



# WINDFLOAT ATLANTIC

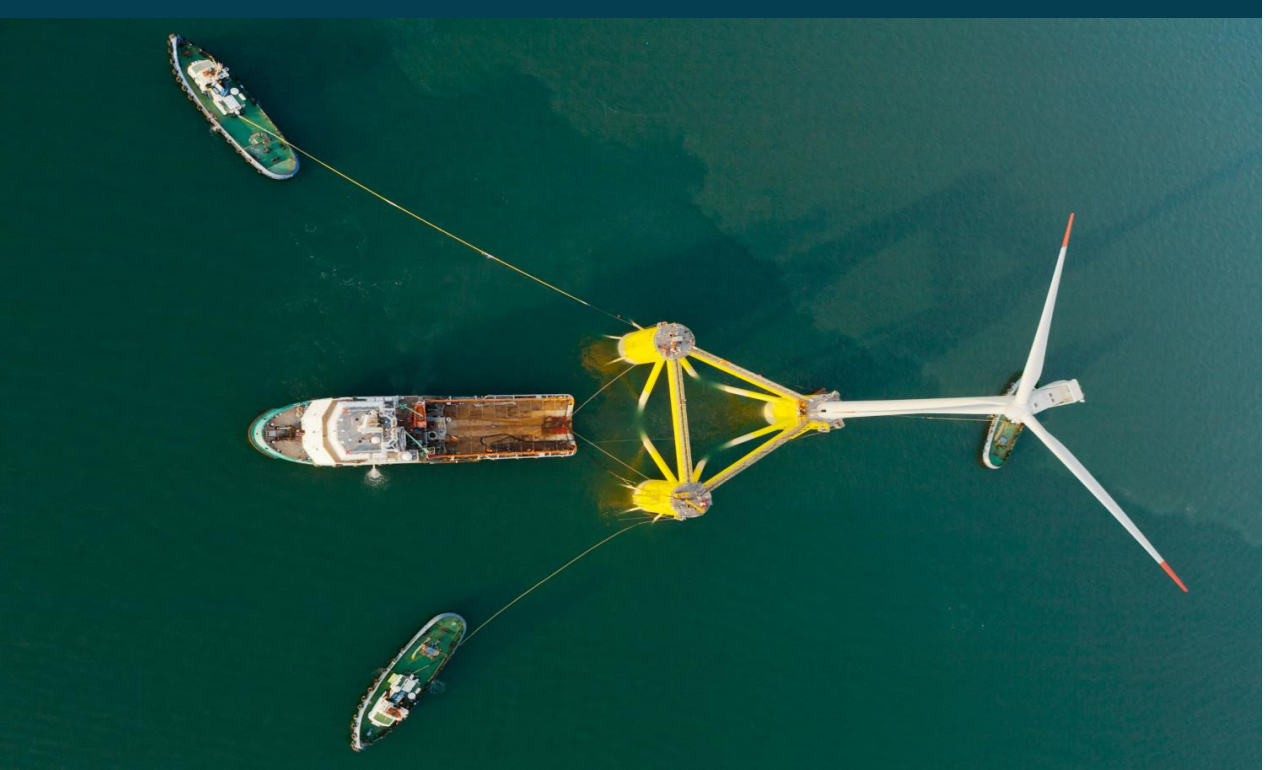
Jornadas de Inovação  
9 Outubro 2021



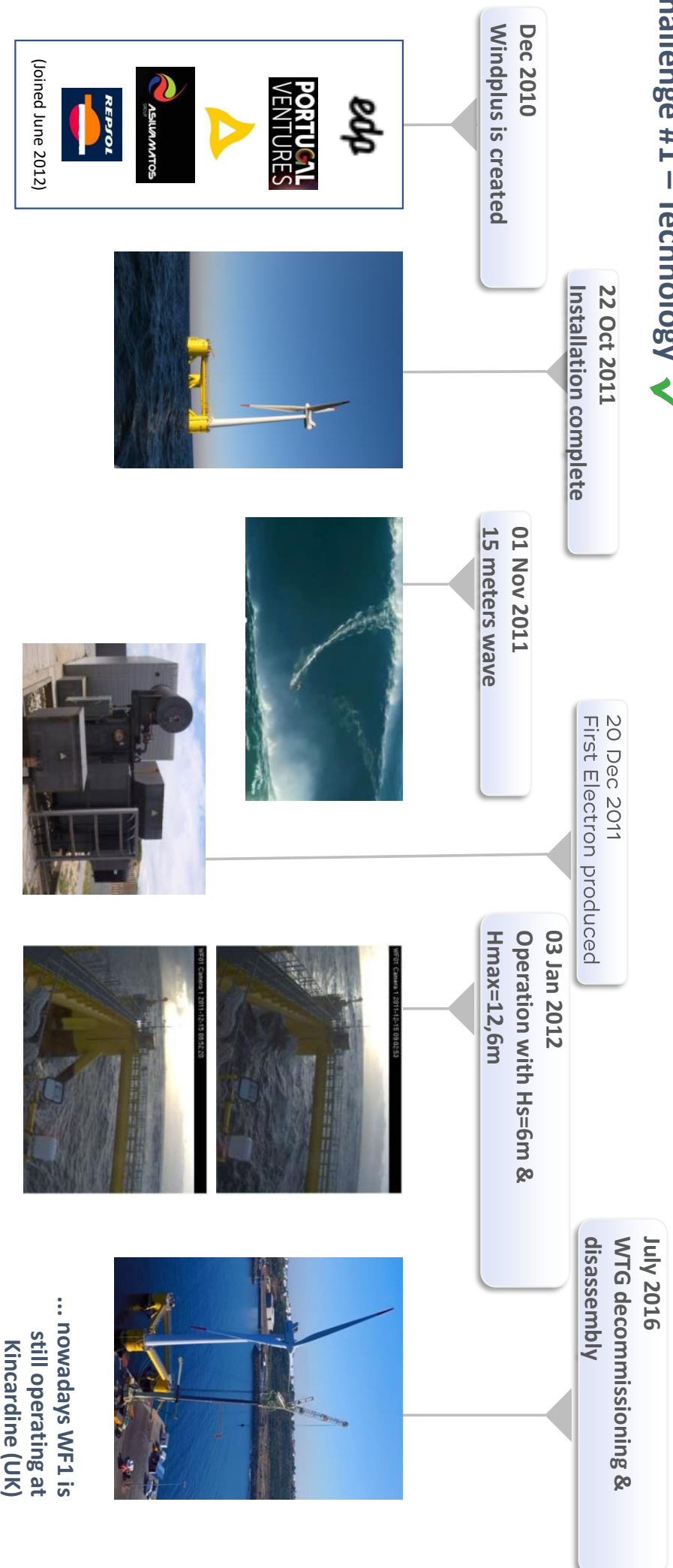
**OWW**  
OCEAN WINDS

# Challenge 1: Technology - Prototype

