



AENEAS

innovAtive ENERgy storage systems onboArd vessels

Place, Date

Speaker name – Organisation

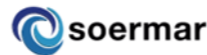
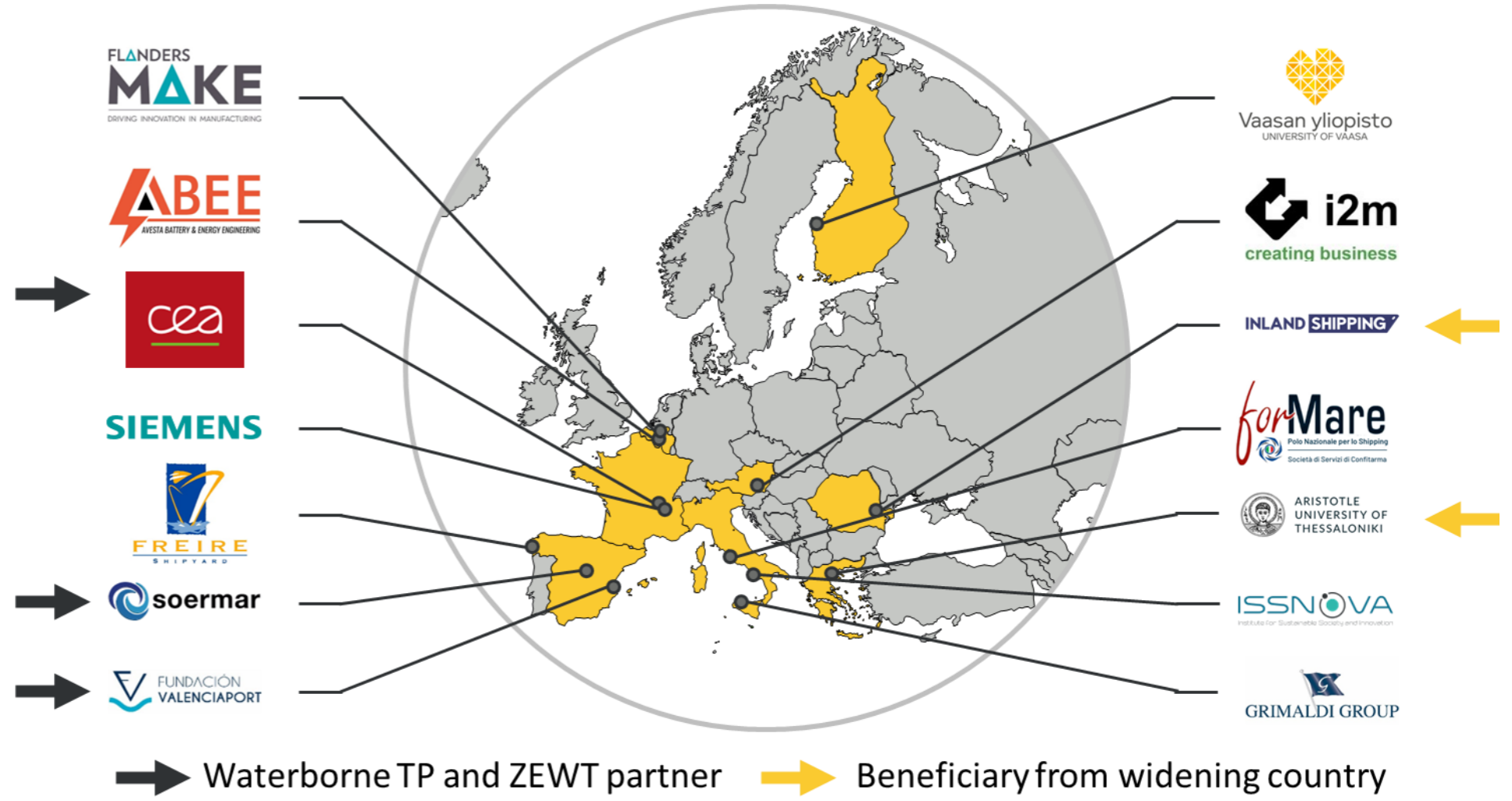


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AENEAS in a Nutshell



- **Call topic:** HORIZON-CL5-2022-D5-01-02 - Innovative energy storage systems on-board vessels
- **Type of Action:** HORIZON-RIA
- **Start date:** 01/02/2023
- **Duration:** 36 Months
- **Budget:** €4,987,277.25
- **Coordinator:** Flanders Make
- **14 partners, 8 countries**





Context and Challenges today in the electrification of waterborne transport vessels:

- Fully battery electric shipping and hybrid propulsions requires very **high energy levels** and **high power**, they are subject to many more charging cycles and longer lifetimes than other transport applications.
- The traditional Li-ion batteries have low energy density, limited safety, not efficient fast charging/discharging process

AENEAS will provide solutions to improve **overall energy efficiency**....



