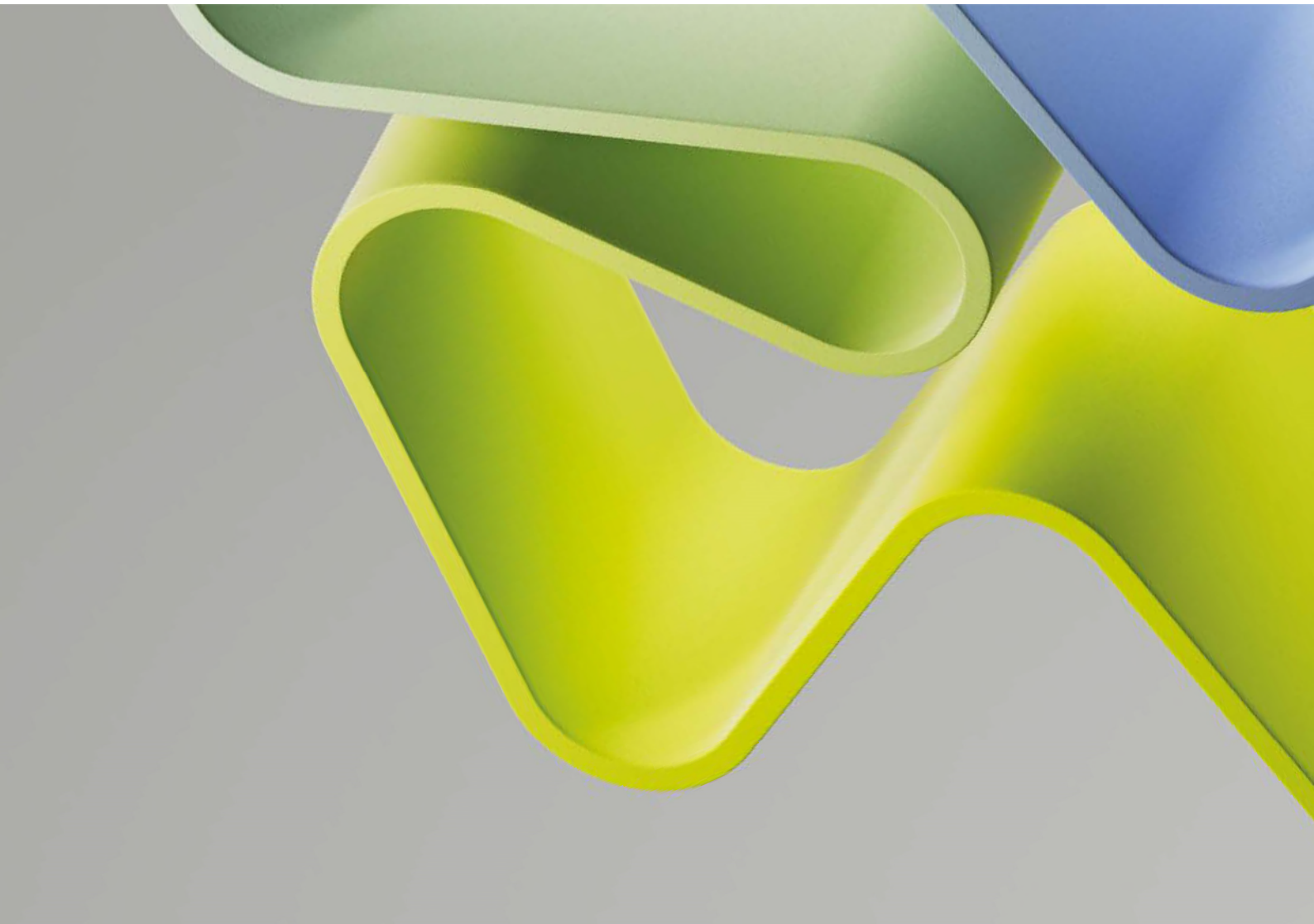
Forskningsrådet

Evaluation of Natural Sciences 2022-2024

Evaluation report
Geological Survey of Norway (NGU)

January 2024



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Statement from Evaluation Committee III – Institutes I

The members of this Evaluation Committee have evaluated the following administrative units at the research institutes within natural sciences in 2022-2023 and submitted a report for each administrative units:

- NORSAR Foundation
- SINTEF Industry
- SINTEF Digital
- Norwegian Geotechnical Institute (NGI)
- Geological Survey of Norway (NGU)

The members of the Evaluation Committee are in collective agreement with the assessments, conclusions and recommendations presented in this report. None of the committee members has declared any conflict of interest.

