

Blade recycling volumes and technologies

Alexander Vandenberghe

Our members make wind energy work

400+ MEMBERS

Wind turbine manufacturers

e.g.  GE Renewable Energy  Gamesa 
RENEWABLE ENERGY

Wind farm developers

e.g.     

Power utilities

e.g.     VATTENFALL 

Component manufacturers

e.g.   Prysmian Group 

Digital solutions & service providers

e.g.     

EPC, Installation and logistics

e.g.    

Financial & legal services

e.g.   Allianz  

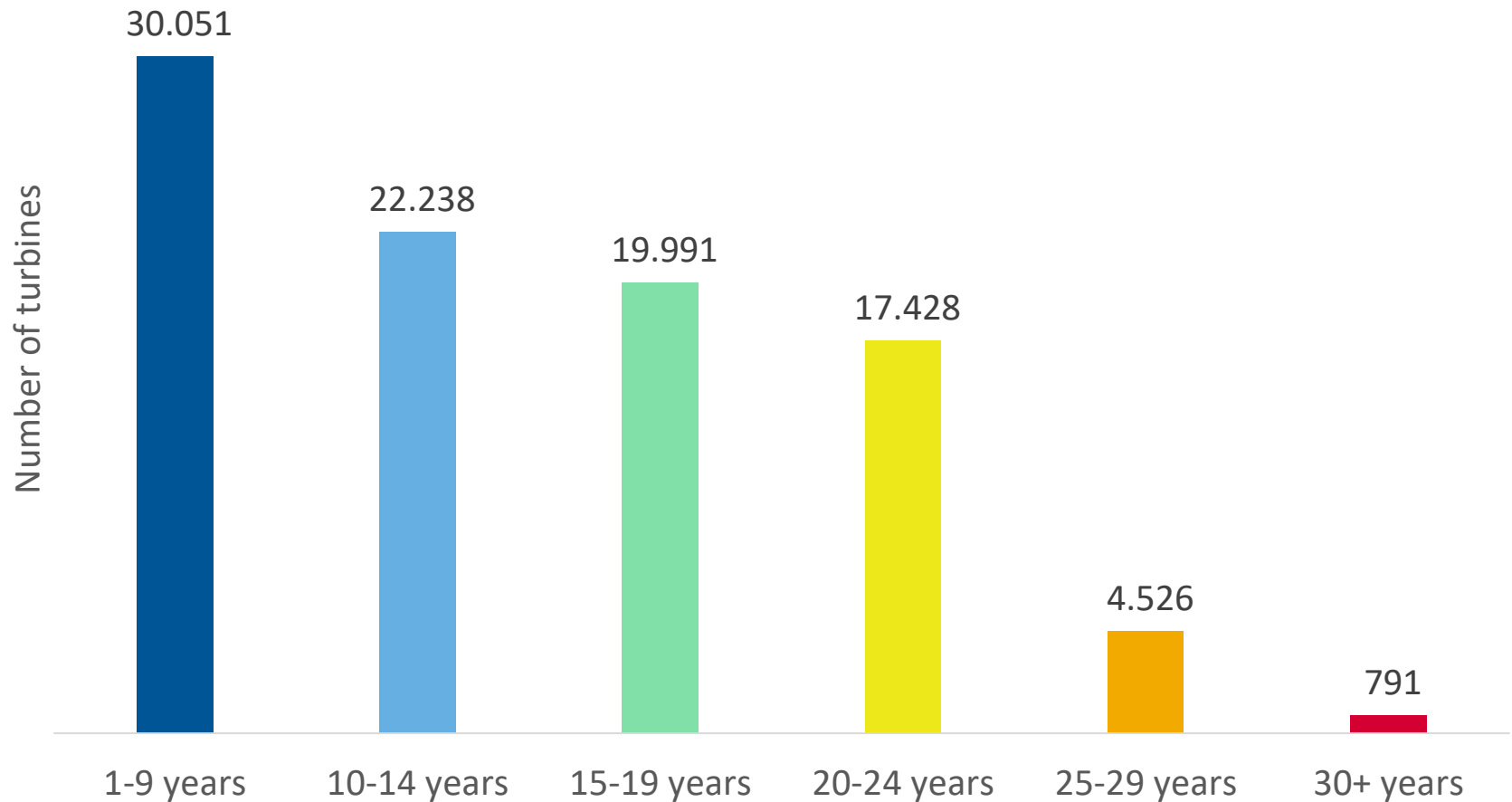
Research institutes

e.g.    