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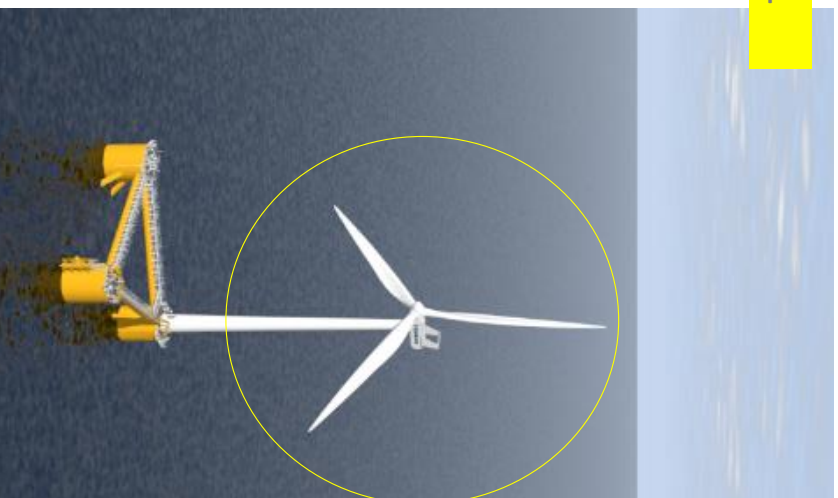
## Challenge #1 – Technology ✓



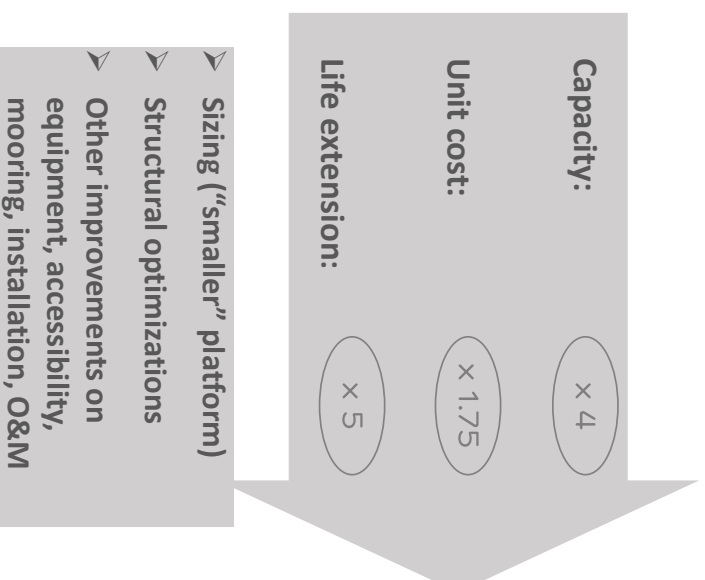
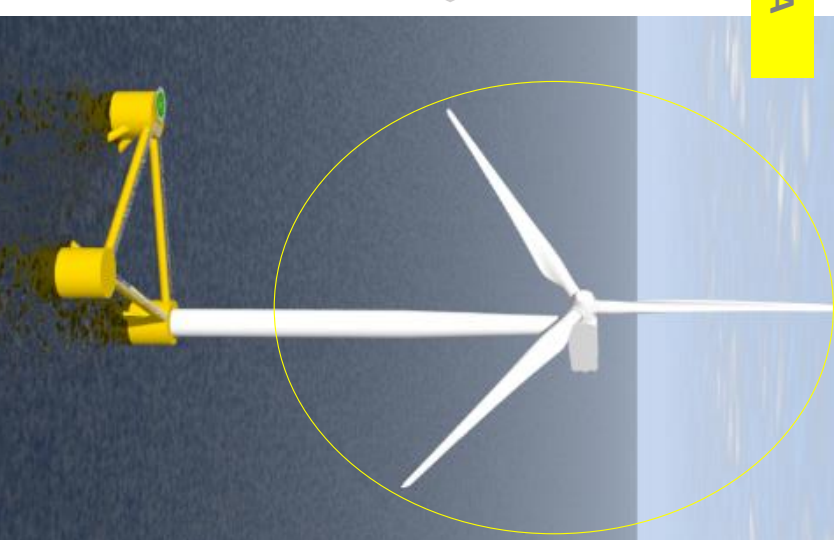
... nowadays WF1 is still operating at Kincardine (UK)

