

Key figures for the Research Council

Statistics for projects, allocations and grant applications at the Research Council of Norway for 2011

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This document is an extract of a larger Norwegian-language publication featuring statistics for projects, allocations and grant applications at the Research Council of Norway for 2011. Key figures are presented for allocations from the Research Council for 2011 and preceding years and for grant applications submitted in connection with the Research Council's funding announcements in 2011.

Each year the Research Council receives around 5 000 grant proposals for funding for new projects. In addition, there are at any given time some 5 500 ongoing projects with funding from grants awarded in a previous year.

The data in this publication are based on information recorded for each individual project. The first chapter presents selected key figures for allocations from the Research Council. The subsequent chapters present statistics in specific areas/subject fields.

1 Key figures

1.1 Total revenues and expenditures

The table below shows the Research Council's total revenues during the period 2007-2011, including allocations for administration. Sixteen ministries provided funding for the Council's budget in 2011; the largest contributors were the Ministry of Education and Research, the Ministry of Trade and Industry, and the Ministry of Petroleum and Energy.

Table 1. The Research Council's total revenues. In NOK million.

2007	2008	2009	2010	2011
5 655.8	5 754.5	6 474.3	6 964.1	7 075.3

The table below shows the distribution of the Research Council's total expenditures for 2011 by funding instrument. The category "Other" includes funding initiatives such as the Outstanding Young Investigators' (YFF) scheme, Strategic Projects – University Colleges (SHP), the Industrial PhD scheme, Commercialising R&D Results (FORNY2020) and Regional R&D and Innovation (VRI).

Table 2. Expenditures in 2011, by funding instrument. In NOK million.

User-driven innovation programmes	979.7
Basic research programmes	173.7
Policy-oriented programmes	917.3
Large-scale Programmes	1343.2
Independent projects	521.2
Basic allocations	885.1
Centre schemes (SFF/SFI/FME)	578.1
Scientific equipment, databases and collections	265.1
Internationalisation measures	322.4
Other	1088.9
Total:	7075.3

1.2 Development in number of projects

In recent years the Research Council has sought to redesign its project portfolio to reduce the number and increase the scale of the research projects. The table on the next page shows the number of active projects per year, i.e. projects that received research funding from the Research Council during the year indicated.

Table 3. R&D projects funded by the Research Council. Total number of projects and number of projects by type of institution/sector.

	2007	2008	2009	2010	2011
Total number of projects	5991	6318	5647	5644	5454
Of which, number of projects					
- at universities	1 882	1 839	1 686	1 614	1 627
- at state university colleges	188	168	150	148	124
- at independent research institutes	1 903	1 940	1 579	1 582	1 459
- in trade and industry	843	1 184	924	963	937
- At health trusts	98	103	107	96	107

The figures show a trend towards a decrease in the number of projects receiving funding. However, calculations show that the proportion of projects awarded grants of more than NOK 1 million has increased from 43 per cent to 56 per cent between 2007 and 2011.

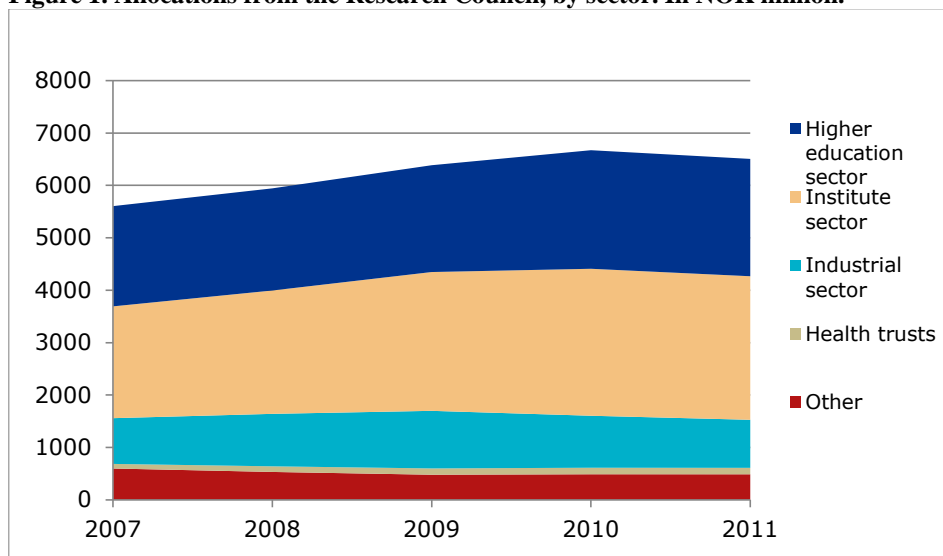
1.3 Sectors

All grant applications and projects granted funding must have a single Project Owner (an institution or company) as the contractual partner to the Research Council. The figure on the next page illustrates the distribution of allocations from the Research Council by sector, based on the Project Owner's affiliation. In national R&D statistics R&D activities are classified into three sectors of performance: the higher education sector (universities and university colleges), the institute sector (independent research institutes) and the industrial sector (trade and industry).

In addition to independent research institutes, the institute sector encompasses other institutions that perform R&D to a greater or lesser degree and which are not classified as trade and industry or higher education institutions. The industrial sector includes private companies or other institutions that produce goods or services for sale on the open market.

The category "Other" primarily encompasses projects with more administrative-related purposes, such as conferences, meetings and day-to-day activities under the programmes.

Figure 1. Allocations from the Research Council, by sector. In NOK million.



For the first time, the health trusts have been categorised as their own sector. In previous reports, some of the health trusts were categorised under the higher education sector (university hospitals), while others were categorised under the institute sector (non-university-affiliated hospitals).

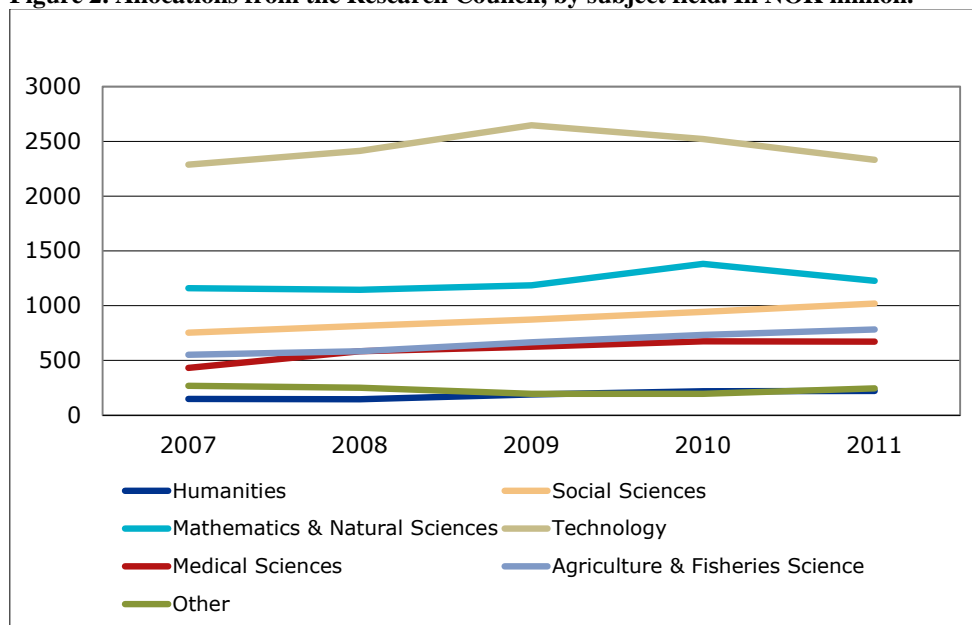
The decrease in overall project funding from 2010 to 2011 is primarily due to the fact that a number of programmes under the Research Council's Large-scale Programme initiative have been concluded and that the Programme for User-based Research Innovation (BIA) had an extraordinarily high level of activity in 2009.

1.4 Subject fields

The figure on the next page illustrates the distribution of the Research Council's overall allocations by subject field during the period 2007-2011.

