The Research Council of Norway

Report of the Executive Board for 2012

A Research Council that performs well and has the potential to be even better

Good results achieved

The evaluation of the Research Council was presented in September 2012. The main report from Technopolis, entitled "A Good Council? - Evaluation of the Research Council of Norway", states that the Research Council is performing well, but that a number of areas remain in need of development.

The report notes that the Research Council has achieved many good results in the past decade. Among these are:

- There is a high level of satisfaction among users, increasing satisfaction with how the Research Council administers its activities, and greater satisfaction among the researchers compared with the previous evaluation.
- The Council has delivered knowledge and recommendations as a basis for the development of research policy and a number of national R&D strategies.
- The Council's efforts have helped to achieve:
 - renewal, increased quality and reduced fragmentation in the R&D system (through the establishment of the centre schemes, the Large-scale Programmes initiative, funding of research groups and collaborative research, and the initiative on national infrastructure);
 - better coordination and targeting of the national R&D effort (by consolidating the number of research programmes and designing programmes that address the needs of multiple ministries);
 - \circ value creation through initiatives in and for trade and industry;
 - improved balance among the funding instruments by increasing the proportion of allocations to programmes that are not thematically oriented (cf. the Programme for User-driven Research-based Innovation (BIA), the FRIPRO funding scheme for independent projects);
 - greater international participation and cooperation.
- The Council has developed:
 - funding instruments that promote renewal (i.e. the Industrial Ph.D. scheme and the Outstanding Young Investigators (YFF) scheme;
 - \circ a national system for performance-based funding of independent research institutes;
 - efficient, effective application assessment procedures in keeping with good international practice.

A more visible change agent

The main thrust of the evaluation is that the Research Council's role as a change agent must be strengthened, as the capacity to encourage change and renewal will be essential for dealing with the challenges emerging in the research and innovation system. The need for a strong knowledge base combined with restructuring means that the Council must fulfil two roles: One is as an *"aggregation machine"*, sorting out the best projects to fund and reflecting the existing needs of society. The other

is as a "change agent" by supporting the process of renewal in research in order to promote change and innovation. The evaluation identifies a number of areas that can enhance the Council's role as a change agent, and the Executive Board is working with follow-up measures in all these areas, including:

- promoting more interdisciplinary research and "high-risk research";
- strengthening the funding instruments that meet the needs of industries and industrial clusters;
- strengthening the knowledge base for developing research policy;
- placing greater focus on the impact of research initiatives;
- strengthening its strategic planning role in relation to independent research institute policy;
- expanding internationalisation activities, with greater focus on targeting activities and defining priorities;
- incorporating more overall perspectives into the steering dialogue with the ministries;
- providing instruments that serve a larger segment of trade and industry.

Large-scale, long-term investments did not materialise

Decline in the budget for the second consecutive year

The Research Council's revenues for R&D purposes from ministries showed a growth of NOK 201 million in 2012 compared to revenues for 2011. The total allocations from the ministries amounted to NOK 7.1 billion in 2012. In addition, the Research Council received NOK 186 million from diverse sources. This brought the overall R&D budget to NOK 7.264 billion in 2012. The weak growth in 2012 followed the comparably weak growth in 2011, resulting in an overall decline in allocations to the Research Council for the second consecutive year.

The national budget for 2012 provided little or no growth to the Research Council's proposed budget, except for the FRIPRO funding scheme for independent projects. Almost half of the increase for this scheme came from a reordering of priorities among the research programmes, as well as from the discontinuation of the donation matching scheme established by the Government in 2006. Activities in the main priority areas of *Energy and environmental technology, Climate change and climate policy* and *Scientific equipment and research infrastructure* were in reality continued with a zero-growth budget. With regard to other areas, a price adjustment was introduced for the independent research institutes, and a new research institute (the Nansen Environmental and Remote Sensing Center) was included in the basic funding scheme. Moreover, the targeted internationalisation measures were augmented with the establishment of a new stimulation scheme (STIM-EU) to encourage independent research institutes to cooperate more with trade and industry in seeking participation in the EU Framework Programme. The Research Council also received an allocation for new graduate-level researcher schools to strengthen doctoral-level training in designated subject areas and professions.

