

# Norwegian research priorities for 2016

The Research Council of Norway is proposing an increase of NOK 1.1 billion for research in its input to the national budget for 2016. Special target areas in the proposed budget for 2016 include sustainability, innovation, the EU and world-leading research groups.

[The budget document on priority initiatives for 2016](#) (PDF-1 557.9 KB) (in Norwegian only) provides clear recommendations for where to place allocation priorities and how to ensure optimal follow-up of the Government's recently published long-term plan for research and higher education.

## **Research targeting innovation and sustainability**

"We need new knowledge in order to solve the grand challenges confronting us. Funding research is a way of investing in a better future," says Director General of the Research Council Arvid Hallén.

"Research and innovation are long-term investments where the yield may not emerge for many years," explains Mr Hallén. "This is why it is so important to increase efforts targeted towards restructuring for a more sustainable society. These are major challenges that cannot be solved without new knowledge and technology. Sustainability pertains not only to climate and the environment but also to welfare and care services."



*Research and innovation are long-term investments where the yield may not emerge for many years, says Arvid Hallén. (Photo: Sverre Jarild)*

Fully one-third of the proposed budget increase is earmarked for the transition towards a more sustainable society – environmentally, economically and socially.

"Innovative solutions for a sustainable society begin with the best knowledge available from world-class research groups and from companies that invest in research-based innovation. Norway must invest in particular in areas where we have specific advantages, where new solutions are urgently needed and where Norwegian research groups have the potential to make their mark internationally," states the Director General.

## Following up the long-term plan for research

“The Government’s 2015 national budget proposal was commendable,” continues Mr Hallén, “but was weak in its support of thematic initiatives, even climate research, although the latter has been strengthened in the final approved budget. The Research Council views it as essential to increase funding for this thematic area in 2016. It is one of the areas where we cannot afford to postpone action.”

“In the budget for 2015 the Government has focused on instruments to promote high quality in research, broad-based mobilisation of the private sector, and the internationalisation of research. These are indeed areas in need of increased support, but we also need a stronger national focus on thematic areas that are vital for Norway and where we can achieve a leading international role.”

“The Research Council provides the Government with key input on how to accomplish this,” Mr Hallén stresses, “and our recommendations are firmly based on our close contact with the research community and trade and industry.”

The Government’s long-term plan for research and higher education represents a new kind of strategy, where priorities relating to recommended areas of focus are linked to objectives to expand investments and activities. In addition the plan established three main research policy objectives:

- solve major social challenges;
- strengthen competitiveness and innovation capacity;
- develop professional communities of outstanding calibre in their fields.

The Research Council recommends increased funding to eight priority focus areas. These correspond closely to the priorities and objectives set out in the Government’s long-term plan. The Research Council has also provided recommendations for what to give the highest priority under each of these focus areas.

### The Research Council’s eight priority focus areas:



#### Climate change will require social transformation

In Norway, the increase in the number of floods, avalanches and landslides is a clear manifestation of climate change. Climate change will become irreversible if emissions remain at their current levels, with wide-ranging ramifications for society as a whole. A more accurate understanding of climate change is needed, as well as more knowledge about how to adapt society to the changing climate. Knowledge about the environmental impacts of our actions is critical. Research and innovation are essential to mitigate climate change and reduce emissions, and thereby promote a sustainable society.

**Budget:** The Research Council is recommending an increase of NOK 125 million for the priority focus area *Climate, the environment and society*.



#### Towards a new energy mix

The world’s growing need for energy makes it essential to step up investment in environment-friendly solutions to limit the rise in the global mean temperature to 2°C. Important priority areas for Norway are hydropower, raising energy efficiency, flexible energy systems, solar cells, offshore wind power, bioenergy, and carbon capture and storage. Research-based technology development,

enhanced expertise and better recruitment to technology disciplines are critical. Renewable energy solutions represent major opportunities for future trade and industry in Norway. Strong knowledge environments developed with the help of public funding play an important role in making this happen.

**Budget:** The Research Council is recommending an increase of NOK 100 million for the priority focus area *Towards a new energy mix*.



### **Marine and maritime research and innovation**

The fisheries and aquaculture industries play a key role in the bioeconomy and are a cornerstone of the Norwegian bio-based society. Research and technological development will enable the marine industries to produce safer, more healthful seafood and exploit marine resources for more purposes than is the case today. It is particularly important to strengthen marine research in areas with significant potential for value creation and to promote interdisciplinary cooperation on technology development. Activities must be intensified in the areas of biology, technology, the environment and markets. This will lay a foundation for sustainable aquaculture production and harvesting of wild resources as well as more environmentally sound shipping activities.

**Budget:** The Research Council is recommending an increase of NOK 90 million for the priority focus area *Marine and maritime research and innovation*.



### **Effective health and care services**

More people will live longer, leading to a rise in the number living with age-related and chronic diseases. More research is needed on what it takes to maintain good health care services and welfare programmes. Greater understanding of the causes of and mechanisms governing illness, health and ageing is needed. Research must help to build a robust, innovative knowledge system for the health and welfare sector as well as expand the capacity and competency of the future labour force.

**Budget:** The Research Council is recommending an increase of NOK 92 million for the priority focus area *Active and healthy for many years*.



### **ICT for societal and industrial development**

The importance of ICT for value creation and competitiveness in Norwegian trade and industry as well as for the renewal of the public sector is growing. ICT is essential for creating new and effective products and services in all areas of society. While there is substantial ICT development activity taking place in the Norwegian business sector, efforts are weak in areas that require a long-term approach. At the same time, there is a rising need for personnel with top scientific ICT expertise. There must be greater focus on basic research, recruitment of ICT-competent personnel, and stronger ICT research for health and care and societal security.

**Budget:** The Research Council is recommending an increase of NOK 65 million for the priority focus area *ICT – enabling technologies*.



### World-leading research groups

High-quality research generates new solutions, deeper insight, wider opportunities and more extensive collaboration with leading international research groups. There is much untapped potential in dynamic Norwegian research environments with outstanding research ideas. Norway can cultivate more world-leading research groups by providing the best researchers with ample, long-term funding and access to top-quality scientific equipment. Increased investment in young talent will help to enhance independent career development. These researchers must also be encouraged to conduct a research stay abroad. Improved access to joint European research infrastructure and research data will advance these aims.

**Budget:** The Research Council is recommending an increase of NOK 110 million for the priority focus area *Innovative research groups*.



### Enhancing the use and value of research

To take full advantage of the potential of research for value creation and benefit to society, steps must be taken to ensure that research results from companies and research groups are used and introduced into markets. Greater focus on enhanced use of R&D is vital to creating new products, processes and services and promoting the establishment of new knowledge-intensive companies. Support for commercialisation, experimental development, verification, piloting and demonstration activities is essential.

**Budget:** The Research Council is recommending an increase of NOK 155 million for the priority focus area *Renewal across the business sector*.



### Taking better advantage of EU research funding

Over the next six years, the EU will distribute NOK 600 billion for research, industrial development and measures aiming to help to solve the climate crisis, among other challenges. A target has been set for Norwegian researchers to bring home two per cent of the total allocations under the EU framework programme Horizon 2020; achieving this will require 60 per cent higher Norwegian participation relative to the previous framework programme. In its long-term plan for research and higher education, the Government has set aside NOK 400 million to boost mobilisation and stimulation measures for participation. It is crucial that this funding is provided early on in the plan's lifetime and promotes broad-based participation on the part of universities and university colleges, research institutes, and trade and industry. It must be just as natural for researchers to seek funding under Horizon 2020 as it is to seek funding from the Research Council.

**Budget:** The Research Council is recommending an increase of NOK 162 million for the priority focus area *Horizon 2020*.

Written by: [Ingebjørg Aadland/Else Lie](#). Translation: [Darren McKellep/Carol B. Eckmann](#).

Published: 04.12.2014

Last updated: 04.12.2014