

# Horizon Geoscience & EU Research Funding

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## Webinar outline

- The European Geosciences Union – who are we?
- The Horizon 2020 Programme
- Key Horizon 2020 Geoscience Survey results
- Horizon Europe
- How to get involved?
- Additional resources



## What is the European Geosciences Union?

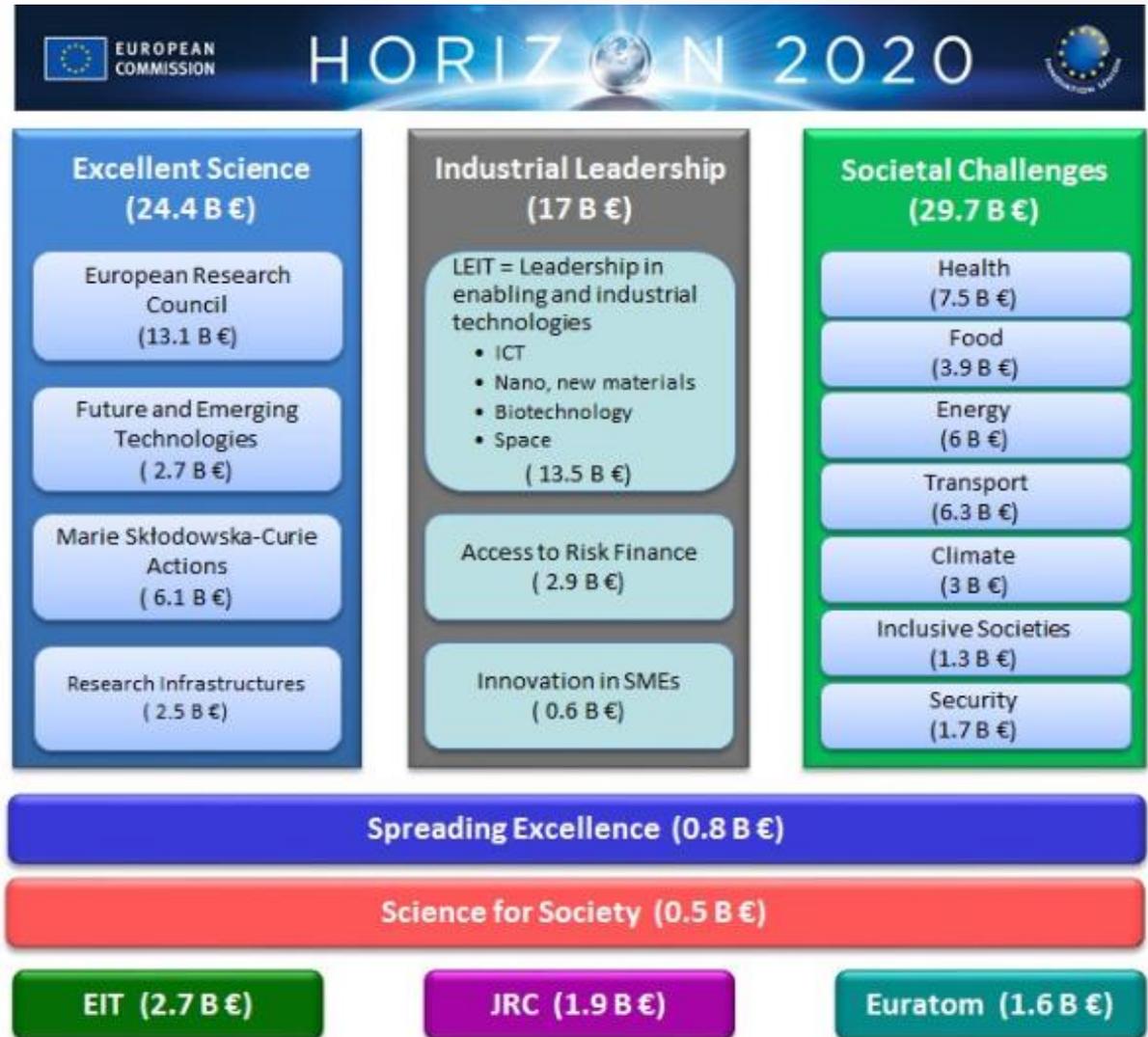
*“Europe’s premier geosciences union, dedicated to the pursuit of excellence in the Earth, planetary, and space sciences for the benefit of humanity, worldwide.”*

