



SINTEF

Annual report 2020



Technology for a better society

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About SINTEF

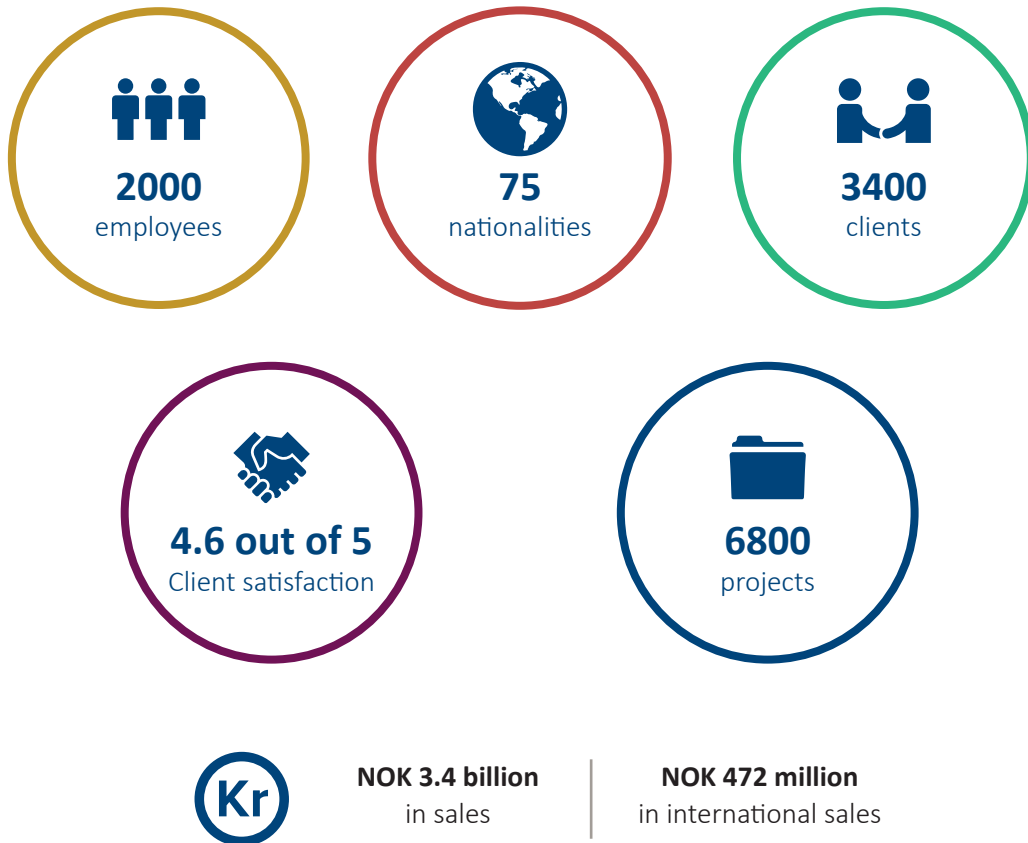
SINTEF is one of Europe's largest research institutes, with multidisciplinary specialist expertise in the fields of technology, the natural sciences and the social sciences.

SINTEF is an independent foundation which since 1950 has been responsible for innovation by means of development and research projects for industrial and public sector clients in Norway and abroad.

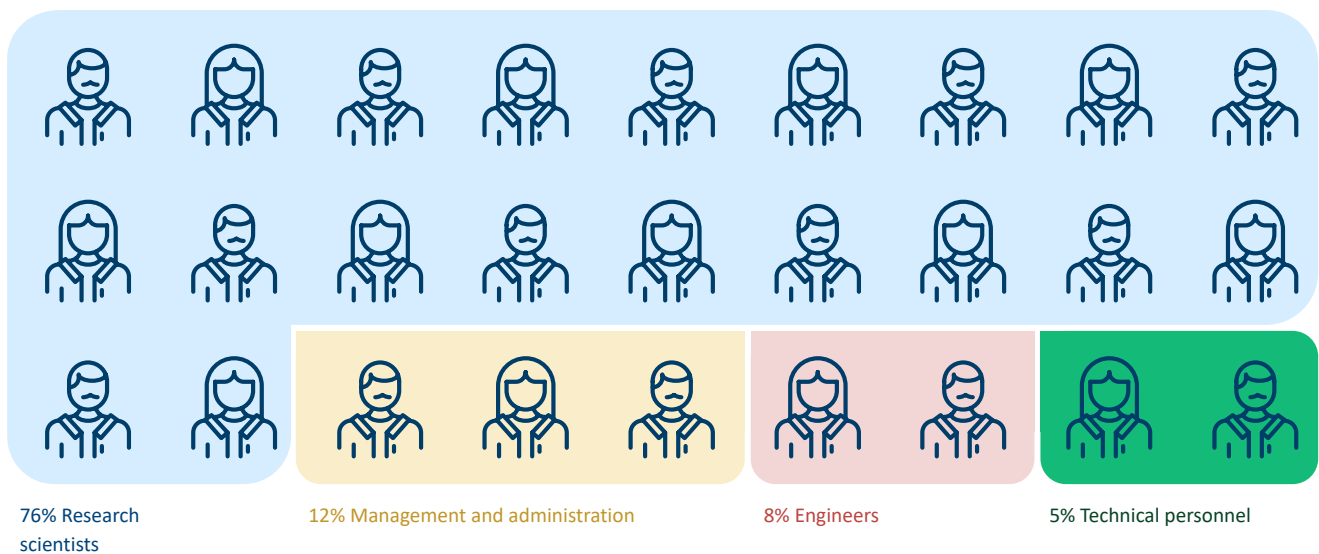
Our vision is 'Technology for a better society'



Research and innovation for clients all over the world



Over seven out of ten employees are research scientists



The 'Year of Corona' went better than we feared

The global crisis triggered by the corona virus pandemic is having a major impact on our everyday activities, and on economies and security across the world. The pandemic has shown us the importance of research, collaboration and the sharing of data – not least in connection with infection prevention, the development of vaccines and the use of digital technologies. It has demonstrated how crucial it is to exploit the major opportunities opening up in the global economy to accelerate the transition to a more sustainable society.

For us at SINTEF, our results for last year have been much better than we feared when the pandemic took hold in the spring of 2020. We have every reason to be grateful to all those who have made this possible. This include the public authorities, who have taken control of the situation and enabled business to continue to innovate throughout the crisis. We must also thank SINTEF's employees throughout the organisation who have made heroic efforts in a very demanding situation.

All this has enabled SINTEF to continue with our research and innovation work with undiminished strength towards a green and digital restructuring of society. Measured in net sales, SINTEF has delivered research and development at the same levels as in 2019. We have achieved a highly satisfactory financial result while at the same time recording the highest levels of client satisfaction since measurements began. This means that at the start of 2021, SINTEF is in many ways in a stronger position than it was just one year ago.

We are also seeing, on an almost weekly basis, that major economies such as the EU, USA and China are announcing ambitious targets for climate change mitigation, health, digitalisation and innovation. We also note that they are investing enormous resources in research with the aim of restoring levels of activity following the pandemic, and at the same time transitioning to sustainable and digital societies for the future. This will present challenges to smaller countries such as Norway and will put great demands on our ability to accelerate the transition here and to develop a more diverse economy after decades of dominance by the oil and gas industry. In this context, it is interesting that investment in research being made by Norwegian business, measured as a percentage of GNP, has traditionally been lower than in those countries with which we compete. This is why SINTEF is making every effort to express our views on what we believe is a sound and progressive research and innovation policy that will trigger businesses' ability to innovate.

This ability to innovate is crucial if we are to meet the major challenges that await us in the future. We must succeed in exploiting the opportunities offered by digital technology and promote



Photo by Terje Trobe/SINTEF

a radical restructuring of the global energy and food supply systems, of logistics and of patterns of consumption. We must also develop sustainable and secure communities in the face of demographic change, a circular economy, user-adapted services and new solutions for health and mobility. All this and more is being addressed by our research scientists at SINTEF – each and every day.

Here at SINTEF, we shall continue in 2021 to offer our expertise and laboratories with the aim of meeting these major challenges, in close collaboration with our clients, the public authorities and all our other partners.

