



# Executive Committee meeting

April 2020

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



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

Alexander Vandenberghe

*Advisor Research & Innovation*

# 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.*

TIMING	AGENDA ITEM	SCOPE
14:00 – 14:10	<b>Introduction, competition compliance and agenda</b> By Aidan Cronin, Executive Committee Chair	For information
14:10 – 14:25	<b>How the COVID-19 outbreak is impacting the wind industry</b> By Pierre Tardieu, Chief Policy Officer, WindEurope	For discussion
14:25 – 14:35	<b>Outreach on H2020 Green Deal call</b> By ETIPWind secretariat	For information
14:35 – 15:15	<b>Factsheet 2020 – presentation of draft concept</b> By ETIPWind secretariat	For discussion
15:15 – 15:30	<b>Publication 2021 – approval of concept note</b> By ETIPWind secretariat	For decision (major)*
15:30 – 15:40	<b>Workshop, 14-15 September 2020</b> By ETIPWind secretariat	For decision (minor)**
15:40 – 15:50	<b>Offshore wind targets – SET Plan Implementation plan</b> By Aidan Cronin, Executive Committee Chair	For discussion
15:50 – 15:55	<b>AOB</b>	For information
15:55 - 16:00	<b>Closing remarks and next steps</b> By Aidan Cronin, Executive Committee Chair	For information



# How the COVID-19 outbreak is impacting the wind industry - short- and long-term

## Short-term

### 1. Supply of wind kit is temporarily delayed:

- 19 wind production plants (blades, nacelles, gear boxes) temporarily closed in Spain (now restarted) and Italy
- Production in China is running again

### 2. Operations and construction disrupted :

- Restrictions to movements of workers, equipment
- Adjustments to auction schedules
- O&M is partly suffering from lack of logistics (spare parts, lifting gear)

### 3. Access to finance is throttled:

- Banks concerned about liquidity
- Corporate finance more challenging – especially debt

## Medium- to long-term

1. Retracted global renewable market in Q2 2020 (Source: IHS Market)
2. European wind installations to be down 30% (4GW) as compared to their forecast (Source: BNEF)
3. Low wholesale power prices put merchant projects at risk, undermine Wind-to-X agenda
4. Recovery in 2021 will not fully compensate lost ground in 2020
5. The pace of recovery will depend on de-confinement schedule and the effectiveness of National and EU recovery plans

# How the COVID-19 outbreak is impacting the wind industry - Wind Information Hub

The screenshot shows the WindEurope website's 'COVID-19 Wind Information Hub'. The browser address bar displays 'https://windeurope.org/newsroom/covid19/'. The navigation menu includes 'About wind', 'Policy', 'Newsroom', 'Wind EUROPE' logo, 'Events', 'Data & Analysis', and 'Membership'. A search icon is also present. The main heading is 'COVID-19 Wind Information Hub' with a breadcrumb trail: 'Home / Newsroom / COVID-19 Wind Information Hub'. Below this, there are four tabs: 'Impact on Wind Supply Chain' (selected), 'Impact on energy policy and regulation', 'EU and national measures taken on free movement and economic relief', and 'WindEurope statements and webinars'. The 'Impact on Wind Supply Chain' section contains two paragraphs of text.

Impact on Wind Supply Chain

Impact on energy policy and regulation

EU and national measures taken on free movement and economic relief

WindEurope statements and webinars

## Impact on Wind Supply Chain

The majority of Europe's wind turbine and component factories continue to operate. Currently 6 wind energy manufacturing sites are closed mainly in Italy due to strict lockdown regulations \*. In Spain the previously closed factories are now reopening after the country eased some of the restrictions in force. Sanitary measures are strengthened within the sites to guarantee full compliance with government recommendations.

Wind energy installations for 2020 will be down as compared to industry forecasts, the impact of COVID-19 on construction activity and installations will depend on the length of national lockdowns notably in the most heavily impacted countries – Spain, Italy. The supply of components and materials from China is now ramping back up after the interruption in February. But continuous disruptions in the global and European supply chains due to restriction to movement of goods and people are slowing activity and likely to drive up capital expenditures (CAPEX).



# How the COVID-19 outbreak is impacting the wind industry - hear it from the CEOs SofaTalk



Industry leaders, **Philippe Kavafyan**, CEO of [MHI Vestas](#) and **Alfonso Faubel**, CEO Onshore of [Siemens Gamesa Renewable Energy](#), discuss the short and long term impacts of the COVID-19 on the wind industry and what needs to be done to minimise this negative impact. This talk was moderated by WindEurope's Deputy CEO **Malgosia Bartosik** and answered many questions asked by the participants.



# How the COVID-19 outbreak is impacting the wind industry - video conference with the EVP and Commissioner



Source: Twitter



Source: Twitter



# How the COVID-19 outbreak is impacting the wind industry - proposals for EU stimulus package

## GREENRECOVERY

REBOOT & REBOOST our economies for a sustainable future

### *Call for mobilisation*

The coronavirus crisis is shaking the whole world, with devastating consequences across Europe. We are being put to the test. We are suffering and mourning our losses, and this crisis is testing the limits of our system. It is also a test of our great European solidarity and of our institutions, which acted fast at the start of the crisis to deploy measures to protect us. The crisis is still ongoing, but we will see the light at the end of the tunnel, and by fighting together, we will beat the virus.

Never have we faced such a challenging situation in peacetime. The fight against the pandemic is our top priority and everything that is needed to stop it and eradicate the virus must be done. We welcome and strongly support all the actions developed by governments, EU institutions, local authorities, scientists, medical staff, volunteers, citizens and economic actors.

In this tremendously difficult situation, we are also facing another crisis: a shock to our economy tougher than the 2008 crisis. The major shock to the economy and workers created by the pandemic calls for a strong coordinated economic response. We therefore welcome the declaration of European leaders stating that they will do “whatever it takes” to tackle the social and economic consequences of this crisis. However, what worked for the 2008 financial crisis may not be sufficient to overcome this one. The economic recovery will only come with massive investments to protect and create jobs and to support all the companies, regions and sectors that have suffered from the economy coming to a sudden halt.

After the crisis, the time will come to rebuild. This moment of recovery will be an opportunity to rethink our society and develop a new model of prosperity. This new model will have to answer to our needs and priorities.

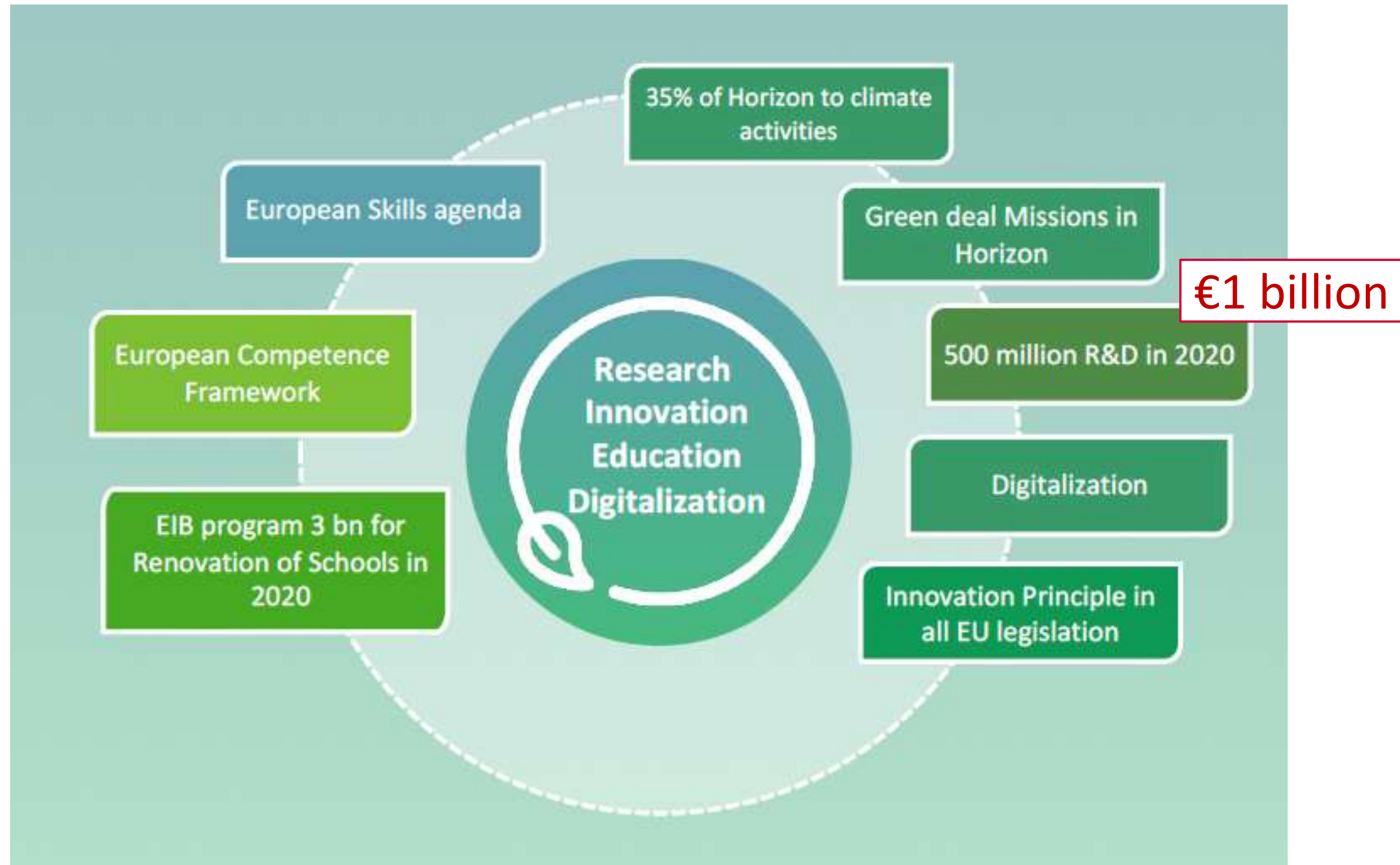
These massive investments must trigger a new European economic model: more resilient, more protective, more sovereign and more inclusive. All these requirements lie in an economy built around Green principles. Indeed, the transition to a climate-neutral economy, the protection of biodiversity and the transformation of agri-food systems have the potential to rapidly deliver jobs, growth and improve the way of life of all citizens.