- Current President: Jonathan Bamber (physicist & glaciologist)
- 15,000 scientific members from 22 different divisions including:
  - Cryospheric sciences, Biogeosciences, Climate: past, present & future, Ocean sciences, Nonlinear processes in geosciences, Natural hazards
- Hosts the EGU General Assembly and co-sponsors a number of meetings
- 17 peer-reviewed open access journals (e.g. *The Cryosphere*)
- Large Early Career Science (ECS) network
- Organises and facilitates a number of science for policy activities

# What is Horizon 2020?

The EU's research funding framework that is giving almost €80 billion to research and innovation over 7 years (until the end of 2020).

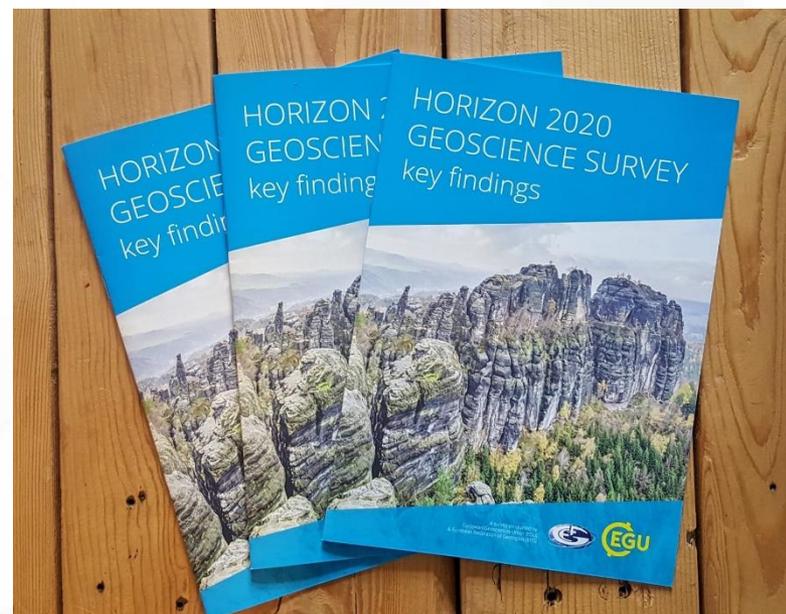
The next research framework [Horizon Europe](#) is already being negotiated by policymakers in Brussels.



[More info: EGU Horizon 2020 blog post](#)

## The Horizon 2020 Geoscience Survey Report

- Earlier this year, the EGU conducted a survey to collect feedback on areas of the [EU's Horizon 2020](#) that the geoscience community felt should be continued or extended and those which could be improved upon in [Horizon Europe](#)
- The geoscience community has a significant representation within European research programmes
- The survey aimed to give researchers who have taken part in Horizon 2020, or who plan to take part in Horizon Europe, the opportunity to voice their opinion