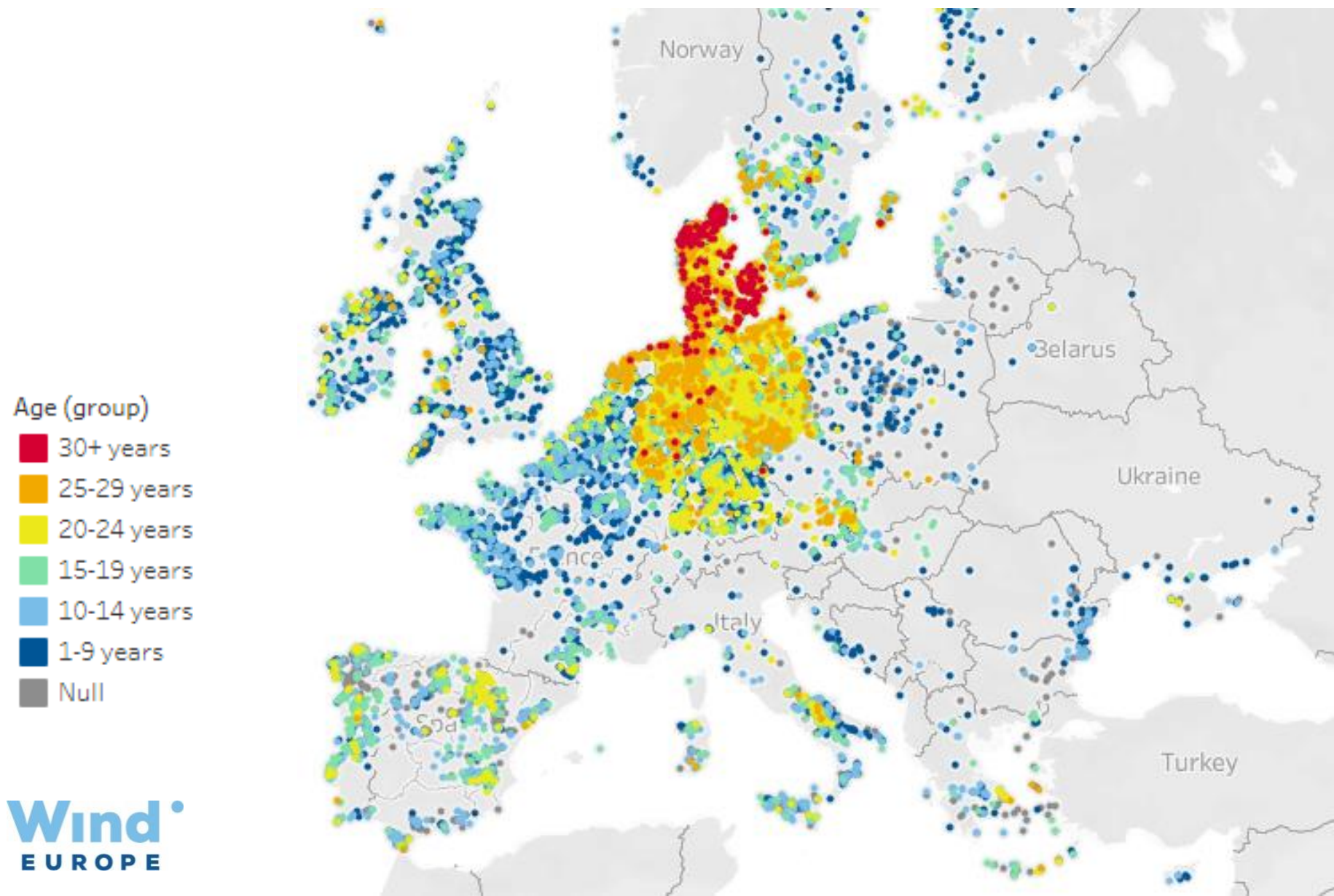
Energy Buyers

e.g.    

An ageing onshore fleet...



Where are they in Europe ?