# WFA: Upscaling and technology evolution is already delivering important savings

WF1

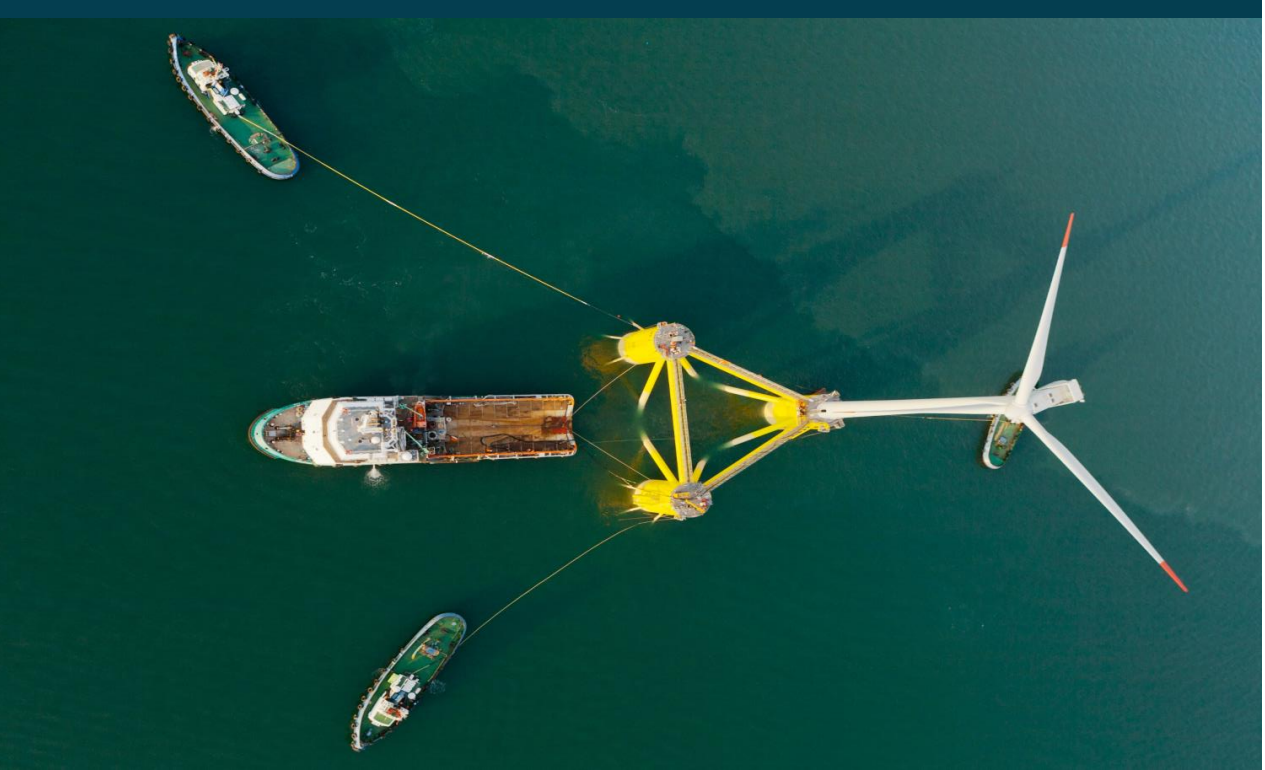


WFA



# Challenge 2: Bankability

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# WINDFLOAT ATLANTIC

## Fact Sheet

**LOCATION**  
18 km of the coast of Viana do Castelo, in 100m water depth, in a area of sand and sediments, suitable for mooring

