

## Continued growth in Norway's R&D efforts

Preliminary figures for expenditure on research and experimental development (R&D) in Norway in 2016 show that the total R&D efforts amounted to more than NOK 63.5 billion. In current prices, this results in an increase in R&D expenditure of approximately 3.3 billion from 2015, corresponding to 5.5 per cent. R&D expenditure's share of GDP increases from 1.93 to 2.04 per cent. Nearly 44,100 R&D full-time equivalents were carried out in 2016, which was almost 1,700 more than in 2015.

In current prices, the growth in R&D expenditure from 2015 to 2016 was highest in the higher education sector (10.7 per cent). The industrial sector had an increase of 6.2 per cent, while the R&D expenditure in the institute sector fell 3 per cent. Health trusts (hospitals) had a nominal increase in R&D expenditure from 2015 to 2016 of 8.5 per cent.

In the industrial sector, growth in R&D in services was 9.6 per cent, while industry R&D had a marginal increase of just under one per cent. The industrial sector's R&D is described in more detail on Statistics Norway's web pages, see <http://www.ssb.no/>. The decline in the institute sector is primarily due to two factors. Several institutes introduced new pension plans in 2015. The winding up of old schemes caused major accounting consequences for this year. These were one-off effects that contributed to the raise in R&D spending in the sector by 2015. In addition, investments were significantly higher in 2015 than in 2016. In the higher education sector, staff growth contributed to the increase in R&D resources. Some of this growth is due to the expansion of the statistical basis. The sector also saw significant growth in R&D expenses related to scientific equipment. For health trusts, which in the R&D statistical context are included in the higher education sector (university hospitals) and in the institute sector (other health trusts and private non-profit hospitals), the overall growth in R&D expenditures is linked, among other things, to increased investments in scientific equipment.

The preliminary figures indicate that a relatively high real growth in Norway's total R&D expenditure is expected from 2015 to 2016. Final 2016-figures for R&D expenditure and R&D FTEs will be published mid-February 2018.

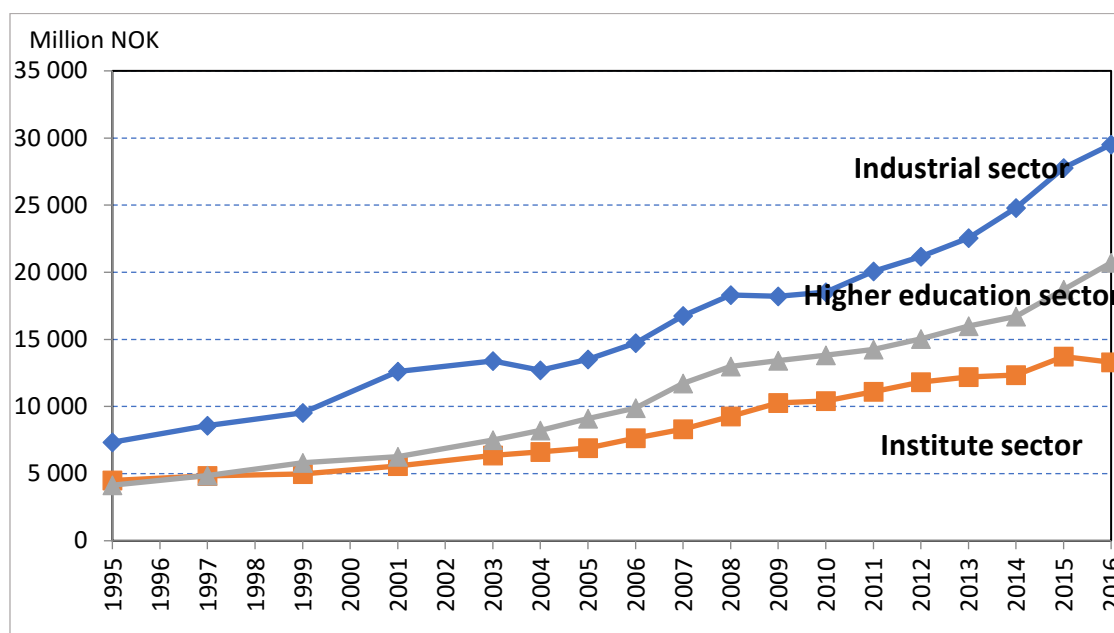
### R&D expenditure in 2014, 2015 and 2016\* by sector of performance. Million NOK and per cent.

Sector	2014	2015	2016	% change 2015-2016
Industrial sector	24,802	27,783	29,520	6.2
Higher education sector	16,720	18,709	20,710	10.7
Institute sector	12,345	13,718	13,300	-3.0
<b>Total</b>	<b>53,867</b>	<b>60,210</b>	<b>63,530</b>	<b>5.5</b>
<i>of which health trusts</i>	<i>3,436</i>	<i>4,007</i>	<i>4,330</i>	<i>8.5</i>
<b>Share of GDP (%)</b>	<b>1.72</b>	<b>1.93</b>	<b>2.04</b>	

\*Preliminary figures for 2016.