There has been less growth in allocations to projects in "Mathematics and Natural Sciences" and "Technology" due in part to the phasing out of a number Large-scale Programmes. Nevertheless, these subject fields still receive the largest proportion of project funding from the Research Council. The growth in allocations to projects in the subject field of "Humanities" is primarily linked to the increase in available funding under the funding scheme for independent projects (FRIPRO), while the growth in "Social Sciences" is primarily linked to a rise in the number of targeted international activities such as the Programme for Research Cooperation with India (INDNOR), the Research Programme on Latin America (LATINAMERIKA), and the Norway – A Global Partner (NORGLOBAL) programme. In addition, funding was awarded to three new FME Centres for Social Science-related Energy Research (FME Samfunn) in 2011.

Figure 2. Allocations from the Research Council, by subject field. In NOK million.

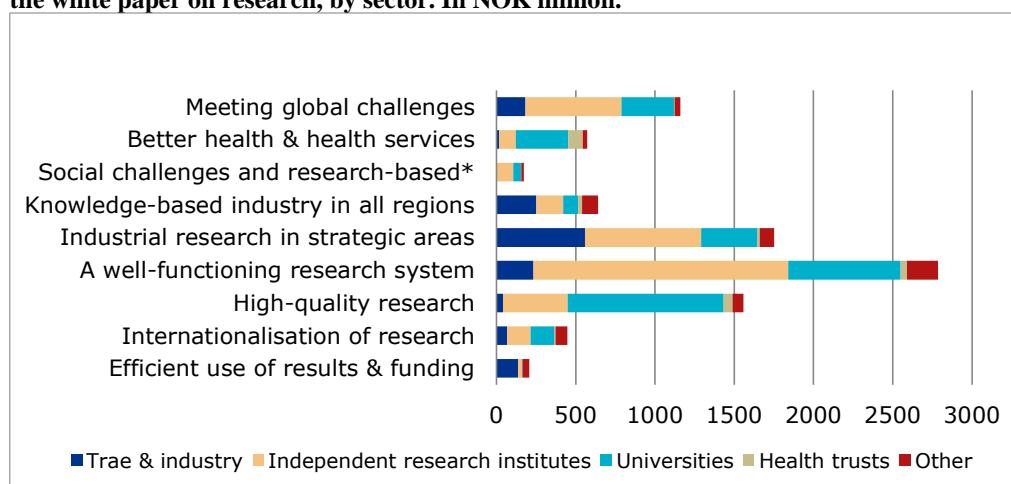


1.5 Priority areas in the white paper *Climate for Research*

The government white paper on research *Climate for Research* (Report No. 30 (2008-2009) to the Storting) sets out nine main goals and appurtenant priority areas for Norwegian research policy. The Research Council has mapped the follow-up of these goals by categorising all projects allocated funding in 2009-2011 in terms of these individual areas.

The figure below illustrates the distribution of Research Council allocations to programmes and activities targeted towards the individual policy goals in 2011.

Figure 3. Allocations from the Research Council targeted towards the policy goals set out in the white paper on research, by sector. In NOK million.



* Social challenges and research-based practice in the relevant professions

1.6 Research funding by county

The table below shows the distribution of allocations for the period 2007-2011 among Norway's 20 counties. Not surprisingly, the bulk of the allocations was provided to counties with universities where the largest R&D environments are concentrated. This results in Oslo and Sør-Trøndelag counties topping the list in terms of the total amount of allocations received.

Table 4. Allocations from the Research Council, by county. In NOK million.

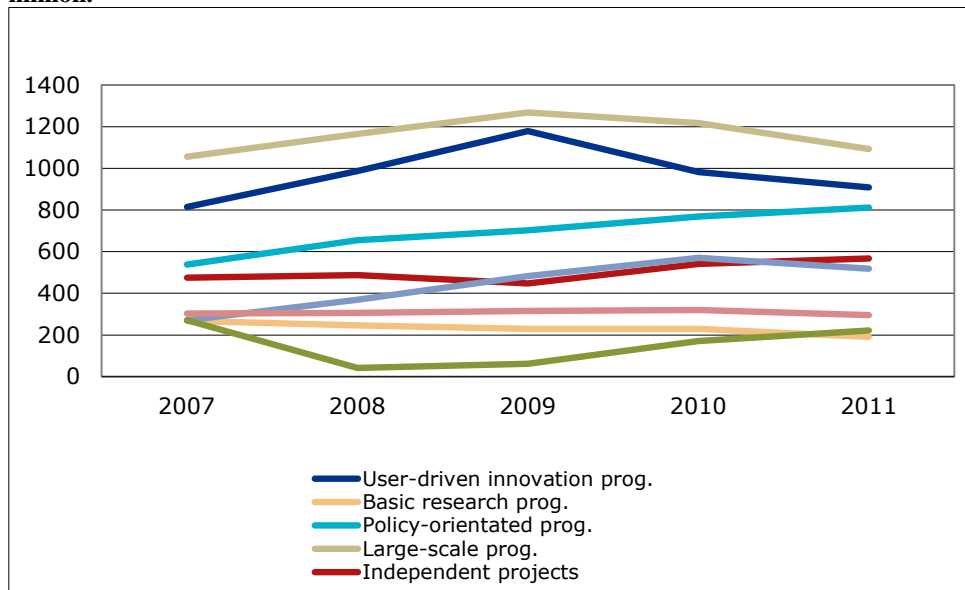
	2007	2008	2009	2010	2011
AKERSHUS	759.3	790.5	860.7	878.4	883.7
AUST-AGDER	33.6	25.1	19.9	17.9	15.7
BUSKERUD	34.6	58.4	74.6	50.0	45.5
FINNMARK	22.7	17.4	17.6	16.7	10.3
HEDMARK	31.2	40.0	43.8	37.2	31.6
HORDALAND	747.9	764.6	798.3	924.7	884.1
MØRE OG ROMSDAL	75.3	92.7	82.0	93.4	63.8
NORDLAND	45.8	57.2	47.5	61.8	62.0
NORD-TRØNDELAG	26.5	35.8	33.2	30.0	30.1
OPPLAND	58.0	50.1	56.3	50.8	53.5
OSLO	1 620.6	1 795.7	1 891.4	1 941.9	1 922.6
ØSTFOLD	28.8	37.5	38.3	40.1	40.7
ROGALAND	191.8	208.5	184.2	193.9	194.5
SOGN OG FJORDANE	25.2	34.0	20.2	24.4	14.0
SØR-TRØNDELAG	1 172.3	1 182.2	1 375.7	1 412.5	1 409.6
SVALBARD	11.1	10.5	7.4	13.8	12.7
TELEMARK	44.3	72.0	60.3	71.9	53.7
TROMS	391.8	377.8	425.4	457.4	434.4
VEST-AGDER	37.8	46.1	56.8	53.8	45.7
VESTFOLD	43.8	47.9	69.4	61.4	52.2
Unknown	203.4	200.7	222.7	240.2	246.1
	5 605.5	5 944.6	6 385.6	6 672.2	6 506.3

1.7 Funding instruments and main activities

Research programmes and activities at the Research Council are grouped under various *main activities*, which in turn are grouped under various *funding instruments*. For instance, "Research programmes" are a type of funding instrument, under which the "Large-scale Programmes" are a main activity. The programme on Clean Energy for the Future (RENERGI) is a research programme under the main activity "Large-scale Programmes".

The figure on the next page illustrates the distribution of the allocations from the Research Council among the funding instruments and main activities.

Figure 4. Allocations from the Research Council, by the key funding instruments. In NOK million.



The figure shows that the research programmes have experienced the largest overall growth during the period 2007-2011, despite the drop in allocations to user-driven innovation programmes and Large-scale Programmes from 2009 to 2011.

The decrease in allocations to Large-scale Programmes is the result of the phasing out of several of the original programmes in this category. The decrease in allocations to basic research programmes is primarily due to the fact that the International Polar Year (IPY) was concluded in 2010.