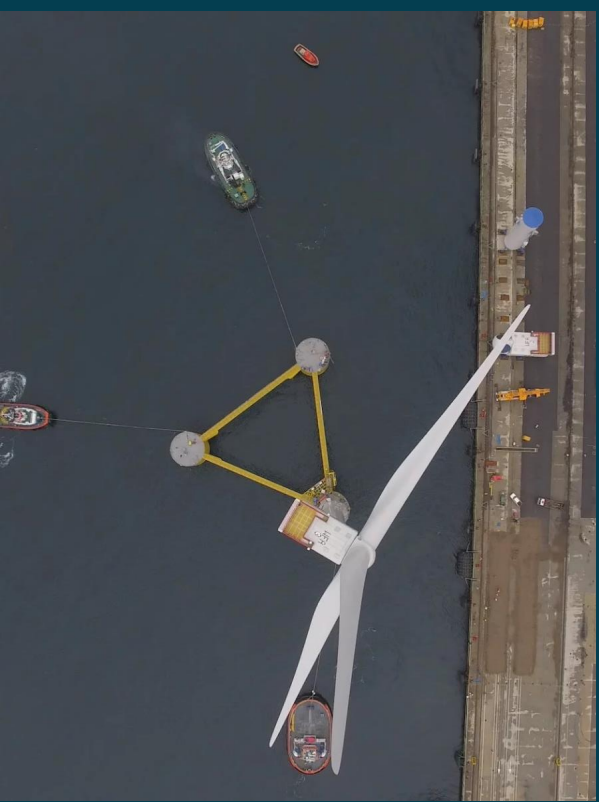
**TECHNOLOGY**  
3 wind turbines V164 - 8.4 MW each  
3 WindFloat floating platforms  
Dynamic cables for the collecting system

**INTERCONNECTION**  
Constructed by PT TSO (REN) allowing a direct connection to 60kV to an existing onshore substation operated by PT DSO (E-REDES)

**FINANCING**  
EIB: Project Finance 60 M€  
EU FUNDING - NER300  
PT ENVIRONMENTAL FUND (FA)  
WINDPLUS shareholders funds



**REMUNERATION**  
Combined scheme:  
PT FIT + FA supplement + EU NER300 Program



- DESIGNED FOR 25 YEARS OF OPERATION
- FID FEB 2018 / FC OCT 2018
- EQUIPMENT FABRICATION STARTED IN Q1 2018
- OFFSHORE INSTALLATION IN SUMMER 2019 / WINTER 2020
- OPERATION & MAINTENANCE BASE IN THE NORTH OF PORTUGAL, USING TECHNICAL TEAMS AND LOCAL LOGISTICS

## 01

### PROJECT DUE DILIGENCE FINALIZED

- This deal demonstrates the **technology and the project's robustness** by having been validated under an independent Project Finance DD.

## 02

### PROJECT FINANCE

- **WindPlus closed with EIB a Project Finance for Eur 60 M€** in October 2018.
- The EIB has agreed to finance the WFA Project through a special facility called **InnovFin Energy Demo Projects**, which is intended to develop "first of a kind" projects and has been developed jointly with the European Commission..