Source: NIFU and Statistics Norway

**Total R&D expenditure in Norway by sector of performance 1995-2016\*. Fixed 2010-prices.**



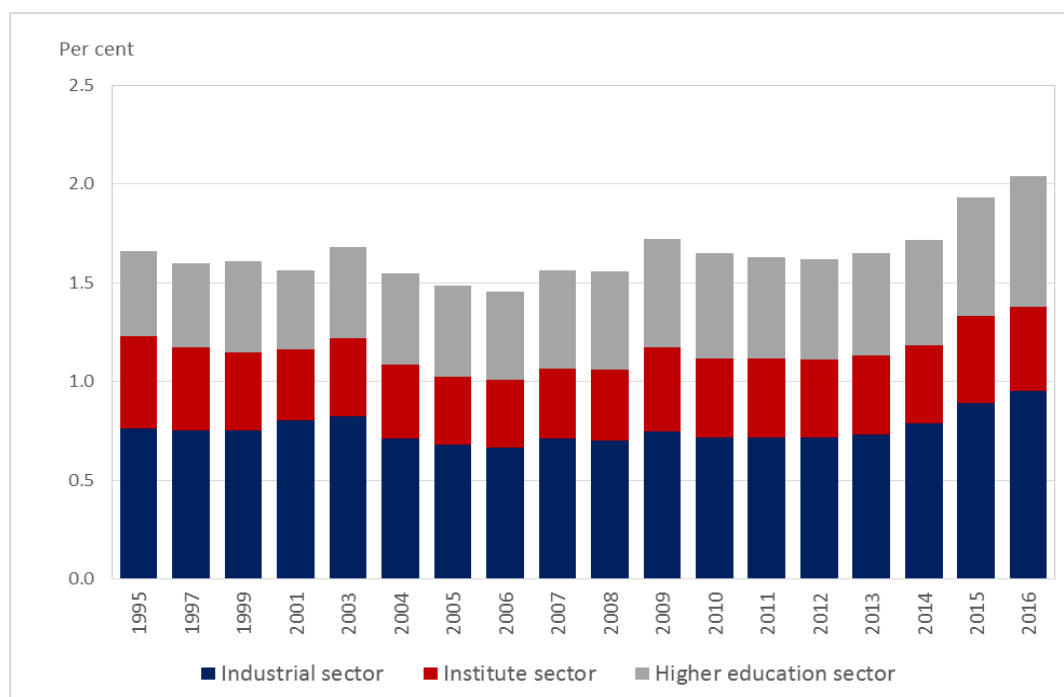
\*Preliminary figures for 2016.

Source: NIFU and Statistics Norway

**Increase in R&D expenditure's share of GDP**

R&D expenditure in 2016 is estimated to amount to 2.04 per cent of gross domestic product (GDP). This is an increase compared to 2015, when the share was 1.93 per cent. In addition to growth in total R&D expenditures, zero growth in the projection for GDP in 2016 contributes to a higher R&D share of GDP. However, it is important to note that both the total R&D expenditure and the projection for GDP 2016 are preliminary amounts.

**R&D expenditure as a share of GDP 1995-2016\*.**



\*Preliminary figures for 2016.

Source: NIFU and Statistics Norway

### 1,700 more R&D full-time equivalents (FTEs) in 2016

Preliminary figures for 2016 show that nearly 44,100 R&D full-time equivalents (FTEs) in Norway were carried out in 2016, 1,700 more than in 2015. This represents an increase of about 4 per cent. The industrial sector accounted for 45 per cent of R&D FTEs, while 34 and 21 per cent were conducted in the higher education sector and the institute sector, respectively. Among the three R&D performing sectors, the higher education sector had the highest growth in FTEs from 2015 to 2016. The R&D FTEs in the institute sector remained virtually unchanged.

Health trusts accounted for 7 per cent of the total R&D FTEs in 2016, a slight decrease in the share of total FTEs compared to 2015. Growth in FTEs was thus lower from 2015 to 2016 than from 2014 to 2015 in the health trusts.

### R&D full-time equivalents (FTEs) in 2014, 2015 and 2016\* by sector of performance.

Sector	2014	2015	2016	Share per sector (%)
Industrial sector	17,932	19,087	19,764	45
Higher education sector	13,010	13,952	14,937	34
Institute sector	9,355	9,370	9,380	21
<b>Total</b>	<b>40,297</b>	<b>42,409</b>	<b>44,081</b>	<b>100</b>
<i>of which health trusts</i>	<i>3,019</i>	<i>3,218</i>	<i>3,286</i>	<i>7</i>

\*Preliminary figures for 2016.

Source: NIFU and Statistics Norway

*Final and more detailed R&D statistics for Norway will be published medio February 2018.*

Every year, the total amount of resources for research and experimental development (R&D) in Norway is prepared. In the higher education sector, the main survey is conducted every two years (odd years). NIFU has statistical responsibility for the higher education sector and the institute sector, while Statistics Norway is responsible for the industrial sector. NIFU compiles the data for the total R&D statistics for Norway. The statistics are based on the OECD Guidelines in the so-called Frascati Manual and are part of the OECD and Eurostat databases for Science & Technology.

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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 are given the opportunity to select tables and data themselves: <http://www.nifu.no/statistik/databaser-og-registre/foustatistikbanken/>. Detailed statistics for business and industry are published by Statistics Norway <http://www.ssb.no/>.