



GeoEnergy
Resources



Geological
Framework Setup



Groundwater
Resources



Coast and Sea



Raw Materials



EGDI
European Geological Data Infrastructure

GSEU

GEOLOGICAL | FOR
SERVICE | EUROPE

Bringing the Subsurface into the Light

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EuroGeoSurveys

www.geologicalservice.eu



Funded by
the European Union



The Geological Surveys of Europe



EuroGeoSurveys (EGS)...

is a collaborative network of European Geological Surveys, enabling research and knowledge sharing to support the sustainable and responsible use of the Earth's subsurface environment and resources.

The flagship project of EuroGeoSurveys is...

GSEU – the Geological Service for Europe project

A 5-year EU-co funded cooperation and support action drawing together baseline subsurface data and knowledge to manage Europe's natural resources and reach Net Zero, and with the ultimate aim of delivering...

a sustainable Geological Service for Europe (GSE)...

A geoscience data, information, and knowledge-based advisory service supporting a sustainable future for Europe



Why a Geological Service for Europe?

FINANCIAL TIMES
EU sounds alarm on critical raw materials shortages

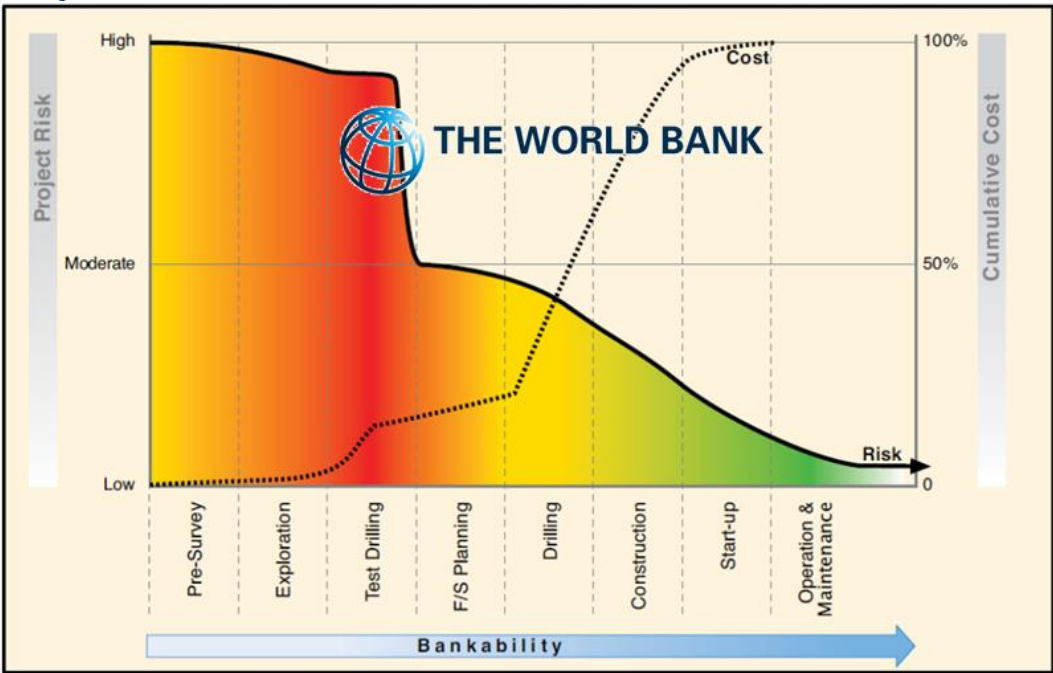
Forbes
We Have An Energy Storage Problem

Europe's groundwater – a key resource under pressure

Europe's groundwater — a key resource under pressure

European Environment Agency

REUTERS



THE WALL STREET JOURNAL.

HEARD ON THE STREET

Critical-Mineral Diplomacy Needs to Focus on Supply, Not Demand

U.S. and EU talk of collaborating to ensure energy security in the renewable age. A bigger priority should be strengthening trade links with big mining nations.

SPIEGEL International

The Global Competition for Raw Materials

Europe at Risk of Losing the Lithium Race

Without lithium, copper and rare earths, our mobile phones, electric cars and wind turbines wouldn't function. Currently we are almost exclusively dependent on China for these critical raw materials. But there might be a way out.