Allocations to independent projects made up 9 per cent of the Research Council's total allocations.

There was a 19 per cent increase in allocations to independent projects during the period 2007-2011. Most of this growth occurred in the period 2009-2011.

There was a marked growth in allocations to the Centres of Excellence (SFF) scheme, the Centres for Research-based Innovation (SFI) scheme and the Centres for Environment-friendly Energy Research (FME) scheme. The FME scheme is the most recently established scheme (2009), while the first SFI centres were started up in 2007.

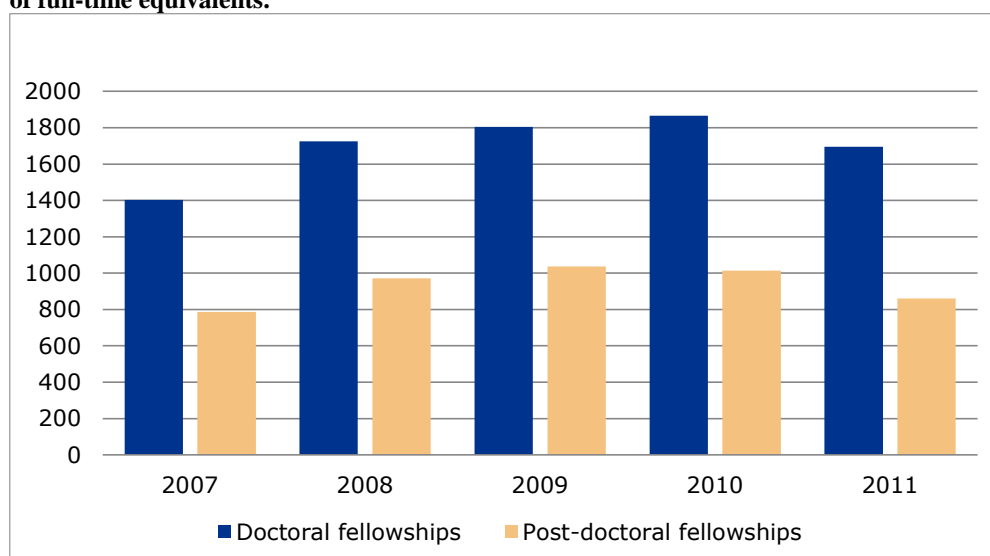
1.8 Recruitment

The Research Council contributes to the recruitment of research personnel through allocation of project funding. In certain cases funding is earmarked for recruitment activities, but for the most part the Research Council awards framework allocations, out of which the Project Owner finances doctoral and/or post-doctoral fellowships.

Table 5. Doctoral fellows affiliated with projects funded by the Research Council. Number of full-time equivalents and percentage of women (preliminary figures).

	2007	2008	2009	2010	2011
Women	578.6	766.9	832.6	841.6	742.9
Men	821.6	952.2	952.0	978.6	863.1
Gender unknown	2.2	5.8	20.0	46.5	89.8
Total:	1 402.4	1 724.9	1 804.7	1 866.7	1 695.9
Percentage of women	41%	44%	46%	45%	44%

Figure 5. Doctoral and post-doctoral fellowships funded by the Research Council. Number of full-time equivalents.



2 The universities

Institutions of higher education and independent research institutes receive the largest proportion of the Research Council's allocations. Naturally enough the universities, especially the broad-spectrum universities in Oslo, Bergen and Trondheim, were the recipients of the largest amount of funding.

In 2011, Norway had seven universities: the University of Oslo (UiO), the University of Bergen (UiB), the Norwegian University of Science and Technology (NTNU), the University of Tromsø (UiT), the Norwegian University of Life Sciences (UMB), the University of Stavanger (UiS) and the University of Agder (UiA).

The figure on the next page illustrates the development in allocations to the universities over time.

Figure 6. Allocations from the Research Council, by university. In NOK million.

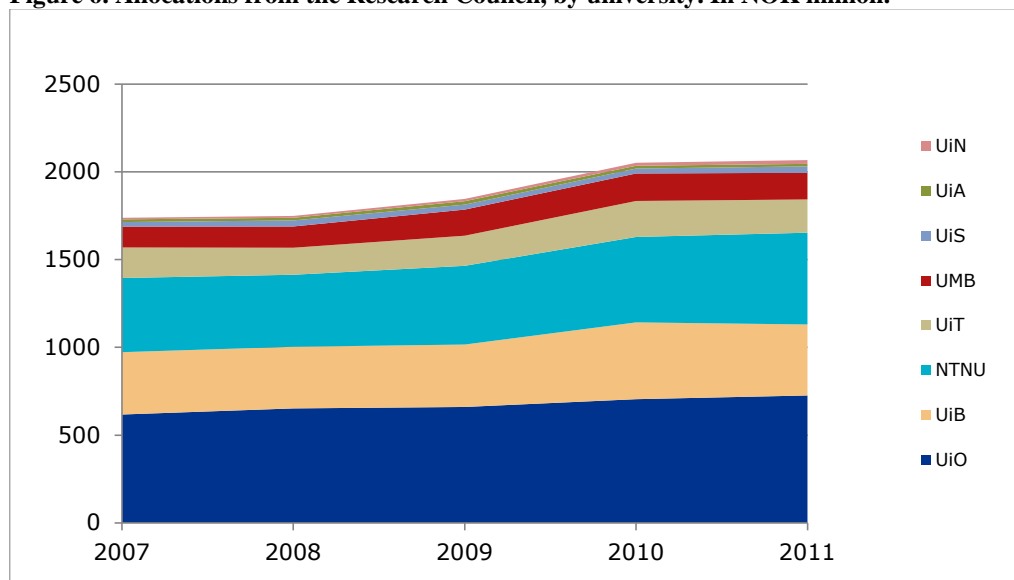
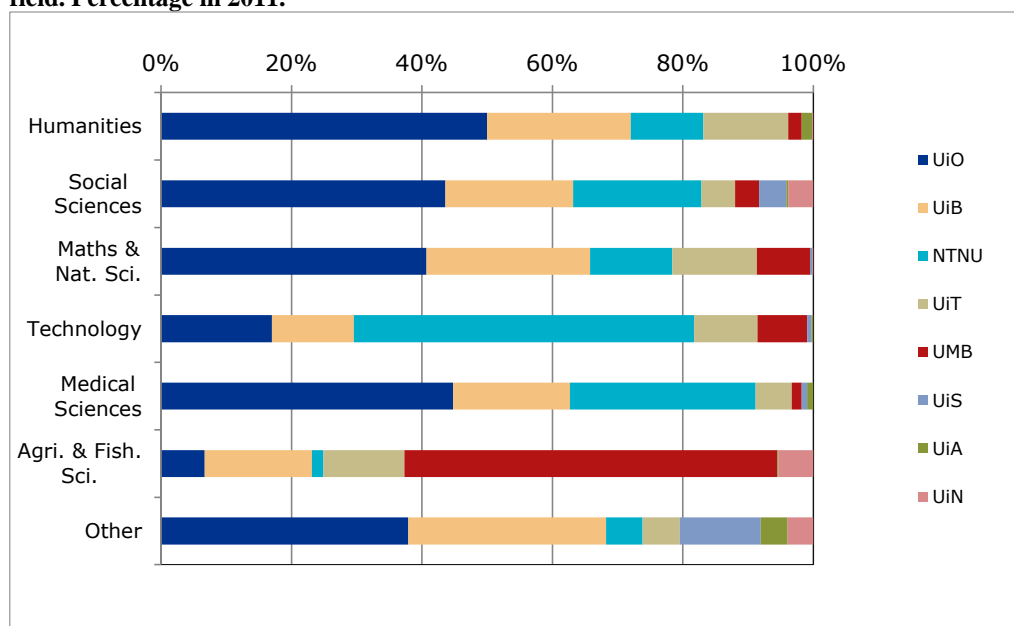


Figure 7. Allocations from the Research Council to the individual universities, by subject field. Percentage in 2011.