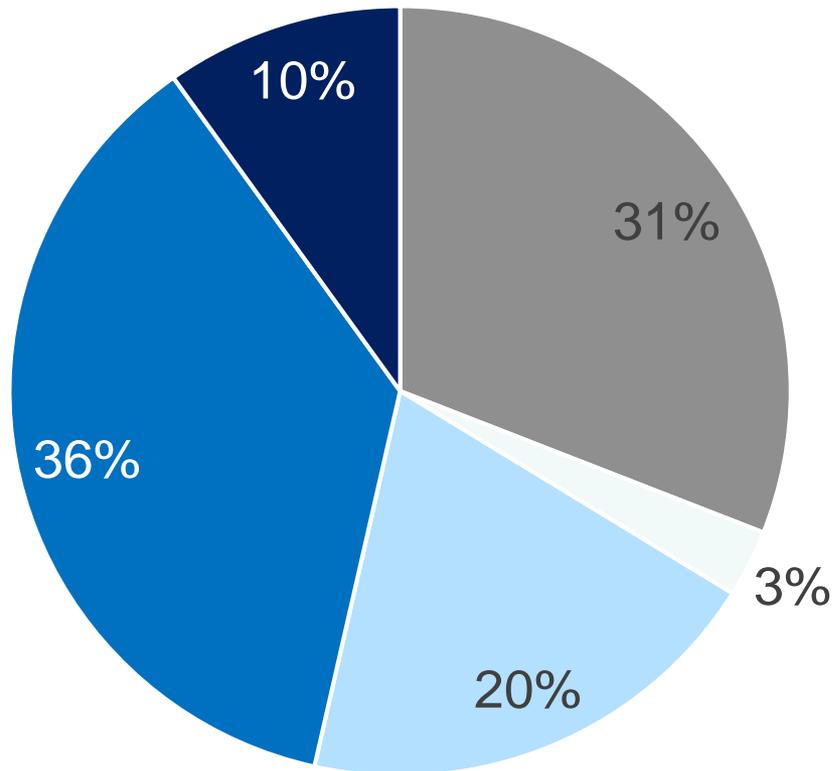


## Key results from the survey

The 271 geoscientists who answered the survey were involved in over 100 Horizon 2020 projects. Some of which were polar-related:

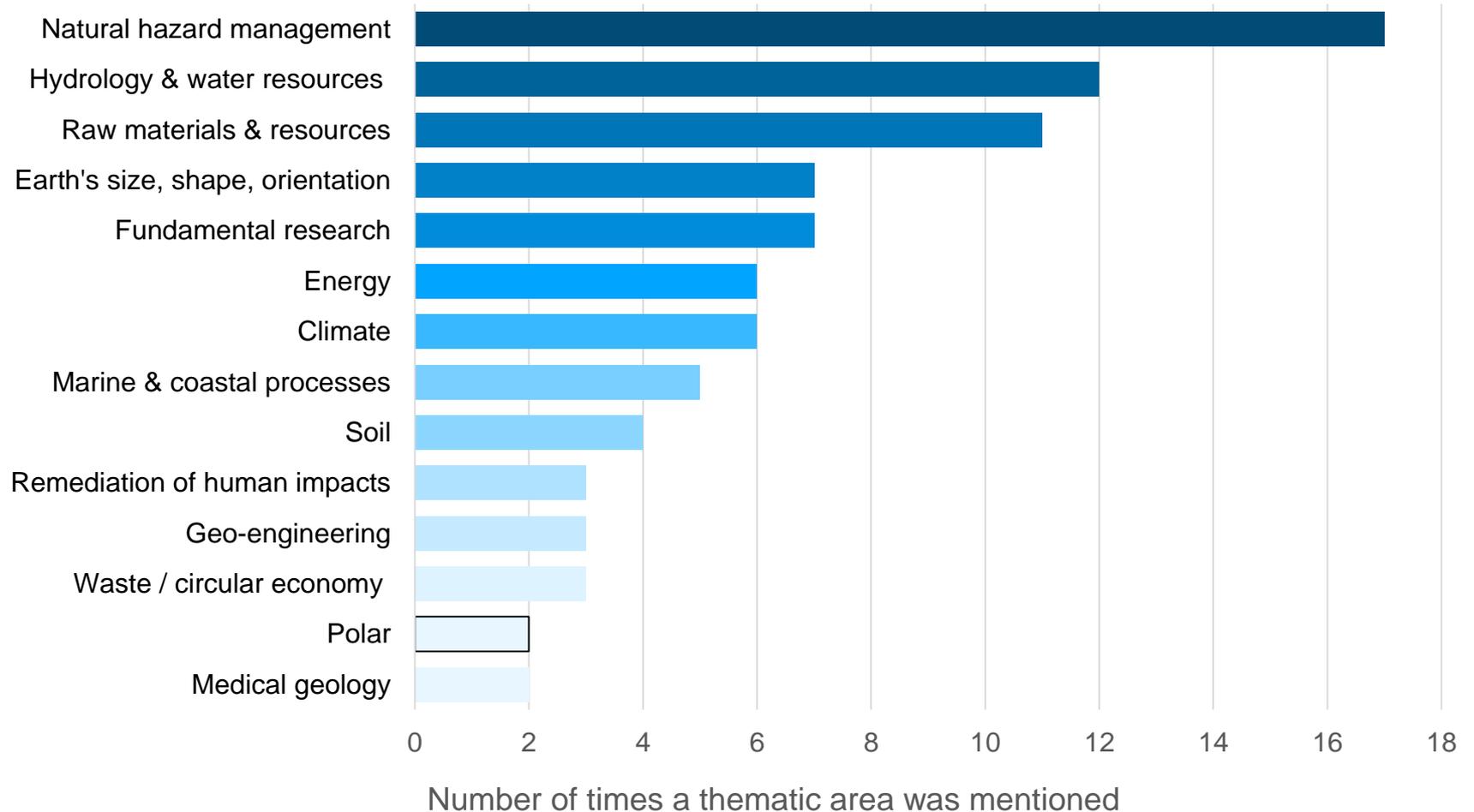
- **MSOPP Mesopelagic Southern Ocean Prey and Predators:** aims to develop standardised methods for assimilating acoustic biomass estimates of micronekton organisms in ocean ecosystem models
- **APPLICATE** (Advanced Prediction in Polar regions and beyond: modelling, observing system design and Linkages associated with a Changing Arctic climate)
- **Blue-Action:** Arctic Impact on Weather and Climate

