competitive?

MODERATOR:



Pierre Tardieu
Chief Policy Officer
WindEurope

SPEAKERS:



Jacek Truszczyński
Deputy Head of Unit – DG GROW
European Commission



Didier Mallieu
Solution Manager for Renewables
Hitachi Energy



Bert Verdyck
Head of Product Portfolio
ZF Wind Power

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Coffee Break

10:45–11:00

Accelerating wind turbine recycling and improving co-existence of wind with nature and society

MODERATOR:



Helena Solman
Researcher
Wageningen University

SPEAKERS:



Jacob Edmonds
Head of Innovation
Ørsted



Hanif Mashal
CTO
LM Wind power



Fabio Fugazzotto,
Head of Wind innovation
ENEL Green Power



Lena Kitzing
Head of Section Society,
Markets & Policy
DTU

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Energy System Integration: How to go from 15% to 50% wind in power demand by 2050

MODERATOR:



Annie Scanlan
Partnerships Manager
WindEurope

SPEAKERS:



Susanne Nies
General Manager Germany
Smart Wires



Lukasz Kolinski
Head of Unit Green Transition and
Energy System Integration - DG ENER
European Commission



Erik van Iperen
General Manager Renewable
Power Generation Technology
Shell



Norela Constantinescu
Head of Innovation Section
ENTSO-E

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Closing remarks

Baris Adiloglu
Project Manager
CINEA – European Commission

Closing remarks

Adrian Timbus

Vice President Portfolio and Market Strategy

Hitachi Energy

ETIPWind Chair

Closing remarks

- **Main takeaways from the panel discussions**
- **Next steps for ETIPWind:**
 - Contribution to the SET-Plan revamp
 - Participation to the SET-Plan Conference 2022
 - Recommendations for the strategic planning 2025-2027 of Horizon Europe
 - Policy recommendations on R&I to national governments in their revised National Energy & Climate Plans (NECPs).

How can you get involved in ETIPWind?

- Join us at our events & workshops
- Provide your input and feedback on our publications
- Follow us on social media
- Subscribe to our newsletter to get updates on wind energy R&I and activities of the platform



Join us at the
networking lunch!
13:00-14:30

THANK YOU

Contact: secretariat@etipwind.eu