

ETIPWind Advisory Group 14:00 – 15:30

30 March 2021

etipwind.eu



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

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Alexander Vandenberghe

Research & Innovation manager

Competition compliance reminder

WindEurope and its members are committed to full and fair competition, and neither WindEurope nor its activities, working groups or task forces shall be used in any way inconsistent with relevant competition laws. In order to promote the compliance with these laws, WindEurope has adopted this Competition Compliance Policy in which the basic rules for competition compliance are set out.

MEETING AGENDA

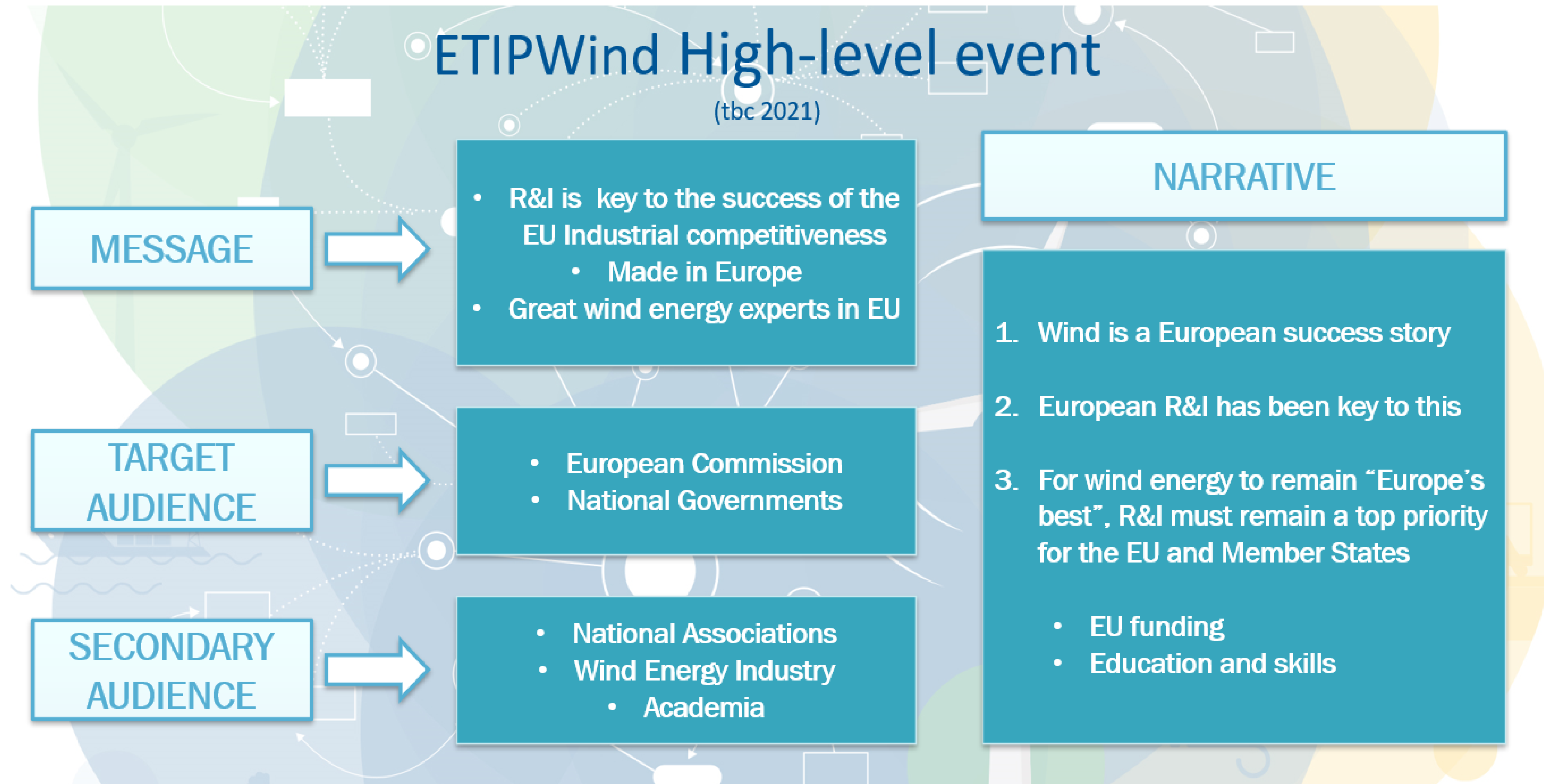
TIME	AGENDA ITEM
14:00 -14:05	Welcome, competition compliance and approval of agenda <i>By Mike Anderson, Chair of the Advisory Group</i>
14:05 -14:10	ETIPWind 2021 work programme – high-level events <i>By ETIPWind secretariat</i>
14:10 – 14:20	ETIPWind 2021 report – main messages <i>By Adrian Timbus, ETIPWind Executive Committee chair</i>
14:20 – 14:40	Public R&D funding – what’s in it for the wind industry? <i>By ETIPWind secretariat</i> <ul style="list-style-type: none"> • Trends in public R&D funding for wind • EU funding opportunities in 2021-2022
14:40 -14:55	Europe’s Industrial Strategy – how to boost competitiveness in renewables <i>By Josh Gartland, Senior Advisor Trade & Competitiveness, WindEurope</i> <ul style="list-style-type: none"> • Wind energy in the European Industrial forum • Our recommendations for the new strategy
14:55 -15:20	Blade recycling and long-term circularity roadmap: next steps <i>By Daniel Fraile, Director for Market Intelligence, WindEurope</i>
15:20 – 15:25	AOB
15:25 – 15:30	Closing statement & next steps <i>By Mike Anderson, Chair of the Advisory Group</i>

