



Roma, 20/12/2023

# Sinergia academia-industria- istituzioni come catalizzatore per l'energia eolica offshore

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# European Academy of Wind Energy (EAWE)

*Fostering wind energy science and education*

**Vision:** An international community that promotes and supports the development of wind energy science to exploit wind energy to its full potential for the benefit of the world

## **Mission:**

- ✓ Connecting expertise in wind energy science and education
- ✓ Providing a forum for wind energy knowledge exchange
- ✓ Promoting education, awareness, career development and interest in wind energy
- ✓ Being a credible, legitimate and independent scientific voice of European wind energy research

58 institutions (8 from the U.S., 1 from China)



[www.eawe.eu](http://www.eawe.eu)





UNIVERSITÀ  
DEGLI STUDI  
FIRENZE

**DIEF**  
DEPARTMENT  
OF INDUSTRIAL  
ENGINEERING



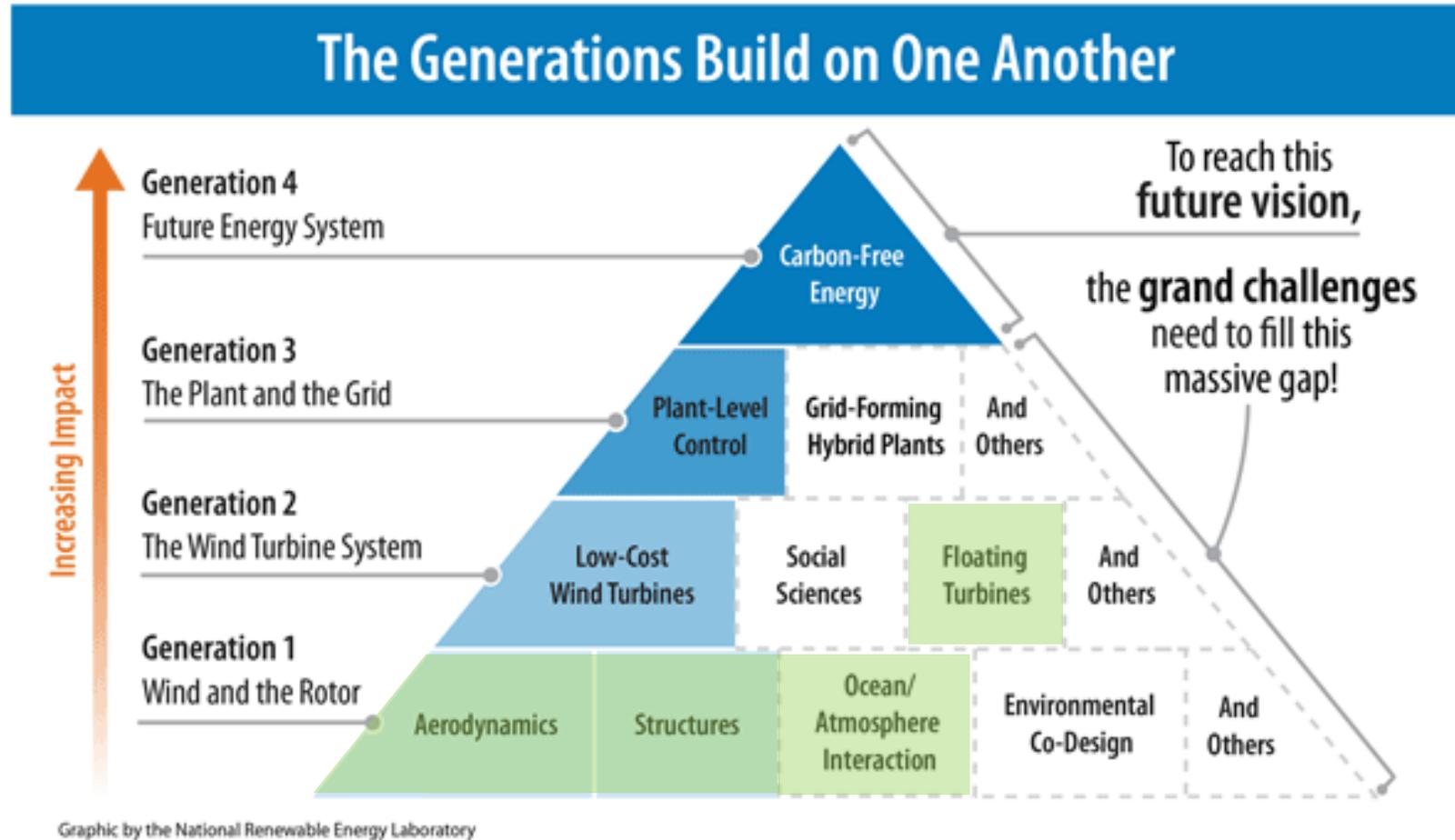
**TORQUE**  
2024

**Firenze**  
**(Italy)**

**May 28<sup>th</sup>-31<sup>st</sup>**  
**2024**



# The Veers' pyramid – The Grand Challenges Papers



Veers, P., et al., 2023, "Grand Challenges: wind energy research needs for a global energy transition", Wind Energy Science, DOI: 10.5194/wes-7-2491-2022



# L'Italia protagonista nella ricerca su FOWT e sull'eolico in generale

Gli ultimi anni hanno visto una significativa presenza dell'Italia nella ricerca sul floating wind, a livello Europeo e nazionale

- ✓ Politecnico di Milano
- ✓ CNR-INM
- ✓ Università degli Studi di Firenze
- ✓ Sapienza
- ✓ Università di Napoli Federico II
- ✓ RSE
- ✓ ..molti altri!

A livello Italiano, i progetti ministeriali, PNRR, e PRIN hanno dato forte impulso al settore

Sinergie a livello accademico già in essere!