The Evaluation Committee has consisted of the following members:

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Description of the administrative unit

The Geological Survey of Norway (NGU) is a prominent institution responsible for geological research, mapping, and surveying in Norway. It plays a crucial role in providing geoscientific knowledge and expertise to support sustainable resource management, environmental protection, and hazard assessment.

NGU has eight geoscience-sections organised within three divisions with 135 scientific and 25 technical staff members (representing two-thirds of NGU's 200 employees). Six Research Groups (sections) were chosen for the EVALNAT evaluation: Quaternary Geology, Geohazard and Earth Observation, Geophysics, Marine Geology, Mineral Resources, and Solid Earth Geology.

NGU has developed a cohesive and robust research strategy. NGU's research efforts encompass a wide range of fundamental and applied studies, as well as the development of advanced survey methods. The research strategy is closely aligned with a clear mission: "*The Geological Survey of Norway (NGU) shall contribute to increased value creation by acquiring, processing and disseminating knowledge about Norway's geological resources on land and in sea areas. NGU will cover society's need for basic geological knowledge, i.e. for business development*." Research projects must be directly relevant to this mission and NGU's vision: "*Geology for Society – Knowledge for the Future*".

To this end, the focus of research by NGU is the geological understanding of Norway's bedrock, surficial deposits, groundwater and seabed, and their implications for natural resources, geohazards, environment and infrastructure development. The information collected is turned into maps and databases which are made publicly available to business and all public stakeholders. NGU takes an active role in supporting innovative science as the main provider of systematic geoscientific data to contribute to fact-based decision-making in society. As such, the NGU mapping plan is a long-term strategic activity plan. NGU has a highly relevant role to play in the long-term societal development of Norway and in national and societal challenges such as climate change and transitions to clean energy and mobility. Their work offers geological knowledge, informed decision-making, and sustainable development opportunities.

NGU actively collaborates with national and international partners to foster interdisciplinary research and innovation. Through joint projects and networks, NGU aims to enhance scientific cooperation, exchange expertise, and remain at the forefront of geoscientific advancements. NGU's overall funding is reported as €22 million, of which 18% is secured through competitive schemes and 82% is received through state subsidies, primarily via the Ministry of Trade, Industry and Fisheries. The research output of the different groups varies, with some groups contributing high-quality, interdisciplinary and international research. Results are published in high-impact journals, such as Nature Communications and Science. This leads to international recognition for NGU as a whole. Of the papers published by NGU, at least 60% are Open Access.

In their self-assessment, NGU identified that their strengths include: (1) a high level of appliable R&D activities with a substantial degree of multi-disciplinarity and (2) strong ties with the Norwegian mineral industry and branch organisations. The threats or weaknesses identified in their self-assessment include: (1) a lack of public knowledge regarding the importance of mapping combined with unrealistic expectations of mapping speed and (2) restricted access to data and co-interpretation of data in the current global political climate, which may limit their position in the future.

Overall assessment

Despite clear differences between the performance of the individual research groups, NGU is – as a whole - internationally recognised as a successful, research-oriented Geological Survey. Its work is highly significant to society, contributing to (1) the provision of the strategic & critical metals for the transition to climate neutrality, (2) environmental protection and (3) societal well-being. Its role is crucial in meeting the UN SDGs. Several of the NGU Research Groups publish high-quality, interdisciplinary and international research papers in high-impact journals (e.g. *Nature Communications*, *Science*), leading to international recognition for NGU.

Despite this positive overall assessment, it is clear that not all Research Groups within NGU are equally successful. As a result, NGU's combined international research output is good but not exceptional. Furthermore, as a whole, NGU should or could be more outspoken about its future research strategy. The role of NGU as a leading Geological Survey organisation contributing to sustainable development and societal well-being would be strengthened. This requires an organisational change where the present, somewhat reactive approach is transformed into a more dynamic, pro-active approach.