A long-term research budget is a constructive step

In recent years, investment has been concentrated on certain critical areas of Norwegian research. The follow-up of the Storting's cross-political agreement on climate policy, the national initiative on research infrastructure and, most recently, the substantial increase in the budget framework for the funding of independent projects under the FRIPRO scheme, have entailed a boost in several key areas. However, the challenges facing Norwegian research are greater and must be viewed in a longer term perspective. The recently-published Government white paper on research, *Long-term perspectives – knowledge provides opportunity*, heralds the onset of greater predictability about the amounts and targets of funding for the research sector as well. In its input on the white paper, the Research Council proposed the establishment of a long-term budget for research, while also noting

that the cross-sectoral funding mechanism for Norwegian research must be strengthened. Funding allocated under item 53 of the budget of the Ministry of Education and Research, which in 2012 replaced the former Fund for Research and Innovation, must be used for long-term, cross-sectoral initiatives.

A Research Council more clearly targeted towards the public sector

Policy for innovation in the public sector

Research must play a greater role in increasing value creation, renewal and efficiency in the public sector. The link between research and innovation is too weak in many areas of the public sector. Research can provide much more in the way of systematic understanding of problems, acquisition of knowledge, and documentation of change and development processes. Innovation is being carried out at all levels of the public sector, and many actors are taking part, including trade and industry. However, there is a need to tie the research system more closely to the innovation processes. There is a need for a more systematic overview of the innovation activity currently being conducted as well as for information about what is needed to disseminate and utilise the results in a more effective manner. This will stimulate more research targeted towards knowledge needs in the public sector and increase the likelihood that the research results will be utilised.

In 2012, the Research Council adopted a new policy for activities related to innovation in the public sector. The policy seeks to redirect existing activities towards this field and identifies areas in need of greater attention. In particular, the Research Council will focus on the knowledge system for innovation in the public sector, the innovation challenges of the municipal sector, public planning and infrastructure, innovation in health, care and welfare, and innovation in education and living conditions for children. Existing funding instruments for regional research and innovation have already given the Research Council valuable experience with the promotion and implementation of innovation projects in and for the public sector.

Active and healthy for many years

The high-priority initiative "Active and healthy for many years" is another component of the Research Council's activities to deal with challenges in the public sector. This initiative is designed to better equip Norwegian society to meet the demands resulting from the dramatic rise in the proportion of elderly among the population. In addition to addressing the elderly as a population segment, the initiative focuses on all the challenges that will assume even greater importance in light of this demographic change. The initiative includes, among other things, the establishment of a new large-scale programme for research and innovation to promote sound, effective health, care and welfare services. It also encompasses a stronger focus on research on dementia, research and innovation that enables the elderly to live at home longer through preventive and health-promoting measures and welfare technology, and research designed to raise the overall level of labour force participation in society.

Input to achieve integration and diversity

Main priority areas in 2014 – input on integrated research funding

The budget proposal on the main priority areas for funding is the Research Council's most important input to ministerial activities to draw up the national budget for the coming year. The proposal includes initiatives for each of the ministries and balances these in relation to each other, providing input on how the Government's overall investment in research should be allocated through the Research Council. Four *thematic* and four *structural* main priority areas of relevance for all the ministries were proposed for 2014.

Thematic priority areas	Structural priority areas
• Active and healthy for many years	Internationalisation
• Climate change and climate adaptation	• More research-oriented and innovative trade and industry
• Norwegian bioresources from land and sea	• Talented young researchers
Renewable energy and petroleum	• Joint European research infrastructure

The sectoral principle gives rise to challenges related to coordination and size. In a situation in which a broad range of perspectives from a wide array of subject areas must be used to address societal challenges, crucial research challenges may fall through the cracks of what each ministry views as its own policy area. This necessitates a greater degree of coordination which also incorporates the overall coherence of the budget proposal as part of the focus.

Input on designated areas

The Research Council's strategic activities in specifically designated areas provide regular input on how to target research initiatives, the further development of funding instruments, views on cooperation and distribution of tasks within the research system, the further development of international cooperation and the utilisation of research results. This input is directed at the Government as well as towards trade and industry and independent research institutes. The input provided in the policy for innovation in the public sector has already been mentioned. For 2012, efforts in three other areas deserve particular comment.

