



## THIRD STORIES SUMMER SCHOOL 2025 'MID- TO LONG-TERM HYBRID ENERGY STORAGE'

The Third StoRIES Summer School 2025 entitled "*Mid- to Long-Term Hybrid Energy Storage*" in June 10-12, 2025 in Trondheim/Norway, co-hosted by SINTEF & Norwegian University of Science and Technology (NTNU).

The main objective of the joint [StoRIES](#) - [NordicRFB](#) Summer School is to give a new perspective on the integration of various energy storage solutions to address the challenges and opportunities in the pursuit of a successful energy transition. Several case studies revealing different combinations of energy storage technologies to provide the best performance in terms of capacity and duration, while also offering the desired flexibility, economic and environmental viability, setting the stage for developing hybrid energy storage (HES) will be presented during the Summer School.

The Third StoRIES Summer School 2025 is open for **early-stage researchers** (Master's students, PhD students and postdoctoral researchers within 2 years after PhD). Please note there is no registration fee for the summer school.

A **draft schedule** of the Summer School 2025 can be found below:

<b>Third StoRIES Summer School 2025</b>			
Venue: SINTEF-NTNU Campus (Gløshaugen) see map <a href="#">here</a> , Trondheim / Norway			
<b>Monday, 9 June</b>	<b>Tuesday, 10 June</b>	<b>Wednesday, 11 June</b>	<b>Thursday, 12 June</b>
Travelling	<b>8:00 Registration</b> <b>9:00 Summer School Opening Talks</b> <b>9:30 Lectures:</b> <ul style="list-style-type: none"> <li>• General aspects of relevant applications for HES – Dr. Peter Fischer, SEI Automotive Europe (45')</li> <li>• Prof. Anders Bentien, AU (45')</li> </ul>	<b>8:00 Registration</b> <b>9:00 Introduction Talk of the Day</b> <b>9:30 Lectures</b> <ul style="list-style-type: none"> <li>• A flexible and intelligent power grid for the energy transition – Dr. Gerd H. Kjølle, SINTEF Energy (45')</li> <li>• ES systems and future systems – Prof. Odne S. Burheim, NTNU (45')</li> </ul>	<b>8:00 Registration</b> <b>9:00 Group Work: Case Studies</b> <i>by Early-stage Researchers</i>
	<b>11:00 Coffee Break</b>	<b>11:00 Coffee Break</b>	<b>11:00 Coffee Break</b>
	<b>11:30 Lecture:</b>	<b>11:30 Lab Visit 1</b>	<b>11:30 Lab Visit 2</b>



	<ul style="list-style-type: none"> <li>Hybrid thermal and electrochemical ES in buildings – Dr. Fride Vullum-Bruer, SINTEF Energy (45')</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">The National Smart Grid Lab at NTNU/SINTEF</a></li> <li><a href="#">Battery Lab at NTNU</a></li> </ul>	<a href="#">Zero Emission Building Laboratory at SINTEF/NTNU</a>
	<a href="#">12:15 Lunch</a>	<a href="#">12:30 Lunch</a>	<a href="#">12:30 Lunch</a>
	<p><b>13:15 Lectures:</b></p> <ul style="list-style-type: none"> <li>Thermal ES: the key piece for long-term ES for grid application – Dr. Esther Rojas Bravo, CIEMAT (45')</li> <li>Mid-to Long-term HES: pumped-hydropower plants and its hybridization – Prof. Giovanna Cavazzini, UniPd (45')</li> <li>The role of hydropower in balancing a renewable energy system with a large share of intermittent power sources – Prof. Tor H. Bakken, NTNU (45')</li> </ul>	<p><b>13:30 Group Work: Case Studies</b> <i>by Early-stage Researchers</i></p>	<p><b>13:30 Group Work Results</b> <i>by Early-stage Researchers</i></p>
	<a href="#">15:30 Break</a>		<p><b>15:30 Outlook Talk</b> <b>15:45 Summer School Closing Remarks</b></p>
	<b>16:00 Poster Session &amp; Drinks</b>	<p><a href="#">16:00 Social Event</a> Outdoor activities (hiking, swimming) at Theisendammen and Baklidammen lakes in Bymarka, the park and nature reserve of Trondheim. See map <a href="#">here</a></p>	16:00 Departure
	<a href="#">18:00 Social Event</a>		
	<a href="#">20:00 – 22:00 Networking Dinner</a>		
		<a href="#">20:00 – 22:00 Networking Dinner (location TBC) near the lakes</a>	