## Have the project(s) that you were involved with achieved the expected outcome(s)?



- Unsure / the project is not yet complete
- No, the project's outcomes were not achieved
- The project's outcomes were somewhat achieved
- Yes, the project's outcomes were achieved
- Yes, the project's outcomes were exceeded

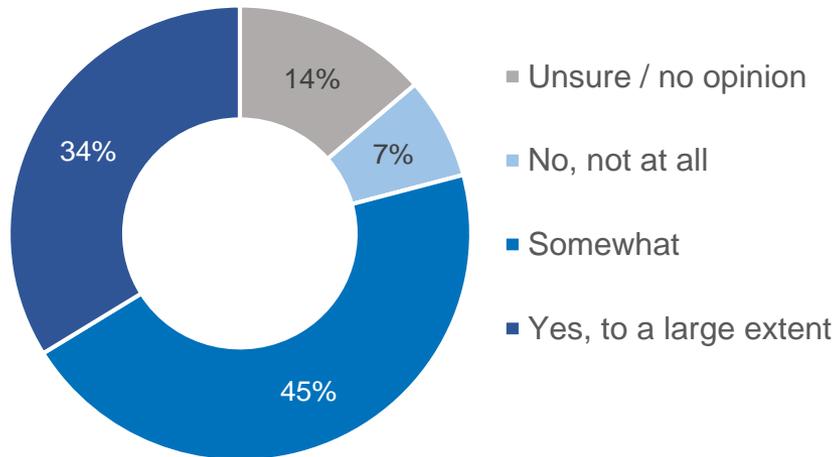
## Areas highlighted by respondents as being underrepresented in Horizon 2020 projects



