



Ocean Energy: The next big thing in energy

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Agenda

- Why ocean energy
- Tidal and wave today
- Goods and services
- Opportunities and challenges
- How to access ocean energy

Ocean Energy Europe

- Largest global network
- 120+ members
 - Manufacturers, utilities, developers, supply chain, test centres, universities, regions...
- Working with governments & international organisations

Lead partners:



WHY OCEAN ENERGY?

Ocean energy has a great potential

- 337 GW globally with current technology
 - 1.2 Mio jobs
- Essential to complement other variable renewables
 - Tidal 100% predictable
 - Wave after wind stops
- Security of electricity supply
 - Indigenous resource
 - Manufactured locally
 - Stability of prices



5 technologies & 2 most advanced

- **Tidal Stream**
- **Wave energy**
- Ocean Energy Thermal Conversion
- Sea Water Air Conditioning
- Salinity Gradient



TIDAL & WAVE TODAY

Stats & Trends 2023 coming late April

- Unprecedented public support
- Pre-commercial tidal projects
- First wave farms underway
- Interest from energy majors



Ocean Energy Key trends and statistics 2022

March 2023



**Tidal – pre-commercial farms
underway**

UK CfDs – 11 farms





**Tidal – pre-commercial farms
underway**

France – Grant + FiT – Tidal commercial tenders announced

Tidal – modular technology to power remote communities



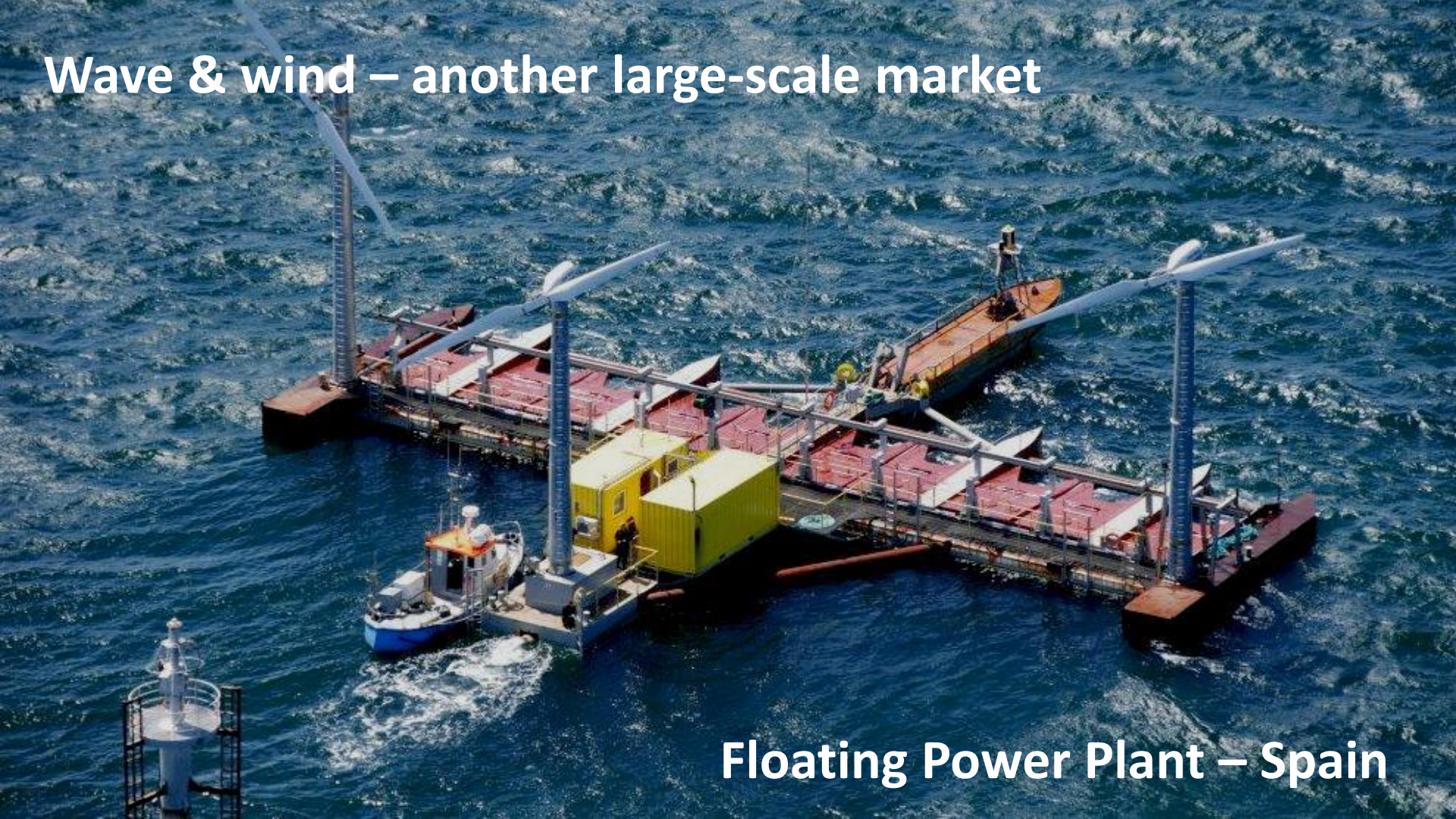
ORPC, US, Canada, Ireland

Wave for mainstream grid From prototype to pre-commercial farms



CorPower Ocean – Portugal & Ireland

Wave & wind – another large-scale market



Floating Power Plant – Spain



Wave alternative markets – Decarbonising, ocean monitoring – ENI, Italy

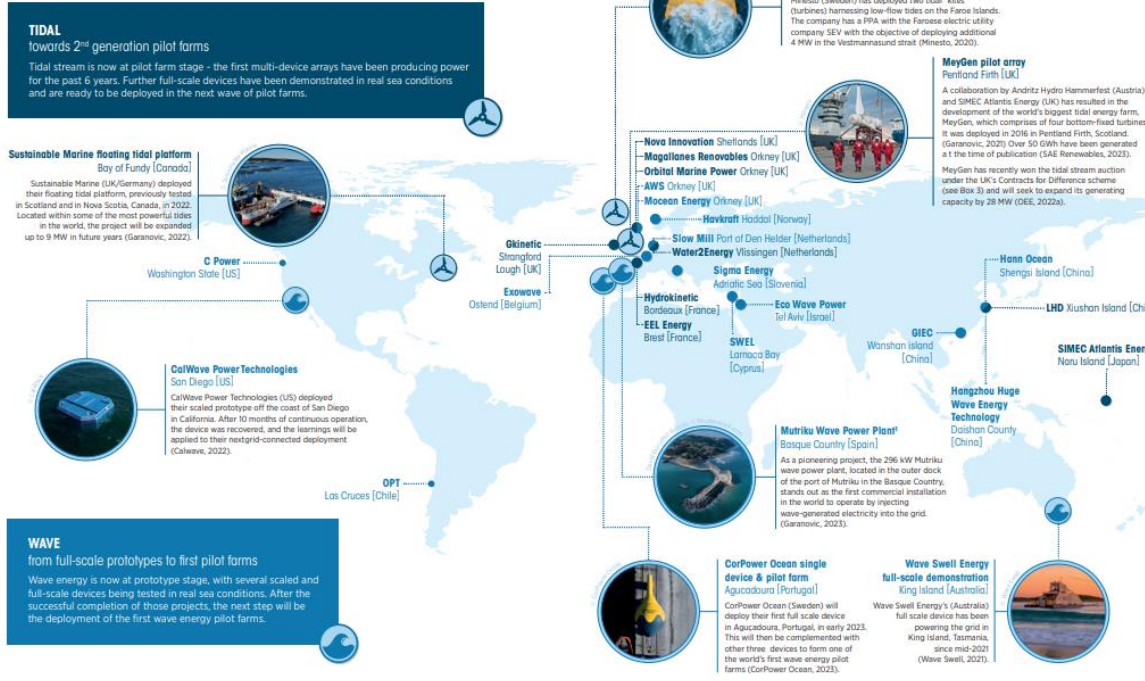
GOODS & SERVICES

Global market, global opportunities

SCALING UP INVESTMENT IN OCEAN ENERGY TECHNOLOGIES

OCEAN ENERGY: A CLEAN, PREDICTABLE AND SECURE SOURCE OF

Figure 5 Global deployment examples and pilot projects



Key goods and services in ocean energy

- Main goods used in ocean energy
 - Steel
 - Composite material
 - Cement
 - Resine epoxy
- Electric engineering
 - Power take-Off
 - Drive train, gearbox
 - Generators
- Offshore services



