



**Call For Abstracts – Deadline 29<sup>th</sup> November 2024**

# Subsurface Energy Storage – Geoscience, policy and application

19 - 21 March 2025

The Geological Society, Burlington House, Piccadilly, London



Subsurface energy storage is emerging as a pivotal component in the transition to sustainable energy systems. As the world shifts towards renewable energy sources, the ability to store energy efficiently and reliably becomes increasingly critical. There are a range of technologies and solutions being developed and deployed across the globe, from relatively small scale (MWh scale) stores through to large scale (TWh scale) stores, each bringing specific opportunities and challenges. Ultimately, we'll need a mix of these technologies, matched to specific geological conditions and the intended end-use requirements, to ensure optimal efficiency, safety, and economic viability.

This conference aims to bring together leading experts to explore the latest advancements and practical applications in this field. The event will cover a broad of subsurface energy storage technologies such as compressed air energy storage (CAES), hydrogen storage, gravity-based systems and heat storage – plus emerging technologies and research. Attendees will gain insights into cutting-edge geoscience research such as store characterisation, modelling, and simulation techniques designed to optimise energy storage in diverse geological settings. Noting the techno-economic and regulatory challenges associated with many subsurface energy store technologies, the conference will also address the regulatory and policy frameworks necessary to support the deployment of these technologies, examining how they fit into the broader energy storage mix and drawing lessons from existing implementations.

Case studies from the UK and around the world will showcase successful projects, highlighting lessons learned and best practices in the implementation of geological energy storage systems. We invite contributors to submit abstracts on these topics, offering an excellent opportunity to share research, network with peers, and contribute to the advancement of geological energy storage. Join us to shape the future of energy storage and make a lasting impact on this vital industry.

**For further information please contact:**

The Geological Society, Burlington House, Piccadilly, London W1J 0BG.

Email: [energygroup@geolsoc.org.uk](mailto:energygroup@geolsoc.org.uk)

Corporate Supporters:



Convenors:

**James Todd**  
Arup

**Ed Hough**  
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TBC

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