- 1.Support to wind projects which would reach FiD in normal circumstances – EIB
- 2.Electrification measures: Linking onshore wind to charging infrastructure; electrifying district heating
- 3.Renewable hydrogen
- 4.Grids for hybrid offshore wind
- 5.Port infrastructure.

Source: CANEurope



# Outreach on H2020 Green Deal Call





# Outreach on H2020 Green Deal Call

## Thematic priorities

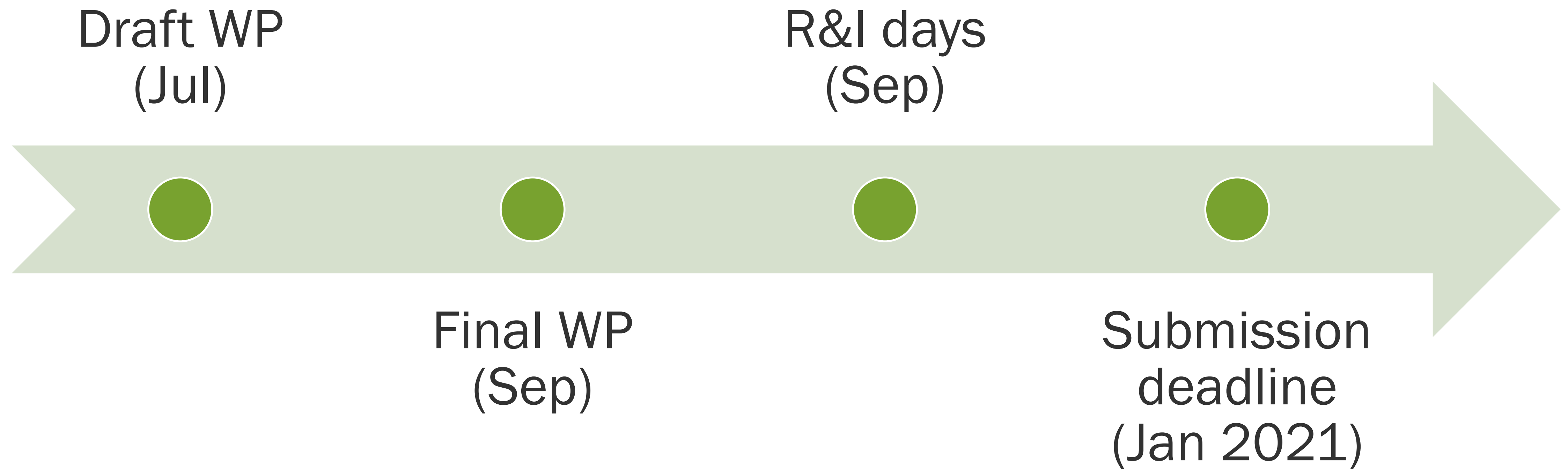
1. Increasing Climate Ambition: Cross sectoral challenges
2. **Clean, affordable and secure energy**
3. **Industry for a clean and circular economy**
4. Energy and resource efficient buildings
5. Sustainable and smart mobility
6. Farm to Fork
7. Ecosystems and Biodiversity
8. Zero-pollution, toxic free environment
9. Strengthening our knowledge in support of the European Green Deal
10. Empowering citizens for the transition towards a climate neutral, sustainable Europe
11. *International cooperation (tbc)*



Source: European Commission



# Outreach on H2020 Green Deal Call





# Outreach on H2020 Green Deal Call

## 1. Blade recycling

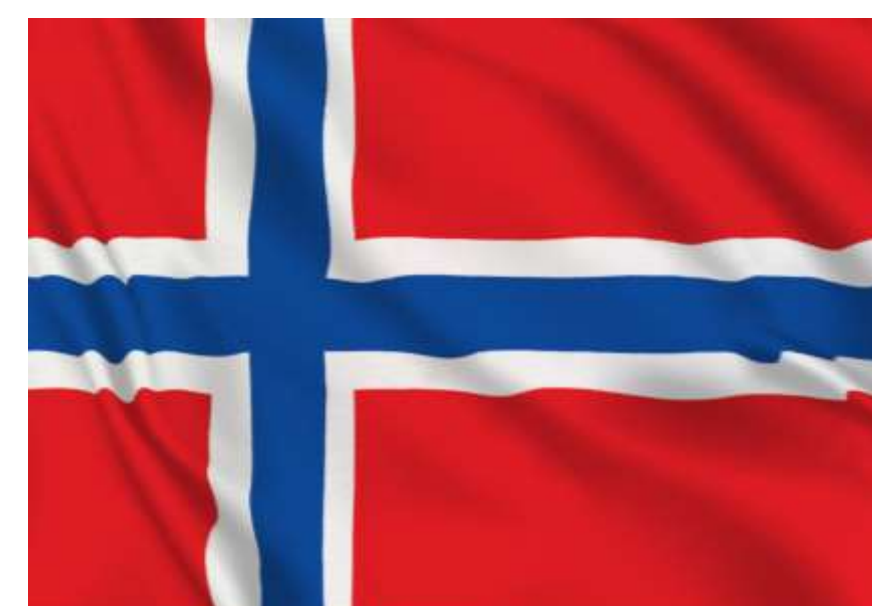
- Large-scale demonstration
  - Economic viability & business models
  - Low-carbon & low-cost processes
- Materials
  - Material waste topology
  - New sustainable materials
- €30 million EU contribution

## 2. Floating offshore wind

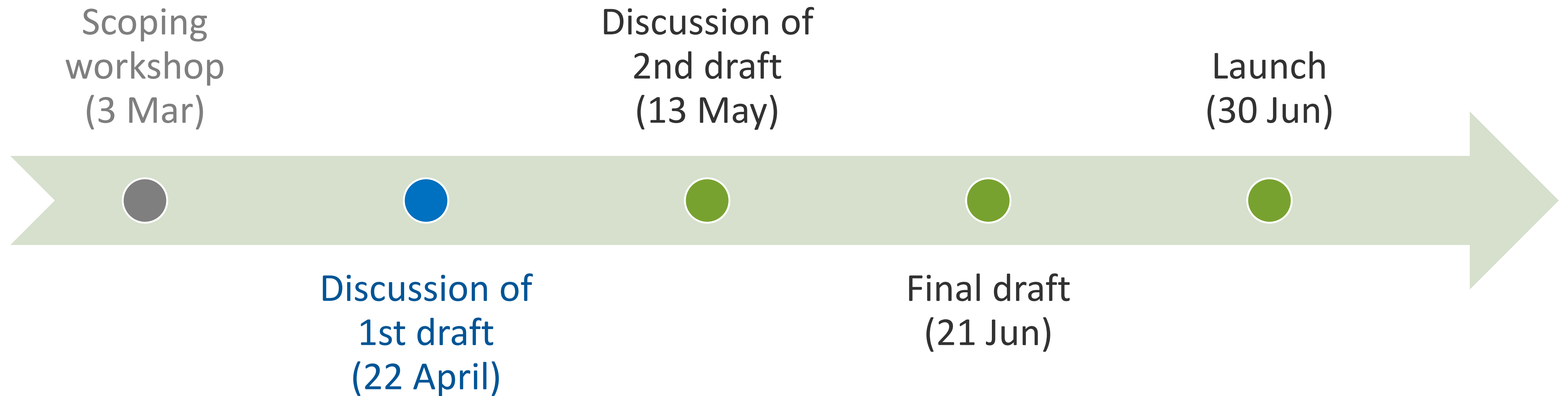
- Industrialisation
  - Serial production of floaters
  - Installation and assembly
- Dynamic electric cables
  - Design tools and models
  - Material properties
- €35 million EU contribution