The University of Oslo (UiO) received the largest proportion of allocations in all but two of the subject fields. The Norwegian University of Life Sciences (UMB) received more than 50 per cent of allocations to projects in the subject field of “Agriculture and Fisheries Science/Veterinary Sciences”, while the Norwegian University of Science and Technology (NTNU) received over 40 per cent of allocations to projects in the subject field of “Technology”.

3 The university colleges and specialised higher education institutions

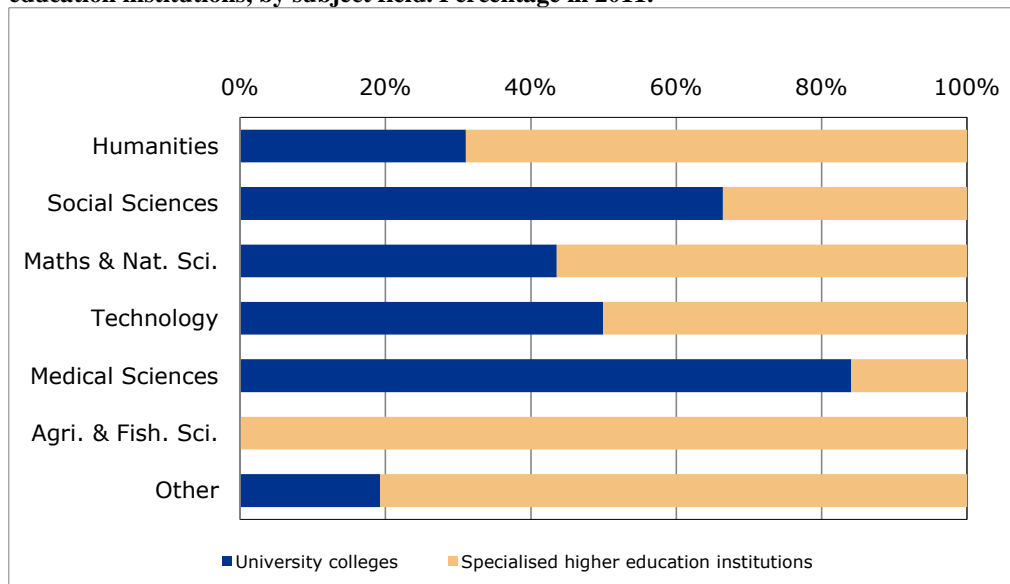
The table below shows the development in the Research Council's allocations to state university colleges and specialised higher education institutions over time.

Table 6. Allocations from the Research Council to state university colleges and specialised higher education institutions. In NOK million.

	2007	2008	2009	2010	2011	Percentage of total, 2011	Growth 2007-2011
State university colleges	103.9	114.1	110.5	117.7	78.7	47 %	-24 %
Specialised higher education institutions	71.0	85.8	82.1	86.2	87.4	53 %	23 %
	174.9	199.9	192.6	204.0	166.1	100 %	-5 %

The figure below illustrates the distribution of the allocations from the Research Council between state university colleges and specialised higher education institutions, by subject field in 2011.

Figure 8. Allocations from the Research Council to university colleges and specialised higher education institutions, by subject field. Percentage in 2011.



4 Independent research institutes

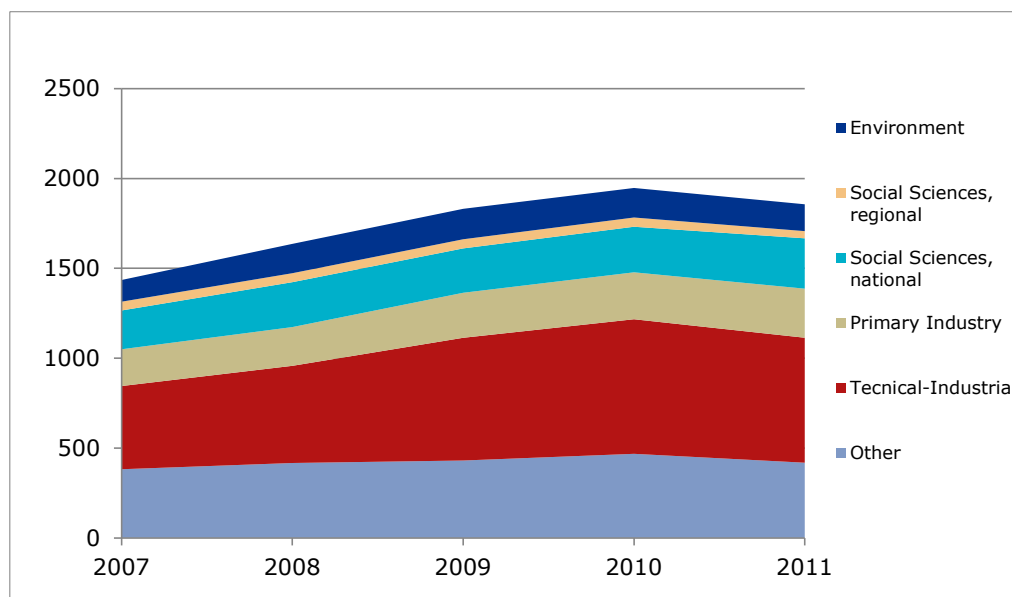
The Research Council has a strategic responsibility for independent research institutes in Norway. In the government framework for basic funding to independent research institutes the Research Council's strategic responsibility is tied to the approximately 50 research institutes to which it grants basic funding. A new basic funding scheme for independent research institutes was introduced in 2009. The Research Council administers the scheme in accordance with the rules set out in the government guidelines for basic funding for independent research institutes.

The research institutes that receive basic funding from the Research Council also receive ordinary project funding. The table below shows the distribution of the total allocations to independent research institutes broken down into project funding and basic funding.

Table 7. Allocations from the Research Council to independent research institutes, by type of allocation. In NOK million.

	2007	2008	2009	2010	2011	Percentage of total, 2011	Growth 2007-2011
Project funding	1 435.4	1 636.3	1 831.5	1 947.5	1 856.6	68 %	29 %
Basic funding	698.5	717.9	817.4	857.0	883.2	32 %	26 %
	2 133.9	2 354.2	2 648.8	2 804.5	2 739.8	100 %	28 %

Figure 9. Allocations from the Research Council to independent research institutes (excl. basic funding), by subject area of institute. In NOK million.



The figure illustrates the marked increase in the amount of project funding from the Research Council to independent research institutes during the period 2007-2011, and how the allocations are distributed among the various types of institutes.

5 Health trusts

For the first time, the health trusts have been classified in their own category in “Key figures for the Research Council”. As the practice for designating which institution is the Project Owner differs among the university hospitals, these figures are not necessarily complete.

Table 8. Allocations from the Research Council to health trusts. In NOK million.

	2007	2008	2009	2010	2011	Percentage of total, 2011	Growth 2007-2011
University hospitals	85.8	100.4	105.1	110.5	110.7	90 %	29 %
Health trusts without any relation to universities	1.8	6.9	14.9	14.3	12.5	10 %	598 %
	87.6	107.4	120.0	124.7	123.2	100 %	41 %

6 Trade and industry

In 2011, 14 per cent of the allocations from the Research Council were awarded to projects whose Project Owner is a company. The table below shows a considerable increase in allocations to trade and industry during the period 2007-2011.

Table 9. Allocations from the Research Council to trade and industry. In NOK million.

	2007	2008	2009	2010	2011
Allocations (NOK million)	873.2	1 001.5	1 098.9	992.5	916.4
Doctoral fellowships (no. of full-time equivalents)	102.3	150.6	177.3	195.9	201.4
Post-doctoral fellowships (no. of full-time equivalents)	27.9	44.3	37.5	38.7	34.0

The table also shows that there was a marked growth in the number of doctoral and post-doctoral fellowships incorporated into projects in trade and industry during the period. This is primarily due to activity under the Industrial Ph.D. scheme, which offers companies support for a three-year period for an employee to pursue a doctoral degree. The scheme's first ordinary year of operations was 2009.