ETIPWind Work Programme

2021 work programme (indicative)

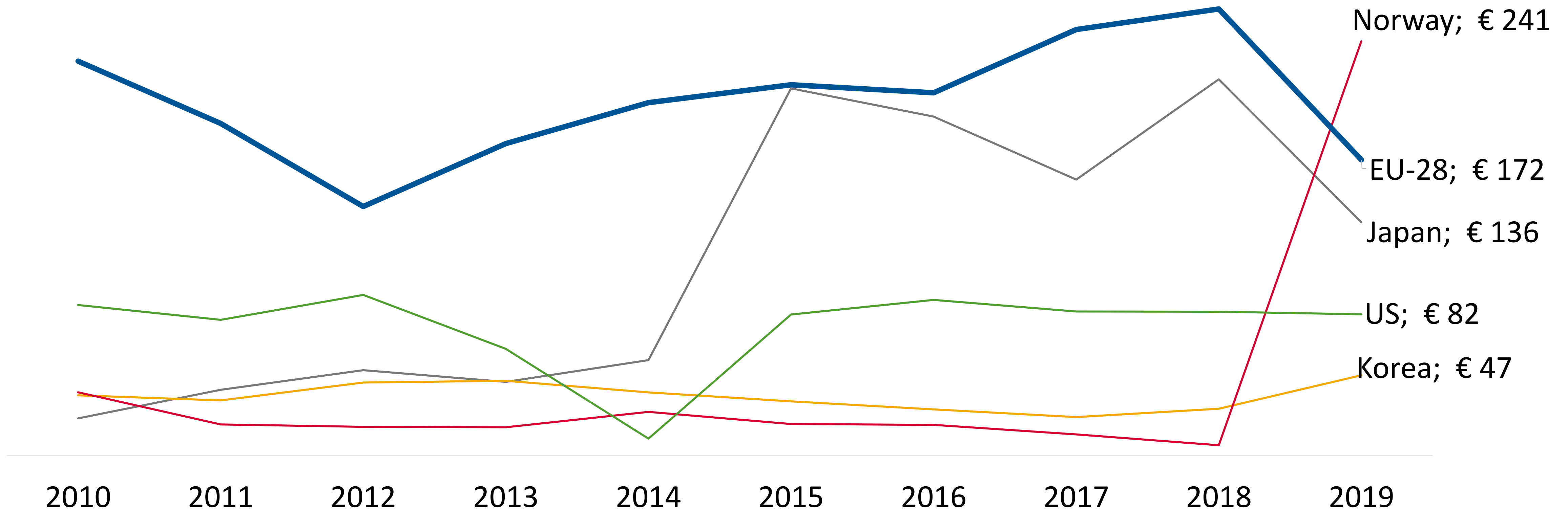


Promoting wind R&I to boost competitiveness