# Outreach on H2020 Green Deal Call

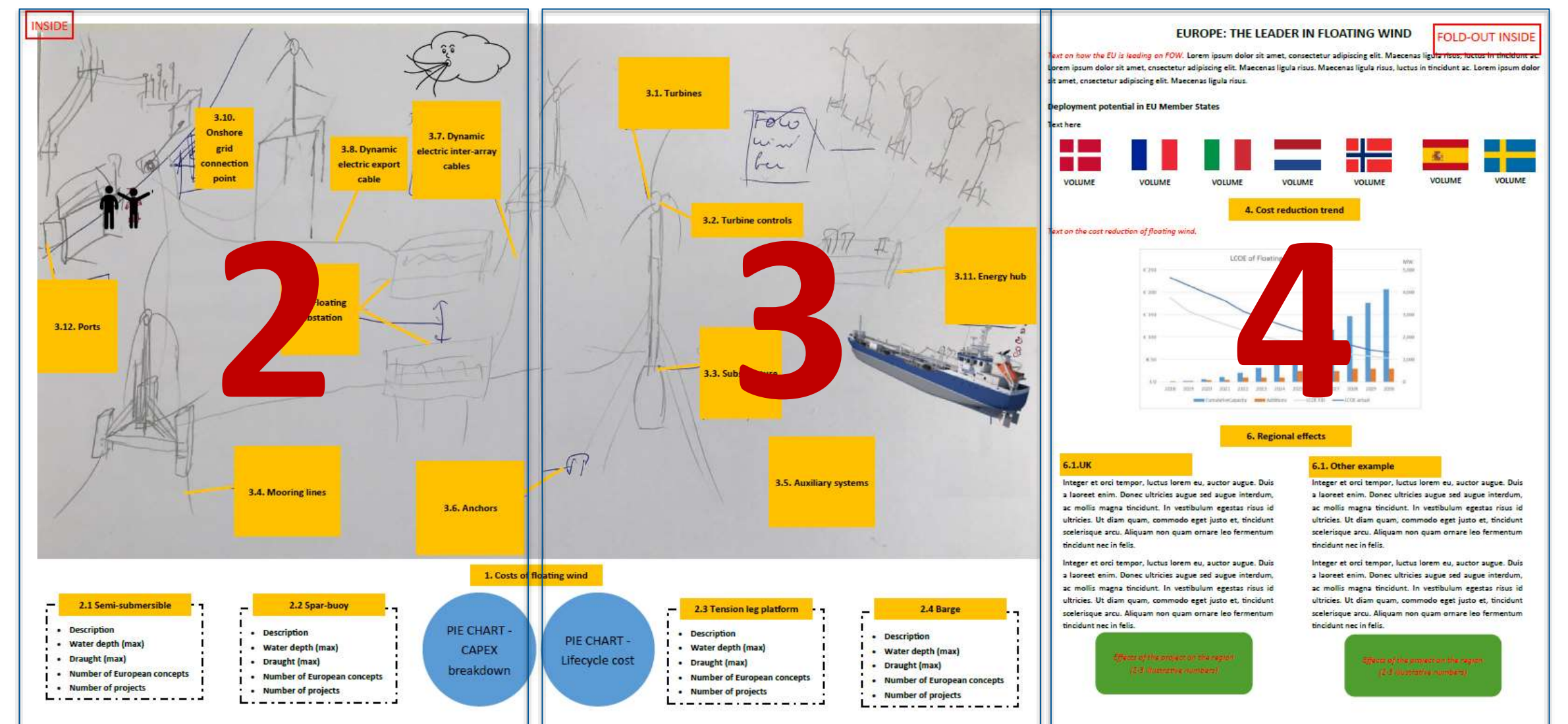
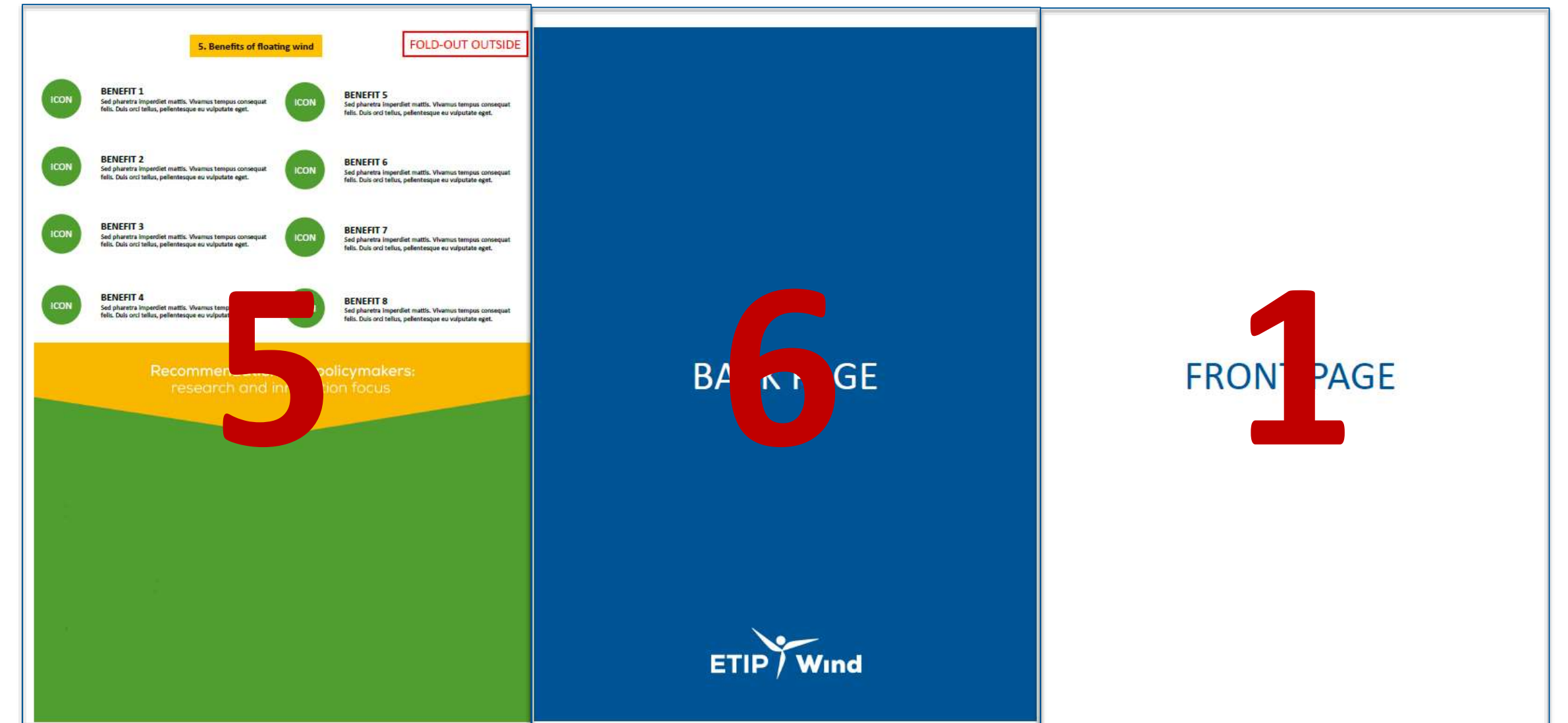
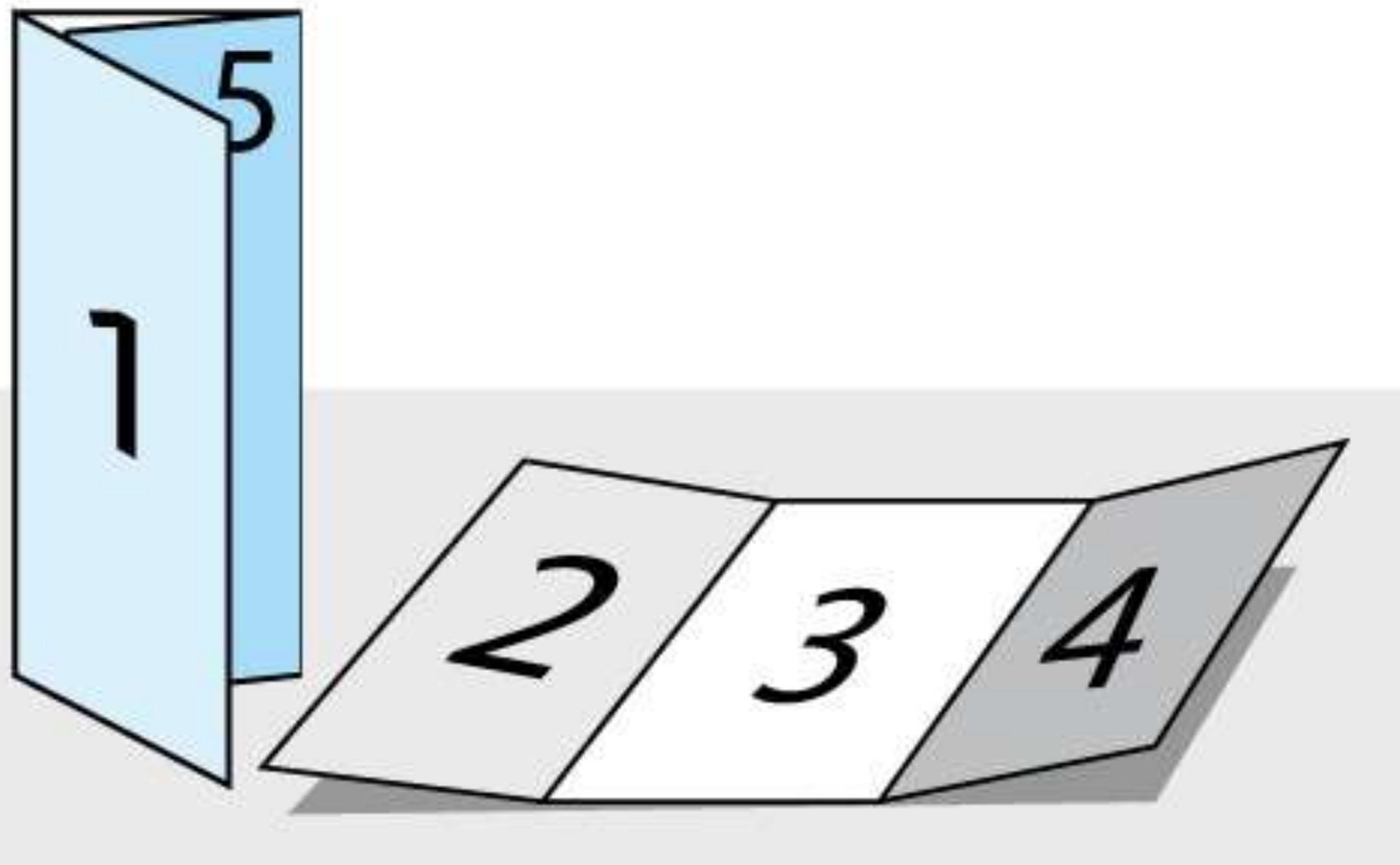