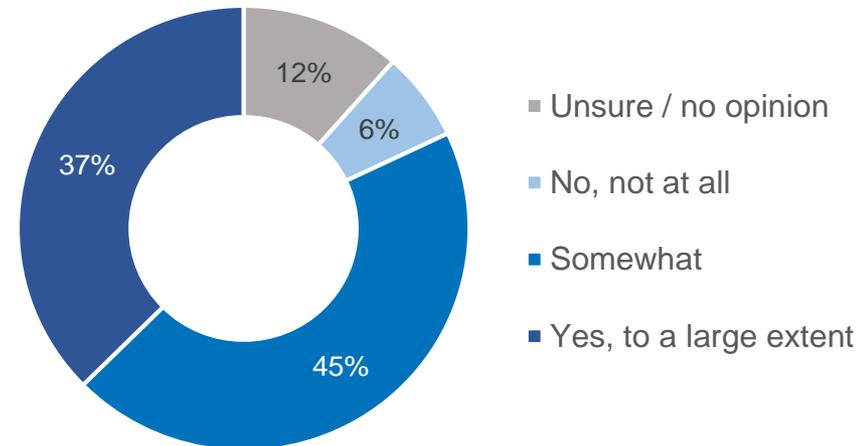
## Collaboration resulting from Horizon 2020

Generally, survey respondents felt very positively about the impact that Horizon 2020 had on collaboration (both between sectors and scientific disciplines)

Has Horizon 2020 increased cooperation across different sectors?



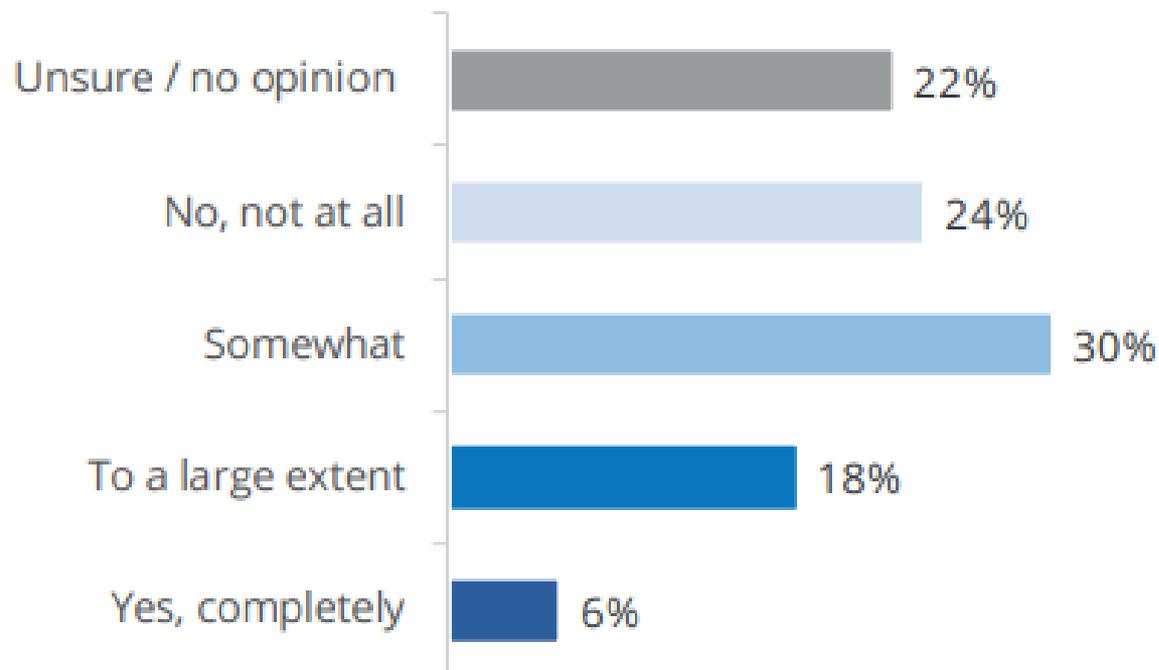
Has Horizon 2020 increased the collaboration between different scientific disciplines?