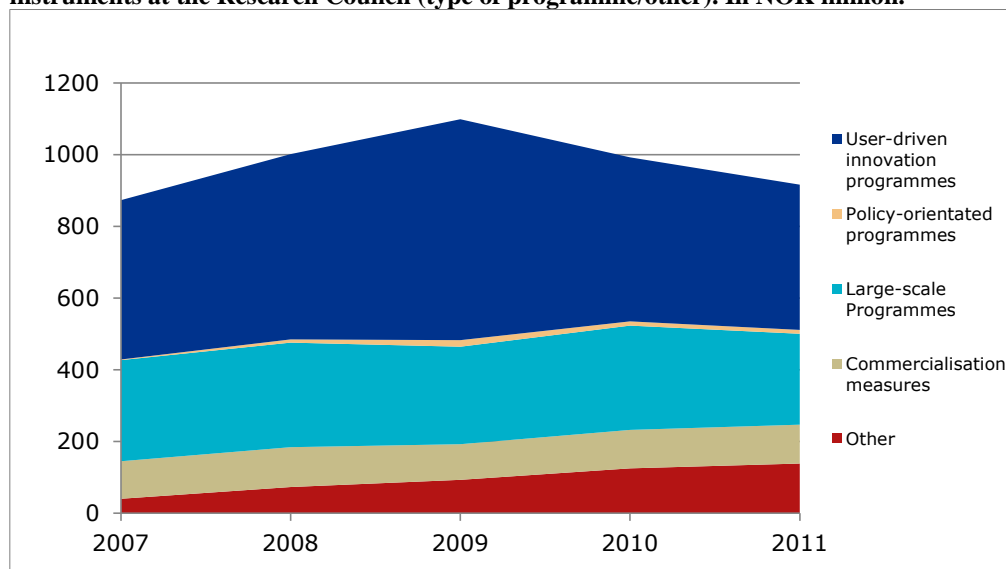
The table on the next page shows the distribution of allocations among various branches of industry. Projects may be categorised under more than one area of industry.

Table 10. Allocations from the Research Council to trade and industry, by branch of industry. In NOK million.

	2010	2011
Knowledge, technology & ICT industries	182.0	156.1
Process industry	112.6	116.9
Manufacturing industry	115.0	116.4
Oil & gas	119.8	113.3
Energy	117.5	103.3
Pharmaceutical, medical & biotechnology industries	80.4	77.4
Transport & communications	95.3	74.6
Fisheries & aquaculture	42.7	38.8
Agriculture	27.2	24.0
Food industry	23.4	22.4
Building, construction & mining industries	17.5	15.5
Other services	12.9	9.8
Forestry & use of wood	8.6	7.5
Media & culture	5.8	5.6
Travel & tourism, trade in goods	0.5	0.2
Finance, banking & property	0.1	0.2

As shown in the figure on the next page, trade and industry receives a large proportion of its project funding from the Research Council's Large-scale Programmes. The category "Commercialisation measures" more or less wholly comprises allocations under the programme Commercialising R&D Results (FORNY2020), the primary objective of which is to increase value creation by ensuring that R&D results from publicly-funded research institutions are brought to the market. The decrease in project funding under user-driven innovation programmes in the past two years is primarily due to the fact that the non-thematically-based Programme for User-based Research Innovation (BIA) had an extraordinarily high level of activity in 2009 and has returned to a more normal level in 2010-2011.

Figure 10. Allocations from the Research Council to trade and industry, by the key funding instruments at the Research Council (type of programme/other). In NOK million.



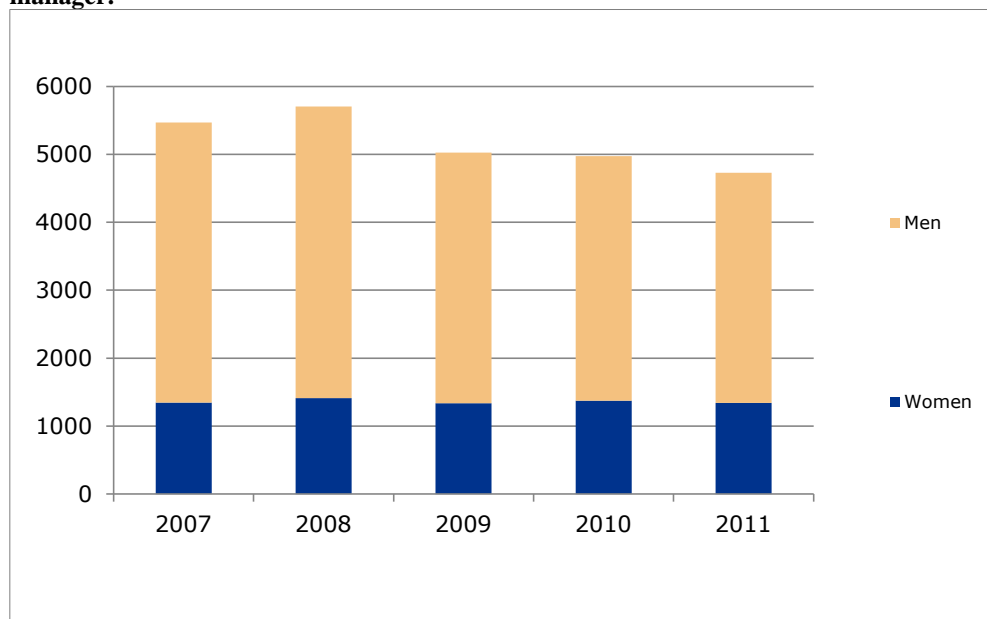
7 Gender distribution

In the most recent white papers on research, the Government emphasised that achieving a better gender balance in research will promote research quality and relevance. Ensuring the high quality of Norwegian research and higher education will require the recruitment of the most talented candidates, and efforts must be made to recruit students and researchers of both genders to all disciplines.

7.1 Project managers

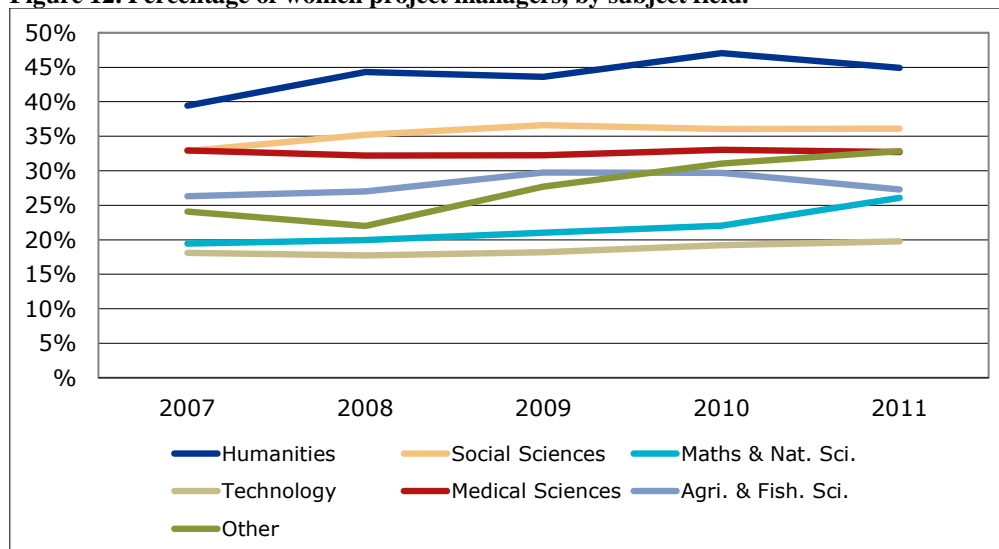
All projects granted funding by the Research Council must have a project manager. The figure on the next page shows that the percentage of women project managers has been rather stable – and low – during the period, at about 25 per cent.

Figure 11. Number of projects funded by the Research Council, by gender of project manager.



The figure below shows that it is the relative lack of women project managers in the MST subject fields (mathematics, science and technology) that brings the overall percentage of women project managers down.