## Factsheet 2020 – timeline

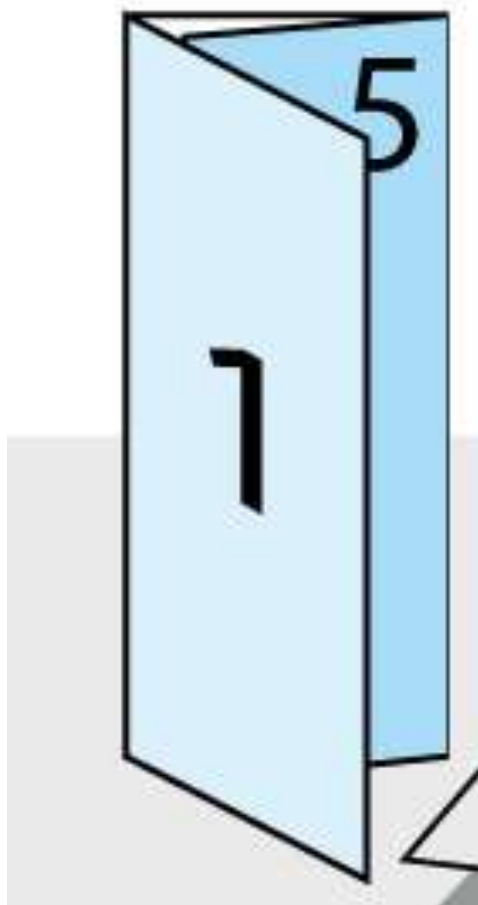




# Factsheet 2020 – concept



# Factsheet 2020 – concept



**5. Benefits of floating wind**

**FOLD-OUT OUTSIDE**

<b>BENEFIT 1</b> Sed pharetra imperdiet mattis. Vivamus tempus consequat felis. Duis orci tellus, pellentesque eu vulputate eget.	<b>BENEFIT 5</b> Sed pharetra imperdiet mattis. Vivamus tempus consequat felis. Duis orci tellus, pellentesque eu vulputate eget.
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**Recommendations for policymakers:  
research and innovation focus**

**6**

**BACK PAGE**

**ETIP Wind**

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**FRONT PAGE**



5

5. Benefits of floating wind

FOLD-OUT OUTSIDE



**BENEFIT 1**  
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Recommendations for policymakers:  
research and innovation focus