Η ΚΑΘΗΜΕΡΙΝΗ

Η Ε.Ε. ψάχνει στην Ελλάδα κρίσιμες πρώτες ύλες

Επιστρέφει Μυτιλήνες - Κομισιόν για την παραγωγή γαλλίου στη Βοιωτία

LA TRIBUNE PARTAGEONS L'ÉCONOMIE

Semi-conducteurs : la prochaine crise viendra-t-elle de l'accès aux métaux stratégiques ?

EL PAÍS

La falta de materias primas y la competencia de EE UU amenazan la producción europea de baterías



Geological Service for Europe project (GSEU) Consortium Members



National and Regional Geological Surveys are collaborating to build a **permanent network of organisations** focusing on the planet itself: the earth beneath our feet.

Find all partners at:

<https://www.geologicalservice.eu/about-us/project-partners>



Objective

The overall objective of the **GSEU** project is to establish a **Geological Service for Europe** as a permanent **collaborative network of European geological survey organisations**.



GSEU will structurally address specific challenges in the **sustainable management of the subsurface** at EU and national level.



From Geological Data to Policy Support

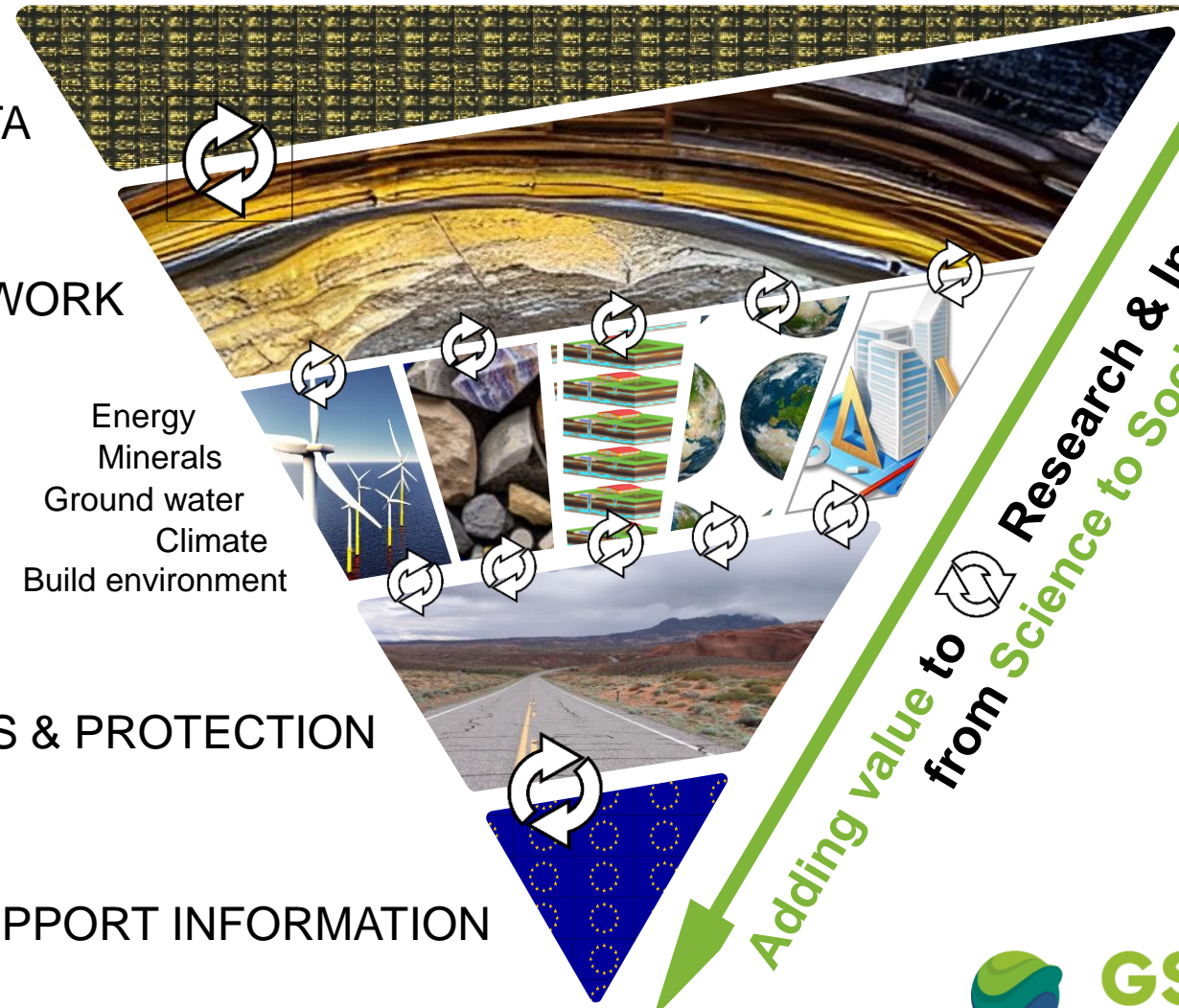
INTEROPERABLE GEOLOGICAL DATA

3D GEOLOGICAL FRAMEWORK

Energy
Minerals
Ground water
Climate
Build environment

IMPACTS & PROTECTION

DECISION SUPPORT INFORMATION



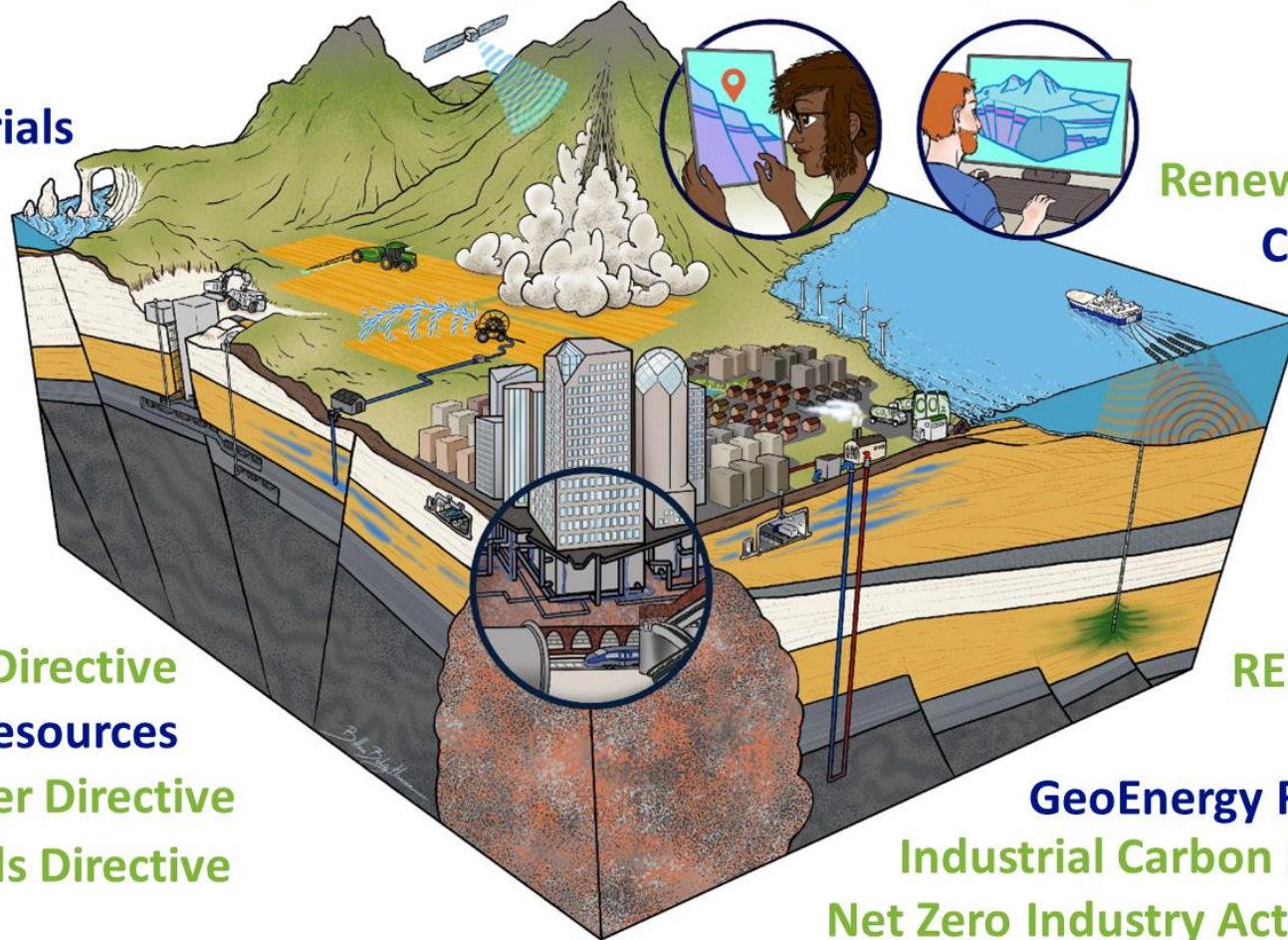
*Adding value to Research & Innovation:
from Science to Society*



