# SHORT VERSION GEUS STRATEGY 2016



GEOLOGY FOR SOCIETY
KNOWLEDGE FOR GROWTH AND WELFARE



### GEUS is a knowledge organisation

The Geological Survey of Denmark and Greenland (GEUS) is an autonomous and independent research institution under the Ministry of Energy, Utilities and Climate. GEUS is regulated by specific legislation; Act no. 536 of 6 June 2007. The objectives and activities of GEUS are stipulated in this Act with associated Statutory Orders, as well as in a number of other acts in which GEUS is appointed to specific tasks. GEUS is a government enterprise with its own Board, which is appointed by the Minister and which sets the general guidelines for GEUS' organisation, long-term activities and development.

GEUS carries out assignments and provides research-based consultancy services for numerous ministries and agencies, including the Ministry Energy, Utilities and Climate, the Ministry of Environment and Food, and the Government of Greenland. GEUS also works for other public institutions and private enterprises, often in partnerships with consultants and other research institutes.

GEUS' objectives and activities are stated in general terms in GEUS' Mission, which is a summary of the relevant provisions in the GEUS Act. GEUS' Vision is described in nine statements under the headline 'Geology for a changing society' (see www.geus.dk/UK).

GEUS' finances are based in part on an annual amount allocated in the Danish Appropriation Act, and in part on revenues from a wide range of projects funded by external sources.

In addition to tasks carried out in Denmark, GEUS takes part in many international projects under the EU framework programmes as well as outside Europe. Moreover, GEUS is active at European level in various international organisations and networks within GEUS's core areas.

The GEUS strategy sets targets for the development of GEUS over an eight-year time horizon.











#### **GEUS' Mission**

- GEUS is responsible for scientific exploration of the geology of Denmark and Greenland with the associated continental-shelf areas.
- GEUS is to carry out research at the highest international level into matters of significance for exploitation and protection of geological natural resources, and carry out mapping, monitoring, data collection, data management and communication about these.
- GEUS is to provide consultancy services to authorities and the private sector and is to carry out authority tasks within its core areas.
- GEUS is a national geological data centre.

### Targets for GEUS for the strategy period 2016–2024

- GEUS will retain its role as the primary advisor for the authorities on issues in which geology has great social impact.
- GEUS will focus on contributing to secure energy supply, energy conversion, water resources management, climate change adaptation and exploitation of the natural resources crucial for the Danish and Greenlandic societies.
- GEUS will extend its participation in international research, capacity building and consultancy services, develop international division of labour and collaboration with sister organisations in the EU, and increase its applications for international funding for its activities.
- GEUS will raise the level of its research and its contributions to innovation as well as its international competitiveness.
- GEUS will improve the accessibility and the value content of its data and knowledge, and, through new and state-of-the-art services, increase the use and improve the utility value of its information and knowledge.

- GEUS will promote collaboration and partnerships with the business community and the authorities in order to help enable GEUS' knowledge and consultancy to form and be part of the best possible foundation for growth in Denmark, Greenland and internationally, and thereby contribute to solving important issues on resources and environment.
- GEUS will apply for projects and establish a diverse portfolio to provide GEUS with sound finances and space for investment.
- GEUS is to be the preferred collaboration partner within geosciences; it will expand collaboration with universities and further develop Geocenter Denmark.
- GEUS will improve exposure of the significance of geology in modern society and improve exposure of itself as organisation.
- GEUS wishes to be an attractive workplace in which ethical standards and social values are central to the corporate culture, and GEUS wishes to be among the leading public institutions in meeting social responsibility and HR policy targets.



# The framework for GEUS and trends in its surroundings

GEUS is entirely dependent on obtaining externally funded projects, as these account for around 60% of revenues. The annual allocations from the Appropriation Act to GEUS' activities ensure that GEUS can fulfil the Danish Government's agreement with the Government of Greenland about assistance to develop the minerals resources sector in Greenland and perform its duties as an authority. The Appropriation Act allocations designated for the necessary joint financing of research projects awarded to GEUS are under pressure, and may restrict possibilities to increase external research funding. Therefore, full exploitation of the competences at GEUS to meet expectations from the surrounding world, including creation of innovation-based jobs, requires provision of adequate and relevant research resources.

