

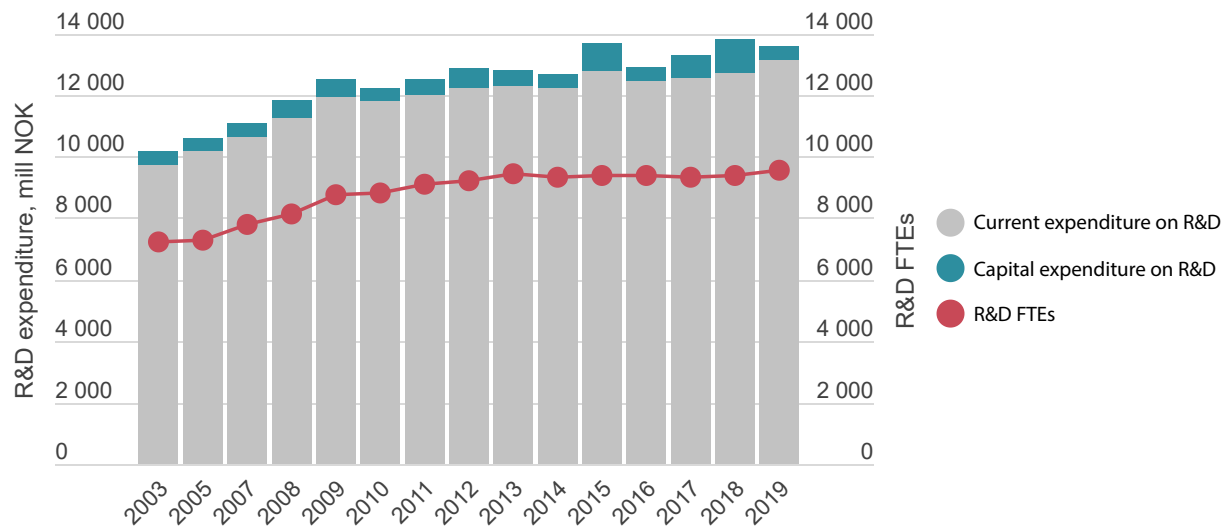
Information from R&D-statistics. November 2020.

NOK 15 billion on R&D in the institute sector in 2019

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NOK 15.1 billion was used to carry out research and development work (R&D) in the institute sector in 2019, which equals a real decrease of about 1.5 per cent from 2018. The entire decrease is due to lower capital R&D expenditure. Current expenditure on R&D had a real growth of 3 per cent, while R&D full-time equivalents (FTE) increased by just over 2 per cent.

Figure 1 The institute sector 2003–2019; R&D expenditure in fixed 2015 prices and R&D FTEs (second axis).



Source: NIFU, R&D statistics

Current costs of R&D expenditure amounted to NOK 14.6 billion in 2019, almost NOK 900 million more than the year before. This equals a real growth of close to 3 per cent in current R&D expenditure. Capital expenditure for R&D fell from NOK 1.1 billion in 2018 to just over half a billion in 2019. The whole decrease applies to investments related to buildings, a cost type that naturally vary a lot from year to year.

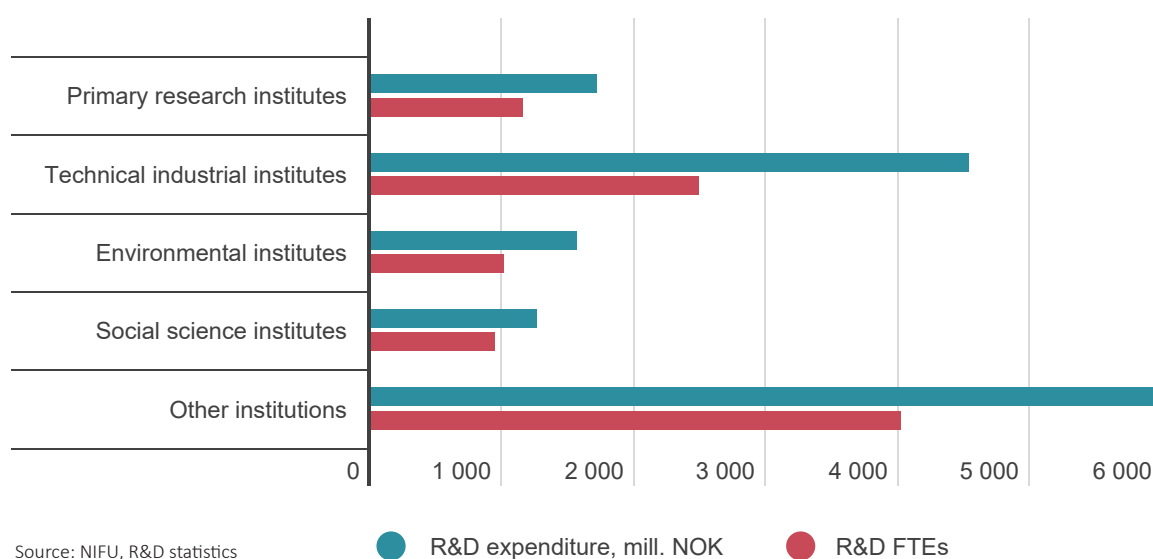
R&D expenditure in the institute sector have increased by 22 per cent since 2007 (fixed prices). Much of the growth occurred in the first few years of the period. After 2009, the R&D expenditure in the sector flattened, before increasing from 2015, partly as a result of high capital expenditure in some years. Current R&D expenditure in the institute sector in 2019, are the highest measured so far.