Green Deal Policy & Earth Systems are Internconnected

INSPIRE Directive Geological Framework Setup European Data Strategy

Critical Raw Materials
The Critical Raw Materials Act



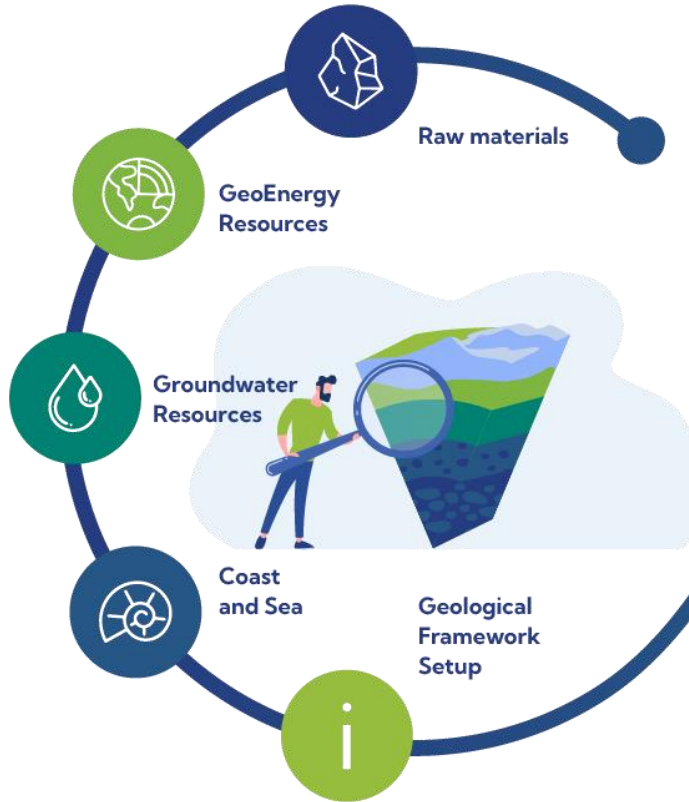
Renewable Energy Directive
Coastal vulnerability &
Windfarm siting
Marine Strategy

Water Framework Directive
Groundwater Resources
Groundwater Directive
Floods Directive

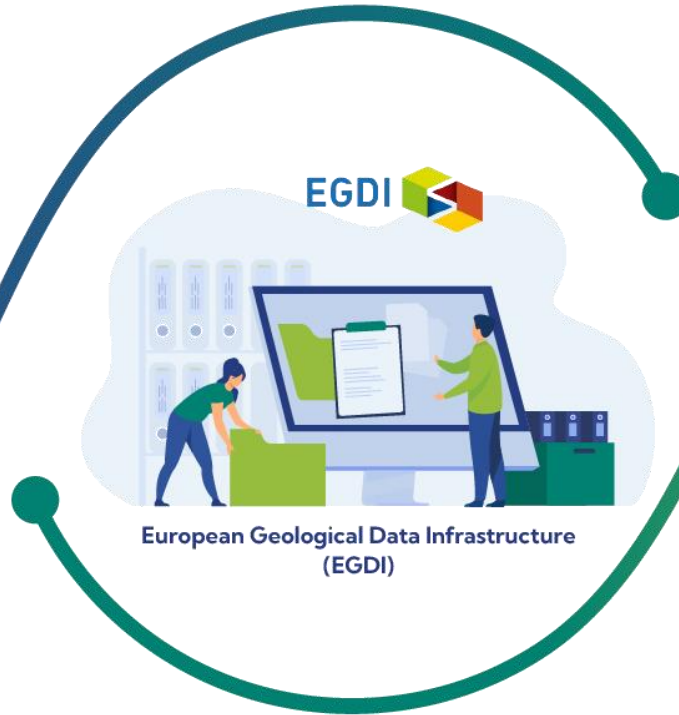
REPower EU
GeoEnergy Resources
Industrial Carbon Management Strategy
Net Zero Industry Act



