

novonordiskfonden

2016

RESPONSIBLE RESEARCH,
INNOVATION AND
THE DANISH SOCIETY

THE NOVO NORDISK FOUNDATION GROUP

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The Novo Nordisk Foundation Group and Society in brief

Research grants: In 2016, the Novo Nordisk Foundation awarded grants worth a total of DKK 4.202 billion (€565 million) gross and paid out DKK 1.133 billion (€152 million). The money was spent primarily for public research at universities and hospitals and the establishment of Steno Diabetes Center Copenhagen in the Capital Region of Denmark. Grants cancelled amounted to DKK 88.8 million (€12 million) and repayments were DKK 3.3 million (€444,000). The net grants were therefore DKK 4.113 (€553 million).

Investments in private research and development: In 2016, Novo Nordisk A/S spent DKK 14.568 billion (€1.96 billion) on research and development activities and Novozymes A/S DKK 1.865 billion (€251 million). In addition, Novo A/S made additional investments in research and development in companies that it owns.

Research hospital, Steno Diabetes Center A/S: Novo Nordisk A/S, the Novo Nordisk Foundation and the Capital Region of Denmark jointly financed Steno Diabetes Center. The treatments provided benefited nearly 6000 people with diabetes. The Foundation has also financed international education programmes on diabetes for professionals in low- and middle-income countries and supported research on health promotion and the development of the new Steno Diabetes Center Copenhagen. In 2016, the Novo Nordisk Foundation donated DKK 2.941 billion (€396 million) for the above activities and, from January 2017, to the establishment of Steno Diabetes Center Copenhagen under the Capital Region of Denmark. The new Center, which is expected to treat 11,000–13,000 people with diabetes annually in 2021, represents an extension and wider development of the activities of Steno Diabetes Center.

Generating new knowledge: The Foundation's grants help to create, retain and develop dynamic knowledge and research environments at public research institutions. They also help to create the basis for educating more-skilled graduates and developing more-talented researchers who can find jobs in both private companies and public research institutions. In 2016, recipients of grants from the Foundation published more than 2000 articles in various scientific publications to benefit the global society as a whole.

Commercializing research at an early stage: The Foundation provides funding that enables researchers in the Nordic countries to identify the commercial potential of their research discoveries and mature the sustainability of their innovations. The focus is on commercializing and using new diagnostic methods, therapies, medical devices and technologies that can result in establishing new biotechnology companies.

Jobs in Denmark: In all, the grants awarded by the Foundation in 2016 have generated an estimated 1900 science-related jobs, primarily in the research and education sectors in Denmark. At the end of 2016, Novo Nordisk A/S employed 18,221 people in Denmark, Novozymes A/S 2660 people and NNIT A/S 1591 people. In addition, the investment in life-science companies by Novo A/S also supports at least a few thousand jobs in Denmark.

Taxes paid: In 2016, the activities of the Novo Nordisk Foundation Group resulted in taxes paid in Denmark of about DKK 6 billion (€808 million), primarily coming from Novo Nordisk A/S. This figure does not include the income tax paid by more than 22,500 employees of the Group in Denmark.

Sustainable activities: The companies in the Novo Group must comply with a special charter that obligates the companies to demonstrate financial, environmental and social responsibility and to deliver products that improve how people live and work. Both Novo Nordisk A/S and Novozymes A/S produce annual Communication on Progress reports that detail the initiatives the companies take to support and implement the principles of the United Nations Global Compact. Other investments made through Novo A/S must not contravene the charter.

Environmental and climate awareness: Novo Nordisk A/S and Novozymes A/S focus on reducing the amount of energy and water used and carbon dioxide (CO₂) emitted. This has resulted in considerable reductions for both companies in 2016 and previous years, but not all targets were achieved.

Humanitarian and social support: The Foundation supports numerous well-known humanitarian and social organizations every year based on the applications received. In 2016, the Foundation awarded grants to 13 international humanitarian organizations, national social projects and individual people. In addition, Novo Nordisk A/S supports the World Diabetes Foundation. Through Steno Diabetes Center, the Foundation has also supported REACH, an education programme that aims to educate health professionals working in the diabetes field in low-income countries; and the STAR (Steno Training and Application of Resources) project that strives to improve the professional knowledge of diabetes through educational activities in countries such as Chile, Columbia, India, South Africa, Bangladesh, China and Indonesia.

Introduction

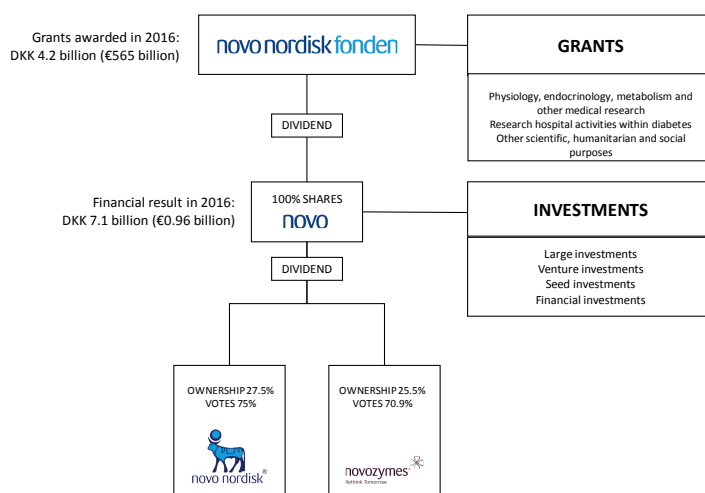
The report *The Novo Nordisk Foundation Group and Society 2016* fulfils the requirements of Sections 99a and 99b of the Danish Financial Statements Act on reporting social responsibility and diversity. Through this report together with the *Annual Report 2016* and *Facts and Results 2016*, the Novo Nordisk Foundation Group complies with all the reporting requirements in the Danish Financial Statements Act and Danish Commercial Foundation Act. Stakeholders with a special interest in the reports from companies in the Novo Nordisk Foundation Group should refer to the reports of these companies.