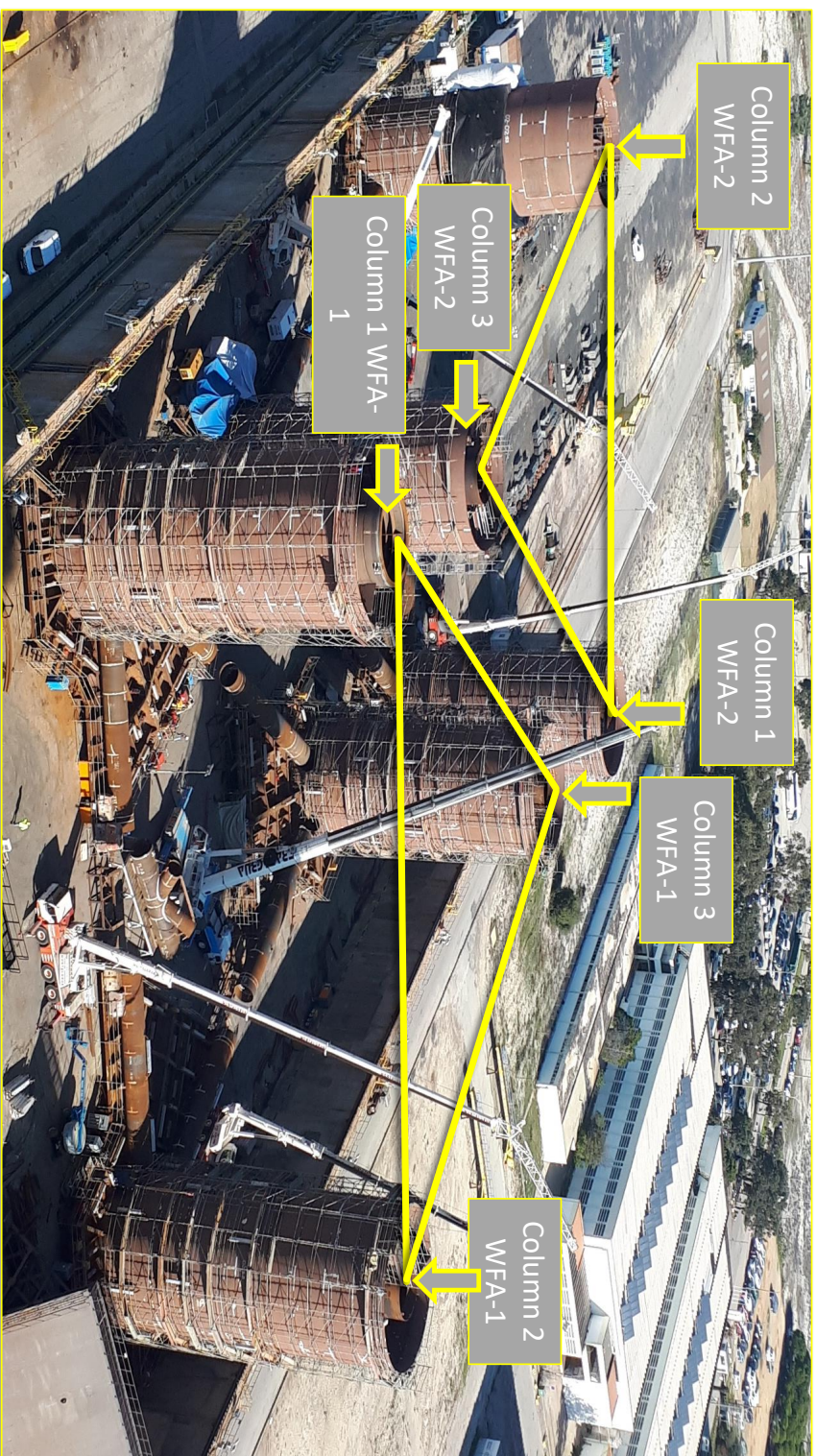
## 03

### POSSIBILITY TO INCREASE SENIOR DEBT IN COD

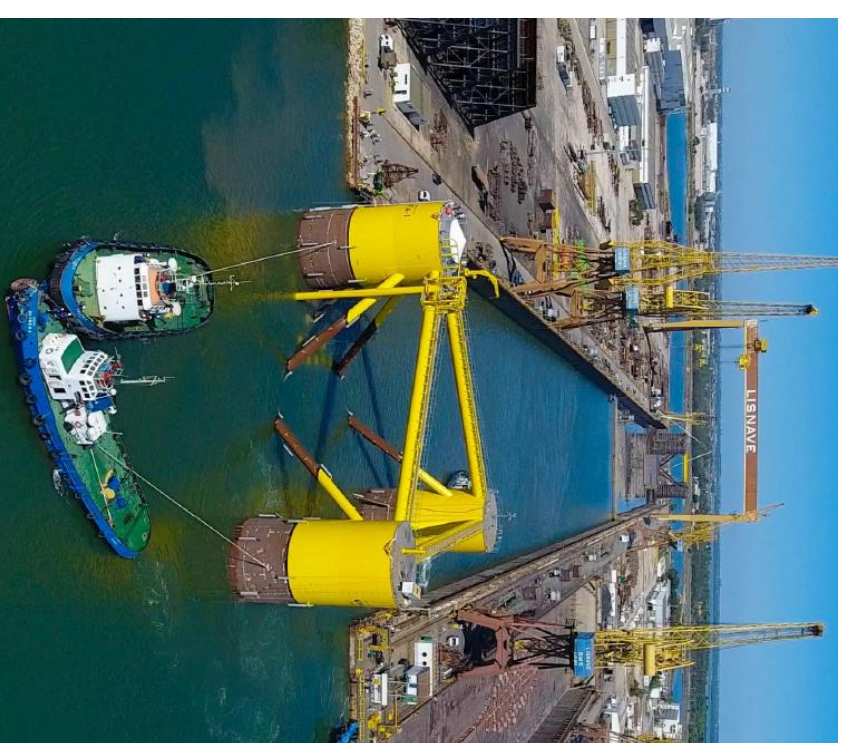
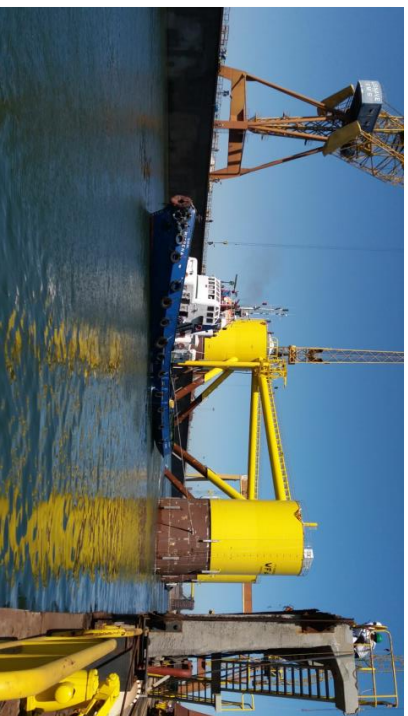
- EIB allows than in COD Windplus may **increase the amount of Senior Debt from EUR 60 up to EUR 80/85 million** introducing new commercial banks in the Senior Debt.