Project Structure



Developing harmonised data & Information service

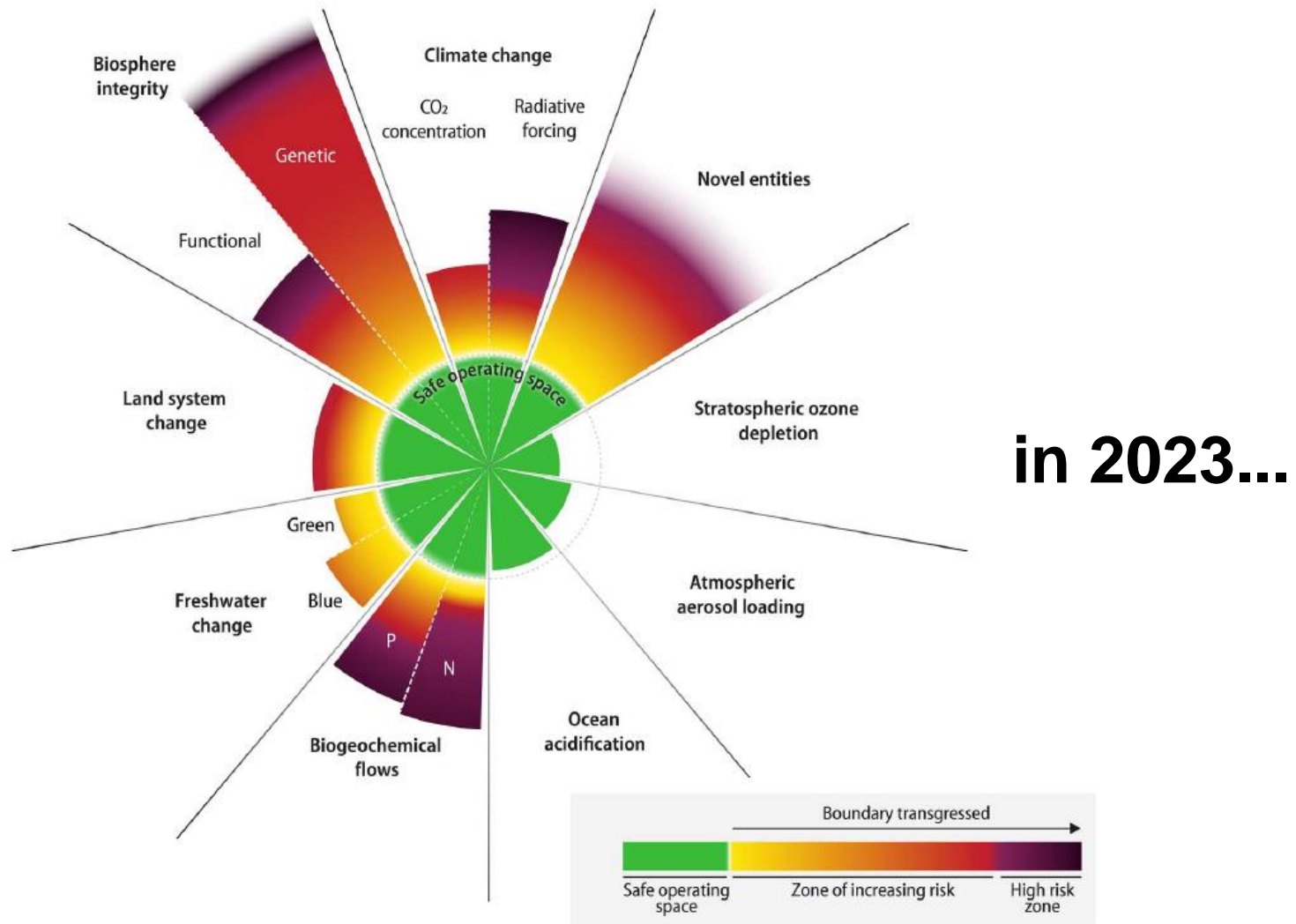


Developing Information structure



Communication, dissemination, exploitation & outreach

The Earth is now outside the safe operating space for humanity in 6 out of 9 planetary boundaries



Richardson et al., 2023. *Sci. Adv.* 9



Past ... Present ... Future ...

2010



2014



2015



2021



2022



2027



EGDI