60 per cent of the R&D activity was performed at “pure” research institutes

Three fifths of the R&D activity in the institute sector in 2019 was performed at institutes subject to guidelines for public basic funding of research institutes. These are research institutes which receive basic funding from the Research Council of Norway. In the allocation system, these institutes are divided into four distribution arenas. The technical industrial arena is by far the largest with R&D expenditure of NOK 4.5 billion in 2019, or 30 per cent of the sector’s total R&D.

Primary research institutes is the second largest arena with 11 per cent of the sector’s total R&D, followed by environmental institutes and social science institutes, which had 10 and 8 per cent of R&D expenditure, respectively. 40 per cent of the R&D activity was carried out at institutions that are not subject to the guidelines for basic public funding. This includes research institutes which receive basic funding directly from a ministry, and other R&D-performing institutions, where R&D normally is not the core activity. The latter include, among others, government agencies, health trusts without a university hospital function and private, non-profit hospitals, as well as museums.

Figure 2 R&D expenditure and R&D FTEs in the institute sector in 2019, by institute arena.



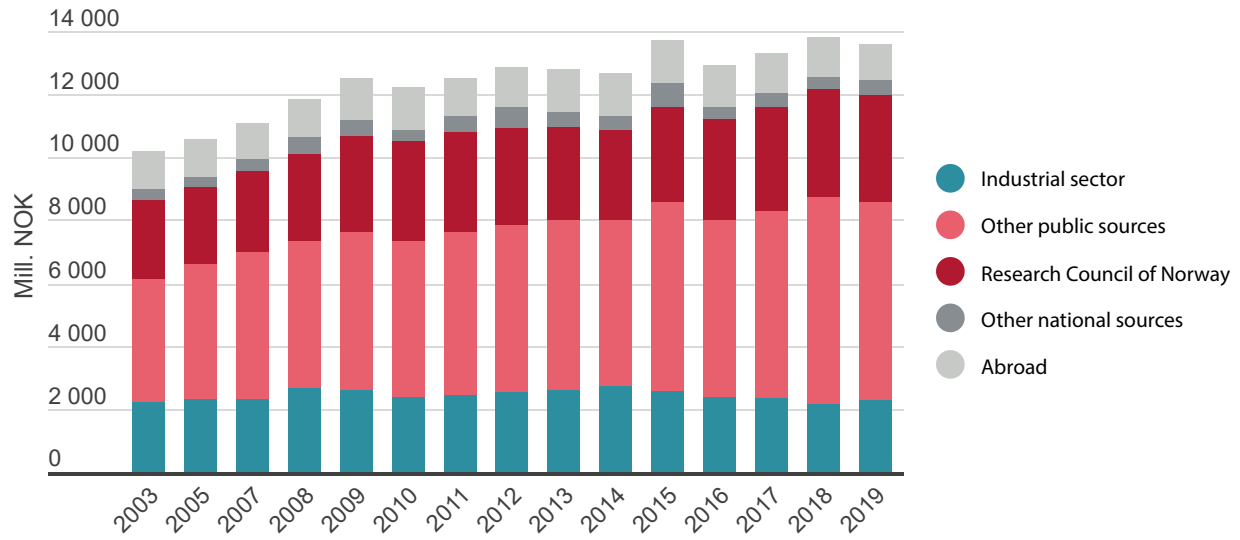
Source: NIFU, R&D statistics

Public funding dominates

Public funding made up 71 per cent of total R&D expenditure in the institute sector in 2019. More than one third of the public funding, corresponding to more than NOK 3.7 billion, was channeled through the Research Council of Norway. The industrial sector financed 17 per cent of the R&D expenditure, funding from abroad 9 per cent, while other national sources accounted for 3 per cent. Of overall funding from abroad (NOK 1.3 billion), close to NOK 520 million came from participation in EU framework programs, while just under NOK 400 million concerned R&D carried out for businesses abroad.

Public funding make up an increasing share of the institute sector’s R&D. The public sector’s share has increased by 8 percentage points since 2007, while the share of financing from the industrial sector has decreased from 22 to 17 per cent in the same period. From 2018 to 2019, however, there was real growth in funding from the industrial sector at about 5 per cent, while public funding decreased somewhat as a result of lower investments. R&D funds from abroad also had a real decline in 2019 of about 5 per cent.

Figure 3 R&D expenditure in the institute sector 2003–2019, by funding source. Fixed 2015 prices.