Alexandra Bech Gjørvi CEO

The SINTEF year in brief – 2020

Solar-powered goods vehicles:

One of the world's first hydrogen-powered goods vehicles is now on the roads, powered by the sun shining in the Norwegian county of Trøndelag, and supported by the wholesale distributors ASKO Midt-Norge. SINTEF has been working with ASKO and hydrogen fuel for almost ten years with the aim of reducing goods vehicle emissions. According to calculations made by SINTEF, Norway can have as many as ten thousand such vehicles on our roads in 2030, provided that government provides sufficiently ambitious incentives. [Read more](#)

Norway launches major wind power research centre:

The Northwind research centre, led by SINTEF, will be at the cutting edge, working on innovations to make wind power cheaper, more efficient, and more sustainable. One of the centre's main priorities will be offshore wind research. Northwind will bring together over 50 partners from research institutions and industry all around the world. [Read more](#)

Equinor and SINTEF agree a strategic collaboration:

Equinor and SINTEF have agreed on a strategic collaboration in four key areas. The areas are offshore wind, marine systems, energy systems and modeling studies related to these areas. [Read more](#)

Sustainable batteries for electric vehicles:

The EU Horizon 2020 battery research project HYDRA kicked brings together leading partners from the European battery industry and research community to develop the next generation of sustainable, low-cost, energy-dense Li-ion batteries for electric vehicle applications. The project is coordinated by SINTEF. [Read more](#)

Sound beacons support safer tunnel evacuation:

Research conducted as part of the project EvacSound demonstrates that auditory guidance using sound beacons is an effective aid during the evacuation of smoke-filled road tunnels. This is good news. [Read more](#)

Working from home is productive:

Working from home does not make us less productive, provided that we work intelligently and are equipped with the tools we need to work together with our colleagues. This is the conclusion from a study of teamwork carried out by SINTEF researchers. [Read more](#)

Plastic waste used for fuel in cement ovens:

SINTEF researchers believe that plastic refuse can be used as fuel in cement factories in Asia. If this idea works, it may provide a solution to two of the planet's biggest environmental problems – plastic in the oceans and high levels of coal consumption. [Read more](#)

Meet the aquaculture industry's new maintenance bot:

It can fully operate on its own and follow along with fish's behaviour and health with its Argus eyes – all while keeping a safe distance. It even inspects the technical standard of the enclosure while it's at it. These are some of the fascinating properties of a new ROV developed by SINTEF, NTNU and partners from the aquaculture and technology industries. [Read more](#)

Making ultrasound universally accessible:

Currently, ultrasound machines are operated primarily by specialists because it requires extensive experience to interpret the images. Norwegian researchers are aiming to tackle this issue. [Read more](#)

Ceramic 3D printing for fast, safe and cheaper production of vaccines:

The NESSIE research project makes it possible for the first time to produce highly complex vaccines in large quantities at low cost using ceramic 3D printing. The novel process makes vaccines available to countries that previously could not afford the high cost of essential vaccines such as measles or rubella. [Read more](#)

The Board of Directors' Report



 **SINTEF**

The year 2020

2020 was dominated by both health- and market-related challenges that were a direct result of the corona pandemic. Thanks to a massive effort by our employees, excellent communication with our clients, and sound measures carried out by the authorities and funding agencies, it was possible for research and innovation activities to continue unabated towards a green and digital restructuring of society. SINTEF delivered research and development that was equivalent in terms of gross sales to approximately the same levels as in 2019. We also achieved a satisfactory financial result. In many ways, the sum of all our hard work, correct prioritisations and targeted actions, has enabled SINTEF to emerge from the crisis stronger at the start of 2021 than it was twelve months before.

SINTEF is an independent and not-for-profit research foundation offering multidisciplinary specialist expertise across a wide range of research fields. In close collaboration with industry, public sector organisations and other research centres, we develop knowledge that generates societal benefits and competitiveness. The UN's Sustainable Development Goals constitute the foundation of our research activities. At SINTEF, we seek always to integrate sustainability into the ways we conduct our work and administer and decide on our priorities. This enables us continually to consolidate our contribution to wider society.

SINTEF operates with the vibrant and ambitious vision of 'Technology for a better society'.

SINTEF is organised as a foundation with subsidiary companies. Our head office and the majority of our employees are located in Trondheim, but we also carry out a significant amount of activity in Oslo and Raufoss. SINTEF also has offices in Mo i Rana, Tromsø, Narvik, Bodø, Bergen, Horten, Ålesund, Grenland, Verdal, Steinkjer, Frøya, Arendal, Hirtshals in Denmark and in Brussels.

SINTEF collaborates with clients throughout Norway and in the international market. We have established a partnership and close strategic and collaborative relationship with the Norwegian University of Science and Technology (NTNU). SINTEF also has a

close working relationship with the University of Oslo and a number of other Norwegian and international research organizations. These collaborations promote high levels of technical quality and are essential if Norway is to succeed in important research fields and as an innovative and adaptable industrial nation.

In recent years, we have carried out a significant restructuring of the organisation and have succeeded in generating new growth in areas that are key to sustainable development. Early actions taken in response to the outbreak of the Covid-19 pandemic, combined with a major coordinated effort, has enabled SINTEF to emerge stronger from the crisis than it was twelve months ago. They have enabled us to maintain the freedom and effective capacity to continue to make essential investments in laboratories, scientific equipment and knowledge development in the years ahead.

Our strategy and role in society

Demographic change, the digital transformation and measures to mitigate and adapt to climate change, combined with increased geopolitical tension, are among the most important factors that are currently resulting in major global upheavals and promoting a great need for change, both in the Norwegian economy and across wider society. Uncertainty surrounding our future

prospects was reinforced in 2020 due to the Covid-19 pandemic. At the same time, we are seeing that the pandemic has helped us to recognise the opportunities inherent in being actively aware of society's long-term risks and need for change.

In the opinion of the Board, SINTEF's research portfolio, expertise and infrastructure continue to make a highly relevant contribution towards meeting these challenges. We are also aware that our clients, to an ever-increasing extent, demand strategic dialogue with SINTEF at the executive level. They want us to contribute towards addressing complex problems that require our multi- and cross-disciplinary technical diversity and specialist expertise in the fields of technology, and in the community and environmental sectors.

The Board has decided to establish the UN's Sustainable Development Goals as the foundation of SINTEF's work, and in doing so to actively seek growth potential in activities that support these goals. SINTEF's ambition here is to be a world-leading research institute operating with an independent and market-oriented focus, offering research conducted to the highest scientific standards and helping to promote commercial competitiveness and beneficial solutions for society as a whole. It is also SINTEF's intention, to a greater extent than in the past, to assume the role of a key developmental partner with our clients by making use of our multidisciplinary expertise and our ability to promote industrial and political dialogue. Group-wide projects and investments involving multiple institutes are key to the development of multidisciplinary in strategic areas. Basic grant funding from the Research Council of Norway is of crucial importance to SINTEF's ability to deliver on its strategy.

The SINTEF Foundation owns substantial assets that are placed at the disposal of the Group's operational divisions. Developed and undeveloped leasehold sites in the vicinities of the universities of Trondheim and Oslo constitute a major portion of the assets entered in SINTEF's balance sheet, and the co-location of research teams from SINTEF and the universities represents a key success factor in terms of research collaboration. In this context, NTNU's Campus project and the ambitions linked to Oslo Science City, both of which prioritise innovation, start-up activities and collaboration with industry, create unique opportunities for the advancement of our strategic position and development of our real estate assets. For this reason, and in order to ensure continued co-location and further collaboration with the universities, industry and start-up centres, the Board is prioritising work focusing on a forward-looking development of SINTEF's property portfolio and laboratory infrastructure.

SINTEF's work to finally establish the Ocean Space Centre was assigned high priority in 2020, with the aim of obtaining a political decision in connection with the Norwegian budget in 2022. In February 2021, the SINTEF Foundation decided to invest NOK 163 million in an office building with the aim of facilitating the completion of the centre.

Commercialisation of the results of research activities is a key component of SINTEF's strategy. SINTEF TTO currently administers three seed funds that invest in, and develop, new companies based on technologies developed in research teams at SINTEF and NTNU. The most recent of these funds, called SINTEF Venture V, holds investment capital worth NOK 500 million,



In 2020, SINTEF published its first sustainability report. [Read more](#)

of which SINTEF's share is NOK 110 million. The European Investment Fund (EIF) is contributing NOK 155 million, and a number of private Norwegian investors, as well as SINTEF, are participating in the fund.

At the close of 2020, SINTEF had 17 start-up companies in its portfolio, two of which were founded in 2020. In total, NOK 300 million has been injected into the companies by their investors in 2020, of which NOK 43 million has come from the SINTEF Venture funds.

SINTEF became the principal shareholder in the company that from October 2019 has been known as SINTEF Narvik AS. During 2020, we note that the company's activities have to date succeeded in creating new technical and market-related opportunities. We are also adhering to a financial improvement plan. In December 2020, the Board decided on a merger between SINTEF and the company Trøndelag Forskning og Utvikling AS (TFoU). On 1 January 2021, the company, and its 16 employees, became a part of SINTEF AS as a technical team within SINTEF Digital.

Via SINTEF Manufacturing, we are the sole owners of the catalyst centre Manufacturing Technology (MTNC AS).