The Research Council has updated *Norway's national strategy for research infrastructure 2012 –2017* and established a new *Norwegian Roadmap for Research Infrastructure*. These documents provide specific advice regarding the need for an initiative on infrastructure and on the research infrastructures considered to be especially important to invest in, both via the Research Council and by the institutions themselves.

The new performance-based funding system for the independent research institute sector has been evaluated, and the Research Council has provided recommendations on how to adjust the system by changing the indicators to improve the impact of funding. Proposals are developed in discussions of the Executive Board as well as through dialogue with the sector.

The Research Council has a special responsibility to follow up the main priority areas through strategic planning efforts and allocation of funding. A wide range of input is provided for the strategic

development of the Research Council's own thematic and technological programmes, as well as through participation in and provision of secretariat services for the national 2021 strategy processes. In 2012, the Council has engaged in dialogue with and provided recommendations to the ministries and research institutions regarding several key programme areas. This includes areas related to the Programme on Clean Energy for the Future (RENERGI), the Programme for the Optimal Management of Petroleum Resources (PETROMAKS) and the Programme on Climate Change and Impacts in Norway (NORKLIMA), as well as the establishment of a new large-scale programme on sound, effective health, care and welfare services. The Research Council has also participated actively in the national HAV21 strategy process and has taken part in developing the national strategies for ICT and biotechnology.

Renewal through a systematic knowledge base

Sound, up-to-date knowledge about and analysis of the functioning of the research and innovation system is essential to the Research Council's activities. It contributes to the design of more effective, better targeted funding instruments, sheds light on emerging needs and establishes the foundation for advisory functions. Activities related to enhancing the knowledge base include research, reports, evaluation activities and the further development of indicators and numerical data.

New policy for evaluation activities

A systematic approach to evaluations is a key element of the effort to maintain a reliable knowledge base. Although evaluation activities are being widely conducted, the current practice displays certain weaknesses related to their organisation, prioritisation, follow-up and strategic use. As part of the effort to rectify this, a *policy for the Research Council's evaluation activity* has been drawn up. The policy sets out four main objectives which are designed to provide direction for development activities. Evaluations carried out by the Research Council will seek to strengthen the knowledge base for research and innovation policy input and development; enhance the effectiveness and targeting of the funding instruments; increase the visibility of the results and effects of investment in research, development and innovation; and finally, contribute to internal learning and organisational development. More strategic work methods and a better, more systematic evaluation practice will be crucial to achieving these objectives.

Effects of investment in research and innovation

2012 saw the completion of a number of evaluations aimed at the further development and renewal of priority areas. The Research Council's largest funding instrument, the FRIPRO funding scheme for independent projects, has been evaluated. The report concludes that the FRIPRO scheme achieves its overall objectives by providing funding to high-quality projects with an international orientation. The FRIPRO scheme is important for recruitment in general and for the recruitment of women to research in particular, but more can still be done to enhance scientific innovation, promote interdisciplinarity and encourage high-risk projects. The evaluation will play an important part in the ongoing process of further developing the FRIPRO funding scheme.

An evaluation of Norwegian climate research and the final evaluations of two large-scale programmes – the Programme on the Optimal Management of Petroleum Resources (PETROMAKS) and the Programme on Clean Energy for the Future (RENERGI) – were carried out as well. These conclude that Norwegian climate research maintains a high international standard and that the PETROMAKS and RENERGI programmes both achieved their programme objectives. The mid-term evaluation of the Programme for Regional R&D and Innovation (VRI), the impact evaluation of the strategic industry-oriented initiative in Northern Norway in the area of Arctic technology (ARKTEK), and an evaluation of research in mathematics at Norwegian universities were also completed in 2012. The Industrial Ph.D. scheme was evaluated, the conclusion being that this scheme has been successful in building long-term competence development in trade and industry and strengthening

cooperation between trade and industry and the research community. An evaluation of the regional research institutes was also carried out. Each of these evaluations bringgreater knowledge that in turn enhances the input provided to the funding ministries in the various priority areas.