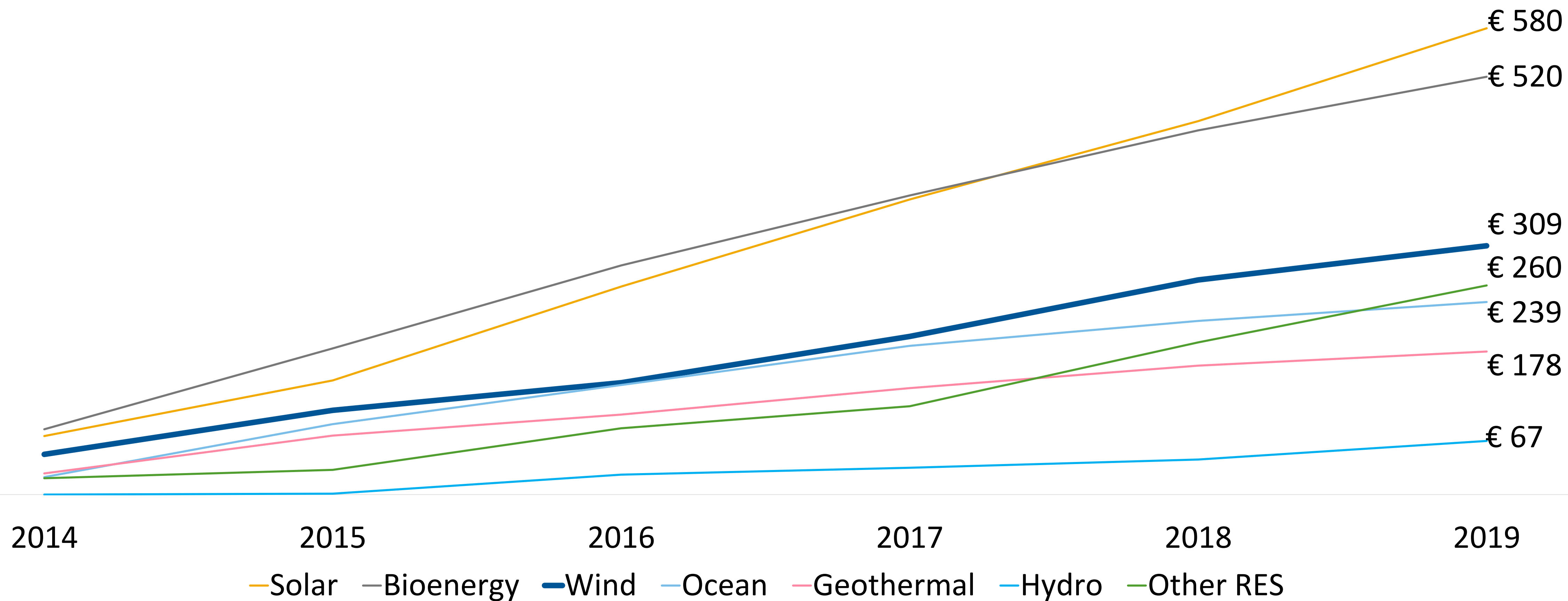
Public R&D funding

Global public funding for wind energy research & innovation (in € million, 2019 constant prices)