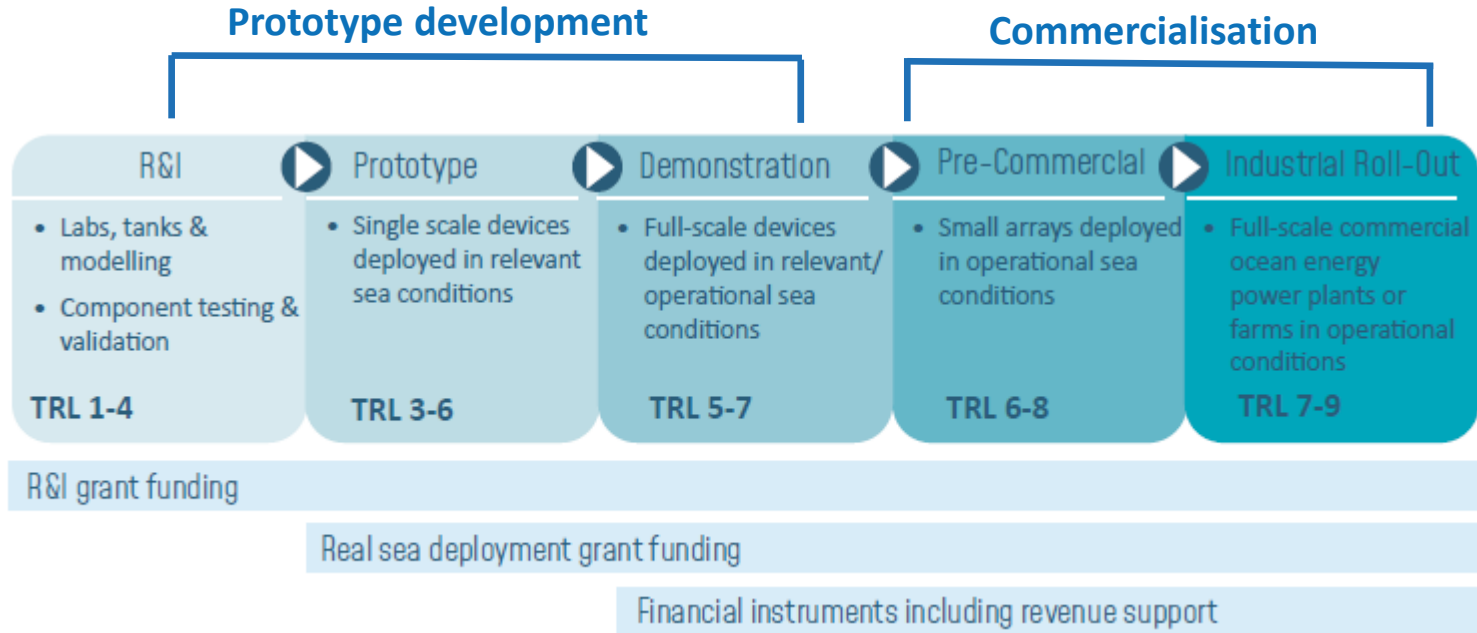
OPPORTUNITIES & CHALLENGES

Many socio-economic benefits

- A new industry at home
 - A lot of sustainable jobs
 - Opportunities for existing supply chains
 - High local content
- In developing countries:
 - Off-grid applications
 - Green power for remote communities
 - Foreign direct investments



Number one challenge is access to capital across development stages



HOW TO ACCESS OCEAN ENERGY?

Governments' 3 main drivers to boost ocean energy



- Deployment targets -> visibility
- Technology support for demonstration via funding
 - Grant support
- Revenue support to attract investors
 - kWh support: Feed-In tariff, CfDs..

Thank you for your attention



For any questions, please contact:

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Ocean Energy Europe

Stay tuned!



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