# WFA: A closer look – platform fabrication (Setubal)



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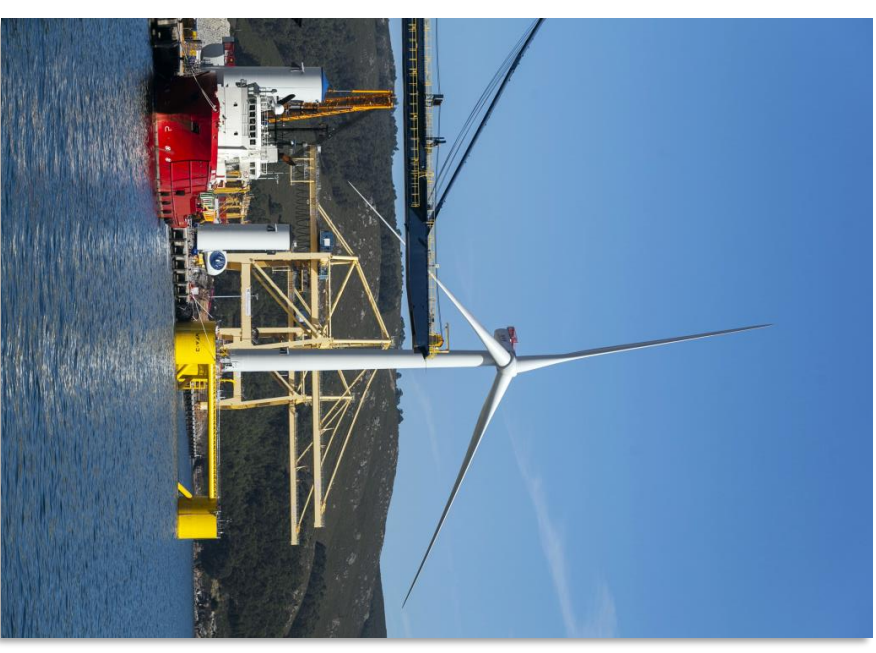
# WFA: A closer look – platform fabrication (Ferrol port)



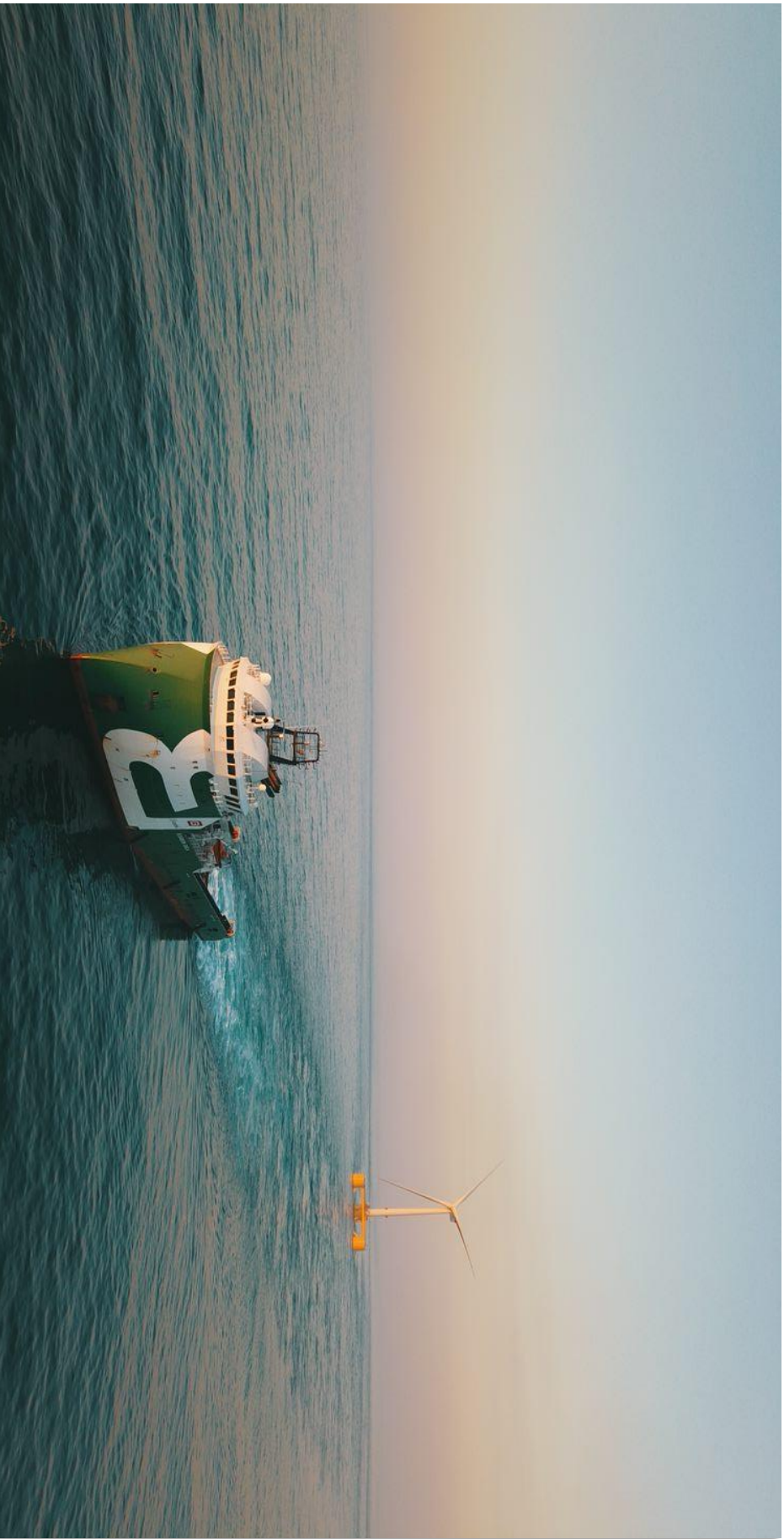
# WFA: A closer look – wind turbine installation