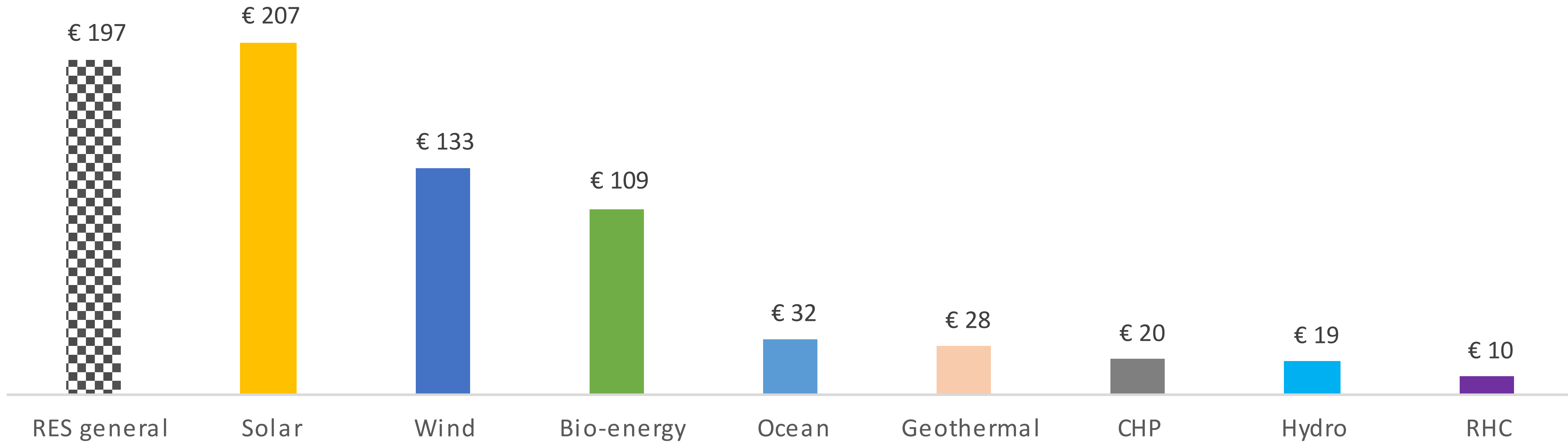
Source: IEA, ETIPWind

Cumulative EU funding for research in renewables (in € million, 2019 constant prices)