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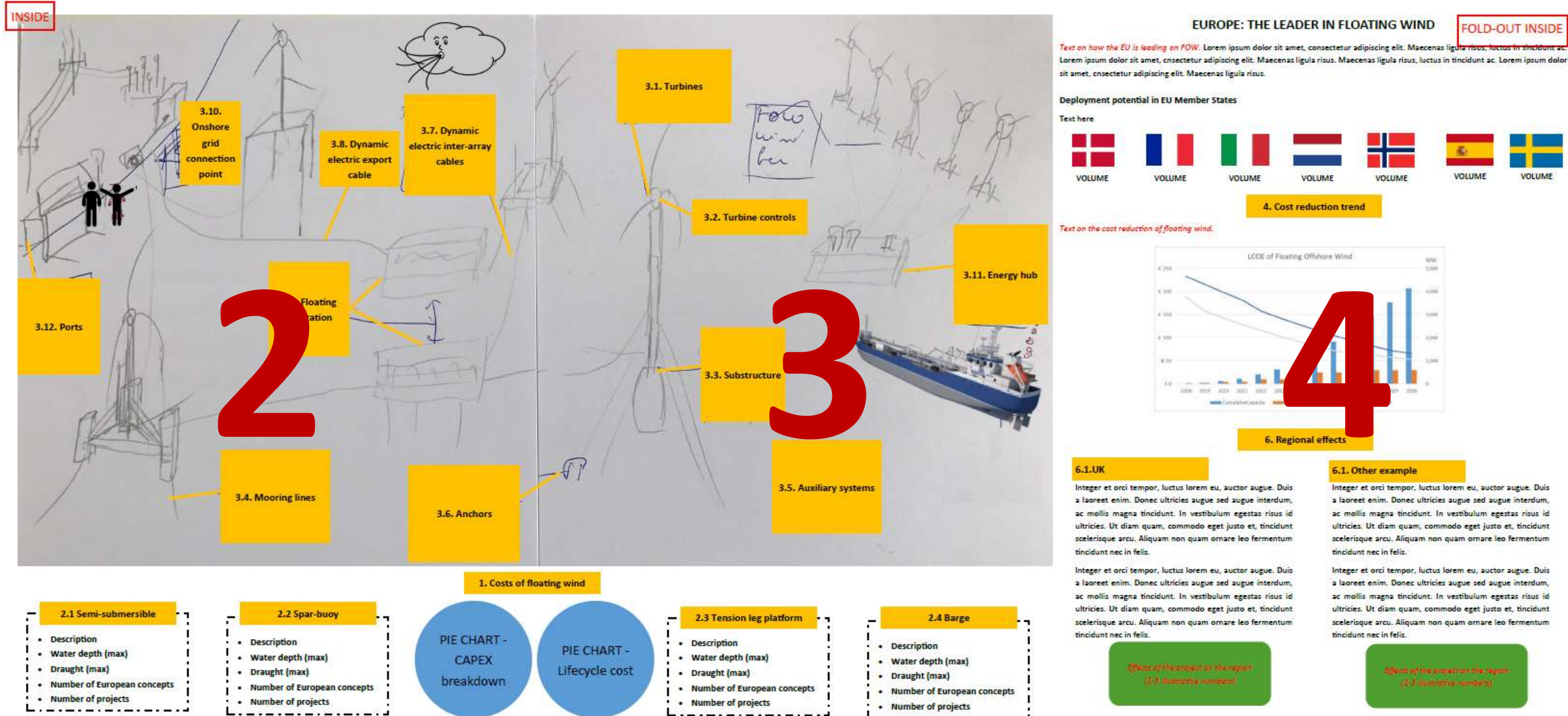
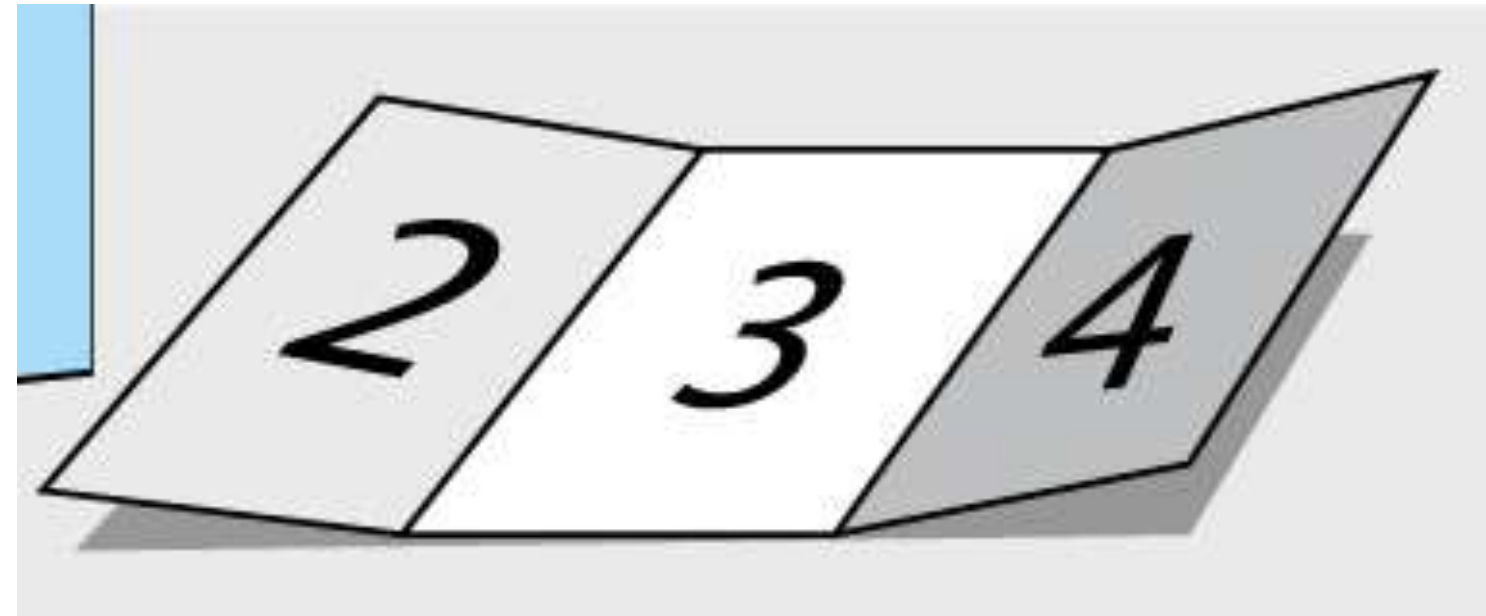


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FRONT PAGE



# Factsheet 2020 – concept

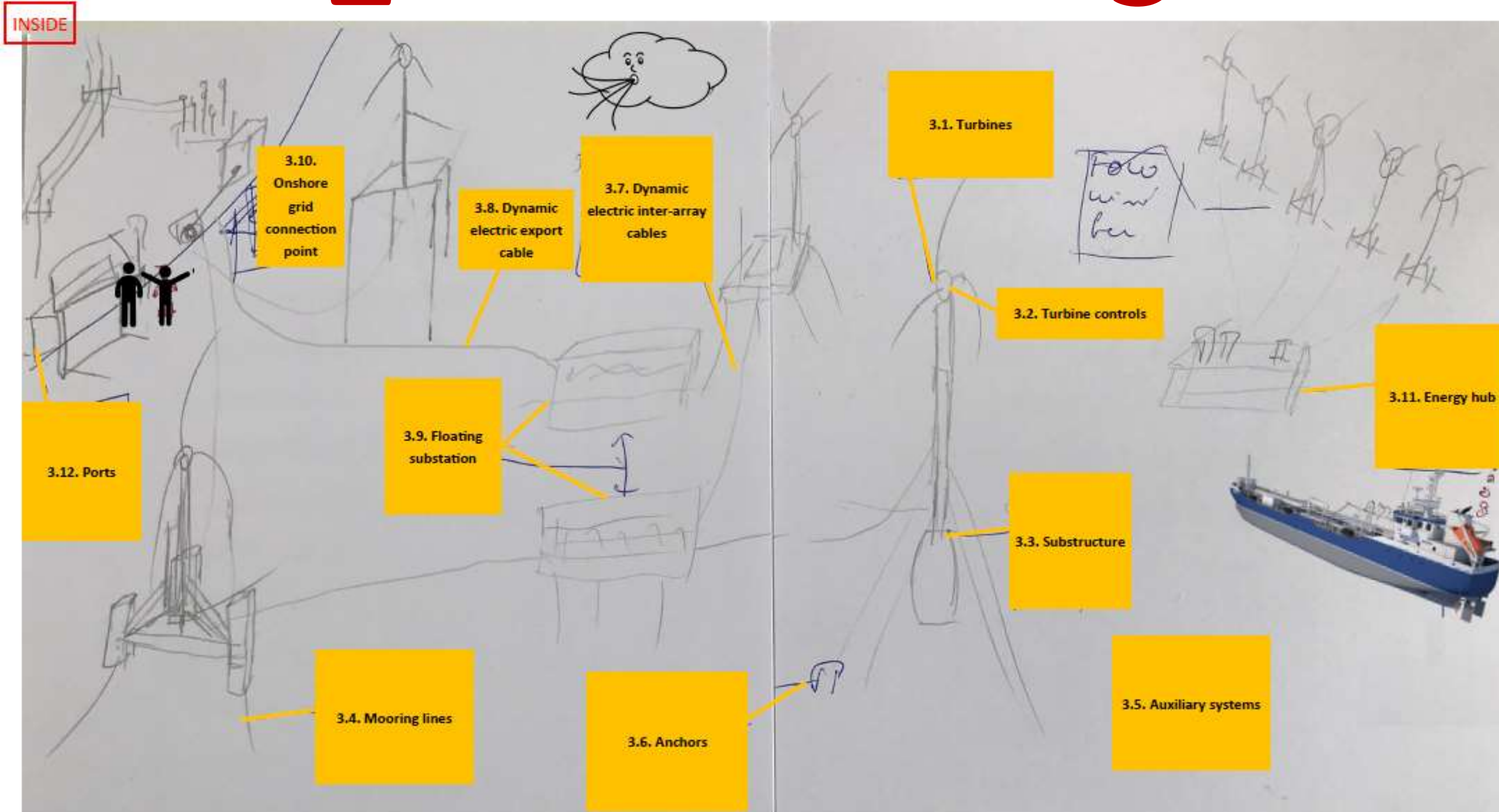




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## EUROPE: THE LEADER IN FLOATING WIND

**FOLD-OUT INSIDE**

Text on how the EU is leading on FOW. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas ligula risus, luctus in tincidunt ac. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas ligula risus. Maecenas ligula risus, luctus in tincidunt ac. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas ligula risus.

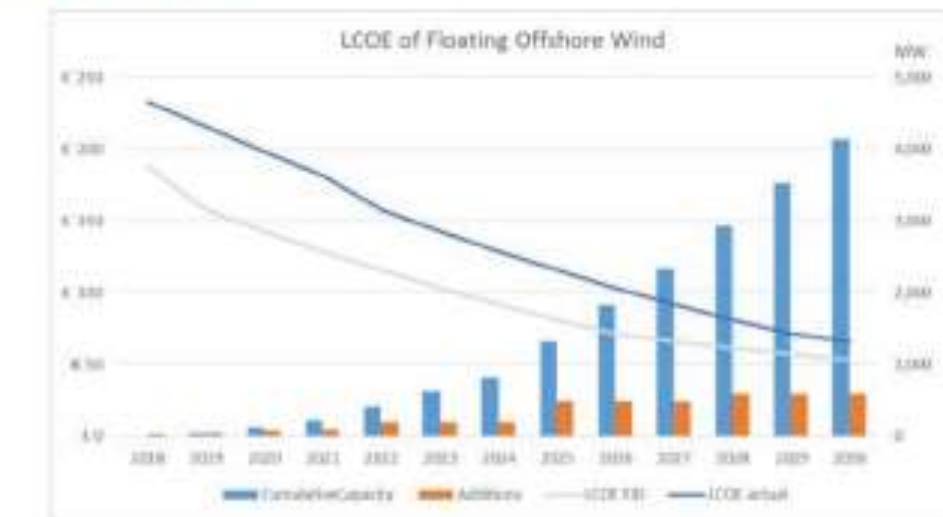
### Deployment potential in EU Member States

Text here



### 4. Cost reduction trend

Text on the cost reduction of floating wind.