WFA: First unit ready to be towed to the offshore site



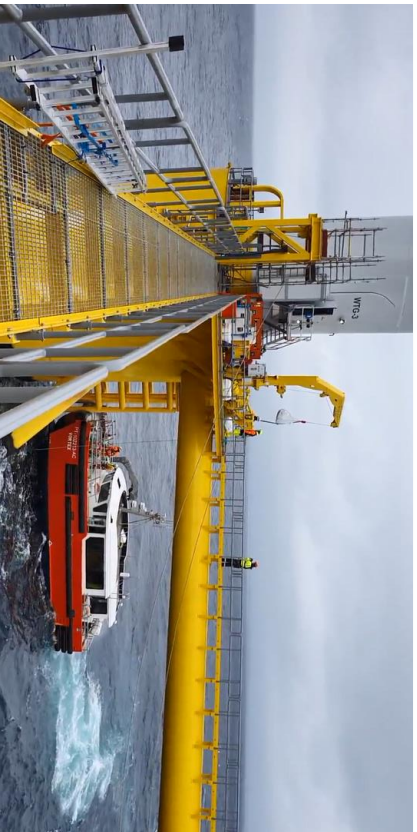
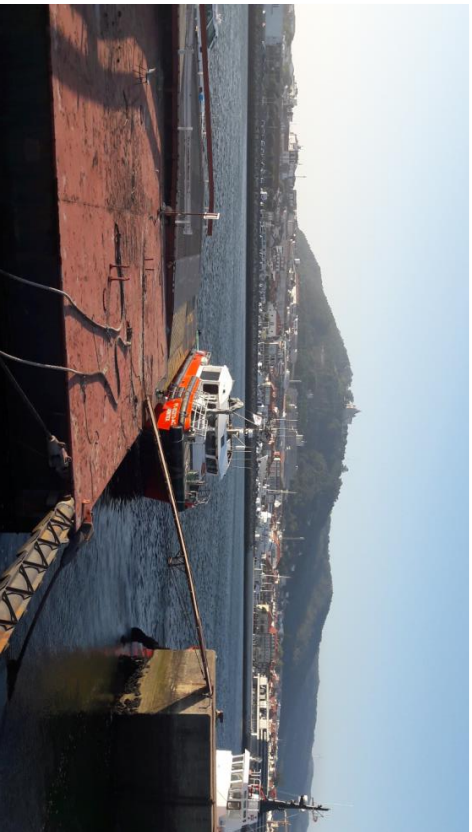
# WFA: Towing the last unit to the offshore site