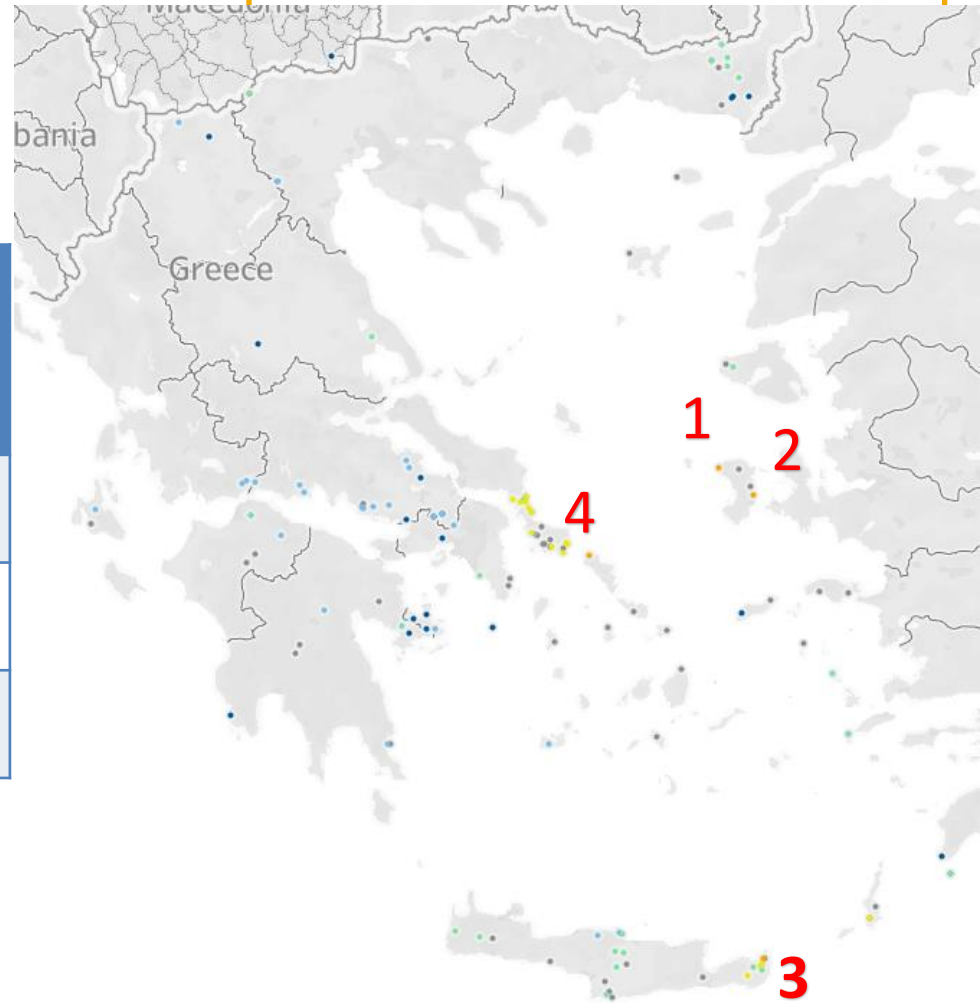


What about Greece?