A number of the Research Council's programmes are involved in activities relating to the knowledge base for research and innovation policy to a greater or lesser degree. The *Initiative on the Knowledge Base for Research and Innovation Policy* (FORFI) and the *Programme on Entrepreneur Research* (MER) are dedicated entirely to this task. Additional Research Council activities in this context include the introduction of more systematic portfolio analysis in selected topics and areas, further development of a statistics and project data bank, participation in the preparation of the Research Barometer (a government report presenting indicators on Norwegian research and innovation), and the launching of new initiatives to increase understanding of the impact and measurement of research and innovation.

Enhanced focus on internationalisation

Norway participates actively in closer European research cooperation

Most of Norway's international cooperation takes place via participation in European research cooperation through the EU Framework Programme for Research and the European Research Area (ERA). At the end of 2012, Norway was a participant in 1 183 projects under the EU Seventh Framework Programme (FP7). Norwegian actors are involved in well over six per cent of all projects that are funded. Norway has been especially well represented in the environment and climate change programme throughout the entire Seventh Framework Programme. The development of other FP7 activities and initiatives has increased at a rapid pace, especially various forms of cooperative programmes. Norway has been especially active in the Joint Programming Initiative for Healthy and Productive Seas and Oceans (JPI Oceans) and heads the JPI's secretariat. The amount allocated to Norway under funding announcements for other FP7 activities has doubled in the course of 2012. Norway has also taken active part in the preparations for the new framework programme, Horizon 2020.

The Research Council employs various types of schemes to encourage Norwegian participation and enhance Norway's profile within the EU Framework Programmes and affiliated activities. The new STIM-EU scheme was introduced in 2012 to encourage greater cooperation between independent research institutes and trade and industry in seeking funding under the EU Framework Programme. A total of 19 of a possible 56 research institutes received STIM-EU funding in 2012. In addition, several programmes have now developed internal instruments to increase Norwegian participation in their respective areas.

Bilateral research cooperation expanded

The US is the most important bilateral partner for research cooperation with Norway, both in overall terms and for individual subject areas and topics. Transatlantic Science Week is a vital annual platform for promoting research cooperation with North America. Institutional cooperation with Norwegian universities has been taken a step further with the establishment of the Peder Sather Center for Advanced Study at the University of California, Berkeley. Bilateral research cooperation with Russia and India has also been expanded through joint calls for proposals on prioritised topics. Nordic cooperation has been strengthened as well, and Norway has participated actively in the development and implementation of the Nordic strategy *Vilja til forskning* ("Willingness to conduct research").

Increased international cooperation is essential if we are to succeed in raising the quality of Norwegian research, obtaining knowledge from abroad, developing the welfare society and

enhancing value creation. The stipulation of clear priorities must not entail that segments of Norwegian research forgo involvement in international research cooperation. The question of priorities will therefore revolve around how research policy instruments are targeted and distributed to forge stronger international cooperation. Thus the interplay between national and international research funding will be critical for ensuring optimal utilisation of research funding as a whole.

Dialogue and collaboration on development of research policy

The Research Council's governing bodies – which include representatives from the research sector, society at large, and trade and industry – comprise a central arena for discussions about research policy in Norway. The nearly 700 representatives who constitute the combined membership of the Executive Board, the four division research boards and the 83 programme boards and committees make it possible to draw on viewpoints from all the key players in the research sector. Together, these representatives have designated and implemented scientific priorities and assessments, and formulated knowledge-based research-policy input across the full spectrum of the Research Council's sphere of responsibility.

Key research policy issues are discussed with other relevant proponents of research policy. Dialogue meetings have been held with the Norwegian Association of Higher Education Institutions on various challenges involving Nordic cooperation, the High North, and the new white paper on research. A constructive dialogue is underway with the Norwegian Association of Research Institutes (FFA) on further specifying issues relating to the Research Council's strategic responsibility for the independent institute sector. Meetings have been held with two parliamentary committees, the Standing Committee on Business and Industry and the Standing Committee on Education, Research and Church Affairs. The designation of four division research boards provides greater specialisation, creating a framework for closer dialogue between these boards and the individual ministries. During 2012, the Research Board for the Division for Society and Health carried out a series of meetings with the most important ministries within its purview.