....and drastically **lower emissions** of waterborne transport vessels



To achieve this mission, AENEAS will develop **three innovative electric energy storage systems**:

1) **Solid-state batteries (SSB)** for constant load waterborne transport applications with long distance navigation.

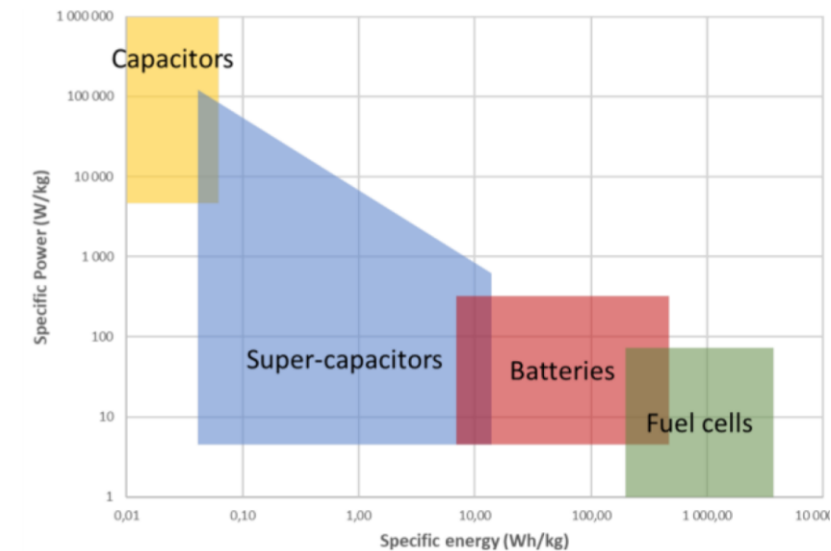
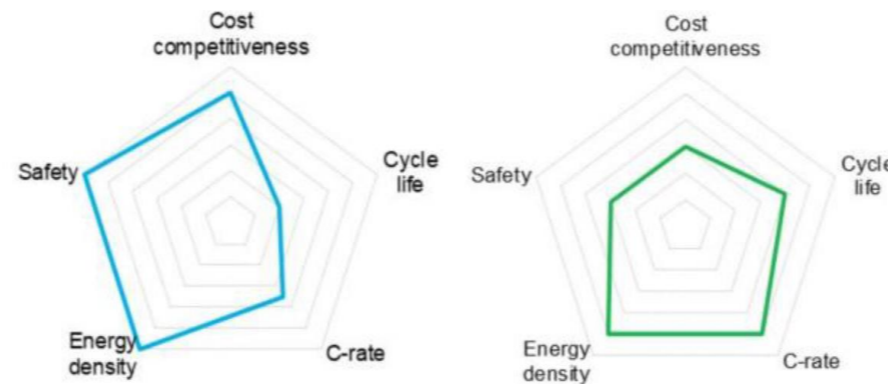
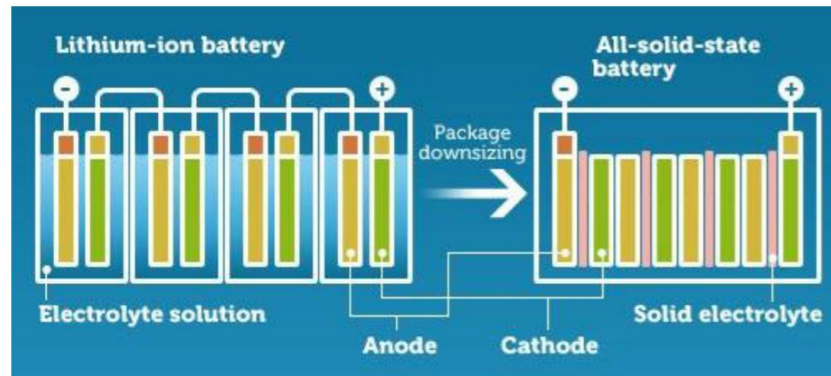
SSB Module prototype

2) **Supercapacitors (SC)** for shaving of power peak demands in waterborne transport systems.

SC Module prototype

3) **Hybrid energy storage system** combining SSB and SC for applications requiring high energy and high power energy storage systems.

Hybrid SSB/SC prototype





Comprehensive understanding of innovative ESS (electric energy storage systems) other than batteries for waterborne transport

Solutions to improve energy efficiency and make waterborne transport climate neutral

Technical feasibility, adequacy, efficiency, safety, cost competitiveness compared to batteries

Knowhow regarding ESS design, modelling and prototyping

Decarbonization strategies for future maritime applications based on EU/Intl CO2



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Other info here

- **Cordis:** <https://cordis.europa.eu/project/id/101095902>
- **LinkedIn:** <https://www.linkedin.com/company/aeneas-eu-project/>
- **Project website:** <https://www.project-aeneas.eu/>



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Thank you for your attention!