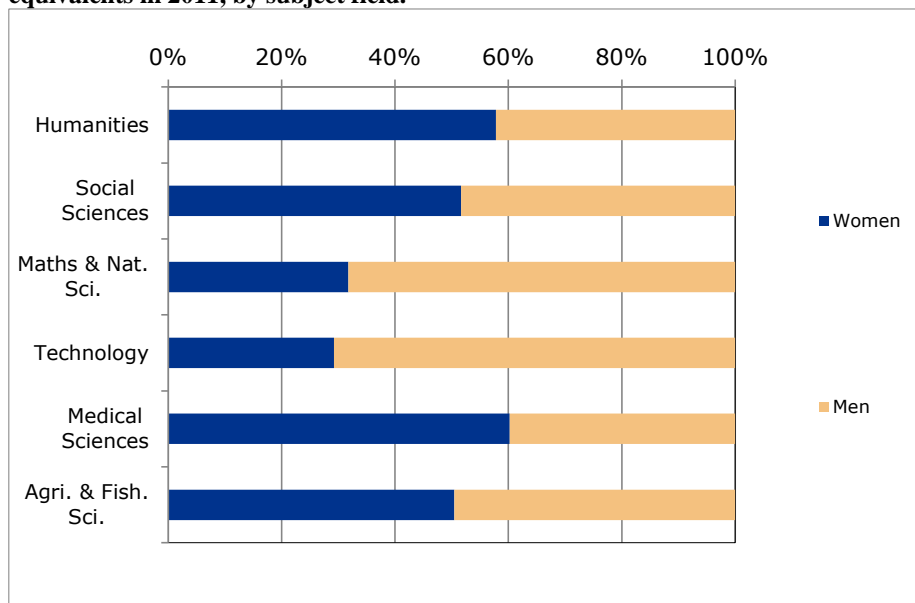
Figure 12. Percentage of women project managers, by subject field.



A comparison shows that there is a higher percentage of women project managers (30 per cent) at the health trusts and the independent research institutes than at the institutions of higher education (27 per cent). The percentage of women project managers in trade and industry is 18 per cent.

The number of doctoral fellowships and percentage of women fellowship-holders varies a good deal among the subject fields.

Figure 13. Doctoral fellowships funded by the Research Council. Number of full-time equivalents in 2011, by subject field.



The percentage of woman doctoral fellowship-holders in “Humanities” and “Social Sciences” is 67 per cent and 60 per cent, respectively. The lowest percentage of women is found in “Technology” (32 per cent). The percentage of women doctoral fellowship-holders in “Medical Sciences” is 66 per cent.

8 Grant applications

Each year the Research Council receives around 5 000 applications for research funding via the eSøknad electronic submission service. Eighty-seven per cent of the grant applications received by the Research Council in 2011 were submitted in response to funding announcements with fixed submission deadlines. The other applications target the Research Council’s funding instruments with open-ended deadlines (for example, scholarships under Cultural Agreements, personal overseas research grants, publication support and the like).

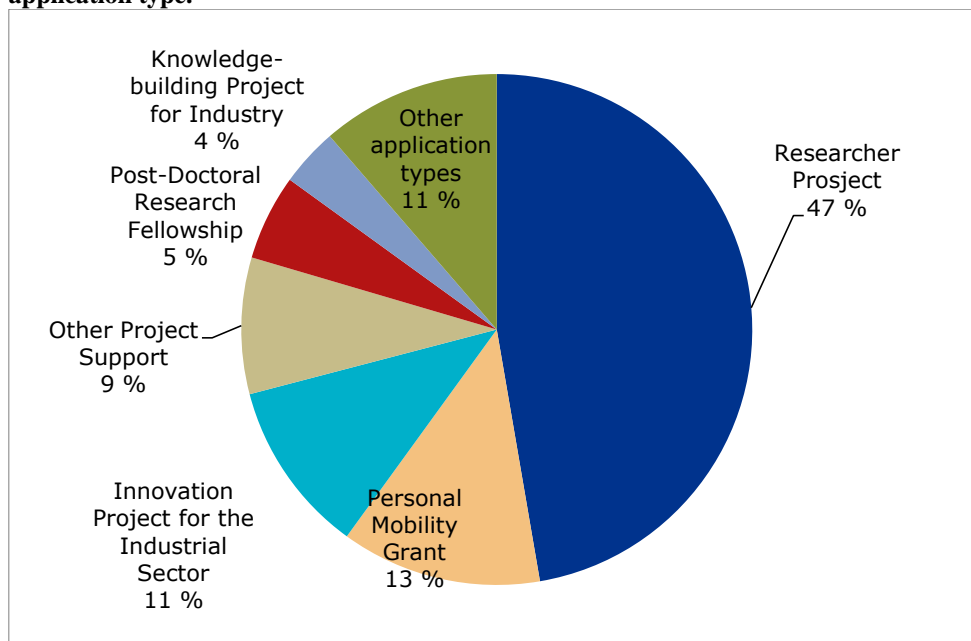
Table 11. Number of grant applications received by the Research Council in 2011.

	Number
Total number of grant applications received in 2010	5 025
- Of which, number in response to funding announcements with fixed deadlines	4 375
- Of which, number fully processed	3 766

8.1 Application types

Calls for proposals for research funding issued by the Research Council specify which *application type(s)* applicants are required to use. All research programmes and activities at the Research Council employ standard application types with appurtenant assessment criteria. The Researcher Project application type is employed most frequently.

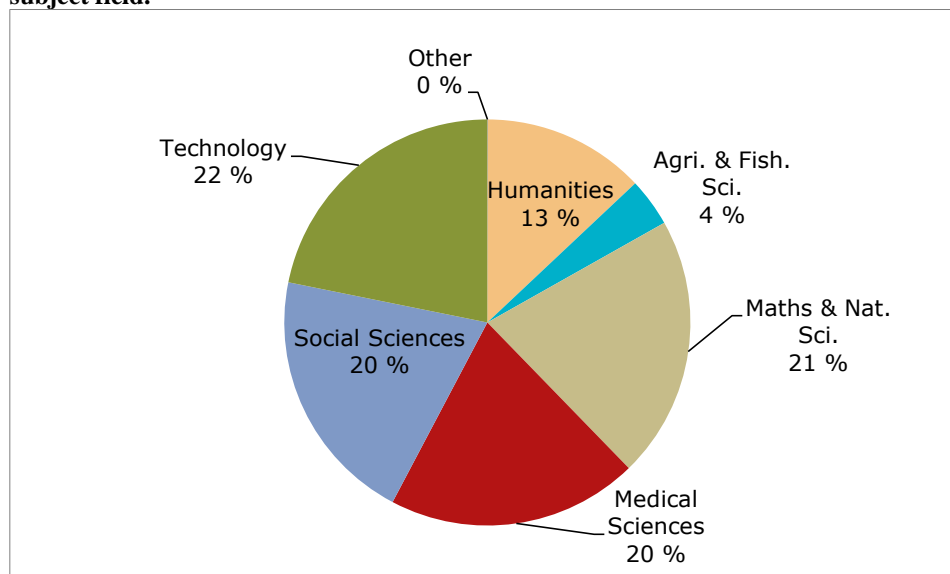
Figure 14. Number of grant applications received by the Research Council in 2011, by application type.



8.2 Subject fields

All grant applications processed by the Research Council are labelled with a subject-field code. The figure on the next page illustrates the distribution of the grant applications among the various subject fields. The applications are relatively evenly distributed among the subject fields “Social Sciences”, “Medical Sciences”, “Mathematics and Natural Sciences”, and “Technology”. The amount of funding sought per project is significantly larger under “Technology” and “Medical Sciences” than in the other subject fields.