Governance

The Novo Nordisk Foundation and the companies in the Novo Group and the other companies in which Novo A/S has a controlling interest comprise the Novo Nordisk Foundation Group. The Foundation receives dividends from its wholly owned subsidiary Novo A/S and makes grants to society. The income received by Novo A/S derives from commercial companies and other investments.

The Foundation's commercial and grant-awarding activities are separate. The Novo Nordisk Foundation awards grants in accordance with the strategy laid down by the Foundation's Board of Directors, which also decides or approves the grants. Novo A/S manages the Foundation's commercial activities within the overall financial strategy and Charter for the Novo Group and the framework decided by the Foundation's Board. The Foundation's Board comprises the ordinary general meeting of Novo A/S and thereby approves both the annual report and elects the members of the Board of Novo A/S. The Foundation ensures control of Novo Nordisk A/S and Novozymes A/S through the controlling ownership by Novo A/S of the two companies.

Figure 1. Organization and financial flow-chart in the Novo Nordisk Foundation Group



Note: Novo Nordisk A/S and Novozymes A/S are the two most important operating companies in the Novo Group and are some of the most significant research organizations in Denmark's life-science cluster. One of the Foundation's main purposes is to provide a stable basis for the commercial and research activities conducted by Novo Nordisk A/S and Novozymes A/S. NNIT A/S is considered to be an independent member of the Novo Group.

Committed to social responsibility

Throughout its history, social responsibility has been at the heart of the Novo Nordisk Foundation's activities. Nobel Prize winner August Krogh laid the basis for this in 1922 when he entered into a rights agreement to produce insulin in the Nordic countries. The agreement stipulated that part of the profit should be used to support free and independent research and that insulin would be made widely available to benefit as many people as possible. Since then, the Foundation and its activities have expanded significantly, and the Foundation has thereby increasingly influenced its surroundings and takes increasing responsibility for society as a whole.

The Foundation has a Charter: values with which all companies in the Novo Group must comply. The two largest companies in the Novo Nordisk Foundation Group, Novo Nordisk A/S and Novozymes A/S, participate in the United Nations Global Compact. Both companies have their own policies on corporate social responsibility and publish independent reports on their activities in this area.

Social responsibility is integrated into the activities of the Novo Nordisk Foundation Group in accordance with the Foundation's overall societal goals. The following pages summarize how the Foundation influences society in relation to the Foundation's societal and strategic goals for each of the Foundation's two main purposes: providing a stable basis for the commercial activities of the companies in the Novo Group and awarding grants.

The Foundation's grant activities and societal impact

The Foundation awards grants for research based on the following four core values – the four cornerstones.

- **Commitment:** In awarding grants, we strive to contribute significantly to research and development that improves the health and welfare of people, and we believe that research benefits the development of society.
- **Professionalism:** In awarding grants, we consult with experts to ensure that the research we support is of the highest international quality with the aim of generating new in-depth knowledge and innovation.
- **Respect:** In awarding grants, we take an international perspective; we support free and independent research and publishing freedom.
- **Trust:** In awarding grants, we trust that researchers will strive to ensure that the results of their research will benefit as many people as possible.

The Foundation's grants are unconditional. The research results and any patents belong to the researchers and the public universities and hospitals that employ the researchers. No company in the Novo Group has preferential access to the research results funded by grants from the Foundation.