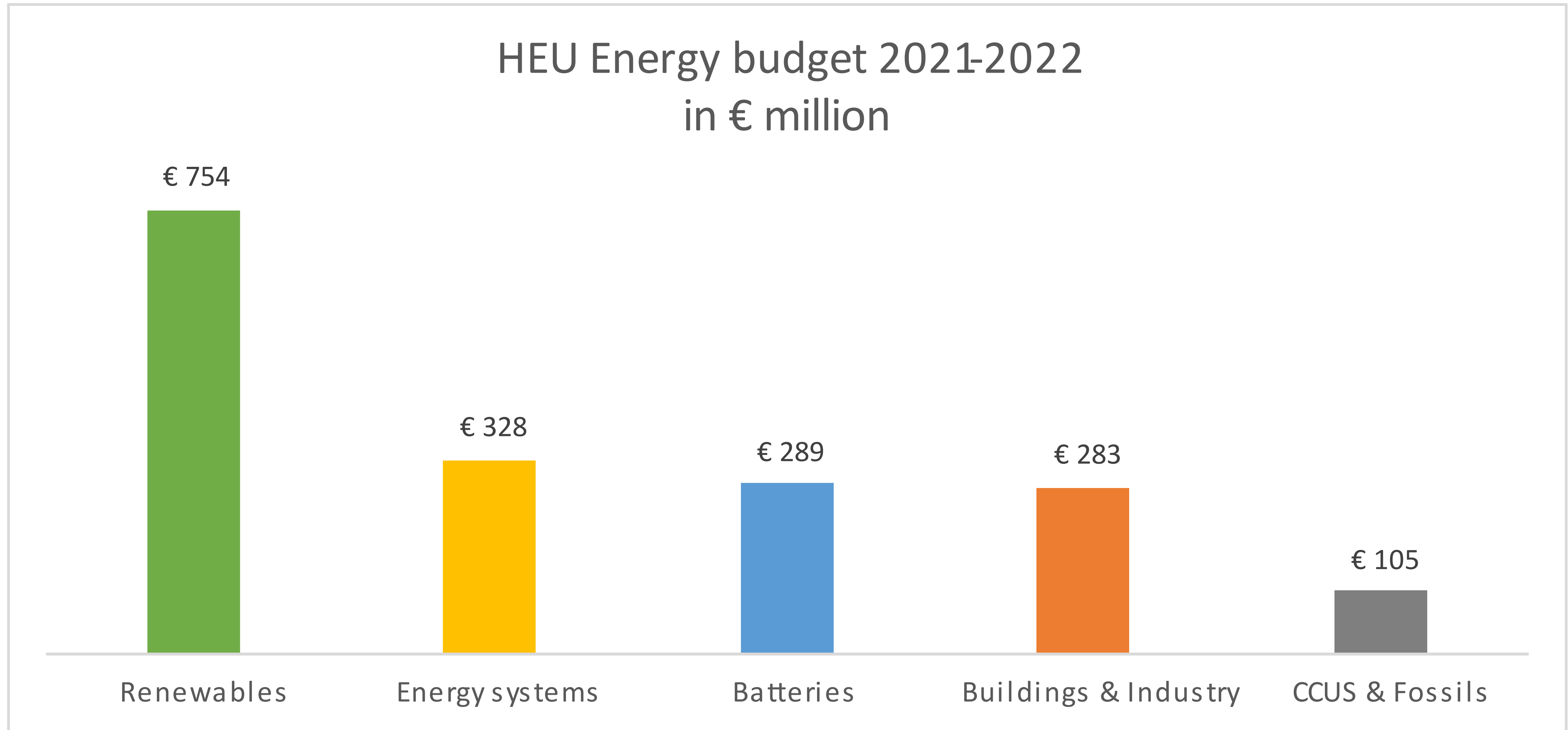


Horizon Europe – Work programme 2021-2022 (draft)

