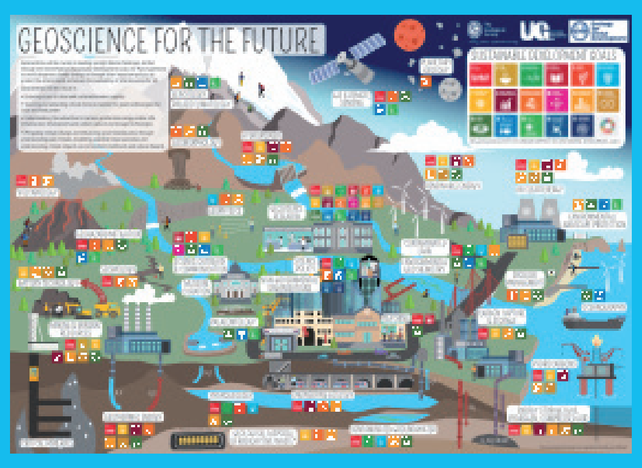
ENGIE

Empowering girls to become the geoscientists of tomorrow

What is geoscience?

Geoscience (or Earth Science) is the study of the Earth and in particular its oceans, atmosphere, rivers and lakes, ice sheets and glaciers, soils, its complex surface, rocky interior, and metallic core. This includes the study of the natural resources we use, our planet's structure, the processes which have shaped it throughout its history and how living things, including humans, interact with the Earth. Geoscience encompasses sciences such as geology, geomorphology, geophysics, geochemistry, geodesy and is closely related to a number of engineering disciplines that are concerned with the earth and earth materials, such as mining engineering, coastal engineering, geotechnical engineering, structural engineering, and civil engineering ("geo-engineering").



Geoscience for the future

Would you like to learn more about the important role geoscience plays for society? Then check out the poster "Geoscience for the future" which is available in several European languages!

www.geolsoc.org.uk/Posters

Why does geoscience matter to society?

Geoscience underpins the provision of most of the **resources** on which Europe's population and industry depend, including energy, minerals, water and food. A wide range of vital services depend on geoscience, including management of the **waste** we produce; ground engineering for the construction of **buildings, roads, dams, tunnels** and other large **infrastructure** projects; and remediation of a wide range of environmental problems, including land contaminated by industrial use.

The work of geoscientists to understand **natural disasters and hazards** is essential for preparedness and mitigation of their effects and geoscience is integral to the study of **climate change** – understanding its causes and impacts and how to mitigate them as well as **adaptation strategies**. The safeguarding of clean, available **drinking water** and the provision of varied **ecosystem services** depends on an understanding of both the underlying geology and its multitudinous interactions with surface processes. The future security of Europe's **energy supply** relies heavily on geological skills in a wide range of contexts, from **mineral exploration and extraction** to the **transition to renewable energy** and use of the subsurface to store carbon dioxide and radioactive waste. *(Source: Geology for Society report, https://eurogeologists.eu/geology-for-society-report-launch)*

Career pathways

Geologists work in a broad range of sectors:

More information and resources on career pathways:

www.geolsoc.org.uk/Geology-Career-Pathways

Why should girls consider to study geoscience?

"I would encourage girls to study geoscience because it matters so much. It's really fundamental to the concerns of the moment, to the concerns of the world. It's fundamental to sustainable development. It's fundamental to understanding and responding to climate change. It's fundamental to developing society. And then because of the huge range of opportunities and flavours. The essence of geology is a different way of looking at the world that the general population doesn't necessarily have. We look at the world and we visualise, we conceptualise the rocks under our feet, the interior of the earth."

Ruth Allington, Treasurer
European Federation of Geologists

Watch this and other statements on our website, under the tab "Inspiration"!

About ENGIE

The ENGIE project aims to turn the interest of girls to study geosciences and geo-engineering, and thus to improve the gender balance in these disciplines. The project is developing an awareness-raising strategy and creating a stakeholder collaboration network for the implementation of a set of outreach actions in more than 20 European countries.

Illustrations: Leonnidas

Web: www.engieproject.eu
Social media: @engie_project

This activity has received funding from the European Institute of Innovation and Technology (EIT), a body of the European Union, under the Horizon 2020, the EU Framework Programme for Research and Innovation.