



GSEU
GEOLOGICAL FOR
SERVICE | EUROPE

www.geologicalservice.eu

A Geological Service for Europe

GSEU Day

19 October 2023

ARTS 56 – Av. des Arts 56, Brussels, Belgium

Press release



Funded by
the European Union



The Geological Surveys of Europe

GSEU Day took place in Brussels on 19 October 2023. Its purpose was to engage with our valued external stakeholders following a year of project implementation, and to drive forward our mission: a sustainable Geological Service for Europe. More than 100 people from all over Europe gathered to hear great presentations and discussions on all GSEU's areas of expertise: Raw Materials, GeoEnergy Resources, Groundwater Resources, Coastal Vulnerability & Windfarms and Geological Framework Setup, all connected and accessible through the European Geological Data Infrastructure.

Julie Hollis, Secretary General of EuroGeoSurveys, emphasised in her introduction that the involvement of external stakeholders in our ambition to establish a Geological Service for Europe - a pan-European expert network based on harmonised data, information and knowledge about Europe's subsurface - is crucial to build strong bridges between the geoscience and policy makers to support the achievement of a green transition and a sustainable future for Europe. Collaboration beyond the geoscientific community with EU institutions and society can solve complex environmental and societal challenges that do not stop at national borders. To address problems on a continental scale, we also need to act on a continental scale, i.e. we need data on the energy, mineral and water resources that drive our society across Europe. The Earth is an interconnected system of processes, and geological knowledge and information helps to understand and effectively translate into sound, science-based policies that enable a net-zero future.

Presentations from GSEU's areas of expertise followed. [Critical Raw Materials](#), [GeoEnergy Resources](#), [Groundwater Resources](#), [Coastal Vulnerability & Windfarms](#) and [Geological Framework Setup](#) were described by representatives of the GSEU team, with a focus on the products and services that will be developed under the project to support science-based policies.

In the session on **Building a Knowledge Platform** the spotlight was on the [European Geological Data Infrastructure – EGDI](#) and the future steps we are about to undertake within the GSEU project. The existing EGDI system will be taken to a new level through the transformation of the current data infrastructure into a knowledge infrastructure. Today, EGDI provides access to data and datasets created in numerous projects from the last 15 years. It is essential to ensure that the foundation of the system is adequate (complete, trusted and usable data) and maintained (up-to-date data). As part of the planned transformation, these data and data sets will be interpreted, and knowledge in the form of added-value products will be added in order that end users can use it in their workflow and decision-making process.

The session entitled **Building a Geological Framework for Integrated Subsurface Management** addressed the importance of geological mapping for effective communication and better understanding of the surface and particularly the subsurface hidden beneath our feet. For the development of harmonised geological maps and models, the use of common data models, standards and vocabularies is essential to address pan-European and cross-border subsurface management challenges.

The Coastal Vulnerability & Offshore Windfarm Siting for Sustainable Development session touched on two important application areas of coastal marine geology, namely coastal zone management and the installation of offshore wind farms. Onshore-offshore geological maps/models/modules will be developed to support informed decisions on coastal zone management and protection and offshore wind energy installations risk mitigation.



The next session focused on **Mapping and Managing Sustainable GeoEnergy Capacities in Europe**. The main objectives of GSEU in the field of GeoEnergy resources are to provide pan-European inventories, characterisations and knowledge of geothermal energy resources, underground capacities for CO₂ sequestration and temporary storage of sustainable energy carriers.

The session entitled **Harnessing CRMs for Sustainable Resource Management in Europe** focused on building a secure and reliable supply chain for critical raw materials to support the green transition of European industry and society at large. The Critical Raw Materials Act recognises the crucial role of subsurface resources, especially critical raw materials. The main objective of GSEU in the field of Raw Materials is to re-evaluate European resources of primary critical raw materials in onshore and offshore fields and to evaluate mining waste resources, with a focus on critical raw materials.

The last session of GSEU Day was devoted to **Safeguarding & Managing Europe's Groundwater Resources for Sustainable Use**. In the GSEU project we are tackling integrated, efficient and sustainable use and protection of European groundwater resources, including the assessment of temporary storage capacities from the perspective of groundwater quantity and quality. We know there are examples of some serious water related issues all over Europe. According to the recent update on the state of the planetary boundaries the Earth is currently outside of safe operating space for humanity in six out of nine boundaries, most recently including freshwater change.

A sustainable Geological Service for Europe requires the technical scientific base – data, information and knowledge – as well as an expert network, which is competent to close the gaps between national data and knowledge to create harmonised data, information and knowledge on a pan-European scale. We have the technical scientific base and expert network - the GSEU project enables us to create the harmonised data, information and knowledge required to support national and pan-European policy, enable the energy transition and provide the understanding needed to implement the EU Green Deal.

For more information, visit:

GSEU: www.geologicalservice.eu

GSEU Day: <https://www.geologicalservice.eu/events/gseu-day>

Contact us:

info@geologicalservice.eu

Follow GSEU on social media:

