



UK Science & Innovation Network Summary:

Norway

1. Science and Innovation Landscape

Norway's science and innovation system is characterised by its close collaboration between the public and private sector, as well as its high level of specialisation in fields that complement its geography and industries. Norway employs 1.7 times as many researchers per capita as the OECD average and is third in the world for number of academic publications per capita. It also ranks 12th in the world for the average citation index ratings for those publications.

When it comes to its innovativeness, Norway lags a little behind their Scandinavian neighbours, coming in at number 19 on the Global Innovation Index, scoring high on infrastructure, institutions and human capital & research. The Norwegian innovation system has traditionally been built around its natural resources and attached industry – first in minerals and hydroelectricity, then petroleum. As a small and open economy, Norwegian industries have followed a strategy of importing technological solutions they reach their technology frontier, whereupon they will invest in highly specialised R&D to gain competitive advantage.

Norway has a tradition of close collaboration between public and private sectors. In its R&D statistics Norway uses three sectors for R&D financing: Public, private and the "institute sector". The latter consists of independent research institutes that operate on a mix of public funding and private contracts, and represent 60% of Norwegian R&D efforts. Altogether, the private sector is estimated to represent some 44% of total R&D expenditure in Norway.

The petroleum and energy sectors are large funders of private R&D, though the overall investments in extraction-focused R&D has stagnated in recent decades. Meanwhile, Norway has increased R&D expenditure in other parts of the energy sector, as well as making large R&D investments in climate and sustainability, health, biotechnology and ICTs. The latter makes up some 55% of the country's private sector R&D. ICT's is also the fastest growing area for R&D in the public sector, with large research projects on the use of ICT in defence and health introduced in recent years.

Norway has a high rate of international collaboration in its research sector. One third of researchers in Norway are immigrants, and within STEM 7 of 10 published papers have one or more co-author from foreign institutions. Norway is a non-EU participant





in the Horizon programme and has been highly successful, winning more research funding than they put in. This success is in part due to the Research Council of Norway's initiatives to encourage and assist Norwegian researchers apply for Horizon projects.

2. UK partnership with Norway on Research and Technology

The UK is Norway's number one partner for research collaboration in Europe, and second only to the US globally. UK universities are highly important to the Norwegian research community, and Norwegian stakeholders were very welcoming to the UK's entry into Horizon Europe.

There is also a Money Follows Cooperation agreement between the UKRI and the Research Council of Norway signed in 2022 to ensure continuation of the research relationship. The agreement involves five of the UKRI's research and innovation councils, covering research areas within arts and humanities, economic and social research, engineering and physical sciences, medical research, and research on the natural environment.

Research is also a vital component of a series of economic and strategic bilateral agreements between Norway and the UK, to strengthen the relationship and support initiatives for security, economic growth and tackling climate change. This includes the UK-Norway High Level Arrangement on Cooperation on Polar Affairs (2021), the Joint Declaration to promote bilateral strategic cooperation between the UK and Norway (2022), and the forthcoming Green Industrial Partnership between UK and Norway (2023).

3. SIN contacts

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