# WFA: Materializing Innovation



# WFA: O&M: A local long-term commitment

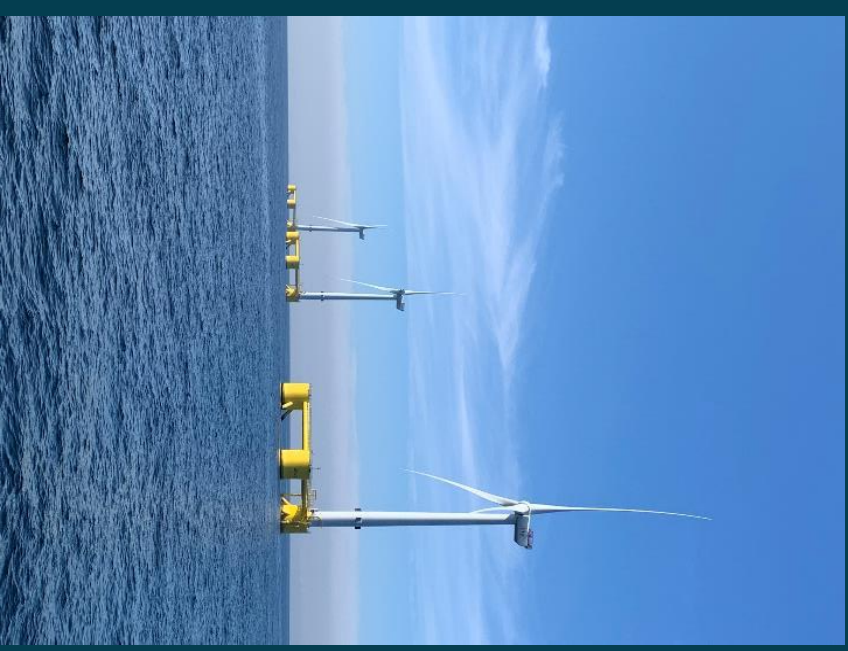


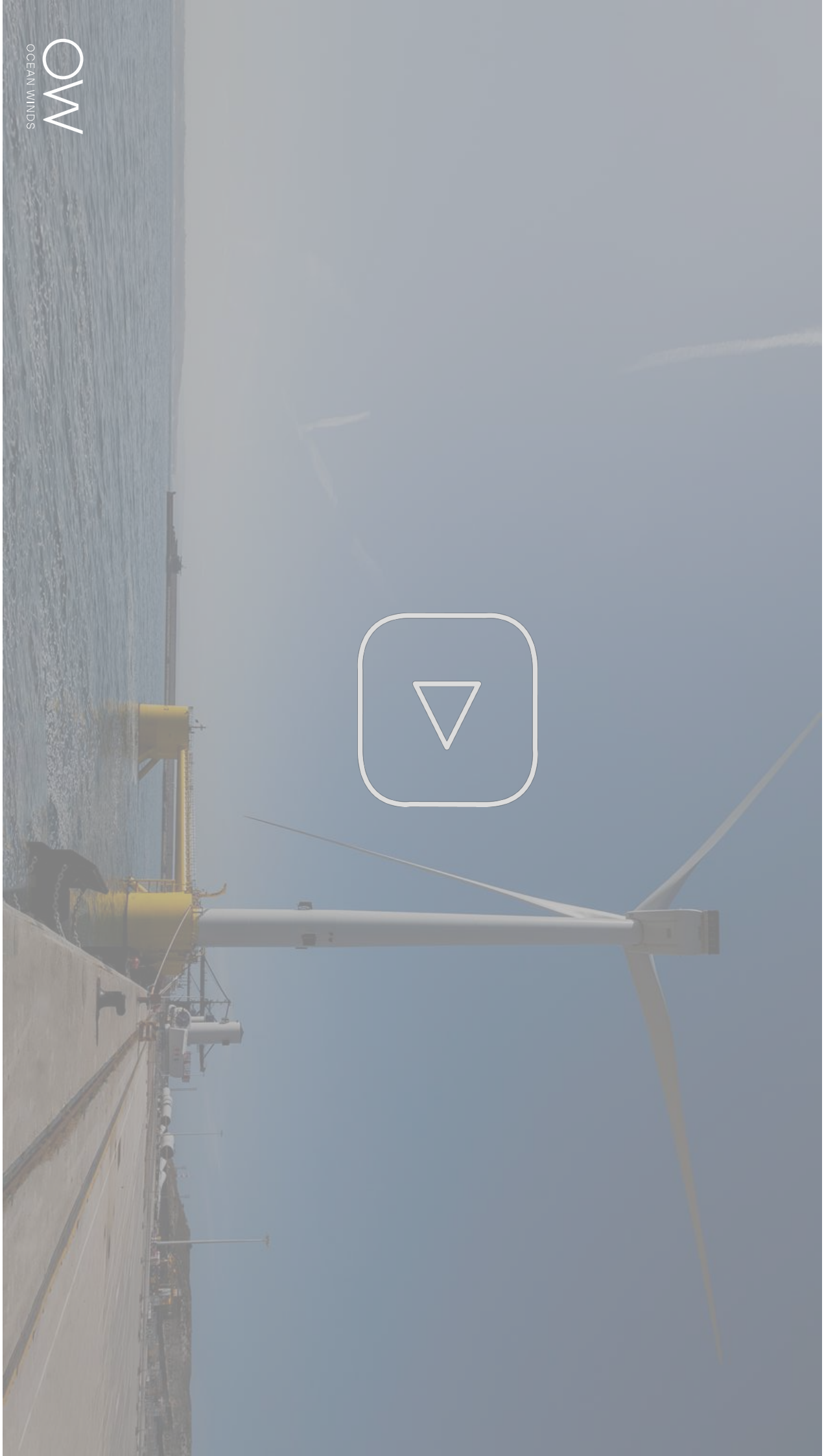
- WFA O&M base located at the port of Viana do Castelo.
- WFA designed for 25 years of operation.
- Onshore based O&M strategy with CTV support service.
- Fully dedicated team able to operate the offshore windfarm 24/7.

# WINDFLOAT ATLANTIC

## Path towards Offshore Floating Commercial Projects

- Over 10 years of accumulated experience offshore floating technology
- WindFloat Technology: TRL 9 (Prototype + Pre-Commercial projects)
- A project that enabled a true gain in experience and knowledge about offshore floating wind to Ocean Winds
- Driving force developing supply chain and technical capabilities within the sector
- Bankability Proven: the first and still the only offshore floating wind farm to have achieved Project Finance
- Lessons learned: Long path to a successful story but full of challenges
- Next Step is Challenge #3: more competitive LCOE through deployment of larger scale commercial projects





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**Thank you!**