

## STORIES MENTORING PROGRAMME REPORT

Mentee (PhD Student) Details	
First Name:	Hüseyin
Last Name:	Ersoy
Affiliation / Employer:	Karlsruhe Institute of Technology
Country of Employer:	Germany
PhD Thesis Title:	Implementation of Constructive Sustainability Assessment Framework for an emerging energy storage technology (EST)
Mentor (Supervisor) Details	
First Name:	Stefano
Last Name:	Passerini
Affiliation / Employer:	Austrian Institute of Technology
Country of Employer:	Austria
Online Meetings	
How often and since when do the mentee and mentor meet online?	
<i>The mentee and mentor meet mainly online on 2-3 months period to discuss various joint publications and overall workflow of the dissertation project since March 2023.</i>	
In Person Meeting (if applicable)	
Where and when did the mentee and mentor meet in person?	
<ol style="list-style-type: none"> <li>1. StoRIES Summer School, 03-06 June 2024, Rome</li> <li>2. StoRIES Project and EERA Joint Programme Energy Storage, 19-20 November 2024, Brussels</li> <li>3. International Symposium on Renewable Metal Fuels (ReMEF 2025), 12-13 February 2025, Rapperswil</li> </ol>	
Mentoring Programme Report	

*The dissertation project of the mentee focuses on the application of a comprehensive sustainability assessment framework to evaluate an emerging energy storage technology. Specifically, the research focuses on the aluminum-air battery developed under the ALUSTORE project (Aluminum Metal as Energy Carrier for Seasonal Energy Storage), funded through the Karlsruhe Institute of Technology's Future Fields initiative, as a primary case study. Within this consortium, the mentee provided sustainability expertise, while the mentor, serving as project coordinator, offered guidance on the technical aspects of battery development.*

*The doctoral research benefits significantly from this collaboration. The interdisciplinary nature of the project has enabled the mentee to acquire a robust understanding of both sustainability assessment methodologies and electrochemical energy storage technologies. The collaboration has resulted in joint academic publications, including book chapters, and strengthened the methodological and scientific quality of the dissertation.*

*To ensure consistent and effective supervision, regular meetings have been held each 2-3 months, with additional consultations as needed during key project phases (e.g., technological specification, system design and configuration, data analysis, publication preparation). Both mentor and mentee confirm the continuity and productivity of this communication structure. Furthermore, the mentor has accepted an official role on the dissertation advisory committee, enabling ongoing academic support and active involvement in the progression of the doctoral project.*

- **Confirmation**

*This report has been confirmed by both parties (09/07/2025).*

☒ Hereby, we authorize the publication of this report on the StoRIES website.

☒ Hereby, we consent to the processing of our personal data according to the StoRIES [privacy policy statement](#).