Wind farms older than 24 years

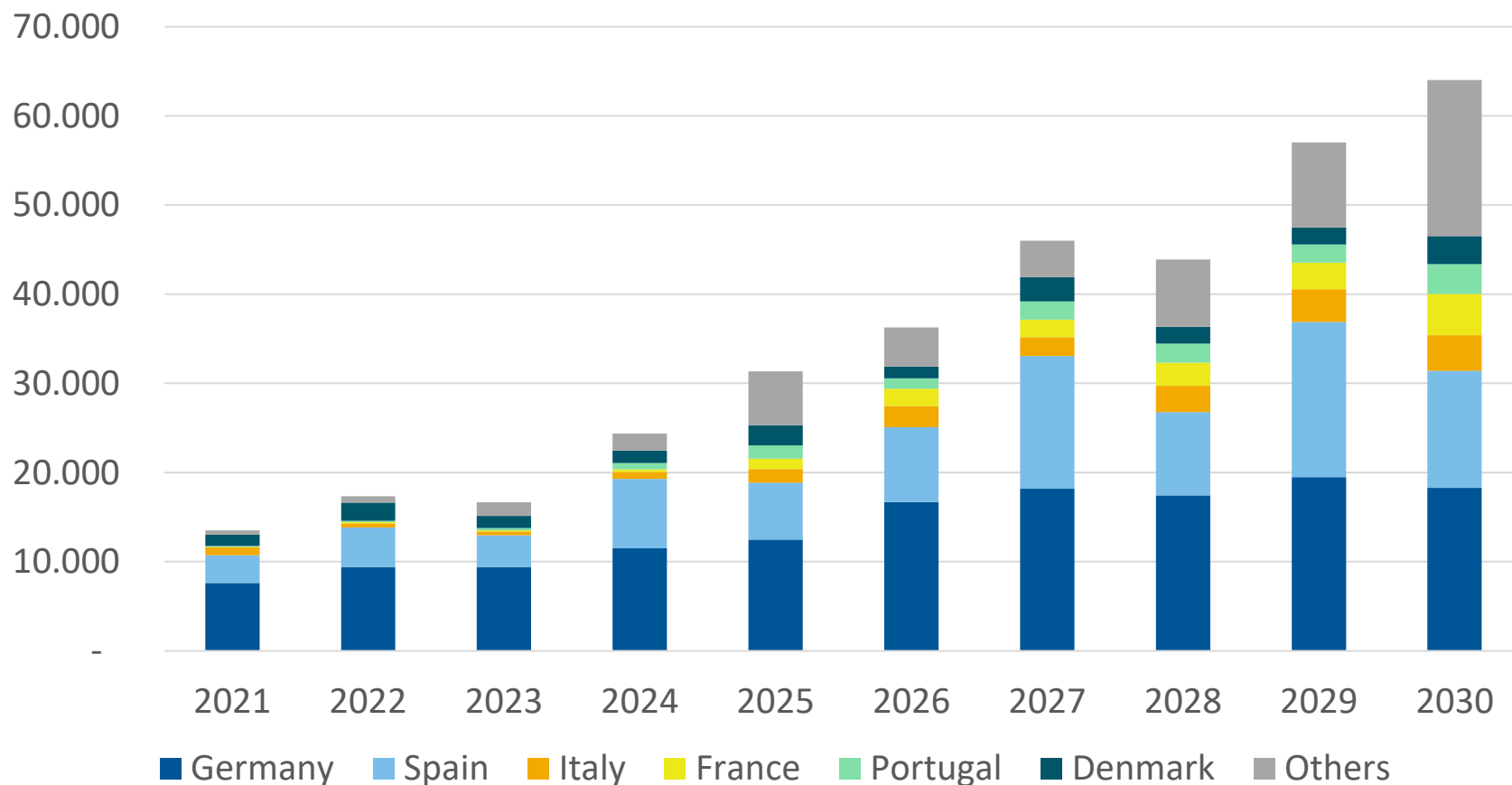
Wind turbines in Greece 2021

Total No.WTGs	2,751