Sustainability

Our adherence to the UN's Sustainable Development Goals (SDGs) serves to extend the commitments that SINTEF already has as part of its membership in the UN Global Compact since 2009. The 17 SDGs specify the actions that the world as a whole must take, and succeed in, in order to create a better global community.

In 2020, SINTEF published its first detailed sustainability report. The report describes not only how our research and innovation activities contribute towards sustainable development, but also how we are working constantly to consolidate sustainability within our own organisation.

This self-assessment of our activities has clearly demonstrated that SINTEF's research projects are making specific contributions to the following SDGs: Industry, innovation and infrastructure;



Photo by Berre/SINTEF

Clean energy for all; Stop climate change; Responsible consumption and production; Sustainable cities and communities; Good health and well-being; Life below the water and Life on land. Work carried out by our start-up companies is focusing in particular on SDGs such as Decent work and economic growth, Industry, innovation and Infrastructure, Responsible consumption and production; Good health and well-being; Life below the water and Zero hunger.

The Board holds regular discussions with SINTEF's administration regarding issues related to sustainability. In 2020, special emphasis was placed on SINTEF's activities linked to the oil and gas sector in the context of climate change. Following a comprehensive discussion, both within the Board and across the entire Group, and with its stakeholders, SINTEF has concluded that there is no ethical dilemma involved in working towards a sustainable society and at the same time providing assistance to the oil and gas sector, provided that its work is part of laying the foundation for a transition within the sector that harmonises with the 1.5 degree increase in global warming scenario. This process has highlighted the fact that while SINTEF is very active in research linked to climate change mitigation and adaptation, the challenge in these fields is so great that SINTEF should in fact be doing even more to support the green transition. This conclusion may also be seen in the context of a need to do more to reduce and compensate for our own CO₂ emissions, and not least those linked to business travel. For this reason, the Board

decided in June 2020 to allocate NOK 7 million of SINTEF's surplus to research into climate-positive solutions. This is equivalent to a quota price of approximately NOK 1,000 per tonne of CO₂, based on 2019 figures. Climate-positive solutions involve measures that combine drawing greenhouse gases from the atmosphere with secure sequestration. The Board views this as a preferable alternative to the purchase of external climate quotas, because SINTEF's most effective contribution to climate neutrality is considered to be derived from its research activities, which generate solutions that are greatly needed if we are to achieve a zero-emissions society. We emphasise that this is research which no private sector clients or funding agencies are currently willing to finance.

SINTEF continues to work systematically with a range of other issues related to sustainability within the organisation. These include diversity, equal opportunity, employee rights, HSE, ethics and supplier follow-up. These are described in more detail in the following sections.

Read SINTEF's latest sustainability report at <https://www.sintef.no/barekraft/>.

The Covid-19 pandemic

The global crisis triggered by the Covid-19 pandemic is having a major impact on our everyday activities, and on economies and

The pandemic has highlighted the importance of research, collaboration and the sharing of data, not least in connection with infection prevention, the development of vaccines and the use of digital platforms.

security across the world. The pandemic has also highlighted the importance of research, collaboration and the sharing of data, not least in connection with infection prevention, the development of vaccines and the use of digital platforms.

It has also had a significant impact on SINTEF's activities. From early in 2020, the Board and the organisation's administrative bodies have been focusing intensively on addressing this crisis in order to ensure that SINTEF can continue to offer its services, resource capacity and expertise in ways that will help to mitigate the damage to society at large.

SINTEF's employees have come together to make a valuable contribution. The situation has continued for some months, resulting in wear and tear on the organisation, and not only on employees who have been working from home, but also on those working in our laboratories and workshops.

In addition to very close follow-up of productivity and resource use in the light of unpredictability and new ways of working, the organisation has invested heavily in a client-targeted effort and has been very effective in seizing new opportunities, such as responding to ongoing invitations to the RCN's IPN (Business Innovation) projects.

SINTEF has made an active contribution by maintaining its contact with wider society and the public authorities across a broad front in order to promote the ability of society and business to innovate and implement sound policymaking throughout the crisis. We were very pleased when in May 2020, the Norwegian government announced its green transition policy package. The measures included extraordinary basic grant funding to the technical-industrial and marine institutes, combined with a green platform (with a budget of NOK 1 billion over three years) that will be implemented as part of a collaboration between the Research Council of Norway, Innovation Norway and SIVA. In June, the Research Council of Norway decided to increase by two-fold the scope of its ordinary planned funding of Centres of Research-based Innovation (CRIs). This will have major significance in terms of technology and finances for 2021 and the years ahead.

Experience from previous crises indicates that there will be a lag of at least 12 to 18 months from the time the pandemic impacts

business until the full effects filter down to affect activity at SINTEF. The consolidation of SINTEF's order book for 2021 is well in hand, but the Board is carefully monitoring the importance of building up orders towards the end of 2021 and into 2022.

HSE

HSE is assigned the highest priority at SINTEF, and our goal is to achieve zero accidents, personal injury and damage to assets. In 2020, no incidents occurred that resulted in absence of work due to occupational illness or injury, or serious personal injury. SINTEF recorded a reduction in total accidents, near-misses and hazardous situations. A possible explanation for this is that fewer employees have been attending their normal place of work.

The in-house HSE campaign '*HMS-løftet*' remains in place, and in 2020 the handling of chemicals was incorporated as an area of special focus. The work of the campaign gives special emphasis to ensuring that the appropriate expertise is in place, combined with correct labelling and the effective recording of chemicals and incidents of exposure. This work will continue into 2021.

In February 2020, the working environment management system was certified under the ISO 45001 standard, and a periodic audit was carried out in November.

Financial freedom of action

Net operating revenues for 2020 are 3.8 per cent up from 2019. Gross operating revenues are 2.4 per cent down from 2019. The fall in gross revenues is due primarily to reduced onward invoicing of direct project expenditures to SINTEF's research partners, and in due part to less business travel.

SINTEF's operating profit in 2020 was NOK 158 million, compared with NOK 153 million in 2019. The pre-tax profit was NOK 174 million, compared with NOK 195 million in 2019.

In general, all the institutes had healthy order books at the start of 2021. As we enter 2021, The Board notes positive developments in most of SINTEF's market segments, not least as a result of major efforts to generate client projects that involve multi-disciplinary contributions from more than one institute.



SINTEF generates growth and development opportunities for private and public sector enterprises, contributing to their wealth creation and the positive development of wider society.

At the close of 2020, SINTEF's overall liquidity situation can be described as satisfactory. SINTEF has established a joint Group arrangement for the investment of its liquidity reserves. In 2020, an average of NOK 403 million has been spent on asset management, compared with NOK 352 million in 2019. Our low-risk profile contributed to a positive yield of 3.9 per cent in 2020, compared with 6.5 and -0.3 per cent in 2019 and 2018, respectively. In 2020, SINTEF placed its financial portfolio in a separate NOK class. This has significantly reduced the need for currency hedging. Every year, the Board approves the foundation's financial management guidelines (*Regler for finansforvaltning i SINTEF*).

SINTEF is exposed to currency exchange fluctuations as a result of some of its project revenues being in foreign currencies, although project costs are entirely or largely in Norwegian kroner. Futures contracts are employed to reduce this risk. A special assessment has been made of financial risk and freedom of action involving a scenario by which the Norwegian krone is significantly weakened against the euro. Such a situation was experienced in March 2020, when the status of our future exchange contracts (in euros) challenged our credit facility. As a consequence, SINTEF extended its credit facility with the bank *SpareBank 1 SMN* with the aim of expanding its financial freedom of action in case of future instances of weakness in the Norwegian currency.

SINTEF's financial surplus is being invested in new research and skills development. In 2020, SINTEF invested NOK 106 million in laboratories, scientific equipment and other business assets. In 2019, the corresponding amount was NOK 132.5 million. In 2020, the Board decided to invest approx. NOK 150 million in a complete renovation of the office and laboratory complex at *Forskingsveien 1* in Oslo. Enova has provided a grant of NOK 20 million towards this project.

SINTEF currently enjoys a robust financial position. As of 31 December 2020, SINTEF has equity amounting to NOK 2,812 million (2,667), which constitutes 55 per cent (55) of its total capital. The corresponding figures for the SINTEF Foundation are NOK 2,497 NOK million (2,369), which constitutes 98 per cent (98) of its total assets.

The annual profit for the SINTEF Foundation in 2020 was NOK 128 million. The corresponding figure for 2019 was NOK 140 million.

Our equity and operational status, combined with cost-saving initiatives and a satisfactory order book, provide us with a good basis for declaring the organisation a going concern. The Boards of the subsidiary companies have made similar assessments, and all have concluded that we have the basis of a going concern. The Board is not aware of any circumstances that have arisen since the close of the accounting year which affect its opinion regarding the financial position of either the Foundation or the Group. On this basis the Annual Accounts have been prepared under the going concern assumption.