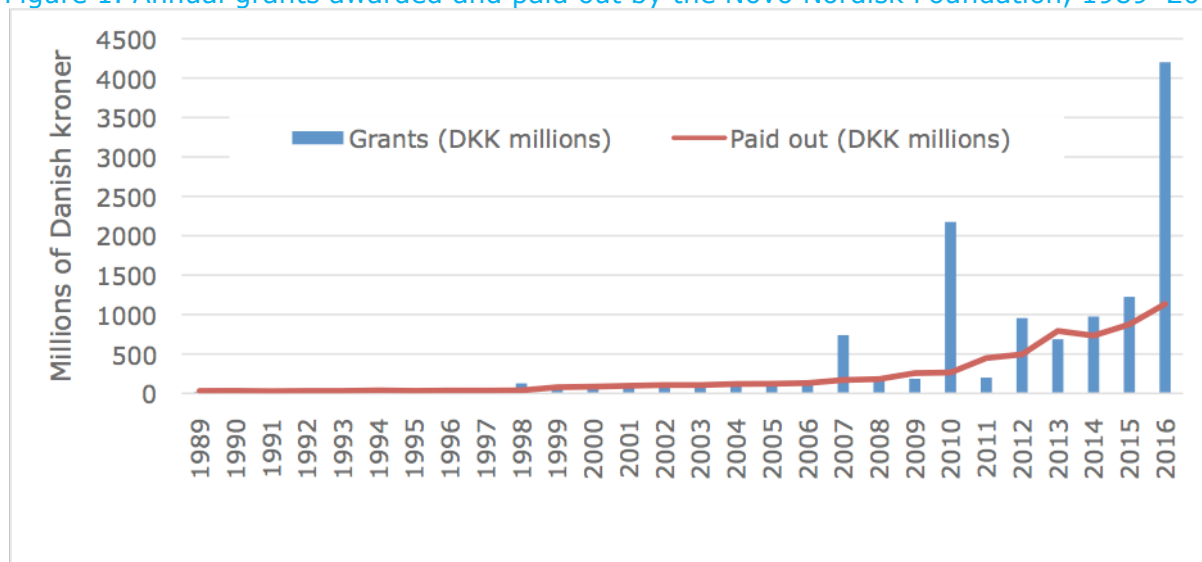
Economic impact

In 2016, the Novo Nordisk Foundation awarded grants worth a total of DKK 4.202 billion (€565 million) gross (DKK 4.113 (€553 million) net after cancelled grants) and paid out DKK 1.133 billion (€152 million). The grants were primarily for research, education and innovation initiatives and for the establishment of the Steno Diabetes Center Copenhagen in the Capital Region of Denmark. This represents a six-fold increase in the amount paid annually during the past 8 years since 2008. Figure 1 shows how much the Foundation has awarded and paid out for each year since 1989 based on its grant-awarding remit laid down in the Articles of Association. The columns show how much the Foundation has awarded in grants, with the curve showing the amount paid out each year. Since some grants extend over several years, the money for such grants is not paid out as a lump sum in the year the grant is awarded.

The Foundation's focused efforts on research within biomedicine and biotechnology at public research institutions contribute to new knowledge, which is also a precondition for renewal, education and innovation. In the public sector, this leads to improved services within such sectors as education, health and the environment.

Research within the supported fields also creates synergy in the rest of society. Based on information from the Foundation's grant recipients and on its own calculations, the Foundation estimates that its grants in 2016 have supported about 1900 jobs in science, especially at universities and hospitals.

Figure 1. Annual grants awarded and paid out by the Novo Nordisk Foundation, 1989–2016



Scientific impact

The Foundation helps to retain, create and develop dynamic research environments at universities and hospitals. For society, this means strengthening research-based education and increasing the supply of talented university graduates, researchers and

clinicians and attracting highly qualified researchers and graduates from outside Denmark. In addition, the Foundation contributes to improving health, preventing disease and improving diagnosis and treatment.

See the Researchfish pages on the Foundation's website at:

<http://novonordiskfonden.dk/en/content/researchfish>

Scientific production

In 2016, the Foundation assessed the impact and monitored the activities supported by the Foundation's grants based on systematic reporting by grant recipients to researchfish®. In 2016 alone, the Foundation's grant recipients reported about 9000 activities, including more than 2000 scientific publications. Most of the publications are research articles in international journals, but the publications also include books, book chapters and PhD and postdoctoral theses.

In 2016, the Foundation published an impact assessment report in Danish entitled *Novo Nordisk Fondens aftryk på offentlig forskning 2015* that measured the Foundation's input of resources to the research community and the associated research activities for the period 2006–2015 and bibliometric analysis of the effects on public research for the period 2006–2013 (see http://novonordiskfonden.dk/sites/default/files/nnf_videnskabeligt_aftryk_final_20160622.pdf).¹

Scientific collaboration

About 60% of the scientific articles by the Foundation's grant recipients are published in international collaboration. One in ten articles is published with researchers from companies. The number of articles in journals generated through research collaboration has grown during the past 30 years and is now three times as high as it was in the early 1980s.

Citation impact factor

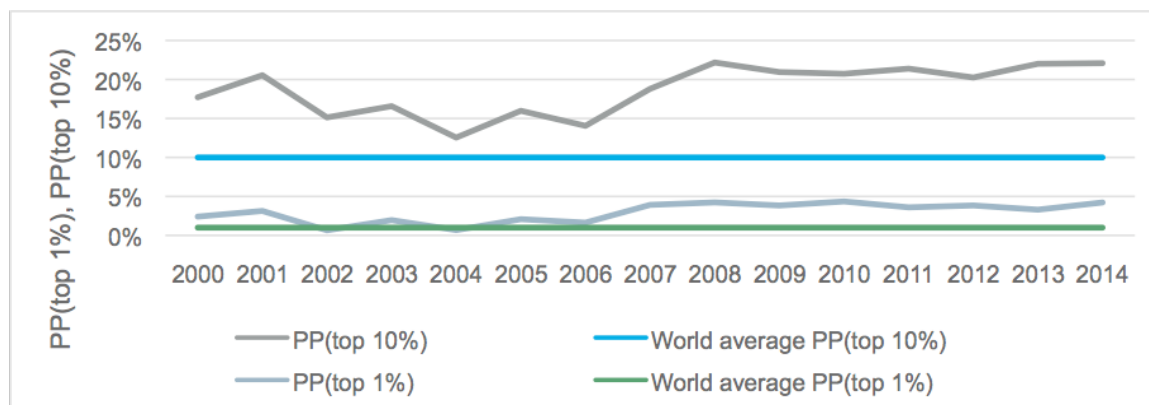
The number of publications indicates a researcher's production of new knowledge that is shared with the research community nationally and internationally. The citation impact factor of articles is measured, for example, through the number of citations per article, with measurements performed 2 years after the year the article is published.

The Foundation uses the internationally recognized Leiden Ranking: PP(top 1%) and PP(top 10%). These indicate the number of grant recipients' publications that are among the world's top 1% and top 10% most frequently cited publications in their research field in the same year. The citation impact factor of research articles published by the Foundation's grant recipients show that, up to 2006, the PP(top 1%)

¹ In 2017, the Novo Nordisk Foundation is publishing *Novo Nordisk Fondens aftryk i samfundet 2016* (in Danish). The report will also identify the extent to which the Foundation has supported scientific production in 2016 and the resulting dissemination, use and impact.

factor was about the 1% world average. However, since 2007, this has grown to 4% (four times the world average). The number of grant recipients' scientific publications that are among the world's top 10% most cited publications (PP(top 10%)) has grown from about 15% in 2000–2006 to more than 20% since 2007.