### 6. Regional effects

#### 6.1.UK

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Effect of the project on the region  
(2.3 illustrative numbers)

#### 6.1. Other example

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Effect of the project on the region  
(2.3 illustrative numbers)

### 1. Costs of floating wind

#### 2.1 Semi-submersible

- Description
- Water depth (max)
- Draught (max)
- Number of European concepts
- Number of projects

#### 2.2 Spar-buoy

- Description
- Water depth (max)
- Draught (max)
- Number of European concepts
- Number of projects

PIE CHART -  
CAPEX  
breakdown

PIE CHART -  
Lifecycle cost

#### 2.3 Tension leg platform

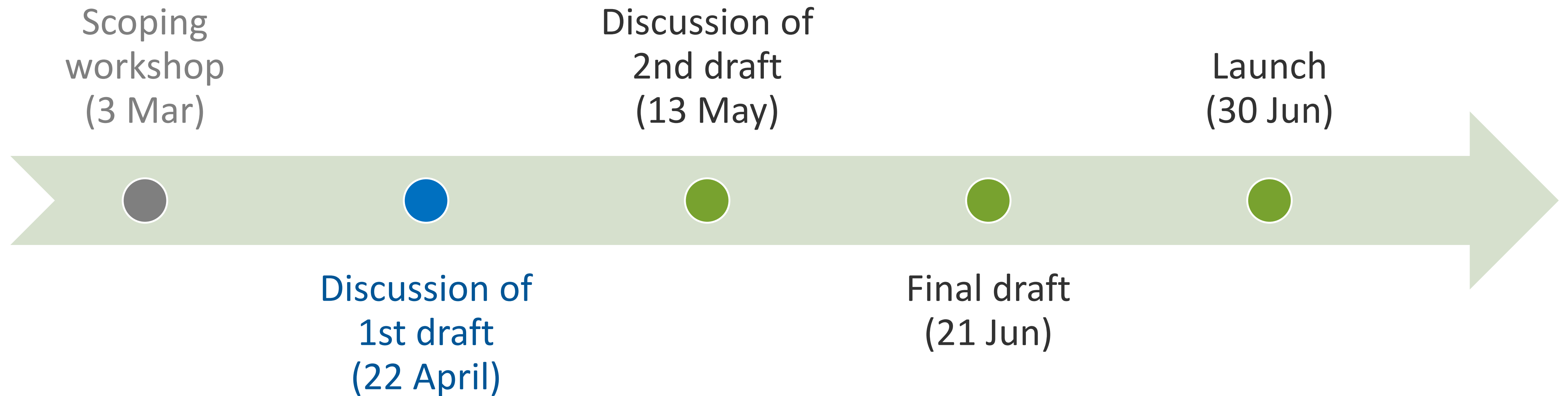
- Description
- Water depth (max)
- Draught (max)
- Number of European concepts
- Number of projects

#### 2.4 Barge

- Description
- Water depth (max)
- Draught (max)
- Number of European concepts
- Number of projects

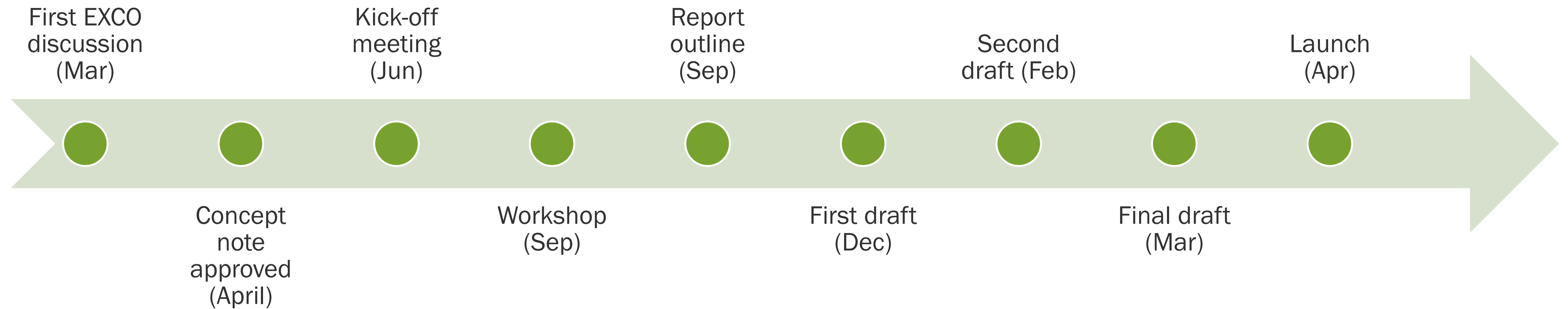


## Factsheet 2020 – next steps





# Publication 2021 – concept note



**Wind**  
EUROPE

**ELECTRIC  
CITY2021**  
27-29 APRIL  
COPENHAGEN

Europe's largest on- and offshore wind energy event  
27 - 29 April, Copenhagen

[About the event](#) [Conference](#) [Exhibition](#) [Practical Information](#) [Sponsorship](#) [Contact](#)



## Publication 2021 – concept note

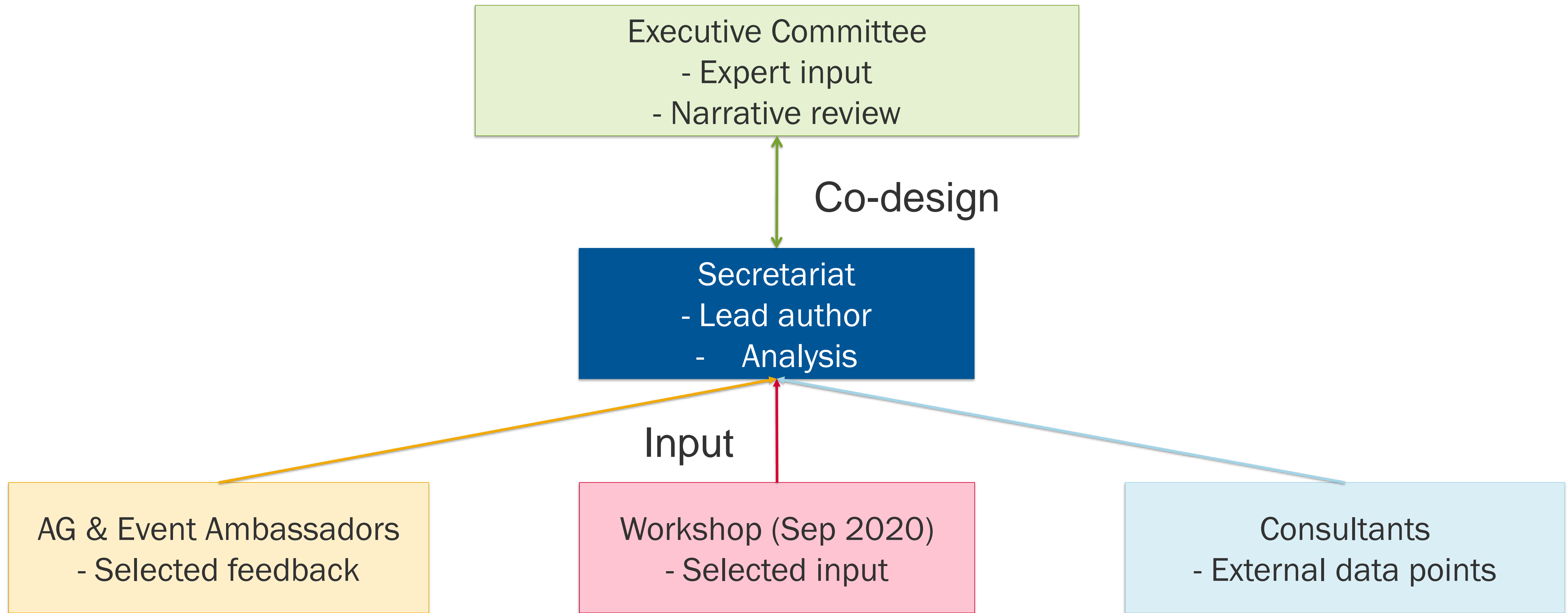
- Industry-driven analysis of **the role of wind energy in Europe's transition towards a climate neutral economy**. How much wind can be delivered by 2050?
- Clarify the **current state-of-the-art** in wind energy technology and provide **insights on future developments** in wind technology.
- Recommendations on policies and technologies needed to
  - Meet the ambitions of the **European Green Deal**.
  - Enhance the wind sector's **technology leadership**.
  - **Retain industry competitiveness** in the global and domestic markets.