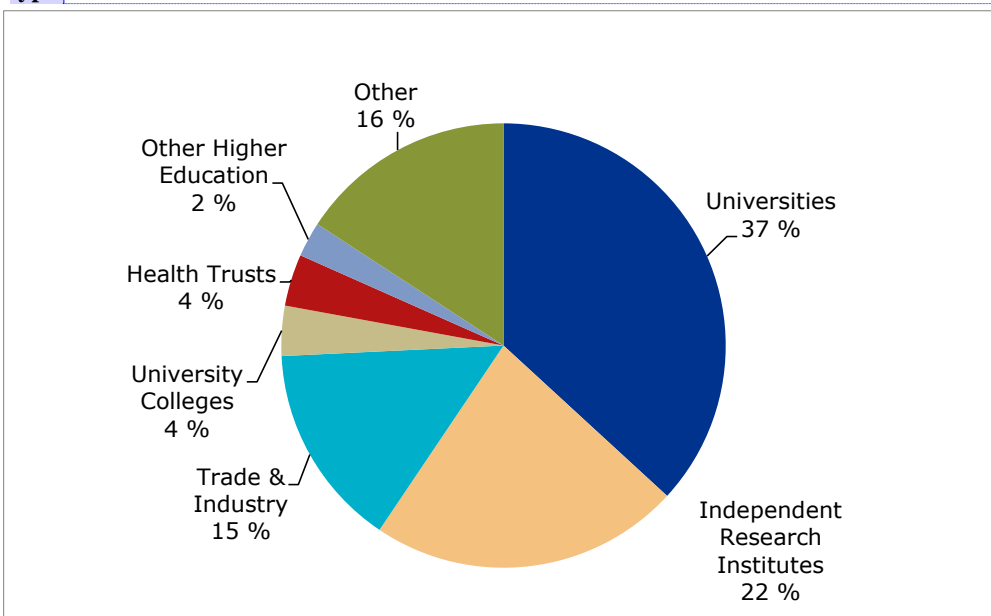
Figure 15. Number of grant applications received by the Research Council in 2011, by subject field.



8.3 Sectors

The figure below illustrates the distribution of grant applications among the sectors in 2011. The universities alone accounted for 37 per cent of the grant applications submitted to the Research Council, while together the universities and university colleges accounted for 46 per cent.

Figure 16. Number of grant applications received by the Research Council in 2011, by sector type.



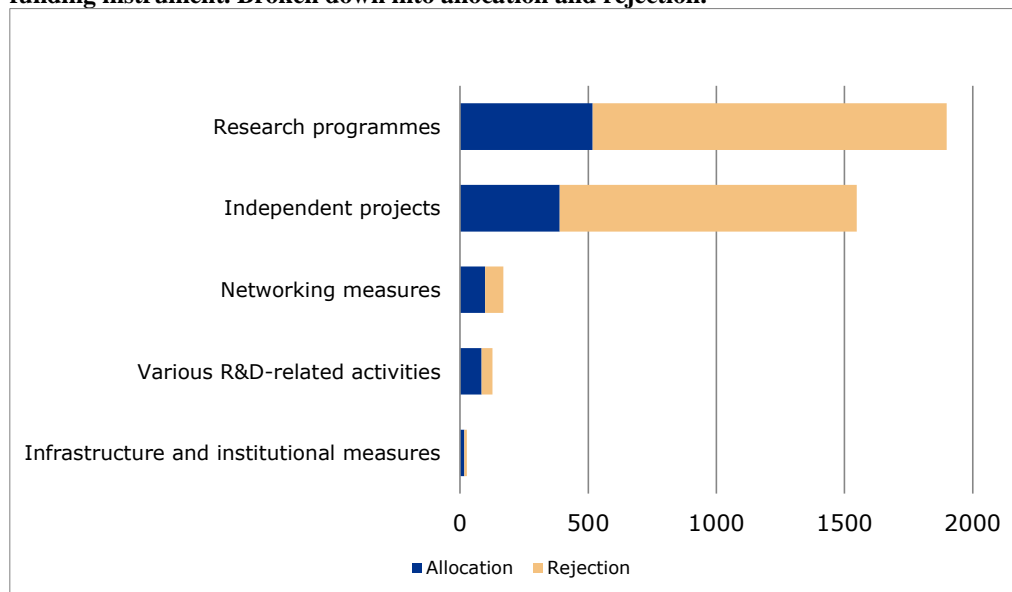
Merknad [thke1]: Må kvalitetssikres

8.4 Grant awards

Of the 3 766 grant applications received by the Research Council in 2011, 29.3 per cent (1 103 applications) were awarded allocations.

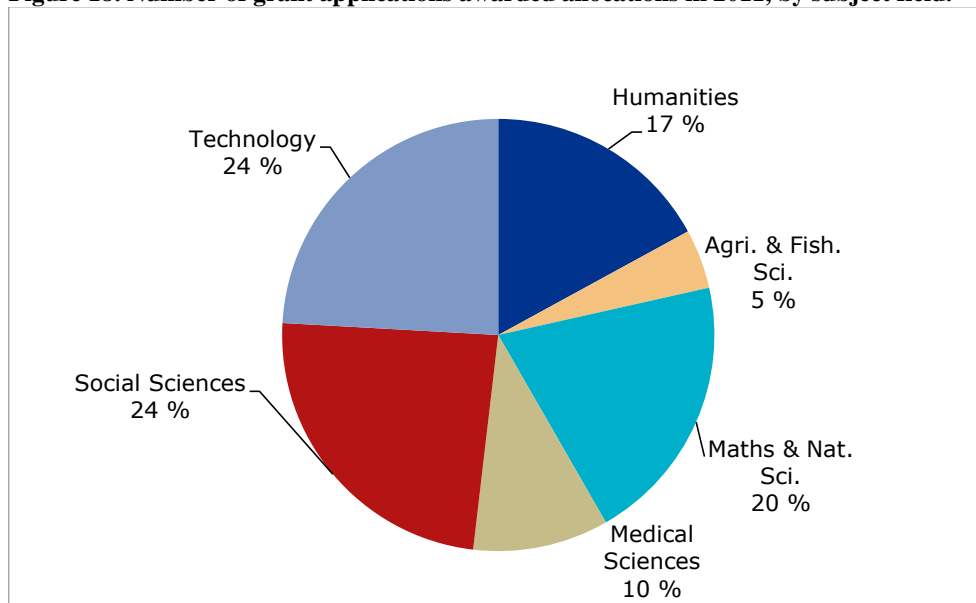
The figure below shows the number of grant applications that received allocations, distributed among the Research Council's various main activities.

Figure 17. Number of grant applications received by the Research Council in 2011, by funding instrument. Broken down into allocation and rejection.



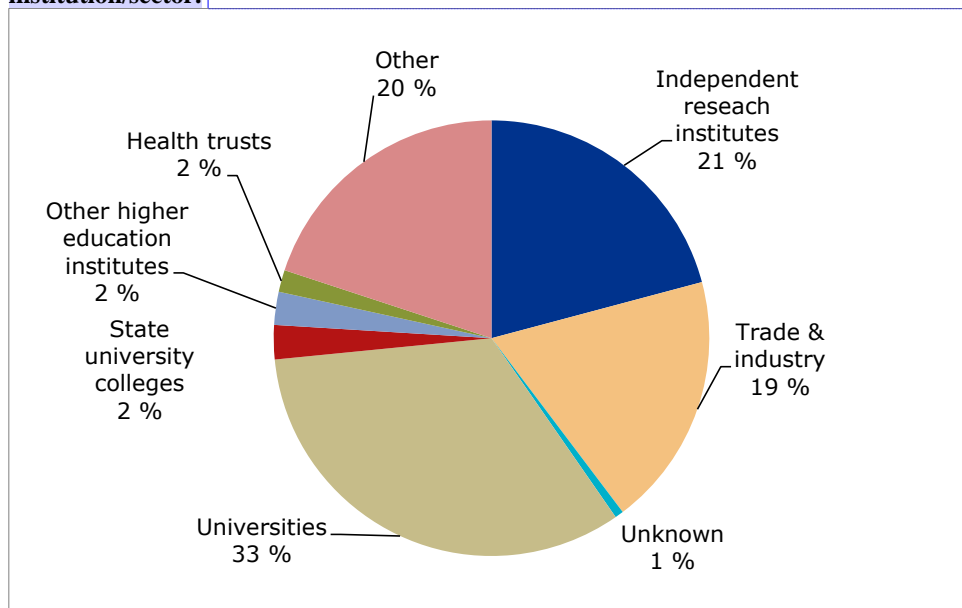
The figure on the next page shows the distribution of the grant applications that received allocations, by subject field.