In terms of research funding, NGU is very dependent on direct national subsidies. Only 18% of the funding is obtained through competitive schemes. NGU's presence in European projects (only 10 in total) – which are to be obtained through very competitive schemes – is significantly lower than is the case for several other leading European Geological Surveys such as the Geological Survey of Finland (GTK) or the French geological survey, BRGM.

As a whole, the evaluation committee evaluates NGU's performance as fairly good but not exceptional.

Where possible, the Evaluation Committee has commented on issues identified in the terms of reference. In some cases this may not be possible, for example due to limitations in the information that was available to the Evaluation Committee

Recommendations

NGU's research strategy could be articulated in more detail, going beyond the comfort zone of merely geological mapping. In relation to its research strategy, the committee recommends NGU consider:

- Further developing emerging technologies like remote sensing, AI, and advanced modelling for more efficient and accurate geological surveys;
- Continue focusing on researching climate change impacts on geology and provide guidance for adaptation and mitigation strategies;
- How to best streamline the performance of all involved Research groups, boosting the overall research output both in quantitative and qualitative terms.
- Develop a more pro-active research strategy aligned with global challenges such as the transition to clean energy and mobility and the search for a secure supply of the critical metals that drive this transition.

To achieve these objectives, the committee recommend NGU:

- Invest ample time in understanding the needs of environmental agencies, energy companies, and local communities to align NGU's work with societal demands. Transparency can be further promoted by making geological data easily accessible to the public, researchers, and policymakers;
- Strive for more (inter)national collaboration in view of attracting external competitive funding, in both European projects and direct contract research with industry;
- Organise a tech transfer office at NGU, as is the norm in most successful research-intensive universities and pro-active Geological Surveys across Europe, though the committee are also aware this may not be possible. During the interview representatives of the administrative unit indicated they were not allowed to do consultancy work.

Finally, in view of Norway's particular situation of being a very resource-rich country and the rapidly changing geopolitical landscape in relation to CRMs/SRMs, the evaluation committee is convinced that NGU's mission could be expanded so as to also include CRM/SRM extraction, processing and refining (cf. GTK, BRGM). This would also allow for diversification of NGU's revenues, as NGU could link up with Norwegian and international companies, as well as with other Geological Surveys and universities. This

would boost the attempts to commercialise Norway's endowments in terms of CRMs/SRMs in both land and sea deposits. However, the committee are also aware that this extension of NGU's mission requires an agreement with the Norwegian authorities and during the interview with NGU it became clear that NGU is currently not in favour of such an evolution.

1. Strategy, resources, and organisation of research

NGU has developed a cohesive and robust research strategy, covering a wide range of fundamental and applied studies, as well as the development of advanced survey methods. NGU's research strategy is closely aligned with its mission and vision. NGU actively collaborates with national and international partners to foster interdisciplinary research and innovation. Through joint projects and networks, NGU aims to enhance scientific cooperation, exchange expertise, and remain at the forefront of geoscientific advancements. Surprisingly, only 18% of NGU's overall funding is secured via competitive project calls, whereas 82% is directly received from the state budget. In terms of multi-party EU projects, NGU seems to trail other leading Geological Surveys in Europe (10 rather than 14 EU projects in total, as discussed during the committee interview on October 17, 2023). The committee believes this is a missed opportunity given the excellent competencies available at NGU.

NGU's research output strongly varies across the six evaluated Research Groups. Overall, NGU's research output is fairly good, but not exceptional. To achieve an excellent score, some of the groups need to boost the number of high-quality papers published in high-impact journals. About 60% of NGU's papers are Open Access, which shows there is still a way to go for this criterion as well.

NGU's research strategy could be articulated in more detail. As became evident during the interview with the administrative unit, the focus is now almost exclusively on geological mapping, which according to NGU is necessary as Norway lags behind Finland and Sweden in terms of mapping its land and sea areas. The challenge is to streamline the performance of all involved Research groups, boosting the overall research output both in quantitative and qualitative terms.

1.1 Research Strategy

NGU considers research as a core part of its main strategy, although during the interview with the evaluation committee it indicated research though important, was not the most important aspect of their activity. NGU's (research) tasks are very well defined, covering mapping, registration of (geological) data, database construction and data management. The research strategy is closely aligned with their clear mission and vision, and research projects must be directly relevant to this mission and vision. As a result, there is a clear focus on research strategy and the admin unit's self-assessment suggests that NGU's research activities are well aligned with the strategic goals.