The Research Council's leadership has taken active part in the research policy dialogue through media articles and a blog, in addition to presentations at a number of research-policy conferences. The latter include addresses at the Norwegian Confederation of Trade Unions (LO) conference on research policy, at the conference on the future of the research institutes, at the Ministry of Education and Research's conference on research policy, at the conference co-organised by the Norwegian Academy of Science and Letters and the Research Council on the role of research programmes as an instrument of Norwegian research funding, and at the Research Council's own conference on the knowledge base for research and innovation policy. A series of meetings has been held with the platform committees of the various political parties to promote more specific incorporation of research policy into the party programmes.

Wide-ranging communication about the results and potential of research

Increasingly, research results are expected to be applied and used. The Research Council has worked systematically to establish better methods, channels and arenas for highlighting and documenting how research can benefit society and trade and industry. In keeping with the new communications strategy from 2011, emphasis is placed on clear, open communication; meeting places that are appropriate to the target groups; user-friendly, effective solutions; and measures that encourage support for and application of research results.

National Science Week is one of the largest science festivals in Europe. The overall theme for 2012 revolved around social research and the motto was "the human dimension". Activities included 11

science fairs throughout the country and events in over 100 different locations under the auspices of over 200 organisers. The *Focus on Business seminar* has been developed as a joint event for all of the industry-oriented funding instruments at the Research Council. The 2012 event focused on innovation and passion, and sought to provide inspiration and highlight the driving forces underlying research-based innovation. New in 2012 was *INFRA Day*, which has been established to provide a meeting place for all parties interested in the efforts to develop a national infrastructure for Norwegian research.

The Research Council organises large-scale conferences related to ongoing and concluding research programmes as a means of disseminating results to users, government authorities and the public at large. The concluding conferences for the RENERGI and PETROMAKS programmes summarised 10 years of research in their respective areas. The conference on educational research presented new findings and research results for the entire education sector from pre-school to higher education. The Arctic and Northern Areas Conference 2012 brought together participants from the public administration, special interest organisations, research environments and industry for an exchange of knowledge and discussion of the opportunities and challenges in the Arctic.

The digital communication platform is becoming increasingly significant as an effective tool for reaching a growing number of users. The website <u>www.forskningsradet.no</u> had a total of 1.4 million site visits in 2012 and five million page views. In 2012, the Research Council exceeded 10 000 followers on its Twitter account.

Greater focus on instruments that contribute to the renewal of research and the research system

The Research Council's value added lies in its ability to develop instruments to facilitate research that research groups could not achieve on their own. The continued development and expansion of such instruments is one of the Council's most important tasks.

Shared use of resources

The joint funding initiative launched between the universities and the Research Council under the FRIPRO funding scheme represents a new form of cooperation. Under this initiative, funding from the Research Council and the universities are linked together, giving new strength to a scheme that is of crucial importance to the quality and renewal of Norwegian research. The participation of the universities in this initiative has led to better coordination between the national competition-based resources and the resources allocated to universities as basic funding. In 2012, this was manifested in unprecedented high growth of NOK 200 million to the FRIPRO scheme, of which half came from the universities.

A new generation of large-scale programmes

The Research Council's seven Large-scale Programmes are broad-based, long-term research programmes with sizable annual budgets for following up major social and technological challenges through basic research, applied research and innovation. The objective is to create nationally coordinated projects within specific priority areas that utilise and further develop the foundation already in place at the individual institutions. In 2011, the technology programmes – the Programme for Biotechnology for Innovation (BIOTEK2021) and the Programme for Nanotechnology and Advanced Materials (NANO2021) – were given a new focus, while in 2012 the Large-scale Programme for Petroleum Research (PETROMAKS2), the Large-scale Programme for Energy Research (ENERGIX) and the Large-scale Programme for Climate Research (KLIMAFORSK) underwent a similar renewal process. The new generation of large-scale programmes has been developed through subject-specific evaluations, extensive consultation with external parties and an evaluation of the large-scale

programme initiative itself. Also in 2012, efforts were launched to develop an entirely new largescale programme on *sound, effective health, care and welfare services,* which will be designed to generate knowledge to enhance the quality and productivity of these services.