Clients

SINTEF generates growth and development opportunities for private and public sector enterprises, contributing to their wealth creation and the positive development of wider society.

In 2020, SINTEF completed 6,794 projects on behalf of a total of 3,421 large and small clients in both the private and public sectors.

Each year, SINTEF conducts ongoing client satisfaction surveys linked to about 500 of its projects. The 2020 survey resulted in an average score of 4.55 measured on a scale from 1 to 5. This score has continued to increase since 2017, and the 2020 average is the highest since the scoring system was introduced in 2013.

SINTEF implements a large number of projects in collaboration with clients linked to the Research Council of Norway's industry-oriented programmes. Ever since the fall in the oil price in 2014, we have observed a trend towards businesses seeking higher levels of risk relief linked to their activities. This trend has been exacerbated during the pandemic. Provisional analyses of our portfolio conducted in 2020 indicate an almost 10% decline in so-called 'pure' projects, i.e. those that are not financed by the funding agencies. With the help of invitations to major IPN (Business Innovation) projects, extraordinary basic grant funding and a high rate of approvals for EU-funded projects, we have succeeded in achieving growth in net sales and in maintaining technology development during the Covid-19 crisis, in collaboration with the private and public sectors.

Our participation, following competitive tender, in the major, long-term and partly state-funded, research centres involves significant collaborative interaction with Norwegian and overseas clients. SINTEF is currently participating in nine Centres for Research-Based Innovation (CRIs) and eight Centres for Environment-Friendly Energy Research (CEERs), established in 2016 and 2017, with contract terms extending over 5+3 years. In 2019, the Research Council of Norway carried out an application round for new CRIs, with the results announced in June 2020. SINTEF was awarded participation in ten new centres and will act as host organisation for four of them. In December 2020 the Norwegian Ministry of Petroleum and Energy announced the establishment of NorthWind, a new CEER dedicated to research into offshore wind power. A SINTEF-led consortium made up of six research partners and more than 40 Norwegian and overseas private sector partners was awarded responsibility for the centre.

In 2020, SINTEF increased its efforts to engage in dialogue with top executives in major organisations. The aim here was to discuss strategic approaches in a time dominated by major transitions, and to discuss regulatory frameworks that would promote business-oriented research and research-based innovation. The use of digital technology has increased our ability to hold a large and varied number of productive meetings.

At the end of 2020, a new strategic joint agreement was entered into with Equinor.

Research

In order to maintain its capacity for technical renewal and influence, it is essential for SINTEF to achieve an appropriate balance between scientific publication and contract-based research. The most important form of dissemination of our research results occurs when new technologies and systems are made use of by our clients and wider society. However, scientific publication is also of considerable value. The Board wishes to emphasise the

significant way in which publication contributes to skills development and the generation of new knowledge. It is also important as an indicator of the quality that makes SINTEF attractive to its clients, research partners and the best research talent.

Our aim is to publish at least one peer-reviewed scientific publication per research scientist per year. In 2020, we achieved a rate of 0.85, the same figure as for 2019. This is not a trend with which we are content, but we acknowledge that restrictions imposed during the pandemic meant that researchers were encouraged to focus on contact with their clients, thus reducing their ability to attend conferences, with a consequent impact on publication production.

SINTEF's standing in the global research community is key to the effective exploitation of research funding in Norway. This is illustrated by the EU's research programmes, where SINTEF is the leading Norwegian participant. SINTEF is by far the leading Norwegian player in those aspects of research programmes that focus on innovation, competitiveness and community solutions. Participation in the EU's Framework Programmes is key to enhancing the quality of SINTEF's scientific output, providing access to an enormous knowledge base and enabling us to remain in the forefront of international research.

Investment in laboratory facilities is crucial if Norway is to continue to develop as a knowledge-generating nation, boost its global competitiveness and attract the best students and research scientists. In the last ten years, SINTEF has invested NOK 1.2 billion in laboratories, scientific equipment and buildings. In collaboration with its partners, SINTEF achieved excellent results in the Research Council of Norway's Financing Initiative for Research Infrastructure (INFRASTRUKTUR) in 2018. In the years ahead, this will help to promote future investment in Norwegian research infrastructure where SINTEF is a partner or participant. In response to invitations made in 2020, SINTEF submitted applications for projects representing a total value of NOK 1.3 billion, distributed among the majority of our research fields.

In 2020, the Norwegian national budget granted funds to finance a preliminary project involving the Ocean Space Centre. This represents an important step towards the establishment of a world-leading research and education centre with major significance not only for Norway as a maritime nation, but also for the country's green transition. Work linked to the preliminary project has been assigned high priority in 2020 and 2021. Statsbygg's steering document for the preliminary project was submitted on 1 March 2021, with the aim of ensuring that the project receives priority in the Norwegian budget for 2022.

SINTEF's strategic collaborations with NTNU, the University of Oslo and other universities are of considerable importance.

Third party analyses demonstrate that the 70-year collaboration between SINTEF and NTNU has been highly significant for Norwegian research and innovation. Both the Board and management teams at SINTEF and NTNU are working actively to maintain this valuable collaboration in the years ahead. In March 2021, NTNU and SINTEF entered into a new strategic joint agreement, replacing the previous arrangement that had been in place since 2007.

SINTEF is an active participant in international research projects. Together with NTNU, we are engaged in a strategic collaboration with leading research centres in Japan and the USA in the fields of energy and materials science. Considerable importance is attached to our collaboration within the European Energy Research Alliance (EERA) and the European Association of Research and Technology Organisations (EARTO), both of which have important strategic roles in European research.

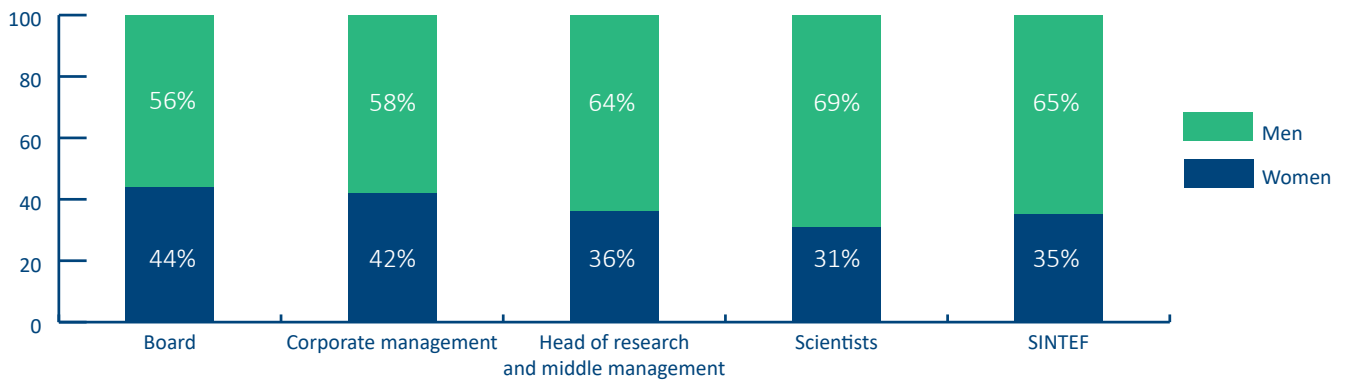
People

SINTEF's aim is to be an attractive workplace offering unique opportunities for personal development. A working environment survey is carried out every year among our employees with the aim of testing this assertion, and to identify any challenges that need to be addressed and benefits that should be safeguarded. All parts of the organisation then prepare binding action plans based on the results of the survey. Over the years, the working environment surveys have demonstrated that SINTEF is a good place to work. People enjoy working here, and are proud of the work they do.

We are pleased to see that the survey carried out in January 2021 has revealed a set of stable results in spite of a very demanding year involving unusual employee working conditions made necessary by restrictions resulting from the Covid-19 pandemic. The survey response rate was 94%. The results continue to show high levels of motivation and team spirit, and positive trends on key issues such as enthusiasm for shared goals and a belief in the future. We also observe a positive trend in our employees' assessment of their managers. This is true at all levels, although Research Managers in particular score very high here. This shows that SINTEF's managers have maintained high levels of dedication and effort during a very stressful period. SINTEF reveals itself as a robust organisation with employees who are able to adapt to change very effectively.

At the same time, the survey has demonstrated that pressure of work and stress continue to present challenges, and a negative trend has emerged during 2020. There are no significant differences in stress as experienced by employees who have worked a great deal from home compared with those who have been at their normal place of work. This will be a key area for improvement at SINTEF in the future.