Figure 2. PP(top 1%) and PP(top 10%) for scientific articles published by grant recipients supported by the Novo Nordisk Foundation, 2000–2014



Impact on health

By awarding a grant to Steno Diabetes Center, the Foundation has substantially supported the research hospital activities within diabetes in Denmark and numerous educational initiatives that Steno Diabetes Center has carried out outside Denmark.

The grant for operating expenses from the Foundation to Steno Diabetes Center has enabled the Center to develop and expand its position as a specialist hospital with a range of specific services and treatments for people with diabetes in 2016. Steno Diabetes Center offers differentiated treatment services, and the principles for treating people at the hospital (The Steno Way) have been a key part of its activities. In 2016, this resulted in a decision to transfer Steno Diabetes Center effective 1 January 2017 to the Capital Region of Denmark, which will continue to operate it as Steno Diabetes Center Copenhagen. The Foundation has also supported the continuation of the research initiatives within health promotion and disease prevention at Steno Diabetes Center, with the aim of continuing to carry out research within patient education, health promotion and disease prevention in relation to diabetes. The grants in 2016 to two internationally oriented education programmes – STAR and REACH – were aimed at ensuring the establishment and continuation of teaching and information programmes in several countries in Asia, Africa and South America.

Social and environmental impact

The Foundation wants to support sustainable societal development, research and research practice. In this context, sustainability should not solely be interpreted as considering climate and the environment but also that employees work in a healthy

and safe working environment and that people and animals are treated optimally and in accordance with laws and regulations. The Foundation contributes to a sustainable society in social and health terms by supporting a broad range of activities that will lead to improving the health and welfare of people.

The Foundation also strives for sustainable and ethical research practice and to prevent corruption and the misuse of research funds. The Foundation has therefore formulated a set of standards for good research practice to which a grant recipient must agree when accepting a grant. The standards for good research practice are summarized briefly below (see also www.novonordiskfonden.dk/en/content/standards-good-research-practice).

- **Laws and regulations:** A grant recipient must comply with the generally recognized standards for good research practice, the national and international rules on animal welfare as well as the regulations on the safety and rights of patients and healthy volunteers in clinical trials. Further, grant recipients must not simply comply with all laws and regulations on bribery and corruption in the country in which the research project takes place but must also refrain from engaging in such activities.
- **Labour practices:** An employee on a project must be paid, as a minimum, in accordance with the applicable collective agreement; must have working hours and holiday in accordance with the national rules; must be treated with respect and dignity; and must not be subject to discrimination.
- **Working environment:** A grant recipient's institution must ensure that the employees working on a project have a safe and healthy workplace.
- **Environment:** A grant recipient must minimize any adverse effects on the environment when conducting the research. This must be achieved by complying with environmental laws; establishing systems to ensure safe handling, storage etc. of the materials used, utensils, waste etc.; avoiding contaminating the local environment; and improving environmental performance continually.

All applicants wishing to submit an application in the Foundation's electronic application system must confirm that they have read and accept the Foundation's standards for good research practice. Before submitting an application, applicants must confirm that they will commit themselves to using any future grant in a responsible manner and for the purposes described in their application and their budget.

Standard conditions for grants have been prepared to make the Foundation's expectations clear to grant recipients and to ensure transparency for the applicants, grant recipients and the outside world. The terms and conditions apply to research grants awarded in open competition and to humanitarian and social projects and activities. The conditions are available on the Foundation's website (see <http://novonordiskfonden.dk/en/content/conditions-grants>).

Researchers must also comply with the Danish Code of Conduct for Research Integrity from Denmark's Ministry of Higher Education and Science (updated on 11 August

2015) if they are grant recipients or apply for grants. If the Foundation determines that a grant recipient has or may have violated the Foundation's standards for good research practice, the grant recipient is asked to respond to the allegations. If the Foundation considers the grant recipient to have violated the standards, it may suspend payments associated with a grant and may require that the grant recipient refund payments already made.

Grants are not paid to the grant recipient but to the institution that will monitor whether the grant is being used correctly and in accordance with the rules and procedures with which the institutions are obligated to comply. All grant recipients declare that they will use and account for the funds granted in accordance with good accounting practices and be subject to audit. The Foundation may commission an independent audit of the accounts to determine whether the funds granted have been used for the intended purposes.

For research grants, the Foundation may provide an administration budget of up to 5% of the total project budget so that the individual institution can monitor that a grant is used in accordance with the approved budget and for the purposes intended. Further, if the Foundation requests it, a grant recipient must submit a brief report on the progress of the project, confirming that the grant recipient has used the funds awarded for the purposes described in the application. Any unused funds must be returned to the Foundation.

To ensure efficiency and to protect the environment, the Foundation strives to have paperless applications and administration.

The Foundation as a workplace

The Executive Management of the Foundation is aware of the responsibility the Foundation has for its employees. The Foundation strives to be an attractive workplace at which employees thrive and develop their professional competencies optimally. A key element of the Foundation's policy involves creating a healthy, safe and flexible working environment. The Foundation has four cornerstones covering its employees. These are designed to ensure a well-functioning workplace with clear objectives for the work and to ensure that the employees treat their fellow employees and collaborators in a trusting and respectful way. The cornerstones are as follows.