However, the self-assessment report does not provide a great deal of detail on their long-term research strategy, though their "*NGUs strategiplan 2020-2030*" document was only available in Norwegian and therefore not reviewed as part of this evaluation. When asked during the interview to elaborate on its research vision and strategy for the future, representatives from NGU did not provide a clear articulation of their view of the way forward either. With regards to innovation, the self assessment report seem to indicate that this is not the main focus of the administrative unit, though the evaluation committee also gets the impression that NGU's concept of 'innovation' is confused with 'commercialisation'. As a result, the institute's activities in this area is also unclear.

1.2 Organisation of research

The committee believes NGU's self-assessment report is somewhat incomplete. From the overall self-assessment report provided by NGU, it is difficult to understand the organisation and internal governance of the institute. As a result, it is difficult for the evaluation committee to confidently assess whether the the organisational structure is optimal to support R&I success.

The SWOT section is by far the most elaborated and articulated. A multitude of strengths are identified, which are credible to the evaluation committee. A long list of opportunities were identified include several relevant national and international policy areas.

Several weaknesses are acknowledged: resource conflicts, suboptimal project management tools, no teaching environment and an organisational culture that is not designed to all move in the same direction. Similarly, NGU identifies a number of threats, including economic austerity, lack of political awareness and the difficulty of recruiting high-level researchers. During the interview NGU reiterated that the main threat to the isntitute is the reduction of the state funding level. Unfortunately, a clear strategy on how to overcome these threats and weaknesses is missing.

1.3 Research funding

The overall funding annual funding for NGU is around €22 million (256 MNOK), of which no less than 82% (210 MNOK) is directly obtained from the state budget via the Ministry of Trade, Industry and Fisheries. By contrast, external competitive research funding contributed to the total budget with 46 MNOK in 2021, merely 18% of NGU's total funding level.

As regards EU funding, a number of 14 EU projects is reported (5.1 MNOK, i.e. 2% of total budget), although during the interview this was corrected to 10 EU projects. In comparison with other Geological Surveys in Europe (such as GTK or BRGM) this number is undoubtedly low and suggests a rather reactive instead of a pro-active EU project strategy.

Likewise, the obtained funding from bilateral industry contracts is short to the mark: only 11 MNOK (4.3% of total budget) was secured from (national) industry. No funding based on national contract research was obtained. NGU indicates that this is in line with their mission as consultancy is not part of its allowed strategy. NGU also adds that it is a matter of limited capacity to not perform industry-driven projects.

Nevertheless, the evaluation committee strongly advises NGU to develop a concerted strategy to boost the numbers for competitive funding (national research projects, EU projects, contract research), in order to diversify income and reduce the dependency on state subsidies. The committee is aware that this might require a change in mission statement, to be agreed with the Norwegian authorities.

1.4 Use of Infrastructures

NGU's self-assessment report has provided little to no information relating to their participation in national and international research infrastructures. The self-assessment only lists an agreement with the Norwegian Space Centre and the Norwegian Water Resources and Energy Directorate about the use of ESA satellite data. The evaluation committee therefore cannot make any judgements about this aspect.

Based on the information provided, the committee think the FAIR principles are dealt with appropriately, for example as NGU's national datasets are published on the geoportal Geonorge.

1.5 National and international collaboration

The self-assessment report mentions that "*NGU is actively seeking to collaborate and promote research and technological development through projects with other public agencies on a national and regional level*." Some examples are provided, such as Eurogeosurveys (EGS), a meta-organisation of geological surveys throughout Europe. Through NGU's presence in EGS, it contributes to the UN SDGs and specific EU policies, Directives and Regulations (e.g., Green Deal, CriticalRawMaterialsAct). Though this demonstrates some progress in this area, the evaluation committee is convinced that this aspect of NGU's work could be further expanded.

In terms of its research output, 77% of the papers were published with international co-authors, which indicates that the research has very often involved international collaborations, mainly with well-known European institutions in the field of geology and geosciences.