WTGs 20-24 years	415
WTGs >24 years	28

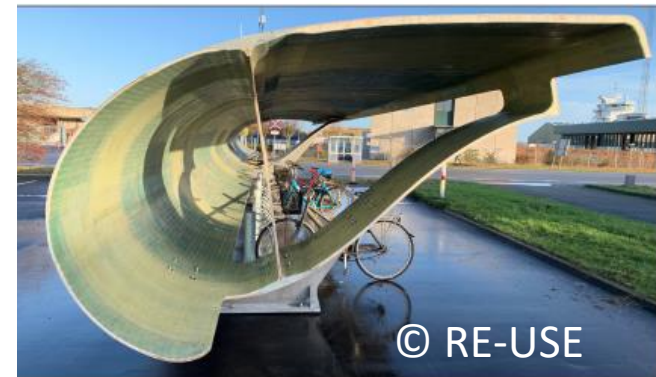
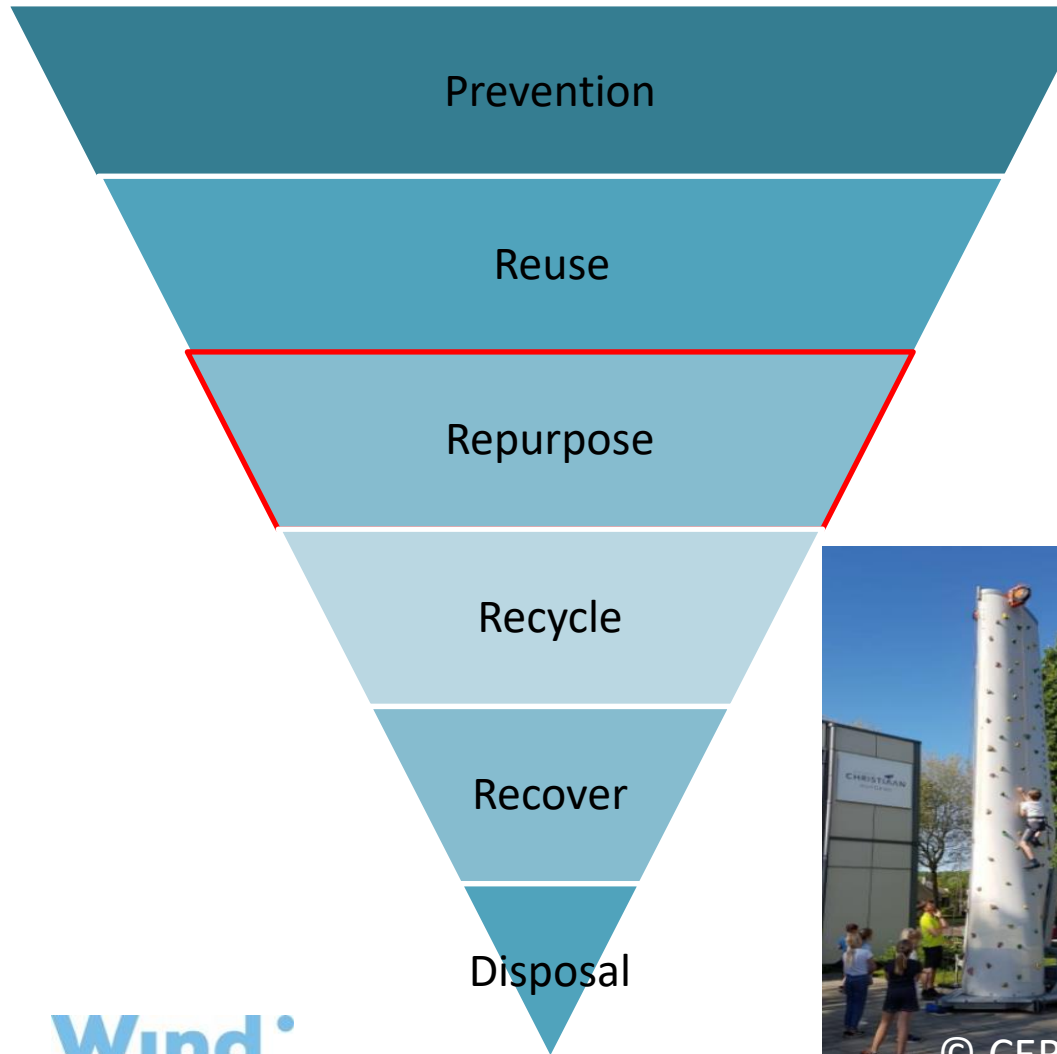