- **Commitment:** In our team, we are open and dedicated, we are curious and eager to learn and we focus on generating outstanding results.
- **Professionalism:** In our team, we work to allow each individual to develop his or her potential, we are conscientious, we have high integrity and we are always ready to do our work in the best possible way.
- **Respect:** In our team, we meet in mutual trust while understanding each other's qualities and we have straightforward dialogue characterized by openness, honesty and credibility.
- **Trust:** In our team, we are targeted and result oriented, and we value freedom with responsibility.

The Foundation expects its employees to comply with these cornerstones in their activities; to provide annual feedback to Executive Management on whether the values are being implemented in practice; and to comply with the relevant guidelines for the working environment and other areas. The Foundation has policies in place covering insider rules, rules for eligibility to apply for and receive grants and purchasing guidelines that are designed to prevent corruption and the misuse of the Foundation's resources. To ensure a healthy workplace, the Foundation has a committee that monitors the working environment and suggests improvements. Every 2 years, the Foundation also carries out an anonymous survey covering the working environment, commitment, the relationship with an employee's line manager, collaboration, staff development, the daily work and fulfilment of the Foundation's cornerstones. The next survey will take place in 2017.

In 2016, a Communication and Stakeholder Relations department was established to carry out the Foundation's communication activities and its relations with the outside world. No other changes were made to the organization, which also has the following departments: Research and Innovation Grants, Strategic Awards, Steno Grants, Operations (including Humanitarian and Social Grants) and an Executive Office.

The Foundation emphasizes ensuring diversity in its staff since a broad range of skills contributes to promoting further development, renewal and quality in work efforts. This broad range of skills covers diversity in relation to sex, age, education, cultural background and international experience.

At the end of 2016, the Foundation had 49 employees and four student interns. In terms of diversity, 57% of the employees were women; 43% were men; and 8% were nationals of countries other than Denmark. In addition, 41% of the employees have a PhD and/or doctorate degree. The age range between the youngest and oldest employees is about 40 years, and the average age of the employees was 45 years. In 2014, the Executive Management group had two women and one man. In 2016, the corresponding figure was two women and four men.

Commercial activities

The Novo Group

The ambition of the Foundation is that the companies in the Novo Group (Novo A/S, Novo Nordisk A/S, Novozymes A/S and NNIT A/S) create world-class business results and position themselves as internationally recognized and significant actors in improving how disease is combated and how to use natural resources sustainably. The Board of the Foundation has therefore laid down a common set of values in its Charter for Companies in the Novo Group, which all companies in the Novo Group must demonstrate that they are willing and able to make a targeted effort to meet. The criteria in the Charter are as follows.

- Company products and services make a significant difference in improving the way people live and work.
- The company is perceived to be an innovator – in technology, in products, in services and/or in market approach.
- The company is among the best in its business and a challenging place to work.
- The company delivers competitive financial performance.

Companies in the Novo Group commit to:

- Value-based management
- Open and honest dialogue with their stakeholders
- Continuous improvement of:
 - financial performance
 - environmental performance
 - social performance
- Reporting in accordance with relevant, internationally approved conventions.

Companies in the Novo Group have established their own policies on corporate social responsibility based on the Charter and publish independent reports about their activities covering such fields as: financial policies; environmental and social responsibility (including anti-corruption); compliance with relevant conventions (including human rights); value-based management; and open and honest dialogue with stakeholders. Reporting includes measuring trends and results in accordance with the Danish Financial Statements Act and international auditing rules.

Novo A/S has defined its cornerstones based on the Charter, and these form the basis for the company's investment and its interactions with other companies. The cornerstones are as follows.

- **Insight:** In our interactions, we strive to provide deep knowledge and innovative solutions.
- **Commitment:** In our interactions, we strive to achieve groundbreaking and long-term results.
- **Professionalism:** In our interactions, we will act in a proper manner, emphasizing high integrity.
- **Trust:** In our interactions, we emphasize building relationships based on mutual trust and respect.

Novo Nordisk A/S and Novozymes A/S have also used the Charter as the basis for developing their own visions and management values: the Novo Nordisk Way (Novo Nordisk A/S) and Touch the World (Novozyymes A/S). Both companies have committed themselves for many years to the United Nations Global Compact, the largest global initiative within corporate social responsibility. The Compact involves companies in solving some of the major global social, societal and environmental challenges. More than 12,000 companies and organizations from more than 166 countries participate in the United Nations Global Compact. This includes a group of about 40 leading companies that have been invited to contribute further through Global Compact LEAD.

Both Novo Nordisk A/S and Novozymes A/S are members of LEAD, thereby setting an example for others.

Financial impact of the companies

In 2016, the activities of the Novo Nordisk Foundation Group resulted in corporate tax paid in Denmark of about DKK 6 billion (€808 million), of which Novo Nordisk A/S was the largest contributor. This figure does not include the income tax paid by more than 22,500 employees of the Group in Denmark.

Much of the Foundation's income via Novo A/S comprises dividends from Novo Nordisk A/S and Novozymes A/S based on profit primarily earned outside Denmark. Novo Nordisk A/S has by far the largest revenue in the Novo Group. In 2016, Novo Nordisk A/S had revenue of DKK 111.8 billion (€15.1 billion); about 82% of this was earned outside Europe and 18% in Europe. In 2016, the global revenue of Novozymes A/S was DKK 14.1 billion (€1.9 billion); about 65% of this was earned outside Europe, the Middle East and Africa, with the United States accounting for 31%.

