

WHO ARE WE?

The Geological Survey of Slovenia (GeoZS) is a multidisciplinary public research institute with a wide range of activities with a scientific and professional focus on geology and other geosciences. By fulfilling our mission and tasks, we respond to the needs of society and remain the central geological institution in Slovenia. We are a national custodian of geological information with a central role in national geological research and a long tradition of data acquisition, information production and dissemination, and management of geological research. We conduct basic and applied research and provide access to objective and accurate data and research results. We follow the principles of open science. We are involved in global research trends and also pursue our goals within the network of European geological survey organisations, EuroGeoSurveys (EGS). Our mission relies on highly qualified and motivated employees in an inclusive and welcoming work environment. We promote the professional and personal development of our employees through continuous training.





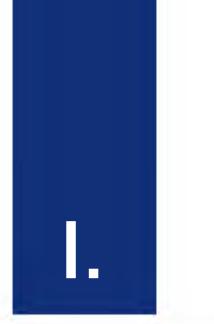
FOR A HEALTHY AND SAFE LIVING ENVIRONMENT

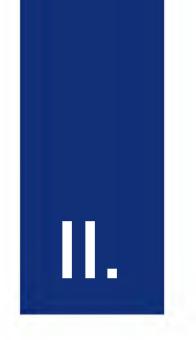
Geological research and the resulting data and its interpretation are central to planning the future development of society in a way that is compatible with the Earth's carrying capacity and limited natural resources.

Through basic and applied research and other specialised work, GeoZS will support decision-makers at the national and European levels in all activities related to sustainable management and spatial planning, both on the Earth's surface and subsurface, including the use of natural resources, vulnerability and risk assessment, and the provision of a safe and healthy living environment.

LINKING, THEORY, PRACTICE and DEVELOPMENT to ADDRESS SOCIETAL CHALLENGES

Our activities are a mixture of scientific research and specialised work, public and professional services and commercial application of knowledge.







Scientific and Professional Research Programme

Developing and conducting scientific research to address societal challenges and needs that require knowledge of processes taking place on and below the Earth's surface.

Geological Public and Professional Service

Developing and performing professional tasks to facilitate the professional and high-quality delivery of public services, focussing on the acquisition, preservation, provision and interpretation of high-quality data and information.

Applied (Commercial) Activities

Effective application of scientific and professional services to facilitate the most demanding commercial projects.

CONTINUOUS IMPROVEMENT OF OUR SCIENTIFIC EXCELLENCE

Four research programmes form the basic framework for scientific work at the GeoZS. We will adapt the number, composition and content of these programmes to the needs of society.

Regional geology
Groundwater and geochemistry
Mineral resources
Dynamic Earth

Research equipment and the information system for the implementation of research programmes are provided by the infrastructure programme.

Basic geological research

forms the basis for understanding natural processes and phenomena, provides corresponding scientific explanations and enables the transfer of scientific findings into applied knowledge and projects.

At GeoZS we strive to strengthen the position and importance of basic knowledge, follow the principles of open science and continuously increase the quality and impact of our scientific work.









STRATEGIC THEMATIC AREAS OF OUR WORK

Strategic development at the GeoZS is grouped into **five thematic areas** that reflect the global, European and national challenges of our time.

