



R&D Webinar - OPHARM2 Project Outcomes

Offshore green hydrogen production: planning, systems qualification, and environmental issues



With the financial support of:



Welcome Words



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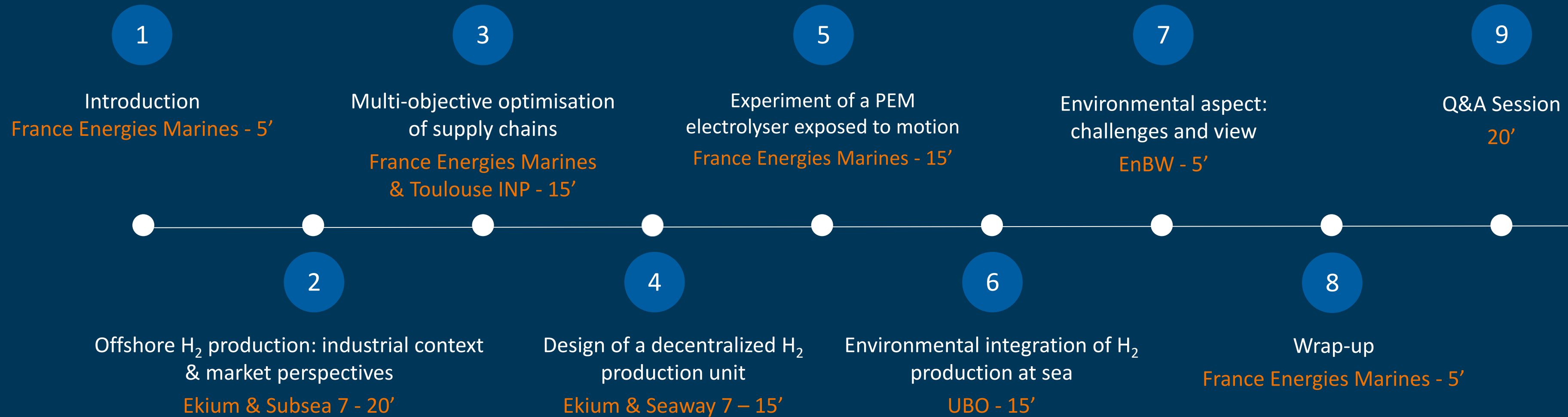
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Innovation Leader



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Agenda



Q&A Tab to ask questions that will be addressed during Q&A Session

Introduction

Why hydrogen and offshore wind?

Advantages



Enhance the energy sovereignty of countries with high offshore wind potential



Make use of abundant remote offshore energy resources



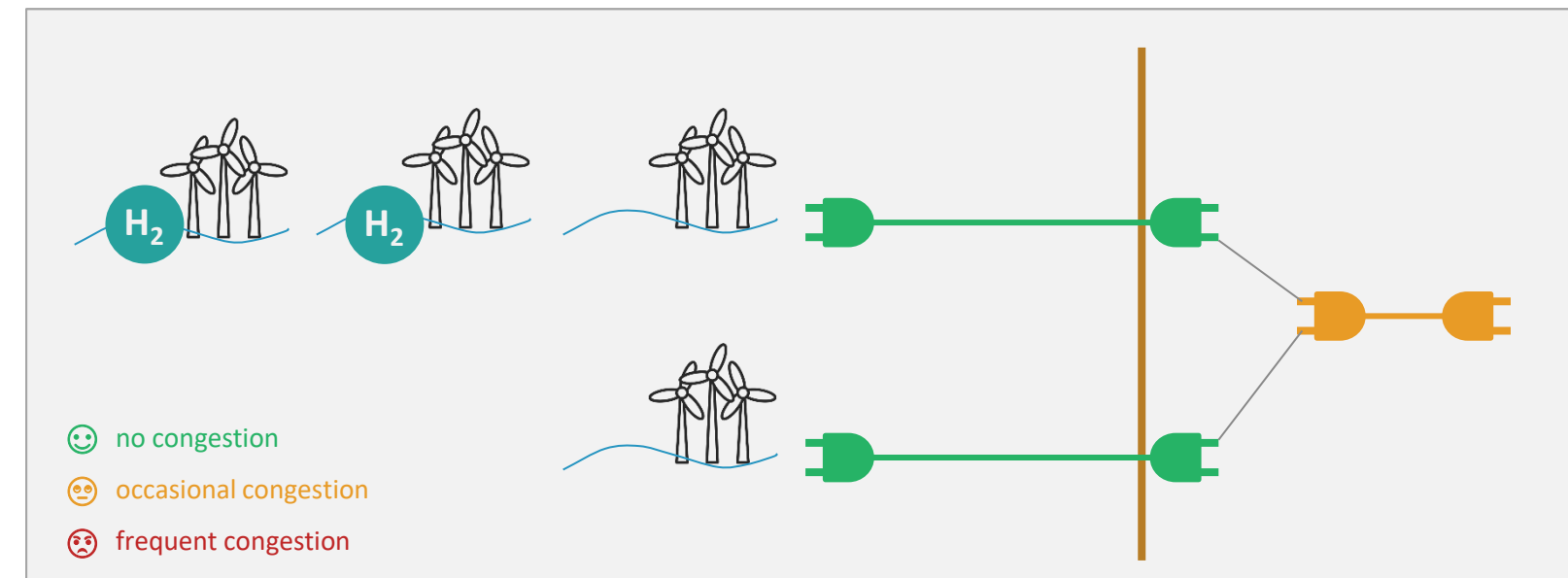
Limit grid congestion in the onshore connections of major offshore wind hubs



Be able to produce hydrogen without drawing on the drinking water supply



Have space to develop GW-scale electrolysis facilities



Remaining barriers



- Keep reasonable costs > decide the right OWF-H2 plant layout

- proper infrastructure sizing
- manage intermittency, related ageing and O&M



- Assessment of the potential environmental risks



- Maritime planning and integration with networks



- Manage safety and standardisation

2 YEARS
(2021-2023)

€550K
TOTAL BUDGET

OBJECTIVE

To produce decision-support tools for hydrogen production coupled with offshore wind energy



17 PARTNERS



MAIN OUTPUTS

- **OPHARM numerical tool** for evaluating hydrogen production configurations coupled with offshore wind energy: costs per brick in the value chain, LCOE, LCOH, life cycle analysis
- **Hydrogen R&D roadmap** for the French offshore wind energy sector

3 YEARS
(2023-2026)

€2.500K
TOTAL BUDGET

17 PARTNERS

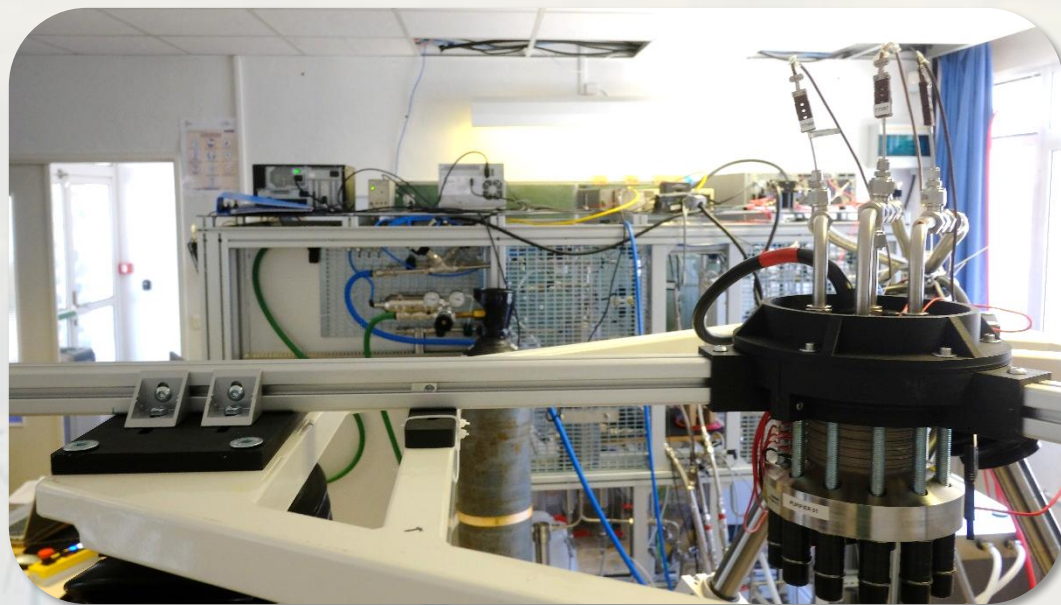


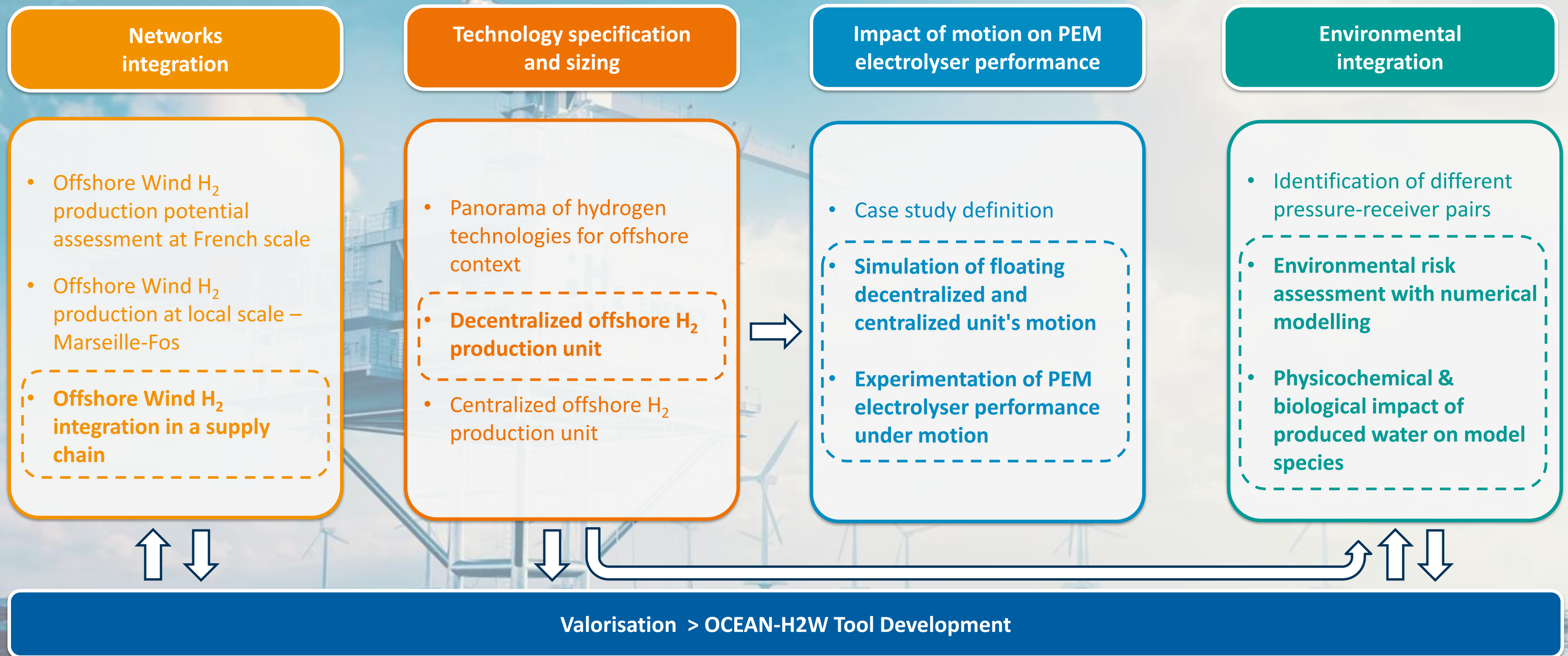
OBJECTIVE

To address complementary aspects of renewable hydrogen production from offshore wind farms to support its progress towards operational deployment

SCIENTIFIC CONTENT

- Networks integration
- Technology specification and sizing
- Impact of motion on proton exchange membrane electrolyser performance
- Environmental integration





Thank you for your attention!