GEUS will target activities towards the following trends in developments in the environment in Denmark, Greenland, Europe and further abroad:

- Conversion of energy supply to renewable energy, including geothermal energy and areas with energy-storage challenges.
- Climate change adaptation and emissions reductions, with increasing need to coordinate and anchor climate adaptation projects in specialist knowledge, as well as need to change and make exploitation of fossil fuels more efficient.
- The Arctic as a new focus area. International interest in the Arctic, potential exploitation of natural resources, and new shipping routes are strategically important for the Danish Realm.
- Shortages of mineral resources. Increasing consumption of a number of minerals is making security of supply critical for Danish/European industry and is increasingly playing a role in international politics. There are significant deposits of a number of critical mineral resources within the Danish Realm.
- Water resources are under pressure nationally because of various interests, climate change and pollution, and internationally in terms of lack of adequate access to clean drinking water. Protection and integrated solutions to water challenges are in demand internationally with great potentials for Danish enterprises. GEUS will take part with its experience in Danish water resources.
- Geology and health. The strata and rocks surrounding us, or which we exploit, have an impact on our health. This is a much overlooked field which, in line with the general focus on health, raises many new issues.

- Urbanisation is spreading globally and nationally and it means that we must manage our resources and adapt ourselves to natural conditions on new terms.
- Nature is a valued recreational space with growing significance for a good life and with growing value for human experience.
- The digital society is a cornerstone of modern society and exploits the increasing amount of data that can be made available.













## A professionally strong and relevant organisation

GEUS defines its strategic goals within the themes below, in which the tasks and projects are to meet GEUS' strategic targets and respond to the demands and expectations of the outside world:

#### · Digital data and knowledge services

Through its function as a provider of specialist data, GEUS will supply quality-assured data and new data services for national users and for pan-European data services together with its European sister organisations.

#### A changing aquatic environment and water cycle ('Water resources under pressure')

GEUS will provide knowledge about water for differentiated regulation to protect the aquatic environment and will take part in export initiatives for Danish competences and expertise which can contribute to water solutions becoming an international growth area for Danish industry.

- Oil and gas as the foundation for supply and conversion
   Through knowledge and projects, GEUS will contribute to developing oil and gas exploitation and exploitation of unconventional resources in Denmark and in Greenland. Moreover, with its specialist expertise, GEUS will contribute to a higher recovery rate from the chalk fields in the North Sea.
- Geothermal energy and underground storage Exploitation of the subsurface for geothermal heating or cooling

and to store surplus energy are necessary elements in increasing renewable energy. GEUS will increase awareness of the geological possibilities of this and provide advice in this context.

#### · Geology and health

GEUS will develop knowledge and provide advice on geological and groundwater-related potential health risks that occur naturally or are caused by human activity and exploitation of geological resources.

#### · Minerals - basic and critical

GEUS will conduct research on mineral resources and provide advice on the possible resources in Denmark and in Greenland as well as on their importance to industrial sectors, focusing on assessment of critical minerals.

#### · Across land and sea - geology in 3D

GEUS will map the geological conditions on land, along the coastline and offshore, and create a continuous geological model in three dimensions.

#### · Past and future climate

Through research and monitoring of the Greenland ice sheet, GEUS will create the best possible background for climate models and the best possible basis for decisions for future climate efforts and climate change adaptation.

 Geology in the public arena – dissemination and experience GEUS will disseminate its geological knowledge through international publications, popular journals, social media and public events for a broad range of users and through teaching material at primary and secondary school level as well as at upper secondary school level.

### **Attractive workplace**

GEUS' main resource is its employees, whose competences must be developed and kept up-to-date. Work must take place in a modern environment and high-quality consultancy must be provided as well as research results at high international level for GEUS to be a strong player in the international competition and to attract and recruit the best employees. The strategy puts special emphasis on internationalisation and on preparing the organisation to perform professionally, culturally and commercially at international level

The knowledge developed is to be maintained, and knowledge sharing is an area of special interest, enabling research findings to form a long-term basis for GEUS' advisory services to society.









This version is an extract of GEUS' strategy for 2016, which was adopted by GEUS' Board of Directors in December 2015 as a basis for GEUS' performance contract for 2016–2019 with the Ministry of Energy, Utilities and Climate. The strategy for 2016 is an update of GEUS' strategy for 2012.

### **GEUS'** organisation



#### SCIENTIFIC DEPARTMENTS

Geophysics	Geochemistry	Geological Data Centre	Glaciology and Climate	Groundwater and Quaternary Geology Mapping
Hydrology	Marine Geology	Petrology and Economic Geology	Reservoir Geology	Stratigraphy

#### PROGRAMME AREAS

DATABANKS AND INFORMATION

WATER RESOURCES ENERGY RESOURCES MINERAL RESOURCES

NATURE AND CLIMATE







GEUS Århus



**GEUS Nuuk** 



GEUS Drill core archive