1.6 Research staff

Overall, NGU's staff is highly qualified. Around 40% of the researchers are female, which is relatively high compared to similar organisations in other European countries. Among the 5 Directors, 3 are female,

highlighting that the decision structures are not male-dominated as in many other organisations, especially in the private sector. Also, NGU clearly devotes a lot of attention to the fostering of scientific competence. Scientific promotions are high on the agenda and involve rigorous selection and review procedures. Nevertheless, there seems to be no specific programme in place to foster researcher careers. Furthermore, it is not specified how research time is distributed among staff besides the statement that research is an integral part of NGU´s projects.

In terms of mobility opportunities, NGU reports that sabbatical stays are still awarded, although they have decreased over the years, due to both "*strategic reasons and economic austerity*". Research mobility is encouraged through shorter stays at collaborating organisations and secondments with other sections. However, the self-assessment reports no real details are provided here, rendering it difficult to judge this criterion.

2. Research production, quality and integrity

NGU is strongly focused on its role as the main provider of systematic geoscientific data to Norwegian society and industry. Mapping is NGU's raison d'être. All in all, NGU is performing quite well in this regard. It seems that the administrative unit strictly follows the instructions issued by the Department of Trade, Industry and Fisheries, also with regard to research activities, i.e. to improve the quality of geological data. Competitive research funding only forms a small share (18%) of the overall funding.

NGU's self-assessment report does not provide detailed information about the number of research papers, nor their "quality" (impact). However, glancing through the research group reports and the bibliometrics, the conclusion is that NGU's research output strongly varies across the 6 evaluated research Groups: the output of the Mineral Resources group is deemed "generally modest" in terms of high-quality research products, whereas for the groups Maringeologi and Earth Surface and Seabed the assessment is very positive: high-quality, interdisciplinary and international research results are being published in high-impact journals (e.g. *Nature Communications*, *Science*), leading to international recognition for NGU.

Norway is a resource-rich country with many occurrences of strategic/critical raw materials (metals) (SRM/CRM) necessary to support the energy/climate transition and therefore has a huge potential to mitigate Europe's critical dependencies on a few third countries such as China and Russia. It is therefore striking that the NGU Group that is pivotal in this quest for more European SRM/CRM independency – Mineral Resources – obtains the lowest score of the 6 Groups. On the other hand, the Group Maringeologi, obtained an excellent score. Given the strategic importance of this work and the opportunity it presents, the committee recommend this be strengthened.

NGU's policy for research integrity is quite generic and does not include any specific preventive measures. The self-assesment report also states that NGU does not routinely perform internal control of scientific publications which undergo peer review.

Combined, the research output for NGU – i.e., as a whole – seems to be fairly good, although not exceptional. Some of the groups need to boost the number of high-quality papers in high-impact journals. About 60% of the papers are Open Access, which shows there is still a way to go for this criterion as well.

2.1 Research quality and integrity

Earth surface and seabed - Overall Assessment

This is a strong group which carries out applied and fundamental research through its strategic goal to be the main provider of Quaternary geological information in Norway. The main focus of the group is on Quaternary and surficial geological mapping in Norway and the development of products (maps and databases) related to that. The group is very successful in this. These products are used by a wide range of stakeholders, and, through this, the group achieves a strong societal contribution nationally. The group produces some excellent disciplinary-based research on the back of this mapping which is published in international scientific journals. Hence, they provide significant added value in terms of research to their principal remit of Quaternary mapping.

Geohazard and Earth Observation - Overall Assessment

The Geohazards and Earth Observation research group at NGU demonstrates high-quality research output and expertise in geohazard analysis, risk assessment, and earth observation techniques. Their strong focus on societal impact, user-friendly solutions, and engagement with stakeholders contributes significantly to the economic, societal, and cultural development in Norway and internationally.

Strengths:

- High expertise in geohazard analysis, risk assessment, and earth observation techniques;
- Focus on societal impact with user-friendly solutions;
- Engagement with stakeholders, including affected communities and local authorities;
- Collaboration with national and international partners, contributing to a broader knowledge base;
- Development of innovative databases and tools for various applications;
- Commitment to open access and accessible communication of research findings.

Weaknesses:

- Overemphasis on Norwegian context, limiting international reach;
- Limited diversity in research topics/methodologies, restricting scope;
- Reliance on a small number of key partners, impacting resilience;
- Need for continuous improvement in data management and user-interface to meet evolving demands.

