



# **TYPSA**

PILOTS

# Greening at the port of Valencia: integrating wind and wave energy

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Marine Renewable Energy
Greening at the port of Valencia: integrating wind and wave energy
TYPSA



**56** years of **experience** 

Revenue in 2020 **270 M EUR** 

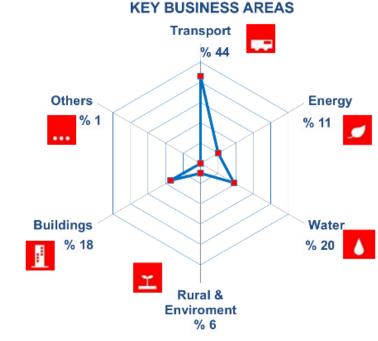
**2,850 professionals**60% international
40% in Spain

Completely **independent** 100% employee-owned Equity: **100 M EUR** 

Spain's leading exporter of consulting engineering services

Multidisciplinary approach

Commitment to quality and sustainability



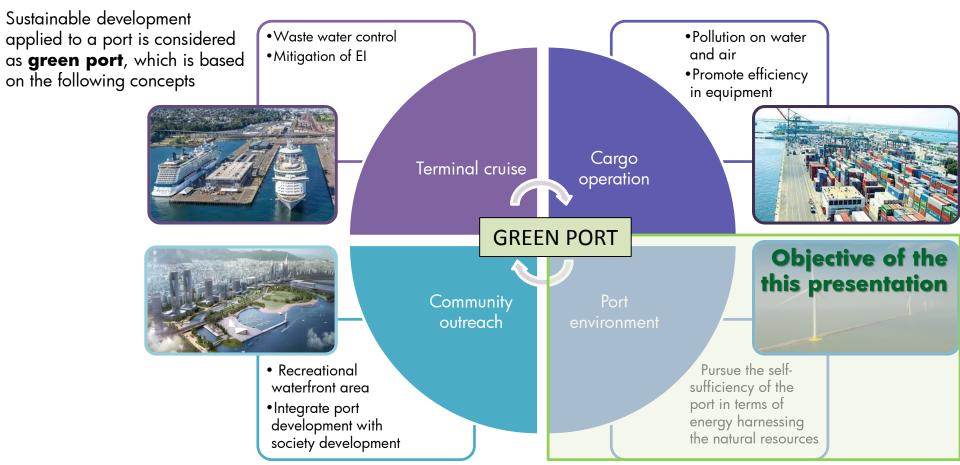


Marine and Ports: #11

Wind Energy: #6

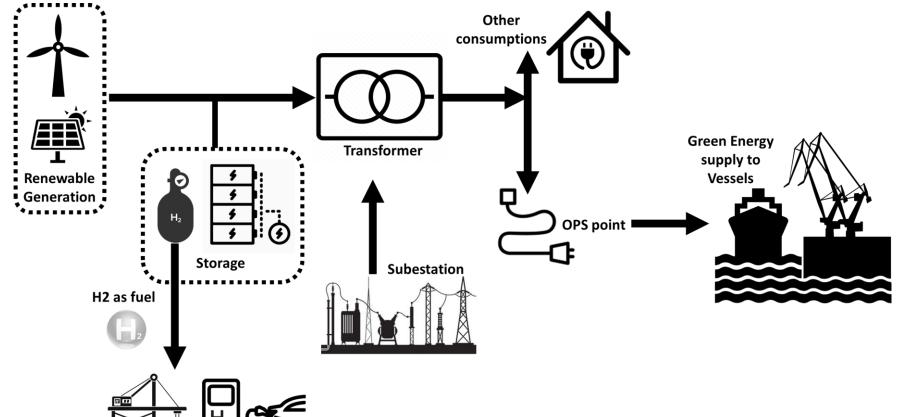
This work is the consequence of the combination of skills and capacities of both divisions





### Conclusion









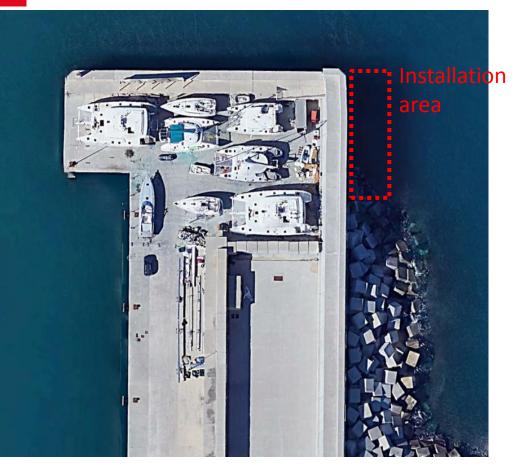


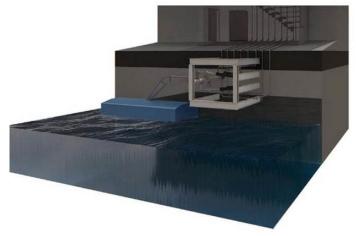
### Timeline:

- ✓ Tender Project (2020)
- ✓ EIA approved (March 2021)
- ✓ Lab tests (Summer 2021)
- ✓ Tender process (Winter 2021-2022)
- ✓ Design and Construction (mid 2022)

Integration of wind energy in ports









Integration of wind energy



# Onshore

# Offshore

Easier to install

Less risks in operation

Proximity to the electrical grid

Greater resource

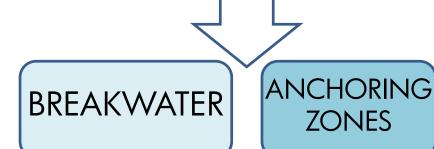
Easier to transport

Greater space available



## Integrate energy in the interface

The ports combine the advantages of onshore and offfshore wind energy



Integration of wind energy in the port of Valencia