Third funding round of the Centres of Excellence scheme – when only the best is good enough

The Centres of Excellence scheme is the Research Council's primary instrument for promoting highquality research and creating new elite environments and structures in the Norwegian research landscape. In 2012, the Research Council awarded status as Centres of Excellence (SFF) to 13 new research groups. Of these, four are located in Oslo, three in Bergen, four in Trondheim, one in Ås and one in Tromsø. Combined, the centres will receive more than NOK 2 billion over a 10-year period to generate research of high international calibre. The competition has been extremely keen. A total of 139 research environments submitted applications for SFF status. Of these, 29 were found to be of sufficiently high quality to advance to the final stage of the competition. Only 13 rose to the top, following a lengthy, in-depth assessment process.

Gender equality and gender balance in research

The price of inequality is a loss of talent, biased recruitment and a research perspective that does not take full advantage of the inherent research potential. The Research Council works across all programmes and initiatives to integrate gender equality and gender perspectives into research. Additionally, a separate initiative – Gender Balance in Senior Positions and Research Management (BALANSE) – was established in 2012 to study the factors that result in inequality, to promote gender balance in senior-level academic positions and research management, and to serve as a meeting place in the field. A revision of the *Policy on gender equality and gender perspectives in research* has been initiated as well.

Transfers pose a challenge

The Research Council receives annual allocations over the national budget. Some of this funding is not used in the year of allocation, and must be transferred to subsequent years. Transfers from 2012 comprise NOK 2.4 billion, representing an increase of NOK 630 million from 2011. The amount of funding used was lower in 2012 than in 2011, with only 76 per cent of the disposable budget for 2012 actually spent. The increase in financial transfers is primarily related to delays in the policy-oriented programmes, the transition to the new generation of Large-scale Programmes, and procurement issues relating to investments in new research infrastructure.

The causes of the financial transfers are well-known, and are at a fundamental level linked to the allocation and steering methods of the ministries, the workings of the research programmes, the inherent ramifications of a competition-based distribution system, and the framework conditions and implementation capacity of the research groups and institutions. These transfers have been a focus of widespread attention over the past several years, and various measures have been implemented to limit their levels. Without such measures, the transfers would most likely be far greater. Financial transfers remain a necessary effect of today's allocation regime; however, the Research Council will continue making every effort to limit their extent, as they can adversely affect the growth sought in research funding if they become too large. The current large rise in transfers gives reason to assume that corrective measures will not be enough on their own to reduce financial transfers, and that changes must instead be introduced in some of the structures underlying the allocation process.

A competent and efficient administration

Efficient, transparent distribution of research funding

In 2012 the Research Council allocated NOK 6.5 billion, of which NOK 2 083 million went to the university and university college sector, NOK 2 799 million to the independent research institute sector, NOK 999 million to trade and industry, and NOK 128 million to the regional health authorities and hospital trusts. A total of 5 156 projects are currently underway, and funding was granted for 1 398.4 person-years in doctoral fellowships and 724.1 person-years in post-doctoral fellowships. In the context of Research Council projects, there have been several thousand scientific articles published overall in peer-reviewed scientific journals, reports, presentations and books. New companies have been established, new patents conferred, and new methods and models produced.

The Council has 83 programme boards and committees authorised to allocate funding. The more than 700 individuals serving on the various boards and committees have reviewed 5 471 grant applications and awarded funding to 1 076 new projects.

The Research Council is continuously seeking to improve its administrative methods and user orientation. New steps have been taken in the effort to restructure grant application processing through the ongoing refinement of the electronic submission and assessment systems (an integrated solution for applicants, individuals submitting reports, referees, project partners, etc.) and the redesign of programme webpages. Greater focus has been given to ensuring transparency and openness in the processing and review of grant applications. The guidelines for R&D administration have been streamlined to promote more efficient, constructive and uniform work processes in the management of research programmes and other instruments. Efforts to bolster the knowledge base, provide strategic planning input, compile statistics and carry out analyses have been expanded through the development of the new evaluation strategy and the establishment of a new project database, among other things.