Up to 64,000 tonnes per year by 2030

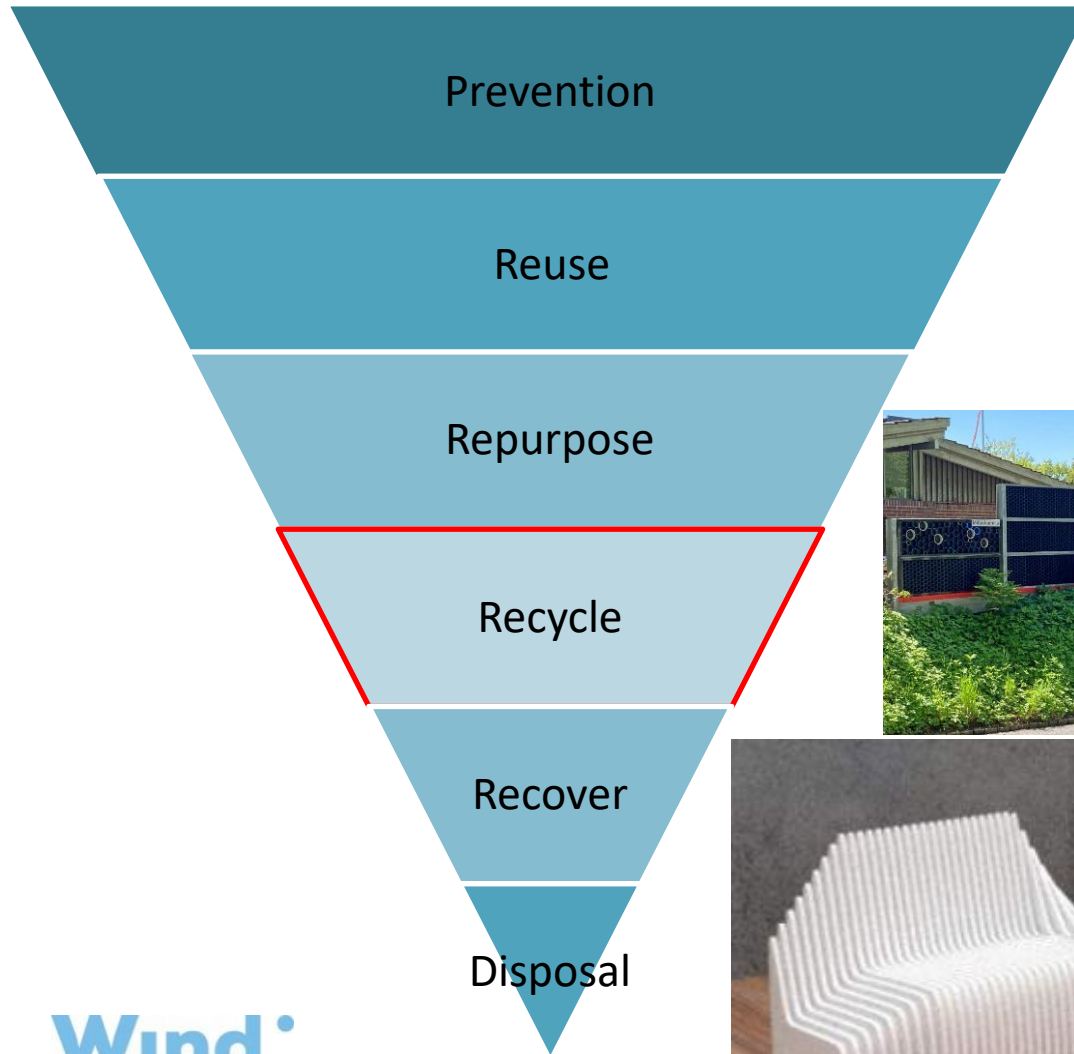
Decommissioned blade mass (tonnes)



What happens to blades today?



What happens to blades today?