In 2016, between 0.3% (Novo Nordisk A/S) and 1.4% (Novozyymes A/S) of the total revenue of the two companies, equivalent to DKK 600 million (€80.5 million), was generated in Denmark, whereas the revenue generated outside Denmark totalled DKK 125.3 billion (€16.8 billion). By comparison, in 2016, the Foundation awarded grants of DKK 4.113 billion (€553 million) and paid out DKK 1.133 billion (€152 million), primarily in the public sector in Denmark.

In 2016, Novo Nordisk A/S invested DKK 4.7 billion (€630 million) in Denmark, primarily driven by investing in expanding the production capacity in Kalundborg, Hillerød and Måløv. In 2016, Novo Nordisk A/S exported DKK 60.1 billion (€8.1 billion) from Denmark, equivalent to about 9% of all goods exported from Denmark.

In 2016, the global revenue and other financial income of Novozymes A/S was DKK 14.291 billion (€1.9 billion), of which 86% was returned to global society by purchasing goods and services from suppliers; salaries and pensions for the company's global workforce of 6441 employees; various taxes paid to society; and dividends and financial expenses to providers of capital. The remaining 14% was reinvested in Novozymes A/S to develop the company and to ensure its competitiveness and the continued future value available for distribution to the company's most important stakeholders.

At the end of 2016, Novo Nordisk A/S had 18,221 employees in Denmark, comprising 43% of its global employees. Novozymes A/S had 2660 employees in Denmark, comprising 41% of its global employees. In autumn 2016, Novo Nordisk A/S laid off 470 employees in Denmark as a result of the challenging market situation, primarily in the United States. Excluding the employees who were still serving out their notice period at the end of 2016, Novo Nordisk A/S created 300 net new full-time jobs in Denmark in 2016.

At the end of 2016, NNIT A/S had 1591 employees in Denmark, comprising 41% of its global employees.

In addition, the investments in life-science companies made by Novo A/S are the basis for several thousand jobs in Denmark.

In 2016, Novozymes A/S invested DKK 1.865 billion (€250 million) in research and development, Novo Nordisk A/S DKK 14.568 billion (€1.95 billion) and NNIT A/S DKK 39 million (€5.2 million). The European Commission's *EU Industrial R&D Investment Scoreboard 2016* (<http://iri.jrc.ec.europa.eu/scoreboard16.html>) publishes data for the world's 2500 largest companies based on their investment in research and development. Novo Nordisk A/S ranks number 26 in Europe and number 73 globally in investment in research. Novozymes A/S ranks 114 in Europe and 442 globally.

Social and environmental impact

The Novo Group is very interested in and invests significant resources in making a positive global social and environmental impact on its surroundings and on exercising sustainable management. The following description of corporate social responsibility at the Novo Group level covers the most important aspects of all the Group's companies. However, each company in the Novo Group has its own corporate social responsibility policy.

Sustainable management

Novo A/S

Novo A/S operates based on a responsible investment process that has a value-based background in environmental, social and communication policy. This is designed to minimize both risk and responsibility and to create opportunities. Before Novo A/S invests in a company, it investigates whether the company's activities conflict with the Charter for Companies in the Novo Group. When investing directly in a company, Novo A/S is responsible for ensuring that a company in which it invests does not act irresponsibly in social or environmental terms. When investing through a third party, Novo A/S has a duty to ensure that this party does not act irresponsibly in social or environmental terms in taking decisions. Every investment is subjected to this process, and a potential investment is declined if a company or third party is considered not to fulfil the criteria. Novo A/S strives to act as an active and responsible shareholder and is represented on the boards of Novo Nordisk A/S, Novozymes A/S and NNIT A/S and, with few exceptions, on the boards of all the other companies in its portfolio.

Novo Nordisk A/S

Novo Nordisk A/S operates based on a value-based management system as formalized in the Novo Nordisk Way with the triple bottom line principle. The company's Articles of Association state that Novo Nordisk A/S will "strive to carry out its activities in a financially, environmentally and socially responsible way", which encapsulates the company's long-term strategy of a sustainable business. This commits everyone in the company to always consider how decisions and actions can affect people, society and the environment. The aim is to ensure long-term profitability by minimizing the risks from business activities and maximizing the positive contributions to society from the company's global activities.

The triple bottom line business principle requires systematic and respectful collaboration with the company's stakeholders, which also makes the company more prepared for any reorganization when the business environment changes and also provides opportunities for competitive advantages. Novo Nordisk A/S collaborates proactively with stakeholders on managing global and systemic challenges that may affect the company's results in the long term. One example of this is the active participation of Novo Nordisk A/S in contributing to the Sustainable Development Goals under the auspices of the United Nations.

Novo Nordisk A/S operates in accordance with the Ten Principles for responsible companies of the United Nations Global Compact and is an active member of the Global Compact LEAD initiative. The company strives to contribute to achieving global goals in partnerships to solve major systemic societal challenges.

Novo Nordisk's global practice for responsible management focuses on due diligence and follow-up to ensure that the company's standards are respected across the whole value chain. This includes anti-corruption initiatives and standards for business ethics. A compliance hotline enables employees and external stakeholders to anonymously report suspected irregularities, such as non-compliance with the Novo Nordisk Way, financial crime, conflicts of interest, corruption and other forms of illicit behaviour.

In 2016, the company reported on its efforts related to corporate social responsibility in accordance with the requirements of Sections 99a and 99b of the Danish Financial Statements Act. The company has also reported for the first time on compliance with the United Nations Guiding Principles on Business and Human Rights in accordance with the recently developed international framework.