# Alcuni esempi dalla mia ricerca - FLOATECH



Jan 2021 – Dec 2023

<https://www.floatech-project.com>

**FLOATECH**  
THE FUTURE OF FLOATING WIND TURBINES

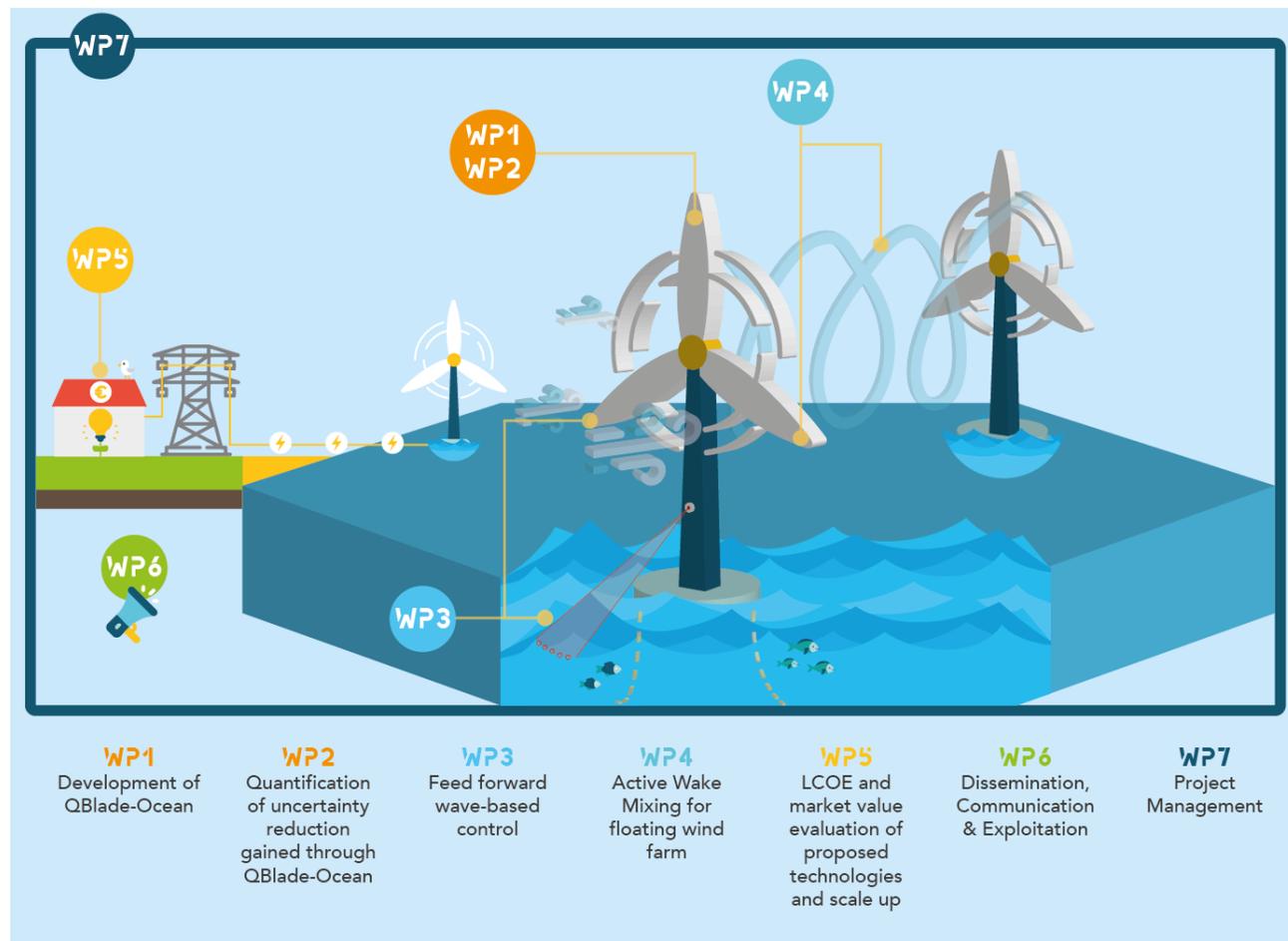