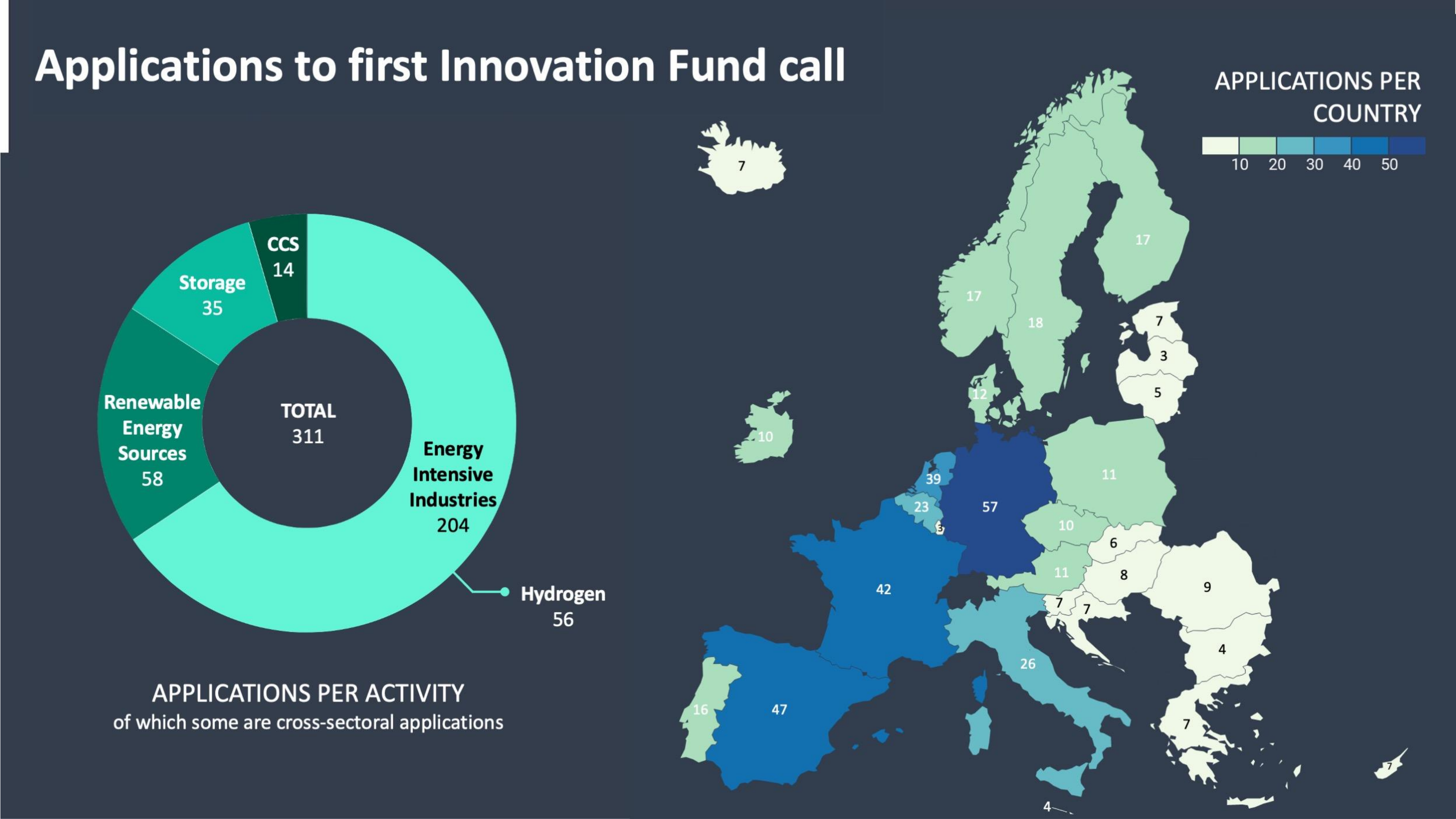
HEU budget for renewables(2021-2022)
in € million



Horizon Europe – Work programme 2021-2022 (draft)



ETS Innovation Fund – start of stage 2





EUROPEAN TECHNOLOGY & INNOVATION
PLATFORM ON WIND ENERGY

Join the conversation
#ETIPWind



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WindEurope advising Commission on EU Industrial Policy



2:01 PM · Feb 1, 2021 · Twitter Web App



Valdis Dombrovskis

EVP Economy that works for the people



Margrethe Vestager

EVP Europe Fit for the Digital Age



Thierry Breton

Commissioner for the Internal Market

Policy recommendations

1. Deliver **market scale**
2. Fund infrastructure as part of the **Recovery Plan**
3. Align the EU's **trade** policies with climate objectives
4. Increase EU **Research & Innovation** funding
5. Address the **skills** mismatch

Next steps

- Adoption of revised Industrial Strategy: 27 April 2021
- Industrial Forum meetings
 - Sherpas: 29 April
 - Full members: May?