In addition, the company strongly emphasizes integrating consideration for people, society and the environment in the business processes so that the decisions made strive to balance stakeholder goals with the company's commercial interests.

Novozymes A/S

Novozymes A/S operates in a transparent and responsible manner across the company's business methods and proactively shares information with stakeholders through various platforms and information channels.

Novozymes A/S is recognized for its sustainable management and is accredited in numerous registers. For example, the company was awarded a Silver Class rating in the RobecoSAM Sustainability Yearbook 2017 for the chemical industry, awarded based on scoring 90 of 100 points for performance in 2016.

In 2016 the CDP (formerly the Carbon Disclosure Project) recognized Novozymes A/S for its leadership in climate. Being on the A List means that Novozymes A/S has been a leader on corporate climate action for 2 years out of 3. Several of the important customers of Novozymes A/S have recognized it as a supplier of innovative and sustainable solutions. In 2016, Novozymes A/S received the Procter & Gamble Best Business Partner of the Year Award for the seventh time. The Prize was awarded to Novozymes A/S for its innovation capacity, leadership in sustainability and operational excellence. Novozymes A/S competes with more than 50,000 business partners, suppliers and agents that work with Procter & Gamble on a daily basis. Novozymes A/S also received the External Business Partner of the Year Award and the Excellence Award.

Use of resources

Novo Nordisk A/S

The long-term ambition of Novo Nordisk A/S is to decouple the consumption of water and energy from sales growth. The current target is set as a maximum of half of the percentage increase in sales in local currencies, measured as a 3-year average. In 2016, sales increased by 6% in local currencies while energy consumption increased by 6% and water consumption

increased by 5%. The target is challenged by the increase in production capacity and lower sales growth rates.

In 2016, the worldwide production facilities of Novo Nordisk A/S used 2,953,000 GJ of energy and 3,293,000 m³ of water. Energy consumption increased by 6% compared with 2015 despite an ongoing focus on optimizing processes. This development reflected increased production and capacity-building. Two facilities are located in regions subject to high water stress, consuming 6% of the total water used at Novo Nordisk sites. There have been no water shortage incidents and, overall, water consumption at these facilities decreased in 2016.

In 2016, Novo Nordisk generated 37,940 tonnes of waste, representing a 9% increase compared with 2015. This mainly resulted from higher pilot production, in which ethanol cannot be regenerated. Reducing ethanol waste is a high priority, and efficient regeneration plants enable the ethanol to be reused repeatedly.

Novozymes A/S

With growing constraints on global resources, Novozymes A/S focuses on optimizing its operations from year to year in a bid to reduce the consumption of natural resources and minimize the negative environmental effects of production. Novozymes A/S has set long-term targets for energy efficiency, CO₂ emissions and water consumption to optimize production processes. This will both reduce the consumption of scarce resources and reduce costs.

The company achieved its renewable energy target of 24% and exceeded the target of reducing CO₂ emissions through customers using Novozymes A/S products by 63 million tonnes, achieving 69 million tonnes.

The results for water and energy efficiency and CO₂ intensity were below the targets for the whole year. The water efficiency target was not achieved because consumption was higher than expected, and there were ongoing challenges in the water reuse system in Denmark. The energy efficiency target was not achieved because of operational problems in the fermentation facilities of Novozymes A/S and higher energy consumption than expected.

Climate responsibility

Novo Nordisk A/S

In 2015, Novo Nordisk set a new long-term target of reducing CO₂ emissions by having all production sites obtain 100% of their electricity from renewable sources by 2020. To achieve the target, the company signed up to the RE100 initiative led by the Climate Group in partnership with CDP. This initiative represents a coalition of influential companies committed to 100% renewable electricity.

At the end of 2016, 78% of all electric power Novo Nordisk A/S used for production came from renewable sources. Of the 16 global production sites, 11 were fully supplied with electricity from renewable sources. With regard to fuel used for steam and heat production, seven of the eight production sites in Denmark use bio-natural gas, which is biogas produced from liquid manure, food waste and organic waste from industry. The biogas is upgraded to meet the quality requirements of natural gas and feeds into the natural gas distribution system. The production facility in Brazil uses certified wood to produce the steam.

CO₂ emissions from the energy used for production decreased by 14% despite a 6% increase in energy consumption. This is a result of ongoing conversion to less CO₂-intensive energy

sources as part of the effort to increase the share of renewable energy. Emissions from transport (used for product distribution) decreased to 38,000 tonnes, a 12% decline compared with 2015, due to increased distribution by sea as opposed to air transport.

The climate action programme of Novo Nordisk A/S primarily aims to reduce CO₂ emissions from production and the distribution of products. However, the company has expanded the programme to include indirect emissions from relevant business activities in the supply chain, including emissions from company cars, business air travel and emissions from the supplier chain. Novo Nordisk A/S engages with strategic suppliers with the aim of increasing energy efficiency and the share of renewable energy.

Novozymes A/S

Novozymes A/S has a climate strategy. Many of Novozymes A/S' biological solutions provide customers with environmental improvements compared with conventional technologies. These lead to higher-quality products with lower overhead and provide customers with the opportunity to reduce their CO₂ emissions. For more than 10 years, Novozymes A/S has conducted peer-reviewed life-cycle assessment studies to document the environmental impact of its biosolutions and to develop specific claims for benefits with its customers. Novozymes A/S estimated that its customers avoided 69 million tonnes of CO₂ emissions in 2016 by using its products in 2016. The annual savings achieved are equivalent to taking about 30 million cars off the road. The emissions avoided amounted to 9 million tonnes more than in 2015, equivalent to 5 million more cars.