Fig. 01– Gender distribution at SINTEF



In May 2020, a shorter version of the working environment survey was carried out in connection with the Covid-19 situation. The aim here was to find out how employees felt about working from home, digital ways of working and reduced levels of travel. Many reported feeling positive about having to travel less and the flexibility that working from home allowed them, while at the same time emphasising the value of being part of a community at work and its significance for work satisfaction and professional development. The survey provided a valuable source of data that will be used to inform our work to promote a good working environment and effective ways of working as we embark on the ‘new normal’.

As of 31 December 2020, SINTEF had a total of 2,008 employees, an increase of five since the previous end-of-year. In 2020, in spite of uncertainty linked to the pandemic, SINTEF has succeeded in recruiting about 200 new employees from a total of 37 countries.

We place great emphasis on taking care of and fostering the development of our current staff, while at the same time working to ensure future recruitment by means of promotional activities in the Norwegian and global recruitment markets. SINTEF continues to be successful in the competition for skilled employees and to achieve high scores as an attractive potential workplace in surveys carried out among students. Sixty-two per cent of research scientists at SINTEF have a doctoral degree. In 2020, 28% of our employees came from a total of 74 countries outside of Norway. The highest numbers in terms of percentages were from Germany and France. This shows that SINTEF remains attractive to international research scientists and that we are successful in bringing highly qualified researchers to Norway. SINTEF’s overseas employees provide a valuable source of scientific and cultural expertise.

Sickness absence during 2020 was recorded at 3.1 per cent. Occupational sickness absence was recorded at 0.2 per cent. Sickness absence is monitored systematically by all institutes at SINTEF.

In 2020, SINTEF experienced an overall employee turnover of 6.7 per cent. The figure for scientific personnel was 6.1 per cent. Employees with work experience at SINTEF represent an important contribution to skills development in both the private and public sectors.

Equal opportunity and family policy

The Board and Group Management are fully committed to promoting equal opportunity at SINTEF. One of SINTEF’s objectives is to increase the proportion of women among both its research scientists and managers. SINTEF’s CEO is female, and the proportion of women in Group management positions is 42 per cent. When vacancies arise, SINTEF aims actively both to recruit women and to develop female managers from its own ranks. However, during recruitment, structural imbalances within the educational establishments in various technical fields will tend to be reflected in SINTEF’s own employee gender balance.

Gender distribution (%) at SINTEF as per 31 December 2020 is shown in the figure above (Fig. 01).

SINTEF is a party to the following collective salary agreements between professional associations and unions: NHO/Tekna, NHO/NITO, NHO/Forskerforbundet, NHO-Abelia/LO-NTL, NHO-Abelia/Parat, NHO/FLT and NHO/Negotia. We are working systematically to ensure that undesirable salary differentials do not arise between men and women.

Eighty-five per cent of our workforce are full-time employees. Sixteen per cent of our female employees and 15 per cent of males work part-time. SINTEF makes only very little use of temporary employment contracts. At year end, 2.7 per cent of employees were in temporary positions, 28 of whom were women and 27 men.

SINTEF's working environment survey reveals no significant gender differences among employees in terms of how they perceive their work situation. We will continue to develop focused initiatives to ensure that SINTEF remains an attractive workplace for both sexes.

In order to ensure that foreign employees are well taken care of, SINTEF has established an integration programme for employees from other nations and their families. The programme offers expat services, free tuition in Norwegian and teaching in English at the SINTEF School. Diversity management is one of the themes of the SINTEF School's manager development programme. Findings from the working environment survey indicate that overseas employees enjoy working at SINTEF.

SINTEF goes to great lengths to meet the needs of employees who have, or who develop, disabilities.

Internationalisation

SINTEF's ambition is to be a world-leading research institute. Internationalisation is an integral part of SINTEF's business operations. We have achieved considerable success with our internationalisation strategy in terms of strengthening our academic networks, participation in the EU's research programmes,

international sales of R&D services and international recruitment. However, maintaining a physical presence in markets outside Norway has proved to be a challenging task for an organisation such as SINTEF, both in terms of profitability and competitiveness. For this reason, we have assigned priority to other and more indirect approaches by which to establish an overseas presence and increase sales.

In 2020, SINTEF's international sales amounted to NOK 472 million, compared with NOK 479 million in 2019. This corresponds to 14 per cent (14 per cent in 2019) of SINTEF's total sales. We have completed projects for clients in 56 countries, and EU projects represent 51 per cent of our international activity.

In order for SINTEF to fulfil its role in society, it is essential for us to be able to develop international networks and globally competitive concepts that bring state-of-the-art know-how to our clients. In many cases, Norwegian companies obtain funding and the opportunity to collaborate with their clients on innovation initiatives by way of EU projects in which SINTEF is a partner.

SINTEF is by far the largest Norwegian participant in the EU's Framework Programmes for research and development. We are very active participants in the Horizon 2020 (8th Framework) programme, which commenced in 2014. In 2020, SINTEF achieved a record number of project awards from the Horizon 2020 programme. We are participating in 249 projects (compared with 194 in 2019), and are acting as coordinator in 59 (46) of them. SINTEF's total budget is EUR 173 (146) million, while the total amount of research funding for all partners in these projects amounts to EUR 2,700 million.





Photo by Geir Mogen/ SINTEF

SINTEF has an office in Brussels on the same premises as NTNU, the University of Bergen and the Norwegian research centre NORCE. The aim of our presence here is to consolidate our networks and boost participation in EU research collaboration projects. In September 2020, and for the fourth time, SINTEF and NTNU arranged a strategic seminar, this time in digital format, involving key meetings with the European Commission, the Norwegian authorities and industry representatives.

We are also working actively on our strategic positioning and preparations for Horizon Europe, the EU's next framework programme for research and innovation, due to commence in 2021. In 2019, SINTEF prepared a new strategy for Europe, in which one of the objectives was to increase its EU-related research activities within the Horizon Europe programme by two-fold, from NOK 225 million in 2018 to about NOK 450 million in 2027. In order for us to achieve this ambition, we are relying on the extension and consolidation of the Norwegian funding incentive scheme STIM-EU within the Horizon Europe programme, which will enable SINTEF and other research centres to obtain predictable and stable levels of costs coverage when they participate in EU projects.

The external environment

SINTEF's main contribution towards mitigating negative environmental impacts is by means of its research projects and development of technology. Our achievements have been set out in detail in the aforementioned sustainability report.

The organisation is actively involved in work to reduce its own environmental footprint, and many of the institutes are establishing 'Green Teams' for employees who wish to take part.

The Covid-19 pandemic has resulted in significant reductions in business travel, and carbon dioxide emissions linked to air travel have been reduced by approx. 80 per cent. Our experience from this period of minimal travel activity has led to productive discussions at many levels within the organisation. As part of the shortened working environment survey carried out in June 2020, eight out of ten employees said that they were able to travel less than previously, while one in four said that it was possible for them to travel much less. In the future, SINTEF wants to encourage a greater awareness of assessing the real necessity of business travel.

SINTEF is certified under the environmental management standard ISO 14001. A periodic audit was conducted in November 2020.

In 2020, we experienced no reportable incidents that impacted the external environment.

Ethics

SINTEF operates with a clear ethical platform, set out in our 'Ethical Compass' document. SINTEF's research ethics are based on the guidelines set out by the Norwegian research ethics committees, on the principles promoted by the European Group on Ethics in Science and New Technologies, on international conventions and on Norwegian law. Our business, relational and research ethics harmonise effectively with SINTEF's vision, values, objectives and its role in wider society.

SINTEF expects and requires its suppliers and partners to be familiar with and accept our ethical values. Suppliers and partners that are involved in our activities are obliged to submit written acceptance of our code of ethics.

SINTEF is a member of Transparency International, an organisation dedicated to the elimination of national and international corruption, and adheres to the guidelines and advice issued by this organisation.

SINTEF employs its own Ethics Representative who acts as an adviser and consultant for the entire organisation, including the Board. The Ethics Representative also serves as a key whistleblowing channel within the organisation.

Corporate governance at SINTEF, including risk management and internal control

The SINTEF Foundation is the parent company of the SINTEF Group.

SINTEF's central administrative bodies are the Board of Directors and the Council. The Board is the Foundation's principal administrative body, for which the Council acts in an advisory function, with authority as stipulated by the Act relating to Foundations and SINTEF's Articles of Association.



Photo by Berre/SINTEF

The SINTEF Council acts in a supervisory role, ensuring that SINTEF's objectives are upheld in accordance with the organisation's Articles of Association.

The Board of the SINTEF Foundation also acts as Board of the SINTEF Group and the Board of SINTEF AS. SINTEF's activities are governed by its Articles of Association, shareholders' agreements, corporate agreements and instructions issued by their respective Boards. Principles for the Group's administration and coordination with its affiliated enterprises are established in accordance with SINTEF's overall goals and strategy.