Section for Geophysics - Overall Assessment

The NGU Geophysics group is an internationally recognized provider of high-quality geophysical mapping products that have immediate societal and economic relevance in, for example, the domains of mineral, hydrocarbon and geothermal resources, natural hazards and engineering. A bolder and more explicit future vision, an increased involvement of early-career researchers, and more focus on methodological/theoretical developments may help to stabilise or even expend the group, and counter-acts concerns of becoming a plain data acquisition service.

Maringeologi - Overall Assessment

Excellent group set within a strong institutional framework. Excellent outputs and a keen sense of the wider impact of their research.

Strengths:

- Mature group with a strong track record of mapping excellence, building from the Survey responsibilities and their international profile;
- Excellent reputation nationally and internationally;
- Strong record of research output;
- Strong awareness of their role to provide wider impact, as might be expected given their Survey role.

Weaknesses:

- They lack a strategy regarding development of next generation talent. Their research environment would be particularly valuable in that regard;
- They also lack formal benchmarks in respect of specific development of their research profile. It is clear they are leaders in some respects, and these should be gauged and developed more formally by specific benchmarking.

Mineral Resources - Overall Assessment

Overall the group performs their mandated tasks adequately, but there are too few highlights and ground breaking publications from running large metallogenesis projects for a group of this size. The research quality could be significantly strengthened in terms of research excellence and a supportive PhD programme. Their contribution to the economic and societal development of Norway is very considerable, and the services that the group provides are urgently needed and will likely increase in importance in an attempt to secure raw materials for the future green energy transition.

Section for Solid Earth Geology - Overall Assessment

The SEG group has strengths in bedrock geology and is set up well to achieve the goals they have identified for themselves. The mapping and data portal services provide an important contribution to the Earth Science community in Norway. Internationally networked research activities have declined, but the group fulfils an important role within the NGU and nationwide. The services they provide are essential to a range of societal challenges such as securing metal and mineral resources, managing water supply, planning land use, and assessing geohazard potential. Overall, this is a group with the potential to produce excellent research that has a very strong societal impact.

2.2. Open Science

The self-assessment report provides clear information relating to the administrative unit's approach and the Open Science and FAIR principles are covered in detail. NGU's publications are accessible in Brage, NGU's own Open Archive and NGU's national datasets are published on a national geoportal. Hence, these criteria are well addressed by NGU. Though he share of open access publications is not very high, with 41% non-OA papers in 2021, this share has been gradually increasing.

There is also explicit mentioning of the role of citizen science, which will become increasingly important in the domains that NGU is covering. Examples of NGU's citizen science's approach include registering groundwater and energy wells as geological attractions. They have established multiple websites for these purposes.

3. Diversity and equality

The self-assesment report states that NGU has an action plan for "*equality and diversity*", aiming to create an inclusive environment that embraces diversity, ensures equal opportunities, and maximises the potential of all stakeholders, however this is an internal document which is not publicly accessible. The self-assessment report states that this action plan (1) contributes to the Equality and Discrimination Act and meets the EC's Gender Equality Plan requirements, however, no further details are provided. Based on this information, it is clear some efforts and considerations for diversity and equality are in place, however the evaluation committee is not able to judge the completeness or relevance of these measures.

4. Relevance to institutional and sectorial purposes

It is absolutely clear that NGU's activities are of the essence with respect to providing the critical/strategic metals and minerals for fuelling the energy/mobility transition to climate neutrality, while simultaneously providing the knowledge base for the preservation of nature and the human environment (land use, tourism, risk management in terms of quick clay, rockfalls, landslides etc). As such, NGU contributes to help meeting many of the UN Sustainability Development Goals (SDGs).

However, in stark contrast with other Geological Surveys such as GTK and BRGM, NGU is not active in terms of contract research and commercialisation activities. For instance, NGU does not engage with industrial companies to develop extraction, mineral processing and metallurgical refining processes, to obtain refined metals (and industrial minerals) from Norway's SRM/CRM-bearing deposits or mines. The evaluation committee understands that this is due to the strict scope of NGU's mission, which is limited to the geological mapping and characterisation of the deposits.