Precast concrete LEGO type blocks



Precast concrete manhole module



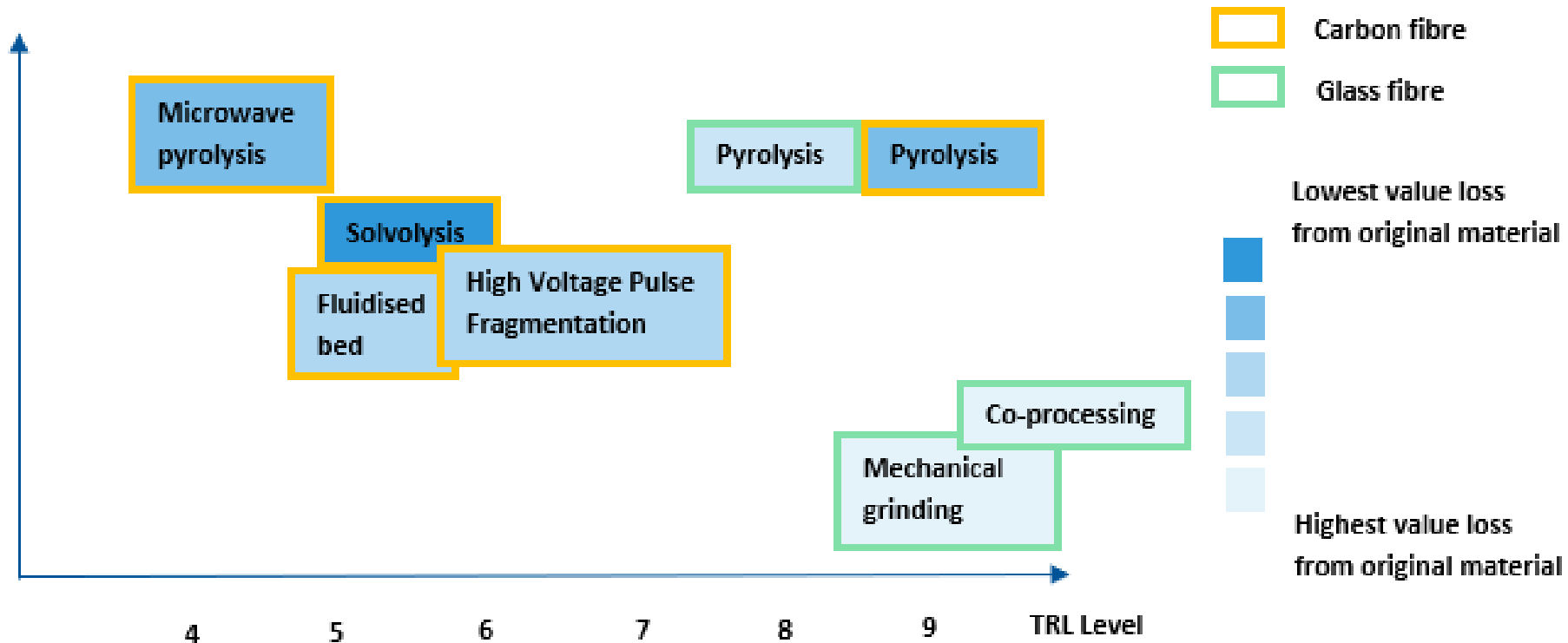
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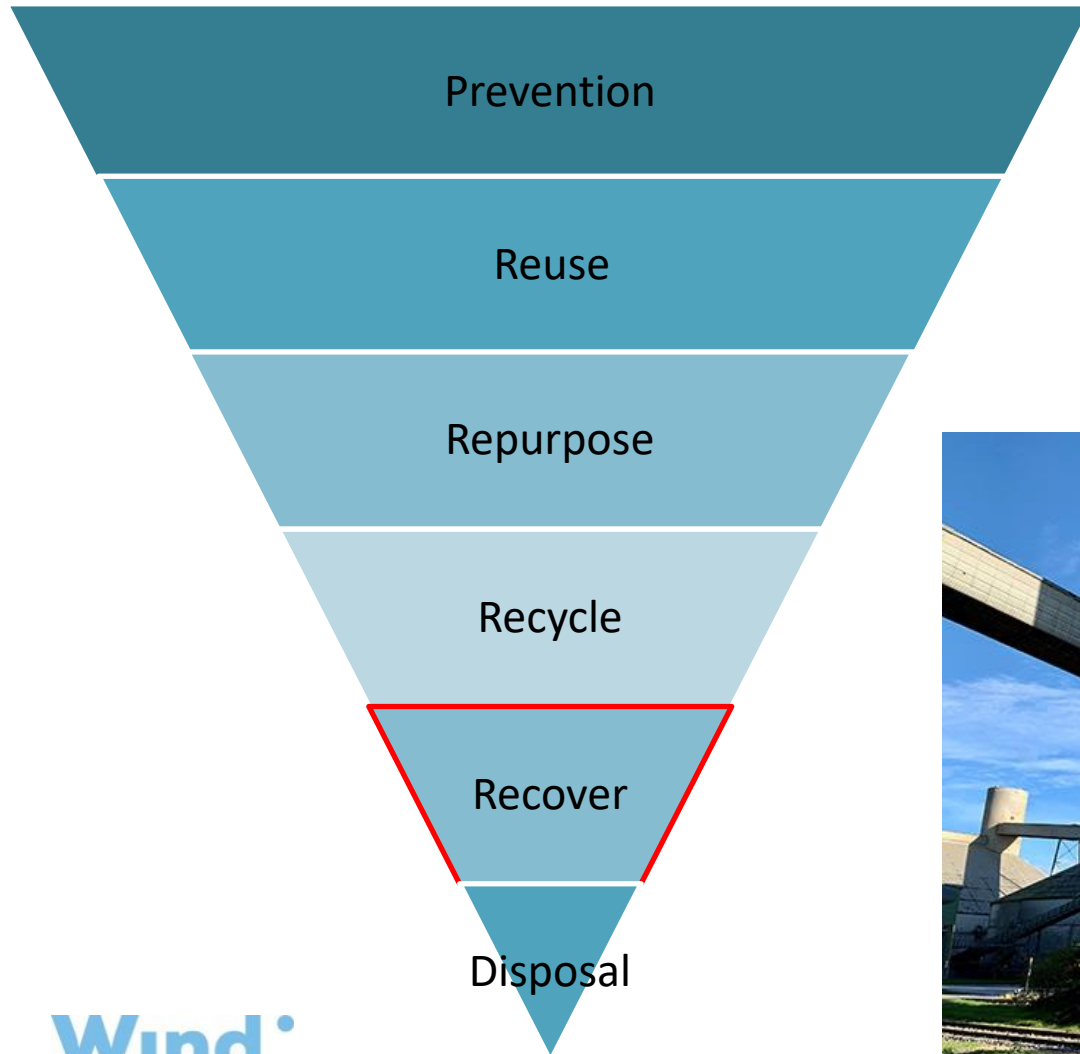
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Recycling technology exists but...