The Board is made up of nine persons. Two have full-time posts at NTNU, four are from industry or public sector organisations, and three are SINTEF employees, elected by their colleagues. The Board has responsibility and authority in all matters which are not assigned to the Council. The Board acts in accordance with SINTEF's Articles of Association and pursuant to the Norwegian Acts relating to Foundations and Limited Liability Companies, respectively. In 2020, the Board held a total of eight Board meetings. Only one of these, held in February, was a face-to-face meeting. All subsequent meetings were conducted digitally.

SINTEF's Group Management is responsible for the administration of the entire scope of SINTEF's business activities. The CEO is responsible for day-to-day operations in accordance with the Articles of Association of the Foundation and corporate agreements, and in all other respects pursuant to the Norwegian Acts relating to Foundations and Limited Liability Companies. The CEO has the authority to act on behalf of the Foundation and SINTEF AS, except in connection with the purchase, sale and mortgaging of property, and the purchase and sale of companies.

In 2017, SINTEF was certified according to the ISO 9001, ISO 14001 and OHAS 18001 standards following a certification

process carried out by DNV. In November 2019, SINTEF was awarded re-certification for a further three years. In 2020, an ordinary annual audit was carried out.

SINTEF has established a system of tertial financial risk reporting. The organisation's risk environment is discussed by the management and Boards of each of the research institutes, as well as at Group management and Board levels. Risk mitigation measures are identified and implemented on a continuous basis. Key topics that are subject of ongoing activity include regulations governing state support, the General Data Protection Regulation (GDPR), money laundering regulations, the Norwegian Export Regulation Act, information security and SINTEF's exposure to technology espionage, hacking and suchlike. These issues have placed increasing demands on the organisation in recent years, and SINTEF is working systematically to address them.

Deloitte currently acts as SINTEF's internal auditor and in 2020 has conducted three internal audits focusing on state support regulations, the General Data Protection Regulation and access governance, respectively. Every year, an internal audit report is prepared for Group management and the Board, setting out the status of implementation of previous recommendations.

In 2020, SINTEF entered into an agreement with the Norwegian Centre for Research Data (NSD) by which the latter shall act in the role of personal data protection ombudsman. SINTEF has also appointed its own Personal Data Protection Coordinator.

As a follow-up to the internal audit of security and contingency strategies carried out in 2018, a high-level security risk analysis for SINTEF was carried out in 2020. Safetec, a leading company in the field of risk management, has provided assistance with both the internal audit and the security risk analysis processes. A high-level assessment of our values, threats and vulnerabilities

In 2020 we have seen a considerable increase in interest from most sectors in innovation and new business models.

has provided us with an overview of current status, as well as a basis for the establishment of overall terms of reference and goals in connection with appropriate and targeted measures. As part of its evaluations of threats to the academic sector, the Norwegian Police Security Service (PST) has identified research and development as an increasingly attractive target for foreign intelligence agencies. This means that SINTEF's assets such as information, knowledge, technology and its laboratories will be increasingly attractive to those presenting potential threats. Intelligence activities such as digital espionage, recruitment and infiltration are assigned high risk in the analysis, and should they occur, have the ability to severely impact SINTEF's integrity and reputation. According to Safetec's analysis, SINTEF operates with satisfactory levels of basic security, including effective barriers such as access control and administration, as well as running awareness campaigns among its employees. However, some vulnerabilities in its barriers have been identified that may compromise their integrity. Assessments and recommended actions from the analysis will be followed up in the future. The Board reviewed this issue in March 2021.

SINTEF's management system incorporates a shared system (*Synergi*) for the administration of accident reports, unwanted incidents, other non-conformances and suggestions for improvement. SINTEF is registered in the Achilles Joint Qualification System for suppliers to the oil and gas industry.

In order to reinforce its corporate governance procedures, the Board of SINTEF resolved in 2016 that an annual Report on Corporate Governance should be prepared, in accordance with the Norwegian recommendation for corporate governance and company management (the NUES Standard). The report is based on the fifteen articles of the NUES recommendations and describes how the Foundation meets those recommendations. The report is published concurrently with SINTEF's Annual Report.

Future prospects and challenges

SINTEF's order books are healthy and we are recording high levels of client satisfaction. We are successfully recruiting highly skilled employees and overall, operations in the majority of our research divisions are running efficiently. Our commercialisation projects are attracting external capital and talent. Our scientific

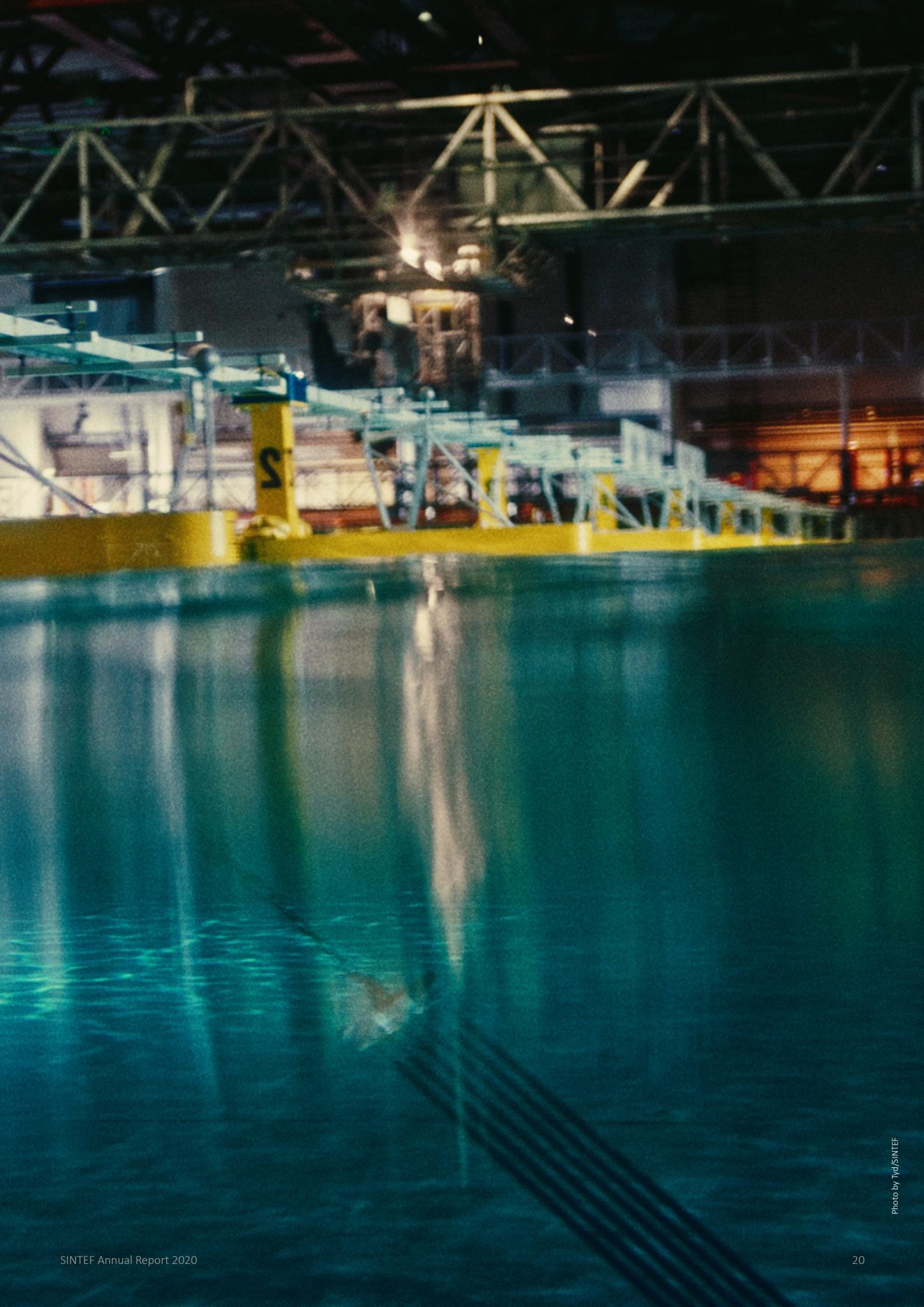
competence puts the organisation in an excellent position to address many of the challenges faced by the world today.

In 2020, we have seen a considerable rise in interest in most sectors for innovation and new business models. Much is being made of the need to develop and exploit the opportunities offered by digital technology and to succeed in achieving a radical restructuring of global energy and supply systems, logistics and patterns of consumption. Such restructuring is essential if we are to mitigate global climate change and reduce losses in biodiversity. Similarly, focus is being directed to the concept of secure and sustainable communities in the context of demographic change, the circular economy, user-adapted services and sustainable solutions for health and mobility. This offers SINTEF and our clients significant opportunities to contribute with research and solutions that will promote sustainable, digital growth and transition.