CONSORTIUM

- Academic sector
- Industrial sector
- Service sector

INNOVATION ADVISORY BOARD

Innovation Advisory Board



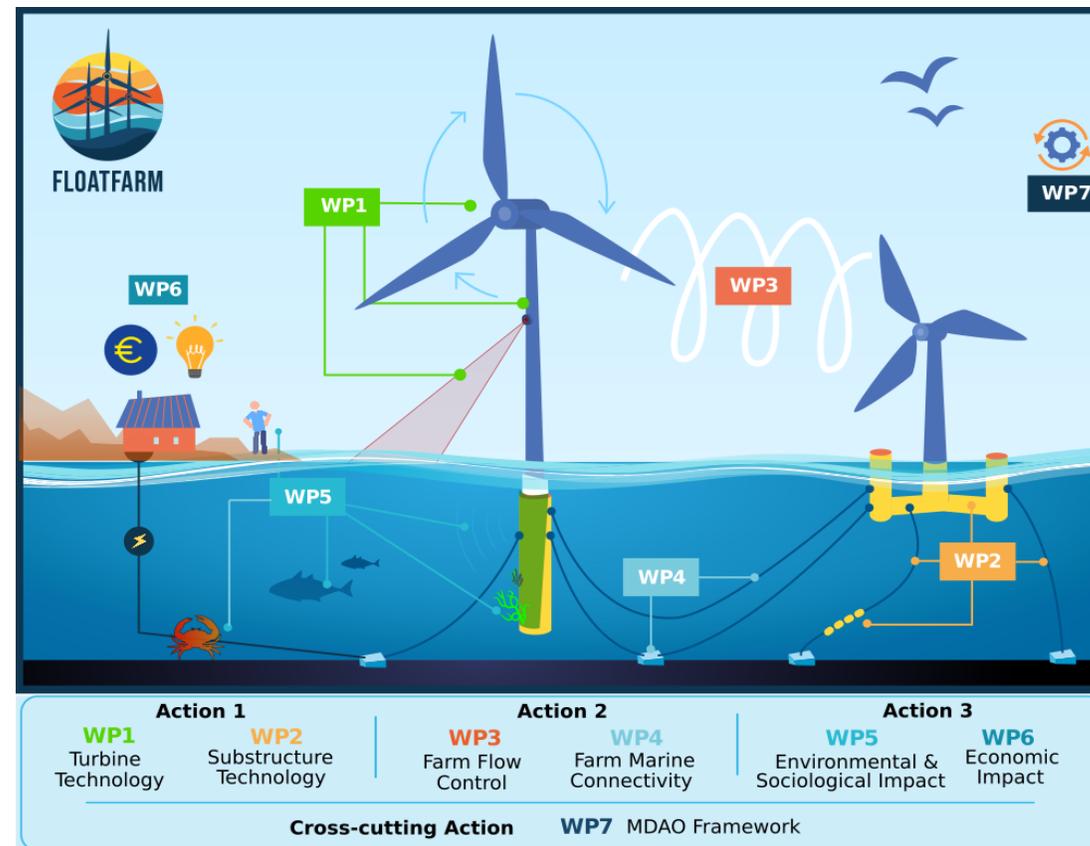
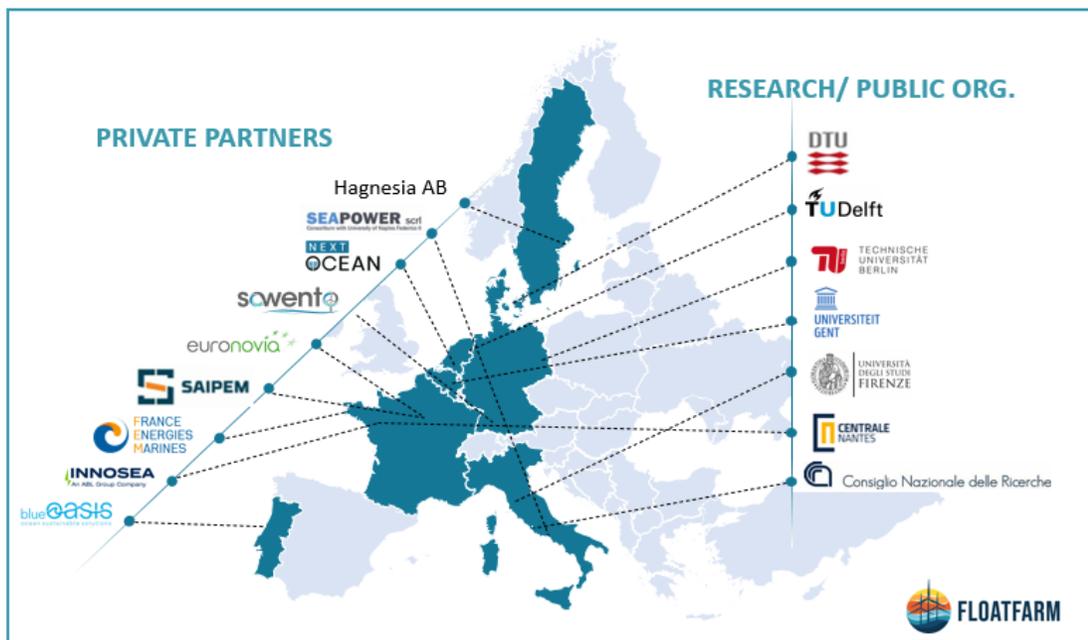


