Battery System Concepts for Fully Electric Vessels

Introduction

Dear SEABAT Community,

In this fifth edition of our newsletter, we highlight the Navalia 2024 event, where project partner SOERMAR was present to showcase SEABAT. We look ahead to the upcoming final event and discuss interesting publications you might have missed.

Enjoy reading.

Jeroen Stuyts, Project Coordinator, SEABAT Project

SOERMAR presents SEABAT at Navalia

On May 23, 2024, SEABAT was presented at the technical conferences at the NAVALIA 2024 fair.
NAVALIA is the most important fair dedicated to the naval sector in Spain and the third in Europe, in which more than 400 exhibitors and 900 represented entities participate.

SEABAT aims to provide the maritime transport sector with a full-electric maritime hybrid concept based on combining modular high-energy batteries and high-power batteries, novel converter concepts and production technology solutions derived from the automotive sector. This pioneering and revolutionary solution will effectively and efficiently contribute to the decarbonisation of the maritime transport sector through its electrification, giving the sector the possibility of achieving complete decarbonisation by 2050.

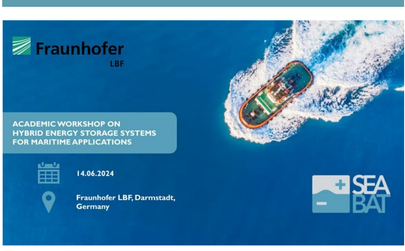
This technical conference was organized by SOERMAR with the title 'NAVAL ENERGY OF THE FUTURE: Innovative Energy Storage Solutions in European Projects focused on Decarbonisation and Development with Batteries', and presented by Cayetano Hoyos, leader of the Dissemination and Communication Work Package.

During the day, the audience was shown the latest developments and results achieved, highlighting the modularity of the proposed solution, which will allow shipowners to reduce both the acquisition costs of the system and the subsequent operational costs, and will also be able to benefit from economies of scale through the use of low-cost, standardised modular components.

In this sense, the viability of the SEABAT results was demonstrated as a strategy for its application to ferries and vessels destined for short-distance maritime transport. The drastic cost reduction with respect to conventional battery systems, both from the point of view of the shipowner and the shipyard, was the key aspect of the round of questions, and what aroused the greatest interest among attendees.

You can find the news item about this event also on our website.

3rd SEABAT Academic workshop



Next Friday, June 14, 2024, the third SEABAT academic workshop will take place at Fraunhofer in Darmstadt, Germany.

The SEABAT consortium will unveil insights, data, and expertise concerning the integration of hybrid energy storage systems for maritime use. The presentation will delve into the electrical, thermal, and mechanical facets of the system, offering in-depth examinations of testing outcomes.
The workshop will cover the following topics:

1. Session 1 will focus on component development and innovations.
2. Session 2 will delve into overall system integration at the hardware level.
3. Session 3 will explore overall system integration at the software level.

The workshop is specifically for Master's and PhD students, and researchers at industrial organisations.

Last Minute registrations are still possible until June 12th at five o'clock in the afternoon. Please send an e-mail to eva-maria.stelter@lbf.fraunhofer.de.

Save the date: SEABAT final event

For 4 years, the SEABAT project (**S**olutions for larg**E** b**A**tteries for water**B**orne tr**A**nspor**T**) worked on a **full electric marine battery concept**.

Electrification is a key technology to reduce maritime emissions. The International Maritime Organization (IMO) wants to reduce annual greenhouse gas emissions from maritime transport by 50% by 2050 compared to 2008, and even pursues efforts towards phasing them out entirely.

However, maritime electric propulsion is not yet mature. Maritime batteries are considerably more expensive than automotive batteries and integrated solutions for ships have not yet started to penetrate the markets.

SEABAT takes the challenge head-on to substantially reduce the costs of large waterborne transport battery systems by developing a full-electric maritime hybrid concept that combines high-energy and high-power storage cells.

During this event will present our findings and look forward to the future. Together, we will navigate the complexities of electrification.

General event info:

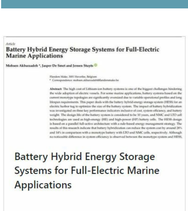
- Date: November 13, 2024
- Location: Port Authority Building, Antwerp
- Host: Flanders Make (FM)

The exact programme & registration form will follow soon.

To make sure you don't miss anything according to this event, be sure to subscribe to our newsletter if you haven't already.

Also keep an eye on the SEABAT website and LinkedIn Page of course!

Publications



SEABAT Partners

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