Health and society

Novo Nordisk A/S

Only slightly more than half of the 415 million people with type 2 diabetes globally have been diagnosed, and many of the people who have been diagnosed do not have access to high-quality treatment.²

Novo Nordisk A/S is actively engaged in fighting diabetes and makes targeted efforts to ensure that people with diabetes have a better life. Novo Nordisk A/S works to prevent diabetes, improve the opportunities for early diagnosis and to ensure better access to high-quality care so that more people can achieve better treatment results.

The company's core focus is to develop and manufacture innovative medicines and make them accessible for people with diabetes throughout the world. The company's long-term target is to reach 40 million people with its diabetes care products by 2020 – double the 2010 baseline number. The aim is to enable more people with diabetes to receive pharmaceutical treatment. Novo Nordisk provided pharmaceutical treatment to an estimated 28 million people with diabetes worldwide in 2016. Current projections show that reaching the 40 million target by 2020 will not be possible, but the company remains committed to continuing its efforts to improve access to diabetes treatment.

² Hart JT. Rule of halves: implications of increasing diagnosis and reducing dropout for future workload and prescribing costs in primary care. *Br J Gen Pract* 1992;42(356):116–119.

ACCISS. Inequities and inefficiencies in the global insulin market. Amsterdam: Health Action International; 2015 (Fact Sheet 1).

In 2016, the company announced a new Novo Nordisk Access to Insulin Commitment that provides low-income countries and selected humanitarian relief organizations with an effective guarantee of human insulin at a lower price. Though donations to the World Diabetes Foundation, which Novo Nordisk A/S established in 2002 to expand access to the prevention and treatment of diabetes in low-income countries, a total of 468 projects in 115 countries have reached millions of people.³

Novo Nordisk A/S is also working to increase the awareness of diabetes, prevent the disease and improve diagnosis and treatment in the world's major cities. In 2014, Novo Nordisk A/S launched Cities Changing Diabetes in a local partnership programme that aims to combat diabetes in collaboration with local partners. The company's initiatives support the work of achieving the United Nations Sustainable Development Goals – especially Sustainable Development Goal 3 on ensuring healthy lives and promoting well-being for all at all ages and Sustainable Development Goal 12 on ensuring sustainable consumption and production patterns.

For further information, see the *Novo Nordisk Annual Report 2016*:
www.novonordisk.com/annualreport

Novozymes A/S

As a United Nations Global Compact LEAD member, Novozymes A/S is actively engaged in a number of United Nations-led initiatives as well as United Nations Global Compact networks in Brazil, China, Denmark, India and the United States. In September 2015, Novozymes A/S ended the proceedings of the United Nations General Assembly in New York by introducing the new United Nations Sustainable Development Goals. The 17 goals represent fundamental challenges such as poverty and climate change that the world needs to overcome to grow in a fair and sustainable manner. Over the next 14 years, countries expect to use these targets to implement policies, share financing and drive changes that will help to build a fairer and sustainable world for all.

Novozymes A/S was among the first to adapt its strategies to the Sustainable Development Goals with pioneering biotechnological solutions that may be the answer to several global development challenges. The Sustainable Development Goals are a reference framework for Novozymes A/S to guide its decisions, manage risks and to ensure future business opportunities.

The Novo Group as a workplace

The Novo Group strongly emphasizes offering employees an attractive, committed and efficient workplace. This comprises an inclusive culture with respect for individuals, ongoing personal development, health and safety. Novo A/S did not carry out an employee satisfaction survey in 2016. This report therefore only describes the results of the surveys carried out by Novo Nordisk A/S and Novozymes A/S.

Novo Nordisk A/S

Measured on a scale from 1 to 5, with 5 being the best score, the consolidated score in the annual employee survey, eVoice, was 4.4 in 2016, compared with 4.3 in 2015. This measured

³ World Diabetes Foundation [website]. Gentofte: World Diabetes Foundation; 2017 (<https://www.worlddiabetesfoundation.org/who-we-are> , accessed 28 February 2017).

the extent to which the organization is working in accordance with the Novo Nordisk Way. The 2016 result reflects a strong culture and commitment to the company's values.

By the end of 2016, gender diversity among managers was 59% men and 41% women. Of the newly promoted managers, 43% were women. All management teams, from entry level upwards, will strive for enhanced diversity, with the aim of ensuring a robust pipeline of talent for recruitment to management positions.

Novozymes A/S

In 2016, Novozymes A/S met its target for employee satisfaction and motivation related to workplace development. Employee satisfaction and motivation scored 76 of 100 in the company's annual survey and once more exceeded the target of 75. In addition, the opportunities for professional and personal development scored 79, meeting the target of 75. The focus on employee development throughout the organization, supported and driven by management, is a key element in relation to improving employee satisfaction and motivation.

Novozymes A/S' proactive approach to avoiding discrimination and to promoting equal opportunities is reflected in specific targets for new managers in terms of gender diversity. In 2016, 36% of the employees promoted were women, meaning that the company did not meet its target of ensuring that at least 40% of employees promoted were women. Novozymes A/S' long-term target is to ensure that women hold at least 30% of senior management positions by 2020.

THE NOVO NORDISK FOUNDATION

The Novo Nordisk Foundation is a Danish foundation with corporate interests. The Foundation has two objectives: to provide a stable basis for the commercial and research activities of the companies in the Novo Group; and to support scientific, humanitarian and social causes.

The vision of the Foundation is to contribute significantly to research and development that improves the health and welfare of people.