



BRIEFING
NOTE
No. 5

Geological Survey Ireland Supporting Geoscience Research in Ireland

Ireland aims to place “research, development and innovation at the heart of addressing our economic and societal challenges, and build capacity and capability across the research and innovation system to move R&I up the value chain”¹.

As part of this research and innovation system, Geological Survey Ireland works with a wide range of Government departments and agencies as well as educational and research organisations, both at national and international level.

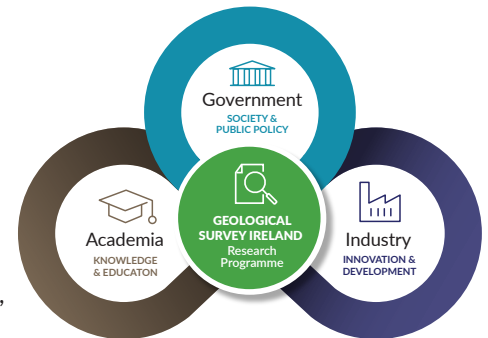


Figure 1. The GSI Research Programme supports Academia, Industry and Government sectors.

Geological Survey Ireland's Research Programme supports the growing needs of policy makers and practitioners, commercial entities, and the geoscience community. It also provides information directly to the public and to the education and research sectors. The programme delivers expertise, data and funding for a range of research topics across Earth sciences including geology, geophysics, geochemistry, geothermal energy, marine geology, groundwater, minerals and raw materials, Earth observation and geohazards²; drawing from and supporting all programme areas of Geological Survey Ireland.

Figure 2. Examples of Geological Survey Ireland's collaborators and partners across government departments and agencies.



The benefits of geoscience research to society and the economy

Geoscience knowledge, and understanding our natural systems, underpins much of our day-to-day lives. This ranges from identifying and carefully managing our natural resources to estimating the current and future impact of climate change on our natural systems. Geoscience research aims to:

- I. contribute to the sustainable management of Earth's natural resources,
- II. provide reliable, evidence based, geoscience information to the public and for policy and planning,
- III. advance geoscience in response to the needs of society and the circular economy, and
- IV. strengthen the research and education sector, and the knowledge economy, through the provision of databases, expertise, products, services and funding.

Geoscience supporting global and national challenges

Improving our understanding of natural systems, and modelling changes through time, allows us to make informed decisions not only about our local areas but also our impact globally. Critically, geoscience sits at the nexus of several key challenges. Research within, and across, these challenges delivers outputs used by all areas of society. By integrating research in physical and natural sciences, with economics, social sciences and behavioural sciences we are helping to

answer large scale and complex questions. For example, geoscience research helps to identify and maintain high quality groundwater resources, estimate Ireland's potential for geothermal energy, identify new mineral deposits and construction materials, support our transition to near zero carbon emissions, protect our environment and soils, and monitor and model the impact of climate change on our coastlines and marine environment.

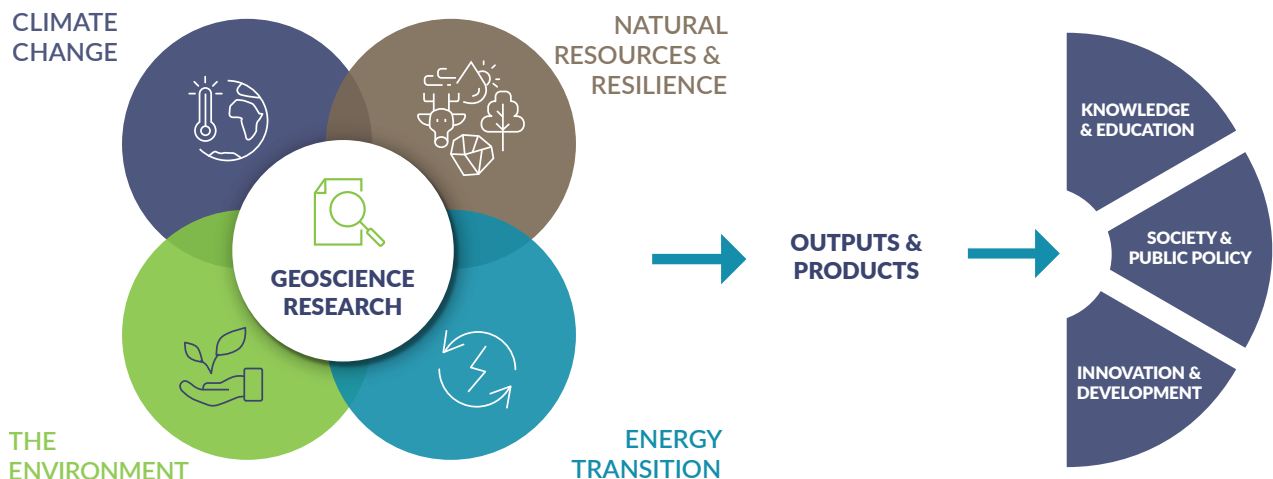


Figure 3. The Geological Survey Ireland Research Programme aims to address four key challenges by supporting high quality research and providing research outputs and products to a range of users.

Programme structure

The Geological Survey Ireland Research Programme provides support to the geoscience research community in three key areas: (i) funding for researchers on the island of Ireland, (ii) provision of expertise through in-house and external research activities and collaborations, and (iii) geoscience research infrastructure across terrestrial and marine sectors including national and international open access, data repositories, research vessels, national laboratory facilities, national archives and field equipment.

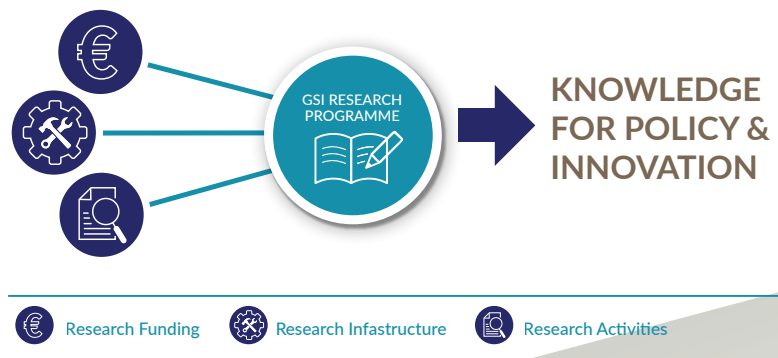


Figure 4. Geological Survey Ireland Research Programme Structure.



References

¹ Government of Ireland (2021) Economic Recovery Plan. <https://www.gov.ie/en/campaigns/709d1-economic-recovery-plan/>

² Geological Survey Ireland (2021) Research website. [https:// www.gsi.ie/research](https://www.gsi.ie/research)

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