Nevertheless, the evaluation committee is convinced that this is a missed opportunity for Norway as a whole. Seen in a larger context, there is a significant gap between the mapping of the resources (provided by NGU) and the metallurgical refining of metals (undertaking by other organisations such as Norwegian University of Science and Technology (NTNU) and SINTEF Industry). Indeed, the whole field of CRM/SRM extraction and mineral processing is underdeveloped in Norway. There is therefore a need for the Norwegian authorities to develop a more comprehensive strategy to support this, in alignment with SINTEF Industry and NTNU.

A commercialisation strategy would entail the setting up of a Tech Transfer Organisation (TTO) as is the norm in research-intensive Universities. As far as the evaluation committee can judge from the provided information, NGU does not (yet) have such a TTO-organisation which explains why "*NGU is not involved in comm (sic)*". During the interview with the Admin Unit, it also became clear that NGU is rather reluctant

to venture into the resource valorisation aspects (extraction & processing). Likewise, the appetite for setting up a TTO was also very low as the administrative unit did not consider it relevant for NGU.

5. Relevance to society

As discussed above, NGU has a highly relevant role to play in the long-term societal development of Norway, the national and global societal challenges (e.g. climate change threats, ecosystem breakdown and derived environmental hazards, transition to clean energy/mobility). NGU provides research and resources vital for society through environmental protection, risk reduction, resource management, infrastructure development, heritage preservation, public engagement, policy support, and collaboration. Their work offers valuable geological knowledge, informed decision-making, and sustainable development for present and future generations. One impact case is described in more detail being of high relevance.

Still, the evaluation committee strongly believes that, in general, a more pro-active stance with respect to driving the transition to climate neutrality – through the supply of critical metals – can be implemented. The evaluation committee do recognise howevert hat this would require an amendment of NGU's vision and mission statement, in close agreement with the Norwegian authorities.

Comments to impact case 1 [InSAR.no]

NGU has established agreements with the Norwegian Space Center and Norwegian Water Resources for the operation and development of the InSAR service, which provides satellite data with a resolution of 1 mm. After years of intensive research and development efforts, the InSAR.no service was launched in November 2018, thereby providing billions of deformation measurements across Norway. This was the first nationwide InSAR service worldwide to provide free, open, and regularly updated data to all users in society. This is a prime example of how NGU has genuine, societally-relevant impact.

List of administrative unit's research groups

Institution	Administrative Unit	Research Groups
Norway's Geological Survey (NGU)	Norway's Geological Survey (NGU)	1. Solid Earth Geology
		2. Geophysics
		3. Mineral Resources
		4. Marine Geology
		5. Geohazards and Earth Observation
		6. Quaternary Geology

Methods and limitations

Methods

The evaluation is based on documentary evidence and online interviews with the representatives of Administrative Unit.

The documentary inputs to the evaluation were:

- Evaluation Protocol (see appendix 3 Evaluation Protocol) that guided the process
- Terms of Reference
- Administrative Unit's self-assessment report
- Administrative Unit's impact cases
- Administrative Unit's research groups evaluation reports

- Bibliometric data
- Personnel and funding data
- Data from Norwegian student and teacher surveys

After the documentary review, the Committee held a meeting and discussed an initial assessment against the assessment criteria and defined questions for the interview with the Administrative Unit. The Committee shared the interview questions with the Administrative Unit two weeks before the interview.
Following the documentary review, the Committee interviewed the Administrative Unit in an hour-long virtual meeting to fact-check the Committee's understanding and refine perceptions. The Administrative Unit presented answers to the Committee's questions and addressed other follow-up questions.
After the online interview, the Committee attended the final meeting to review the initial assessment in light of the interview and make any final adjustments.
A one-page summary of the Administrative Unit was developed based on the information from the self-assessment, the research group assessment, and the interview. The Administrative Unit had the opportunity to fact-check this summary. The Administrative Unit approved the summary without adjustments.

Limitations
The Committee judged the information received through documentary inputs and the interview with the Administrative Unit sufficient to complete the evaluation.

Appendices (link to website)

1. Description of the evaluation of natural sciences
2. Invitation to the evaluation including address list
3. Evaluation protocol (including ToR template)
4. Template Self-assessment administration unit
5. Grading scale for research groups

Website: https://www.forskningsradet.no/tall-analyse/evalueringer/fag-tema/naturvitenskap/

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