# Publication 2021 – concept note

- **Outlook to 2050**
  - How much can wind deliver (GW installed); and
  - Economic benefits of wind energy today and tomorrow.
- **State of industry today**
  - Technology overview;
  - Competitiveness; and
  - Leadership opportunities.
- **Macro-level enablers/barriers:**
  - Electrification;
  - Grids and energy networks; and
  - Digitalisation.
- **Sector trends**
  - Growing size of turbines;
  - Sustainability & circularity;
  - (Floating) offshore wind; and
  - Skills.

# Publication 2021 – concept note





# Workshop 14-15 September

## Format

- Spread out over two days (Day 0 and Day 1) of the EERA JP Wind/SETWIND annual event.
- A series of thematic break-out sessions preceded by keynote speeches from industry experts.

## Scope

- Feed expert input into the ETIPWind report on
  - Digitalisation (day 0);
  - Turbine design (day 0);
  - Floating offshore wind (day 1); and
  - Grid and system integration (day 1).
- Break-out sessions will **respond in a pre-given format** addressing.
  - State of play 2020;
  - Vision 2050 (requirements for climate neutral 2050 with 1,200 GW of wind); and
  - Drivers & barriers.

# Workshop 14-15 September

Time	Item			
13:30 – 13:45	<b>Introduction</b> <ul style="list-style-type: none"> <li>ETIPWind Chair – scope of the workshop</li> </ul>			
13:45 – 14:15 PLENARY	<b>Delivering climate neutrality by 2050</b> <ul style="list-style-type: none"> <li>ETIPWind secretariat – outline of ETIP report (15')</li> <li>Keynote speaker – non-wind sector (15')</li> </ul> <p><u>Issues:</u> How could the EU reach climate neutrality by 2050? How will the energy transition affect energy consumption in different sectors? What is the role of wind energy and how much is wind development linked to developments in other sectors?</p>			
14:15 – 14:30 PLENARY	<b>How wind is going digital?</b> <ul style="list-style-type: none"> <li>Industry expert (15')</li> </ul> <p><u>Issues:</u> How could new tools increase the connectivity between wind farms and other actors. How secure and reliable will a digital transmission and distribution network be? How will machine learning lower costs of O&amp;M? How will wind turbines be manufactured in the future and what skills are needed?</p>			
14:30 – 15:45 BREAK-OUTS	<b>System security</b> <ul style="list-style-type: none"> <li>Inverter grid</li> <li>Power electronics</li> <li>cybersecurity</li> </ul>	<b>System integration</b> <ul style="list-style-type: none"> <li>Grid services</li> <li>Sector coupling</li> </ul>	<b>Increasing value</b> <ul style="list-style-type: none"> <li>Trading</li> <li>Forecasting</li> <li>Business models</li> </ul>	<b>Lowering costs</b> <ul style="list-style-type: none"> <li>Operations</li> <li>Manufacturing</li> <li>Maintenance</li> </ul>
15:45 – 16:00 PLENARY	<b>Conclusions</b> <ul style="list-style-type: none"> <li>Moderator (industry expert or ETIPWind secretariat)</li> <li>Break-out leader 1</li> <li>Break-out leader 2</li> <li>Break-out leader 3</li> <li>Break-out leader 4</li> </ul>			
16:00 – 16:30	<b>Break</b>			



# SET Plan Implementation plan

- Targets are outdated and in need of revision.
- LCOE not the ideal measurement to track progress.
- Cost reductions are achieved by deployment & technology improvement.
- Scaling up (delivery) is the main challenge.

# SET Plan Implementation plan

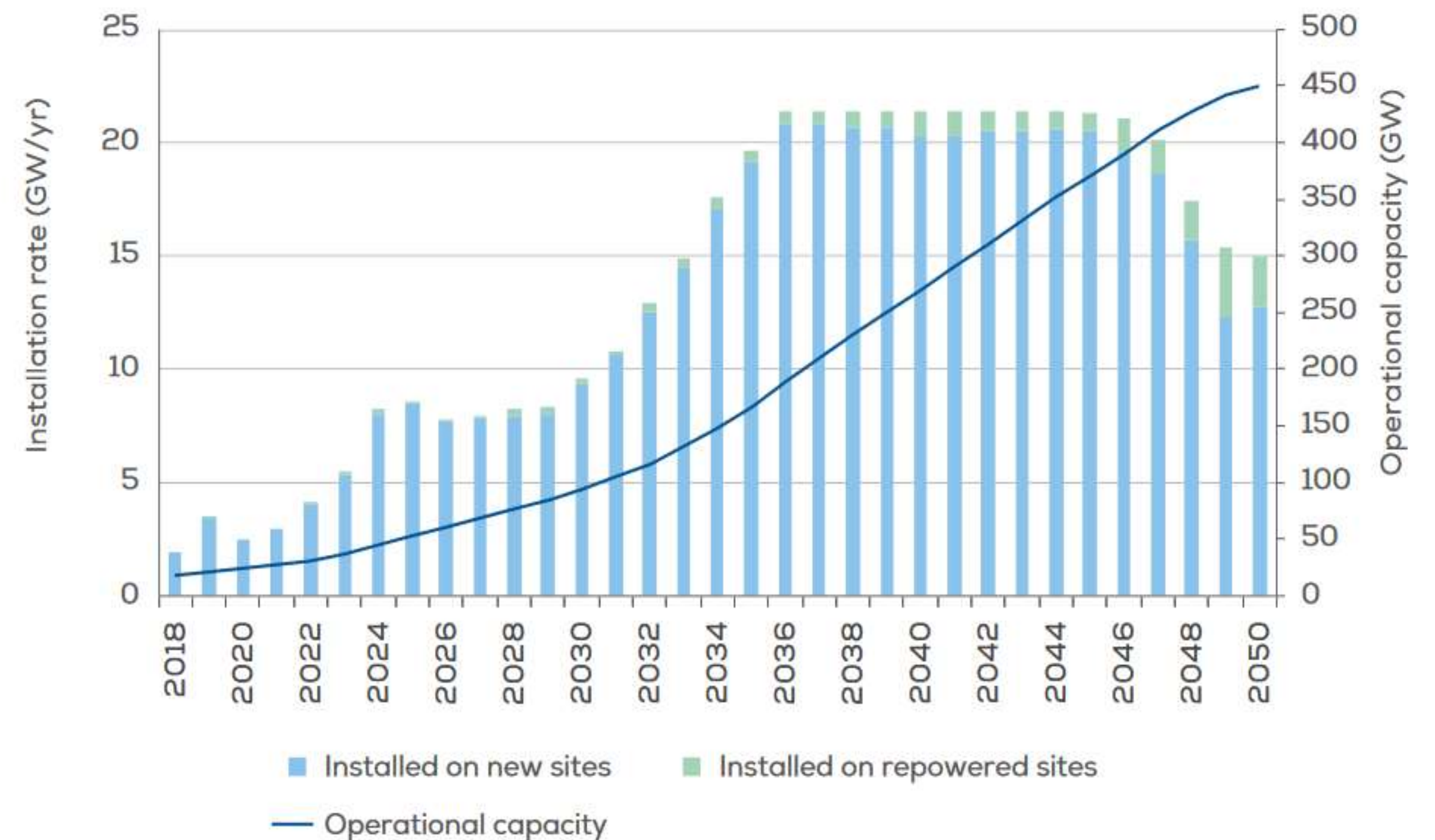
## Proposed target 1

Annual installed capacity (volumes)

- Avg. of 3.8 GW p/a in 2020-2023
- Avg. of 8.1 GW p/a in 2024-2027
- Avg. of 8.7 GW p/a in 2028-2030