The 2021 Norwegian government white paper on Future Perspectives highlights not only the need for eco-friendly energy systems, but also societal expectations of significantly lower levels of future activity in the oil and gas sector. This will demand a major restructuring of Norwegian business, and not least in the supplier sector. At the same time, we also see demands for a significant restructuring of the public sector and of working life in general, in order to address the increasing proportion of elderly people in the population. SINTEF's strategy of focusing on contributions that promote competitiveness and solutions in nine specific areas of community concern thus appears to be highly robust in this context.

Digitalisation, automation, artificial intelligence, biotechnology, new materials and advanced robotic technology are driving enormous changes in all aspects of social and working life. SINTEF has considerable expertise in these fields and is uniquely equipped to play an active role in a restructuring process where higher levels of quality and efficiency in public services, combined with innovation and supplier development in the fields of health, mobility, and a safe and smart society represent key strategic areas of focus.

Green value chains are assigned a high priority in SINTEF's strategy and its spending of basic grant funding, and play an



increasingly growing role in our contract and public-funded research projects. SINTEF is closely involved with the future development of a number of renewable energy sources, batteries, electrolysis and hydrogen, as well as the capture and storage of CO₂ (CCS) from processes in which power from renewable sources is not a realistic option. We continue to conduct research into technologies to replace fossil with renewable raw materials in materials development, with circular economy technologies, and with climate change mitigation and adaptation systems for the transport and construction sectors. We are also among the global research centres that is best positioned to bring efficient BioCCS systems and other carbon-negative systems into commercial use.

The combination of cutting-edge skills in enabling technologies and domain know-how related to robust Norwegian industries and other areas of society is of key importance to most Norwegian businesses. New technology is of crucial importance to the development of wealth creation and solutions linked to the key social challenges facing Norway today. SINTEF is helping to ensure that its clients can boost their profitability by means of efficient processes and new technologies that can create new products and growth in new markets, as well as improve public services.

SINTEF assigns high priority to the enhanced servicing of start-up businesses and small and medium-sized enterprises (SMEs). In recent years, SINTEF has established a presence in many parts of Norway and has entered into closer working relations with a variety of competent industrial owners and clusters. This offers

us new opportunities linked to regional R&D activities, and better knowledge sharing with many businesses across the country.

Norway is experiencing a great demand for industrial restructuring. However, relatively speaking, private sector businesses continue to invest less in research and innovation per GNP than many other OECD countries. This is why it is important for wider society to increase its investment in business-focused research. Such research is, to great extent, reliant on risk alleviation in the public sector. The techno-industrial research institutes are currently working closely with the business community and are playing a key role in the Norwegian research and innovation system. In order to be able to contribute even more effectively to the restructuring process, SINTEF recommends that basic grant funding should be increased and that conditions linked to participation in the EU's research programmes must be made adequate and predictable.

The Board would like to thank all of SINTEF's employees and research partners for their efforts and co-operation in 2020. We also wish to thank all the co-owners of our subsidiaries, as well as all of the 64 representatives from the business community and community leaders who participate in SINTEF's many Boards and councils.

Trondheim, 24 March 2021



Walter Qvam
Board Chair



Marit Reitan



Tor Grande



Hanne Refsholt



Maria Bratsberg Gellein



Arne Birkeland



Ole Swang



Kristin Misund



Bård Myhre



Alexandra Bech Gjør
CEO

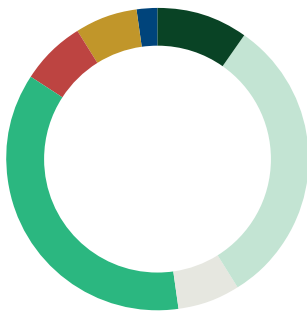
Financial results 2020



Key figures 2020

Revenue sources

(% of gross operating revenues)



● RCN basic grant funding	10%
● RCN project revenues	32%
● Public sector agencies	7%
● Norwegian business	37%
● International revenues	7%
● EU project revenues	7%
● Other revenues	2%

Employees

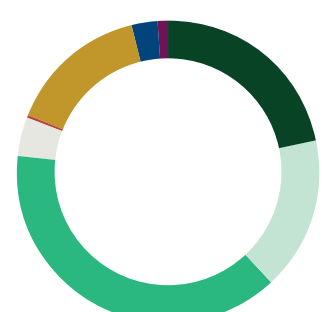


● Administrative	256
● Technical personnel	97
● Engineers	161
● Research scientists	1 494 ¹

¹ 923 of these hold doctoral degrees

Publications

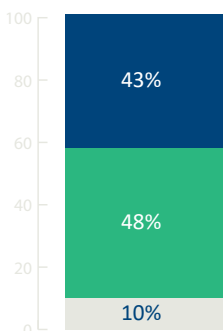
(incl. dissemination)



● Scientific articles in periodicals, series or anthologies	1126
● Scientific monographs	2
● Scientific presentations/lectures and posters	834
● Reports	1986
● Popular scientific articles and presentations	224
● Technical manuals, textbooks, etc.	16
● Media contributions (interviews, feature articles, presentations)	763
● Blogs and information materials	145
● Multimedia products (podcasts/videos)	51

Distribution of revenues

acc. to . project portfolio (%)

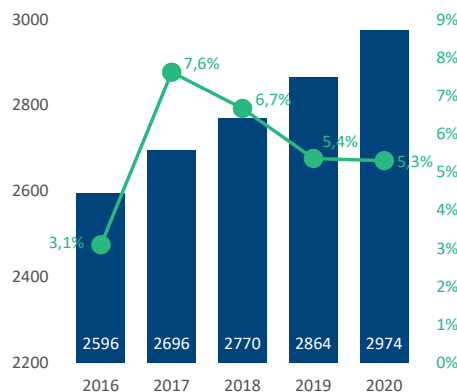


● Basic grant funding	10%
● Collaboration research	48%
● Contract research	43%

Net operating revenues | Net operating margin

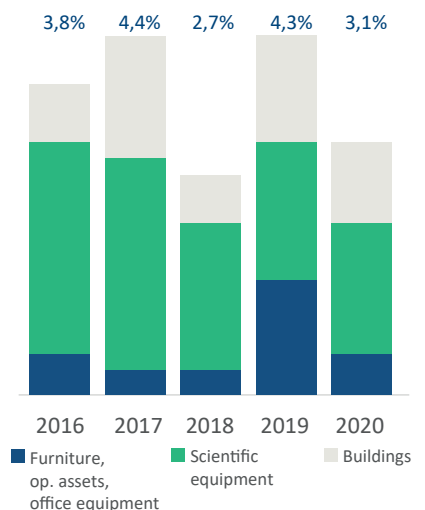
(MNOK)

(%)



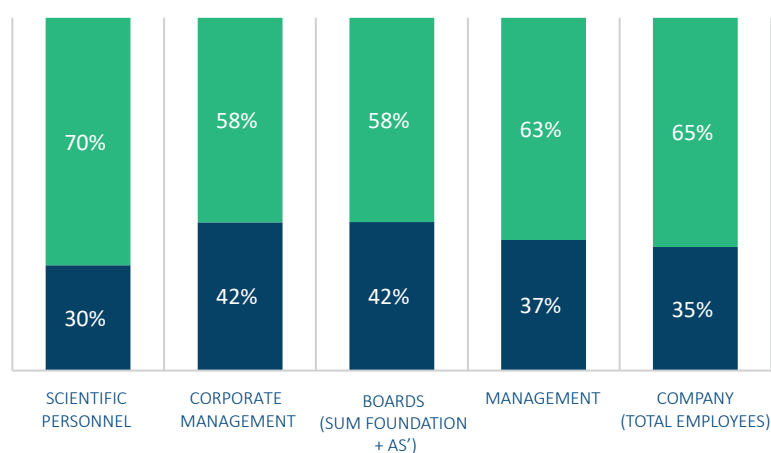
Investments

Scientific equipment and buildings (% of net operating revenues)