## Fundamental vs applied science

- **Applied research:** used to solve a specific problem, e.g. [Stopping the flood: could we use targeted geoengineering to mitigate sea level rise?](#) (EGU's journal, The Cryosphere)
- **fundamental research:** aims to improve scientific theories and understanding, e.g. [Dynamic Ocean Topography of the Greenland Sea: A comparison between satellite altimetry and ocean modelling](#) (EGU's journal, The Cryosphere)
- Many geoscience projects are a **mix** of both fundamental and applied science e.g. [ICE-ARC](#) (Ice, Climate, Economics – Arctic Research on Change) which measures the current and future changes in Arctic sea ice.
- **24%** of survey respondents felt that the distribution between applied and fundamental science was not distributed fairly at all. With qualitative responses calling for a larger focus on fundamental science.

## Is Horizon 2020 funding fairly distributed between applied and fundamental research?



*“... it seems as though the focus [of Horizon 2020] was more on applied research, the results of which can have immediate application and impact. It seems as though the more fundamental or ‘pure’ research topics received less attention, if not lesser amounts of funding. However, these two types of research work in tandem to provide longer-term measurable solutions.”*

# What to expect from Horizon Europe?

## The negotiation is still in process!

- €100 billion for science, research and innovation projects between 2021-2027 (€94.1 billion to be allocated to Horizon Europe).
- Horizon Europe will be mission-orientated and have a “*problem-solving approach to fuel innovation-led growth*”
- The European Innovation Council (EIC) will be introduced
- It will be simpler, clearer and more accessible than Horizon 2020



## What to expect (part 2)

- The Commission proposal is currently being assessed by the EU Parliament's Committee on Industry, Research and Energy & the Council
- Parliament aims to vote on Horizon Europe in November
- The Council want to see more details before they vote
- Key elements need to be agreed upon before the May 2019 European elections



## What H2020 Geoscience Survey Respondents would like to see

- More fundamental science
- Less bureaucracy
- Tapering of funding to extend the life of EU-funded projects
- More Eastern Europe and “third country” involvement
- Project evaluation panels with greater scientific diversity
- More projects on Natural Hazard management, hydrology / water management and raw materials (& circular economy)
- Inclusion of smaller grants that have a shorter application process
- More early career scientist opportunities

Some respondents suggested that providing more opportunities for early career scientists to work within the private sector could help boost private sector investment, *“Better conditions for supporting the contracting of young scientists by companies.”*

## Can scientists still help shape Horizon Europe?

Unfortunately, the Horizon 2020 Geoscience Survey has finished and the report is finalised but as a scientist, there are other ways that you can contribute!

- Keep an eye on upcoming events and join them if possible, e.g. [STOA's MEP-Scientist Pairing Scheme](#)
- Sign a petition, answer surveys and join events such as [Evidence Matters](#)
- Answer an [EU Consultation](#)
- Try out a [science-policy internship or placement](#)

EU Commission's 5-month [Blue Book Traineeship](#) has 1,300 placements available annually

## What else can scientists do?

- Talk to your local MEP's (especially those working within the Committee on Industry, Research and Energy)
- Work with a national scientific body who has a position on Horizon Europe
- Share your research with the public
- More tips for engaging with policymakers can be found [here](#)

## Links with more information

- [Horizon 2020 Geoscience Survey Report](#)
- [Horizon 2020 Geoscience Survey \*\*2-page\*\* Report](#)
- [Policy section of the EGU website](#)
- [EGU Division on Cryospheric Sciences](#)
- [The Cryosphere \(journal\)](#)
- [List of science-policy internships, fellowships and secondment opportunities](#)
  
- For more information or any questions: [policy@egu.eu](mailto:policy@egu.eu) or
- Twitter: [@Chl0e Hill](#)