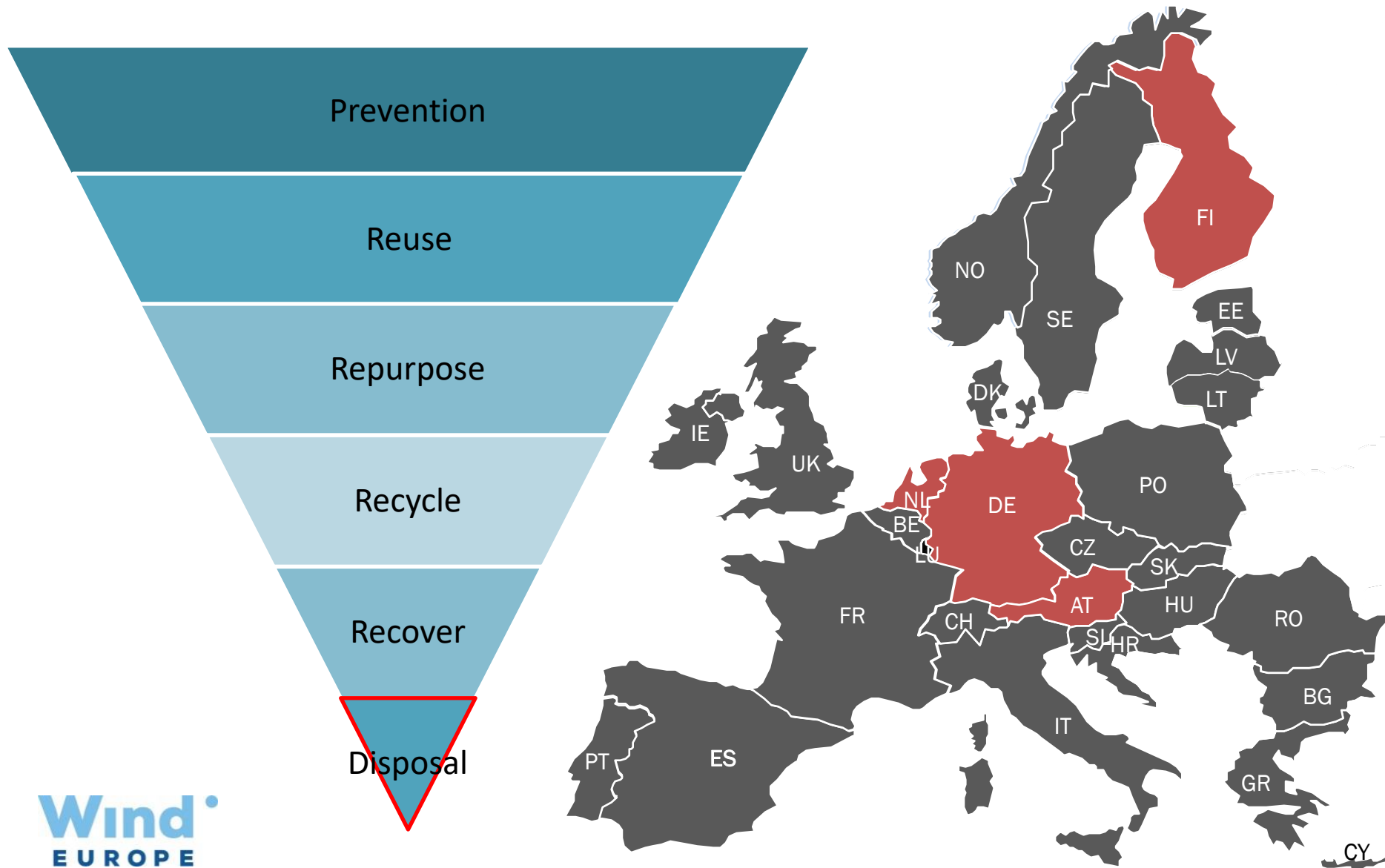
Process Cost



What happens to blades today?



What happens to blades today?



Blade Recycling Position Paper

Call for a European **landfill ban** on decommissioned blades by 2025.
This means the wind industry commits to **re-purpose, recycle or recover 100%** of decommissioned blades by 2025.

Four pillars of action to achieve full recyclability in the future:

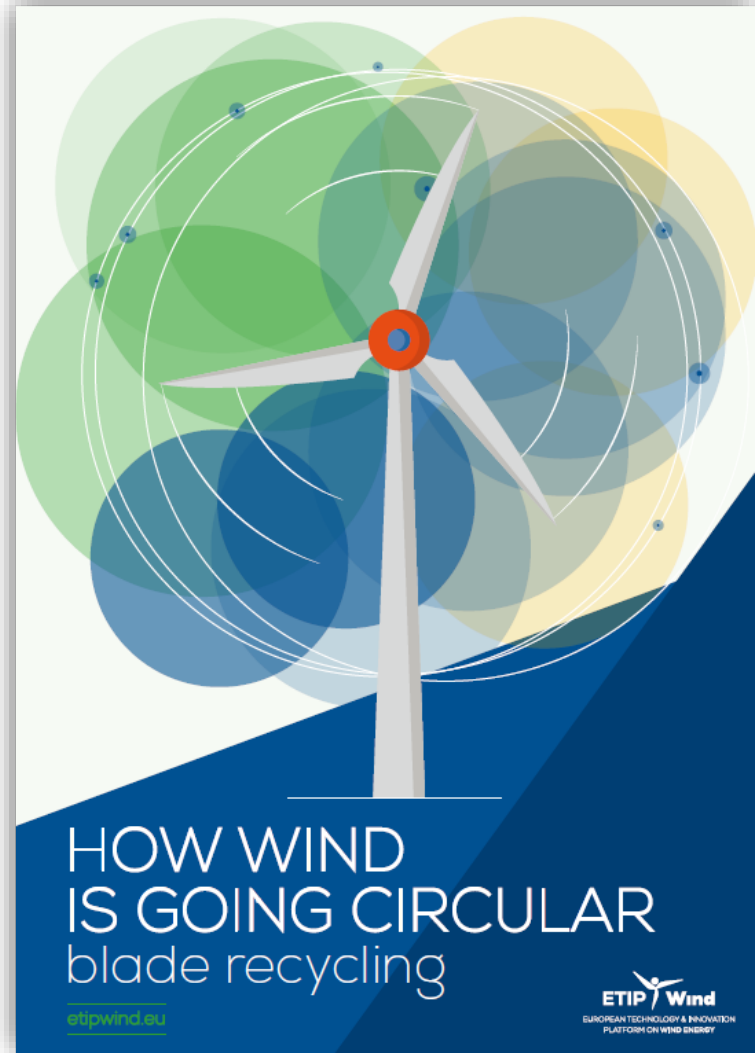
1. Increasing funding on R&D for evaluating and scaling-up diversified blade recycling technologies;
2. Incentivising the use of recycled composite materials in new products;
3. Increasing funding on R&D for the development and use of new (recyclable) blade materials; and
4. Establishing a European cross-sectorial platform and sharing good practice.

For more information



Accelerating Wind Turbine Blade Circularity

May 2020



HOW WIND IS GOING CIRCULAR blade recycling

etipwind.eu

ETIP Wind
EUROPEAN TECHNOLOGY & INNOVATION
PLATFORM ON WIND ENERGY

Thank you

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