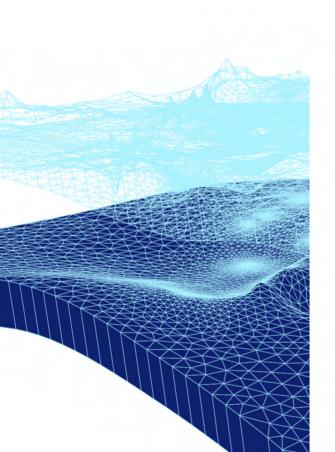
Environmental changes and quality of life	Multidisciplinary cooperation and active participation in the formulation of policies aiming to ensure clean air, unpolluted drinking water, the preservation of soil quality and quality of life, and the provision of geothermal resources for food production.	We use our knowledge and scientific expertise to help build a society that uses natural resources responsibly, sustainably and with the least possible impact on the environment. By being guided by professional independence, we strengthen the trust of decision-makers, industry and the general public.
Geohazard – geological hazards	Enhancing research and development with the aim of identifying the key spatio-temporal factors influencing the occurrence and evolution of geological hazards. Supporting decision-makers and advocating regulations that require the consideration of risks associated with geological hazards in spatial planning and development.	Expertise in this field is a prerequisite for landslide mitigation and management and for improving earth- quake safety and protection against other geologically induced natural disasters and their risks. In this way, we help to reduce the vulnerability of the population, infrastructure and cultural heritage.
Energy transition and use of carbon-free sources	Achieving a breakthrough in understanding the potential and benefits of geothermal energy as a key strategic resource for the country's green energy transition and for decarbonising and replacing the use of fossil fuels. Comprehensive assessment of the potential and optimal use of geoenergy sources in Slovenia and advising decision-makers and investors on the selection of geothermal energy sources.	We provide the basis for ensuring that national policies for the development of heating, cooling, power generation and energy storage are based on a comprehensive inventory and analysis of the national potential for the sustainable use of geothermal energy. Our research also focuses on (deep) geological structures and their impact on the siting of new strategic energy installations and the safety of existing ones.
Sustainable use of mineral and energy resources	Exploring the geological potential of mineral and energy resources and evaluating their deposits and reserves, keeping records of their occurrence and exploitation. Providing expert support for decision-making in the field of mineral and energy resources and for the protection and conservation of the environment and the natural and technical heritage. Promoting research on minerals and energy resources throughout their life cycle, including secondary raw materials. Focusing on the critical and strategic mineral resources that are crucial to the green transition and researching new ways of exploration and extraction of mineral resources.	Based on existing inventories and current and ongoing research, we ensure the best possible understand-ing of the geological, mineral and energy resources on Slovenian territory , as well as their documentation and sustainable management. This includes exploration, extraction, environmental protection and reclamation, green transition policy, circular economy and social acceptance.
Digital transformation with the goal of digital twin development	Staying up to date with new technologies and the use of artificial intelligence, including in the area of cybersecurity, and systematically gathering and ensuring the quality of the data collected. Working towards the adoption of a new law on geological data that is in line with the principles of open science and free access to analysed data. Central management of all geological data in Slovenia.	Our focus is on the presentation and use of 3D and 4D models of geological structures and processes. We will enhance and digitise the Basic Geological Map so that it can serve as the foundation for all subsequent geological research and the creation of expertise. We follow the principles of open science and the greatest possible public availability of data.



STRENGTHENING OUR INTERNATIONAL ROLE AND EXPANDING PARTNERSHIPS

In the EU, GeoZS is active in the **EuroGeoSurveys (EGS)** network, which brings together national and regional geological institutes. We are involved in the implementation of the comprehensive EGS research and innovation programme, which is aligned with the priorities of the European Commission and the Sustainable Development Goals. As part of the Strategic Plan for the European Union Framework Programme for Research and Innovation 2021–2027, we participate in the **Horizon Europe programmes and collaborate on the next Framework Programme**. Through our scientific research activities, we make an important contribution to Slovenia's role in the European Green Deal. The objectives of the **European Green Deal** cannot be achieved without sound knowledge of geosciences.

Due to the nature of our work and the associated international involvement, GeoZS relies on the development and strengthening of a network of partners at home and abroad. By successfully participating in high-quality partnerships, we increase our contribution to social development and strengthen our international reputation. As the answers to the most important challenges in science and society are no longer limited to individual scientific disciplines, we will focus on expanding interdisciplinary partnership networks.



Through the development and application of geosciences, we are helping to make life on this planet safer, more sustainable and more prosperous. As a leading geoscience research organisation, we are committed to preparing for the future, embracing change and working towards greater recognition of the geosciences and their importance for society. We have aligned our strategy with the United Nations Sustainable **Development Goals** and participate in the implementation of the European Union's priorities according to the Resolution on the Slovenian Scientific Research and Innovation Strategy 2030. In this time of great technological and societal change, we are working to provide objective and unbiased scientific answers. To this end, we are also strengthening our links with other institutions, including research organisations, universities, national and local authorities, the private sector and civil society as a whole. Through openness to collaboration and respectful dialogue, together we can ensure a stable and secure future for Slovenia.