# Alcuni esempi dalla mia ricerca - FLOATFARM



## FLOATFARM

Jan 2024 – Dec 2028



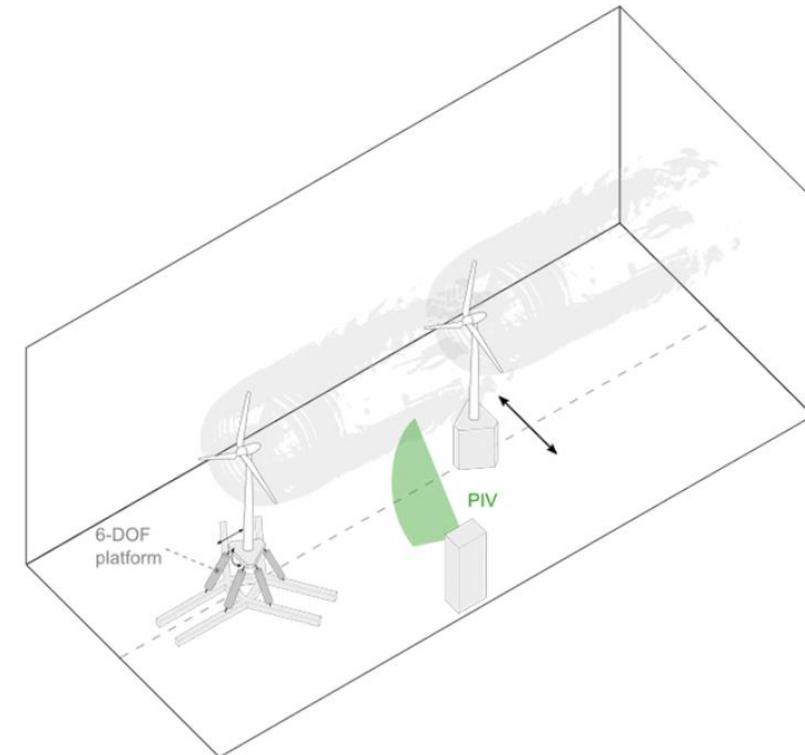
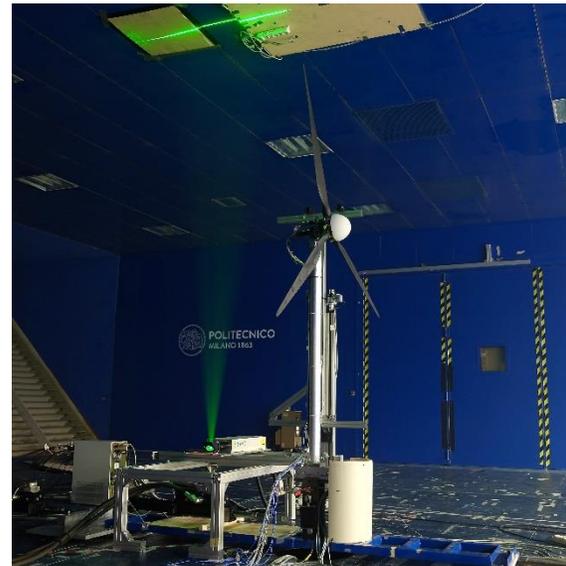


# Alcuni esempi dalla mia ricerca - NETTUNO

## Progetto PRIN2022 – Univ. Firenze, Politecnico di Milano

1. One turbine (first campaign) + two turbines (second campaign)
2. Turbines: 2.4m rotor, 3 blades, active generator/blade pitch control, fixed yaw
3. One robotic platform simulating platform motion of floating wind turbines
4. Measurement of generated power and tower top loads

**Tutti i risultati saranno resi disponibili open-access**





# Promuovere la sinergia oltre l'accademia

L'accademia può e DEVE aiutare a migliorare l'equilibrio del nostro «sgabello»



ACCADEMIA

ISTITUZION

I

INDUSTRIA



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