Competent administration

The Research Council is a public administrative body granted special powers of authority. Its main offices are located in Oslo, with a separate office in Brussels and regional employees with offices located in counties outside Oslo. The Research Council manages property assets as part of its portfolio. These activities are organised as a separate profit centre.

The administrative accounts show that NOK 503 million was used in 2012 to perform the Council's three main tasks: allocation of funding, provision of advisory services and meeting place activities for parties in the research sector. Based on totals in the Research Council's time registration system, approximately NOK 305 million was used in the allocation of research funding, NOK 55 million for meeting place activities and NOK 143 in the provision of advisory services. In addition, NOK 175 million was used on strategic advisory tasks for development of disciplines and R&D in general directly under the individual R&D funding instruments. This encompasses, for example, expenses related to remuneration and operations of some 80 programme boards and a large number of referees. Reporting and communication activities in connection with the programmes are also included here.

As of 31 December 2012, the Research Council's staff consisted of 440 person-years (458 individuals). Senior-level managers comprised 39 individuals, advisers 343 individuals and executive officers 78 individuals. The Council has a stated objective to seek gender balance at all levels of the organisation. Gender balance is satisfactory at the management level, with women comprising 57.5 per cent of the senior-level positions. Women comprise the majority of other executive officer and adviser positions. The percentage of men is declining and is quite low at the lowest executive officer level. The Research Council's employment procedures stipulate that it is mandatory to call in qualified applicants of non-Norwegian origin for interviews.

The Research Council maintains an ongoing focus on issues relating to the working environment, and carries out preventative Health, Safety and Environment (HSE) measures, including regular assessment of the physical and psychosocial working environment, internal staff surveys conducted every other year, follow-up of employees on sick leave and cooperation with the occupational health services. The total sickness absence remained low (3.2 per cent), but showed a slight increase over 2011.

The overall assessment of the Executive Board

Although Norwegian research still faces many challenges, developments over the past 10–15 years have by and large been positive. Alongside China, whose production has skyrocketed, Norway is one of the few countries that has boosted its share of the global scientific article production. Norwegian research is competing successfully in the international funding arena, and is especially strong in the fields of energy the environment, food, agriculture, and marine and other transport technologies. Moreover, Norway received a high score on the EU Innovation Union Scoreboard for its "open, excellent and attractive research system." Much is already in place to bring Norwegian research to a new level.

Efforts to enhance the quality of research must be continued, and as was pointed out in the evaluation of the Research Council, there are still challenges to resolve in terms of achieving adequate renewal. Another ongoing task will be to continue to expand internationalisation through increased cooperation with researchers in other countries. It is also essential to achieve a more knowledge-intensive industrial sector that carries out more research, and efforts targeting the global Grand Challenges must be given special priority. We must ensure that research results help to foster innovation in the public and private sectors alike.

The Executive Board has noted that the above are also identified as key challenges in the new white paper on research, *Long-term perspectives – knowledge provides opportunity*, presented in the winter of 2013. In addition, the white paper points out that the research institutions need to enhance their own profiles to reflect their areas of strength, and must do more to present research as an attractive career path for women as well as men. The proposal to introduce a long-term budget for research and education will create a viable framework for dealing with these challenges in a long-term, future-oriented perspective.

The evaluation of the Research Council confirms that the solution with a single, unified research council functions well, and that the Council plays a critical role in the Norwegian research sector. The Research Council is pleased that the white paper on research follows up the evaluation by asking the Research Council to enhance its role as a change agent within the Norwegian research establishment. However, more resources will be needed if we are to succeed in this endeavour. The Executive Board expresses concern with regard to the lack of real growth over the past three years. A continued trend of little or no growth in the Research Council budget will pose an obstacle to efforts to promote the desired change.

Considerable effort has been invested in all of the Research Council's areas of activity in 2012. Performance is strong in activities to promote higher quality in research, internationalisation, and measures to improve the functioning of the research system, while somewhat less has been achieved in relation to the follow-up of the national priority areas. Objectives relating to more effective use of research allocations have not been achieved, as illustrated by the lower percentage of funding spent and the rise in financial transfers. Here there is a need to work together with the research community and allocating authorities to take action at a more fundamental, structural level.