Source: NIFU, R&D statistics

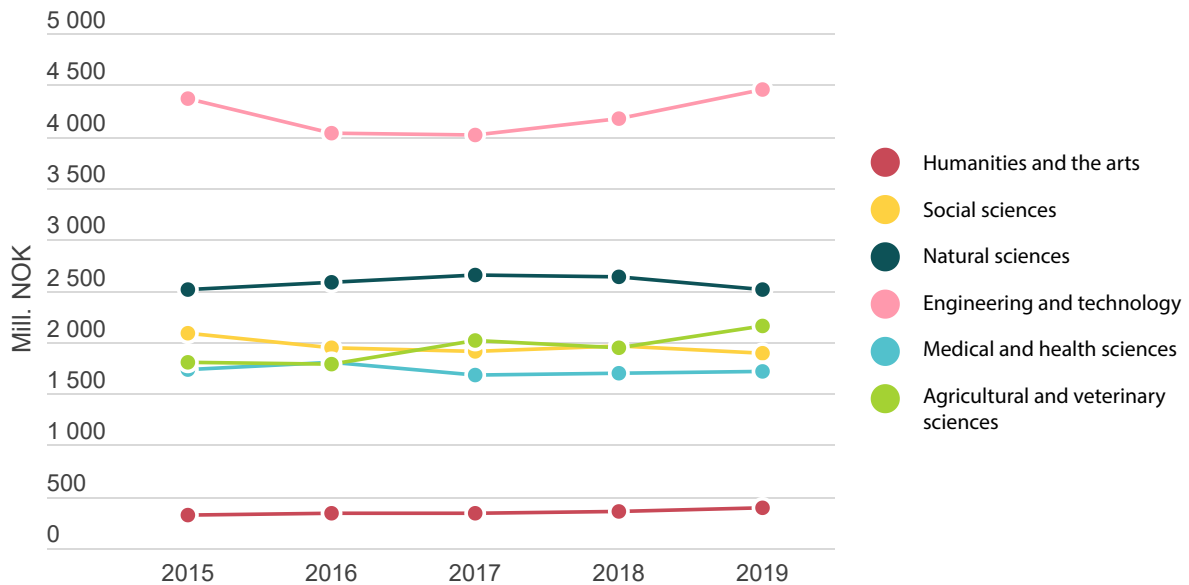
The institute sector perform research within all fields of R&D

Engineering and technology is the dominant field with one third of the institute sector’s combined R&D efforts, while about one fifth of the resources are used within natural sciences. Overall, over half of the sector’s R&D resources was used within these two fields in 2019. Agricultural and veterinary sciences, social sciences, and medical and health sciences were typically equal

in size with 13–16 per cent of the resources. The humanities and the arts were by far the smallest field of R&D with 3 per cent of total R&D expenditure.

Research institutes under the guidelines for public basic funding account for most of the R&D activity in most fields of R&D, except for humanities and the arts and medical and health sciences. Within these fields, most of the sector’s R&D is carried out at health trusts and museums, as well as governmental institutions.

Figure 4 Current R&D expenditure in the institute sector 2015–2019 by field of R&D. Fixed 2015 prices.



Source: NIFU, R&D statistics

200 more R&D FTEs than in 2018

More than 13,000 people participated in R&D activity in the institute sector in 2019. Almost 9,600 R&D FTEs were performed, an increase by more than 200 compared to 2018. 71 per cent of the R&D FTEs were performed by researchers, while technical and administrative staff stood for rest of the FTEs. The number of FTEs measured in the institute sector in 2019, is the highest figure so far.

See more details and download data about R&D activity in the institute sector in

- [NIFU's R&D statistics bank](#) and tables from the
- [Norwegian Science and Technology report](#) (A.8, in Norwegian only).

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About

NIFU and statistics Norway prepare total figures for Norwegian R&D activity annually. In the higher education sector and health trusts (from 2017), there is a main survey every two years (odd years), while there are annual surveys in the industrial sector and the institute sector. NIFU is responsible for the higher education sector and the institute sector, while Statistics Norway is responsible for the industrial sector. NIFU compiles the data into national totals for Norway. The statistics are compiled in accordance with the OECD guidelines in the so-called Frascati manual and are included in the OECD and Eurostat databases for Science & Technology.

The national R&D statistics for Norway are published by:

NIFU <http://www.nifu.no> and the Research Council of Norway <http://www.forskningsradet.no>

In the R&D statistics bank, users may choose tables and data for downloading: <http://www.foustatistikkbanken.no>

Detailed statistics for the industrial sector are published by Statistics Norway <http://www.ssb.no>

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NIFU

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Nordic Institute for Studies in
Innovation, Research and Education

NIFU is an independent social science research institute, organized as a non-profit foundation. The institute aims to be a leading European research organization for studies of innovation, research and education at all levels. NIFU collect, analyze and disseminate national statistics and indicators for R&D and innovation, and are active participants in statistical cooperation at European and international levels.

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