FIGURE 8

Installation rate required to achieve 450 GW by 2050



Source: BVG Associates for WindEurope



# SET Plan Implementation plan

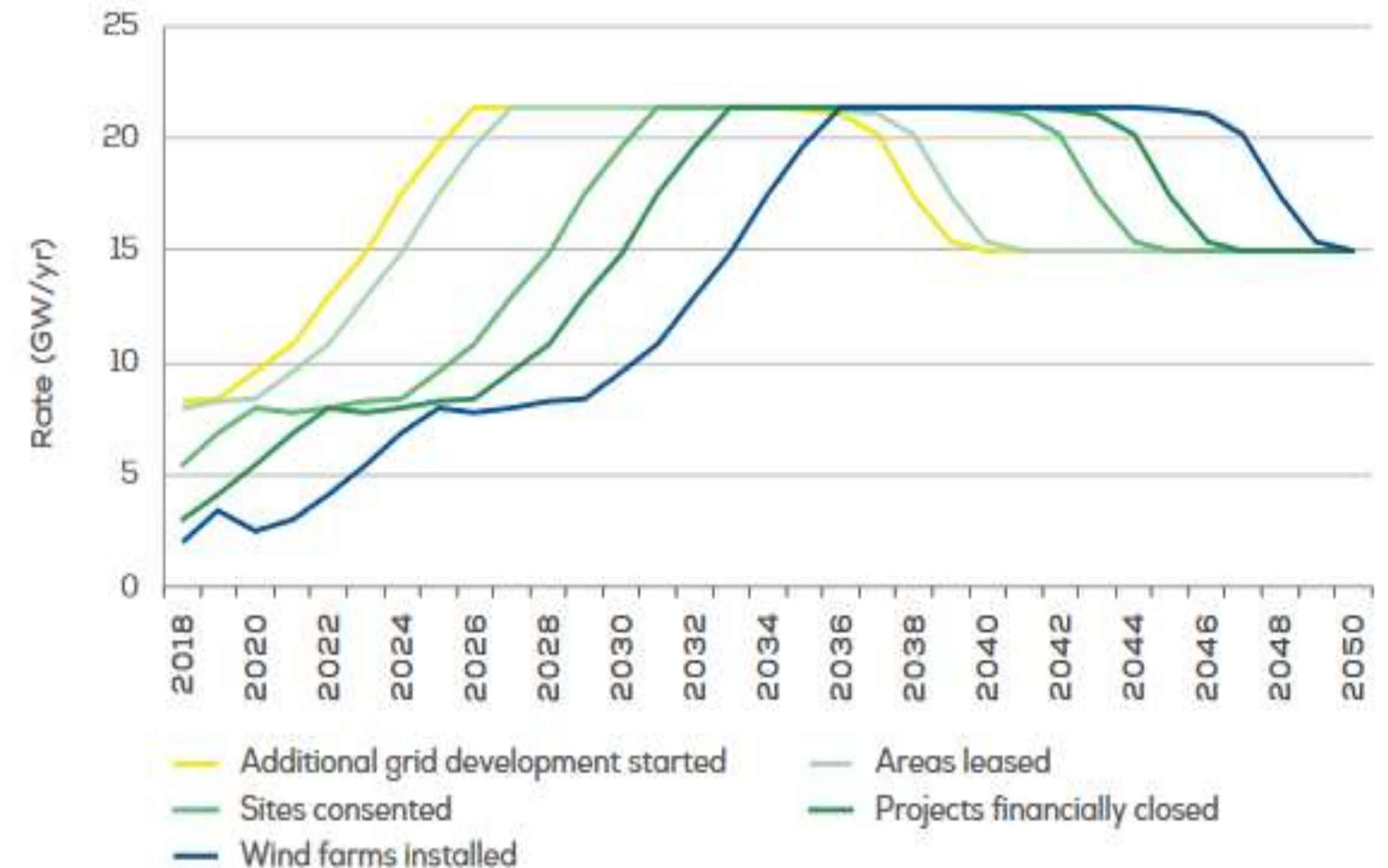
## Proposed target 2

### Annual grid capacity

- Avg. of 12.1 GW p/a in 2020-2023
- Avg. of 20.0 GW p/a in 2024-2027
- Avg. of 21.4 GW p/a in 2028-2030

FIGURE 10

Grid development, leasing, consenting, financial closure and installation rates required to achieve 450 GW by 2050



Source: BVG Associates for WindEurope

# SET Plan Implementation plan

## Proposed target 3

Cost of Wind in Capex per MW financed

### Bottom Fixed Offshore Wind

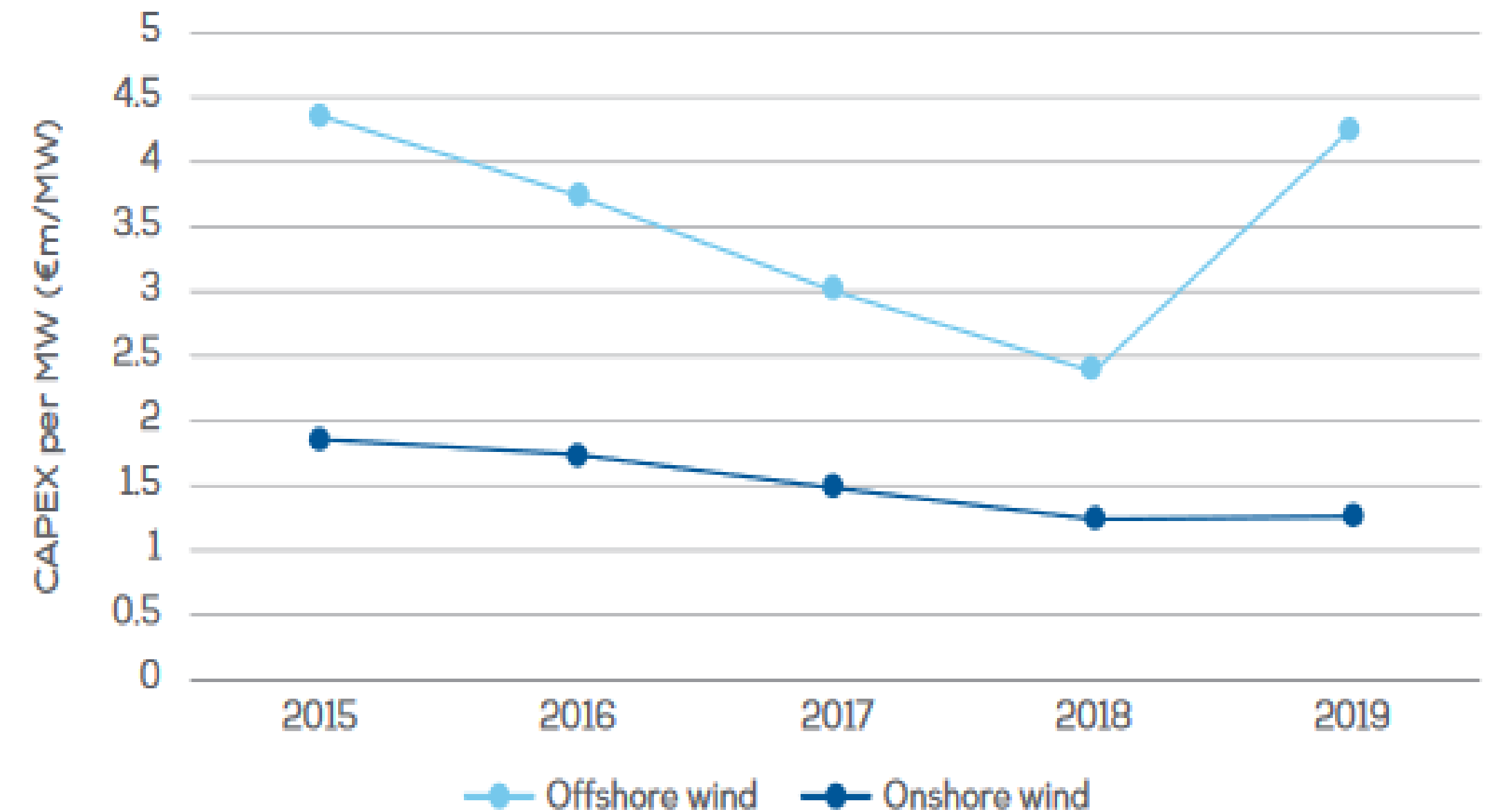
- Avg. of XXX €/MW in 2020-2023
- Avg. of XXX €/MW in 2024-2027
- Avg. of XXX €/MW in 2028-2030

### Floating Offshore wind

- Avg. of XXX €/MW in 2025-2027
- Avg. of XXX €/MW in 2028-2030

FIGURE 7

Capital expenditure per MW financed in wind energy 2015-2019 (€/MW)



Source: WindEurope



# Next steps



EUROPEAN TECHNOLOGY & INNOVATION  
PLATFORM ON WIND ENERGY

# Join the conversation #ETIPWind



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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