Figure 18. Number of grant applications awarded allocations in 2011, by subject field.



The figure below shows the distribution of the grant applications that received allocations among the various types of institutions/sectors.

Figure 19. Number of grant applications awarded allocations in 2011, by type of institution/sector.



Merknad [thke2]: Må kvalitetssikres

Together, the universities and university colleges accounted for 43 per cent of the grant applications that received allocations, while trade and industry accounted for 15 per cent.

9 EU statistics

This chapter presents the overall figures for Norwegian participation under the EU Seventh Framework Programme (FP7). All of the figures represent the aggregated results in the period from 1 January 2007 to 31 December 2011.

The statistics are based on proposals recommended for funding (called “recommended projects” in the table below). This is the status of the project proposals after they have been evaluated and before negotiations on the grant agreement have been completed. These project proposals nearly always receive funding, except when something unexpected occurs during the negotiations.

As of 31 December 2011, Norwegian players had participated in 4 002 project proposals submitted under FP7, of which 933 proposals were recommended for funding. Norway takes part in 6.4 per cent of all recommended projects. The quality of the proposals involving Norwegian participants is good, and Norway’s success rate of 23.3 per cent is 2.6 percentage points higher than the average for all of the countries participating in FP7.

By the end of 2011, Norway had obtained NOK 3.4 billion in EU funding via participation in proposals recommended for funding.

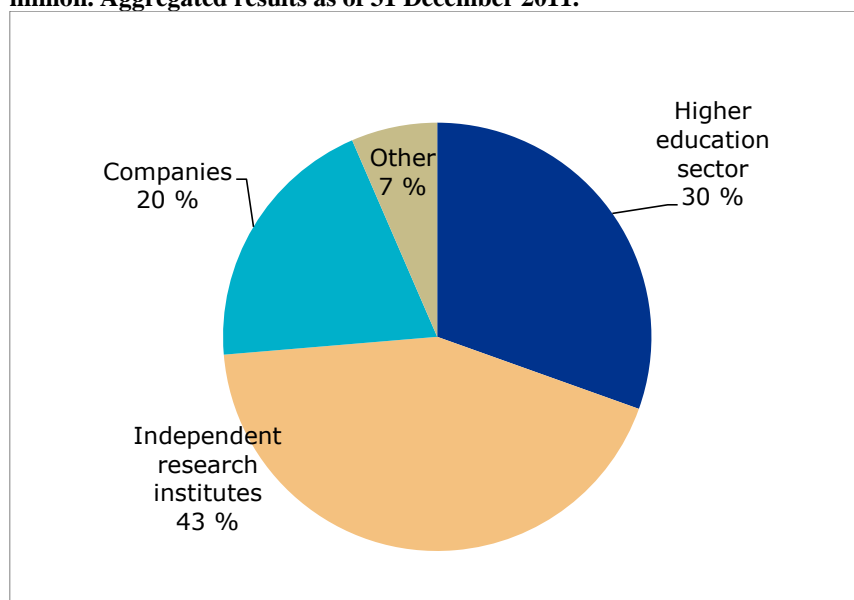
9.1 Overall figures

Table 12. Amount of EU funding obtained by Norway via FP7 proposals recommended for funding, in percentage returns by programme. In NOK million. Aggregated results as of 31 December 2011.

Programme name	Programme acronym	Norwegian EU funding in recommended projects (NOK mill.)	Norwegian % returns
Health	HEALTH	267.8	1.1%
Food, Agriculture and Fisheries, and Biotechnology	BIO	204.0	2.3%
Information and Communication Technologies	ICT	465.7	1.1%
Nano, Materials & Production Technologies	NMP	256.5	1.6%
Energy	ENERGY	319.1	3.3%
Environment (including Climate Change)	ENVIRONMENT	358.2	4.2%
Transport (including Aeronautics)	TRANSPORT	157.1	1.2%
Socio-economic Science and the Humanities	SSH	58.6	2.1%
Space	SPACE	127.2	3.5%
Security	SECURITY	172.8	3.0%
General Activities (Annex IV)	ERA-NET	8.0	0.5%
Sum Cooperation:		2395.0	1.8%
Research Infrastructures	RI	180.4	1.7%
Research for the benefit of SMEs	SME	272.1	4.8%

Regions of Knowledge	REGIONS	6.8	0.9%
Research potential	POTENTIAL	1.5	0.1%
Science in Society	SIS	53.4	3.0%
Coherent development of research policies	COH	0.0	0.0%
Activities of International cooperation	INCO	9.8	1.2%
Sum Capacities:		524.1	2.5%
European Research Council (Ideas)	ERC/Ideas	304.3	1.1%
Marie Curie Actions (People)	MCA/People	166.8	1.1%
Euratom- Fission	Euratom	0.0	0.0%
Total sum all programmes:		3390.2	1.7%

Figure 20. EU funding to Norwegian FP7 proposals recommended for funding. In EUR million. Aggregated results as of 31 December 2011.



Data source: E-CORDA (the European Commission).

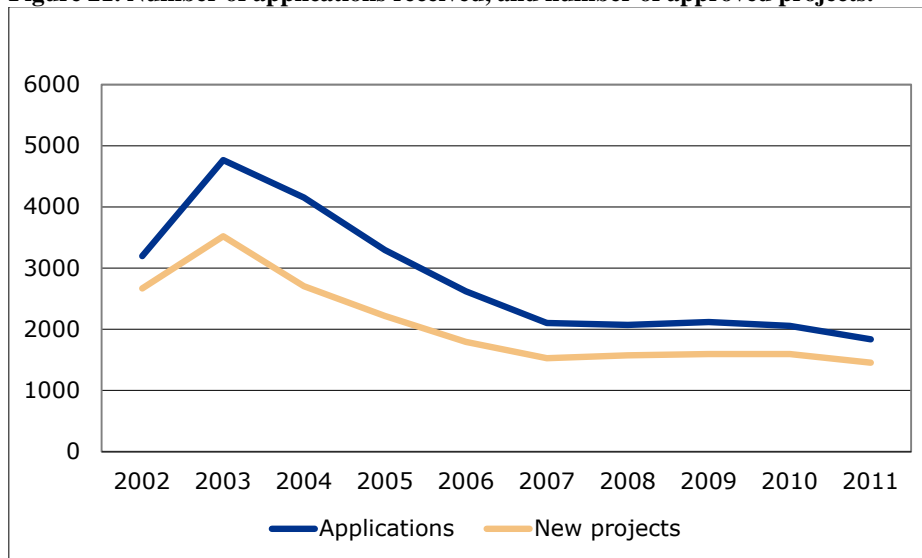
10 The SkatteFUNN scheme

The SkatteFUNN tax deduction scheme is a legal-rights based scheme designed to promote research and development (R&D) activity in Norwegian trade and industry. From its establishment in autumn 2002 through the end of 2011, the scheme has received 27 733 applications from Norwegian companies, of which 20 928 projects (75 per cent) were approved for funding.

10.1 Overall figures

The development in terms of number of applications received and the ratio of number of applications to number of new projects approved for funding under the SkatteFUNN scheme are illustrated in the figure on the next page.

Figure 21. Number of applications received, and number of approved projects.



The number of applications received has remained stable since 2008. It is presumed that the drop in the number of applications received in relation to the initial years of the scheme is due to saturation in the market.

The figure below illustrates the development in the number of active/ongoing projects and actual tax deductions per year. (Figures for actual tax deductions provided by the Norwegian Tax Administration.)

Figure 22. Budgeted and actual tax deductions (in NOK million), and number of active projects.