Wind Turbine Blades Circularity

Daniel Fraile

WindEurope Board approval on landfill ban

- Landfill ban for decommissioned blades by 2025
- Beside the discussion on blades:
 - WG sustainability to produce very concrete timeline and commitment for recycling the rest of the turbine components such as the tower
 - Give an indication on the cost of recycling

3 Workstreams



Communication of position on blade recycling and landfill ban

- Time: June
- Key messages
 - The wind industry is committed to the transition to a circular economy
 - This transition requires the right policies and strategic cross-sector partnerships
 - We are stepping up to lead this effort
- Tools
 - Position paper – published on WindEurope website
 - Press release (quotes from key actors)
 - Q&A for press and stakeholders
 - Videos profiling technology solutions

Coordination with key stakeholders

- Chemicals Industry (CEFIC, DOW, BASF)
- Composites producers (EUCIA)
- Composite users (e.g. boating industry, Automotive)
- Users of recycled composite (e.g. Cement producers)
- Waste management companies (e.g. Marius Pedersen, Suez)
- Wind industry
 - National Associations
 - R&I community – ETIPWind
 - WindEurope Working Group communications

Delivering circularity through innovative materials and recycling technology

4 May 2021, Online event



- **Target audience:** Wind industry ,research community waste management companies
- **Scope**
 - Material risks and research opportunities
 - Efficiency, material substitution, sourcing countries
 - Blade recycling and circularity
 - Recycling practices and challenges (copper, cement, Chemicas)
 - Incentivising re-use of composites
 - Insights from ongoing projects and future EU funding Opportunities
 - Decomblades, zebra,
 - Upcoming Horizon Europe Call

Recycling beyond Blades

Port La Nouvelle wind farm (France)

- 5 Vestas turbines (4 V39/500 and 1 V25/200)
- Materials (excluding blades) :
 - Steel reused in steelwork
 - Cables and motors : separation of elements, aluminum and copper recovery and recycling into new products
 - Electronic waste treated separately in specialized units
 - Recovery and reclaim of used oils for production of heat and electricity
 - sorting plastics for recycling or energy recovery
 - Disposal or energy recovery of hazardous waste
- Results in mass (excluding blades) :
 - 98.4% of materials have been recycled
 - 0.9% buried or incinerated waste in specific units
 - 0.7% waste to energy plants



Recycling beyond Blades

Klim repowering (Denmark)

- Vattenfall repowered 35 Vestas V44 turbines,
- Turbines were sold to the US, Italy, Lithuania and England,
- The concrete foundations (13,000 tons) were crushed and reused in the roads for new turbines,
- Steel from the steel bases was melted down to be recycled.
- Iron was sold to scrap dealer for recycling.



Recycling beyond Blades

Surus Inversa (Spain)

- 3 different wind farms: Malpica, Zas and Come wind farms
- Between 75 and 100% of saleable assets were delivered to be reemployed in secondary markets, the rest was scrapped.
- Foundations were removed
- **IN MALPICA WF ,0% GENERATED WASTE:**
- 69 Turbines and 15 transformers sold to international markets
- 2070 tons of iron and steel recovered
- 5000 kg of plastic recovered
- 475 tons of hazardous oil recovered
- 62100 kg of fiberglass waste



EU funding opportunity

Topic 1 : Total of 3-4 projects for ~40M€ . TRL 6-7 (Call: Oct to Jan '22)

- **Subtopic 1:** industrial scale demonstration of blade recycling and knowledge hub for cross-sector collaboration
 - A flexible production line, able to deal with a large amount of material (including, for example, coatings, paints, etc.) and applicable to several manufacturers and possibly to other sectors.
 - knowledge hub within the sector and with other sectors
- **Subtopic 2:** pilot projects to identify substitute critical raw materials
 - in line with the EU Action Plan on Critical Raw Materials
 - Indicate the effect that such proposed solutions have on promoting circularity and/or recyclability on wind energy

Topic 2 : Coordinated a support action on education and sustainability

- Enhance and promote sustainability by addressing social and environmental aspects of renewable energy and fuel technologies
- Set up and initiate a structured programme to promote an innovative multi-disciplinary approach on teaching
- Develop and run an industry-academia programme focused on hands-on training

Thanks

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