GENDER EQUALITY

 %- of women
  %- of men



Key financial figures MNOK

FINANCIAL RESULT	2016	2017	2018	2019	2020
Gross operating revenues	3 147	3 239	3 258	3 483	3 399
Net operating revenues	2 596	2 696	2 770	2 864	2 974
Operating profit	80	206	185	153	158
Financial revenues	52	51	39	50	62
Financial expenditures	35	22	22	8	46
Profit/loss before tax and extraordinary items	97	234	201	195	174
Annual profit/loss	56	169	143	161	145
BALANCE					
Non-current assets	1 300	1 243	1 201	1 250	1 215
Current assets	2 322	2 897	3 052	3 358	3 912
Total assets	3 622	4 140	4 254	4 608	5 127
Equity	2 178	2 348	2 514	2 667	2 812
Long-term liabilities	52	52	47	44	34
Short-term liabilities	1 392	1 740	1 693	1 897	2 282
Liabilities	1 444	1 792	1 740	1 941	2 316
Total liabilities and shareholders' equity	3 622	4 140	4 254	4 608	5 127
PROFITABILITY					
Operating margin (%)	3.1	7.6	6.7	5.4	5.3
Total return on investment (%)	3.6	6.6	5.3	4.6	4.5
Return on equity (%)	4.5	10.3	8.3	7.5	6.4
LIQUIDITY					
Net cash flows from operational activities (A)	193	549	356	466	653
Working capital ratio (1)	1.7	1.7	1.8	1.8	1.7
CAPITAL ADEQUACY					
Equity (%)	60	57	59	58	55
Operative working capital	929	1 157	1 359	1 461	1 631

Annual Accounts 2020

Profit and loss account

Figures in NOK 1000

THE SINTEF FOUNDATION			SINTEF	
2019	2020	NOTE	2020	2019
OPERATING REVENUES AND EXPENDITURES				
0	0		2 923 019	3 124 611
0	0		370 598	265 642
0	0		5 746	0
298 355	305 073		99 597	93 066
298 355	305 073	1,2	3 398 959	3 483 319
0	0		425 049	618 839
298 355	305 073		2 973 911	2 864 480
91 789	83 388	3	2 066 193	2 010 914
28 828	30 944	4,5	127 888	118 254
0	0	4.5	4 375	0
169 477	179 475	2,3,5	617 655	581 856
290 094	293 807		2 816 112	2 711 024
8 261	11 266		157 799	153 455
FINANCIAL REVENUES AND EXPENDITURES				
115 186	99 882	7	-14 570	-12 692
7 220	2 963		21 253	33 023
4 164	7 744	2	0	0
4 807	8 100		26 186	15 869
5 223	13 121	8	29 302	14 240
-8	-42		-1 149	-1 204
-19	-12 758		-44 823	-7 273
136 573	119 011		16 198	41 963
144 834	130 277		173 997	195 419
4 826	2 689	14	29 472	33 938
140 008	127 589		144 526	161 480
			17 220	21 023
			127 306	140 457
ALLOCATIONS				
115 186	106 856	11		
24 822	20 733	11		
140 008	127 589			
TOTAL ALLOCATIONS				

Balance

Figures in NOK 1000

THE SINTEF FOUNDATION				SINTEF	
2019	2020	NOTE	ASSETS	2020	2019
NON-CURRENT ASSETS					
INTANGIBLE ASSETS					
0	0		Research and development	1 681	2 372
0	0	4	Concessions, patents, licences, trademarks, etc.	43 403	60 628
101 904	99 880	14	Deferred tax assets	245 902	242 634
0	0	4	Goodwill/(- badwill)	-9 972	-3 732
101 904	99 880		Total intangible assets	281 015	301 902
FIXED ASSETS					
342 966	333 186	15	Unserviced sites, buildings and other real property	514 843	535 453
32 304	1 105		Building(s) under construction	58 111	52 033
0	0		Scientific equipment	187 925	195 774
2 204	2 798	15	Tangible operating assets, inventories, tools, office equipment, etc.	28 877	27 698
377 474	337 089	5	Total fixed assets	789 756	810 959
NON-CURRENT FINANCIAL ASSETS					
1 098 574	1 202 856	7	Investments in subsidiary companies	0	0
204 589	204 722	2, 10	Loans to companies in the same group	0	0
0	0	7	Equity in affiliated companies	95 453	85 400
0	0	10	Loans to affiliated companies	490	0
157	157	8	Investment in stocks and shares	6 394	6 405
0	0	13	Pension plan assets	3 536	3 207
37 258	35 824	10	Other long-term receivables	38 621	41 808
1 340 578	1 443 558		Total non-current financial assets	144 495	136 820
1 819 956	1 880 526		Total non-current assets	1 215 265	1 249 681
CURRENT ASSETS					
STOCKS					
0	0		Inventory of finished goods	14 551	14 316
0	0		Work in progress	498 205	534 737
0	0	6	Total goods	512 756	549 052
RECEIVABLES					
3 192	3 342		Client receivables	477 648	486 469
60 154	78 942	2	Consolidated current receivables	0	0
2 929	10 316		Other current receivables	68 894	64 625
66 275	92 601		Total receivables	546 543	551 094
INVESTMENTS					
145 917	167 037	8	Market-based bonds and other securities	403 072	352 110
0	0	8	Shares in portfolio companies/other financial instruments	16 184	26 791
145 917	167 037		Total investments	419 256	378 901
400 170	401 835	9.15	Bank deposits, cash, etc.	2 433 676	1 879 299
612 362	661 472		Total current assets	3 912 230	3 358 346
2 432 318	2 541 998		TOTAL ASSETS	5 127 495	4 608 027

Balance

Figures in NOK 1000

THE SINTEF FOUNDATION				SINTEF	
2019	2020	NOTE	ASSETS	2020	2019
EQUITY					
PAID-IN EQUITY					
71 350	71 350		Foundation's equity	71 350	71 350
71 350	71 350		Total paid-in equity	71 350	71 350
ACCRUED EQUITY					
929 558	1 036 414		Reserves	0	0
1 368 155	1 388 888		Other equity	2 425 409	2 297 712
2 297 713	2 425 302		Total retained earnings	2 425 409	2 297 712
			Minority interests	314 873	297 614
2 369 063	2 496 652	11	Total equity	2 811 632	2 666 676
LIABILITIES					
PROVISIONS FOR LIABILITIES					
0	0	13.15	Pension liabilities	25 949	30 984
0	0		Other provisions for obligations	7 595	12 046
0	0		Total provisions for liabilities	33 544	43 030
OTHER LONG-TERM LIABILITIES					
0	0	10,15	Debt to credit institutions	792	1 170
0	0		Total other long-term liabilities	792	1 170
SHORT-TERM LIABILITIES					
0	0	15	Debt to credit institutions	773	4 734
34 149	19 176		Accounts payable	195 997	209 403
-14	350	14	Current taxes	32 162	40 726
11 015	4 692		Tax withholdings and other public taxes/duties	208 541	187 886
0	0		Advance payments from clients	970 944	718 219
6 062	2 784	2	Current liabilities (Group)	0	0
12 044	18 344	12	Other current liabilities	873 110	736 185
63 255	45 347		Total current liabilities	2 281 529	1 897 152
63 255	45 347		Total liabilities	2 315 864	1 941 351
2 432 318	2 541 998		TOTAL EQUITY AND LIABILITIES	5 127 495	4 608 027

Cash flow analysis
Figures in NOK 1000

THE SINTEF FOUNDATION				SINTEF	
2019	2020	NOTE	ASSETS	2020	2019
CASH FLOWS FROM OPERATIONAL ACTIVITIES:					
144 834	130 277		Annual profit/loss before tax	173 997	195 419
-115 186	-99 882	7	Share of profit/loss in subsidiaries and affiliated companies	14 570	8 720
-104	-300	14	Tax paid during period	-41 040	-15 937
28 828	30 944	4.5	Ordinary depreciations	127 890	118 254
0	0	5	Write-downs of non-current assets	4 430	596
0	0	13	Pension expenditures without cash flow effect	-5 364	-1 387
0	-8 093		Proceeds/(losses) from sale of operating assets	-24 836	-30
-5 223	-12 612	8	Change in value of financial assets	-32 574	-14 240
0	0	6	Changes in inventories	-235	-4 142
548	-1 067	6	Changes in work in progress	36 532	5 569
1 295	-151		Changes in client receivables and advance payments from clients	262 589	-11 076
3 730	-14 972		Changes in accounts payable to suppliers	-13 693	47 402
39 266	-3 277	2	Changes in inter-Group transactions	0	0
-4 285	-6 343		Changes in other accruals	150 715	137 070
93 703	14 524		Net cash flow from operational activities	652 981	466 218
CASH FLOW FROM INVESTMENTS:					
0	0		Revenues from sales of fixed assets	5 701	-1 205
-50 201	-15 015		Purchases of fixed assets	-99 296	-131 108
0	0		Purchases of intangible assets	-505	0
0	5 536		Revenues from loan receivables, Group	0	0
0	0		Revenues from sales of non-current financial assets	0	172
-10 400	-4 814		Purchases of non-current financial assets	-7 617	-22 474
-60 601	-14 293		Net cash flow from investment activities	-101 717	-154 615
CASH FLOW FROM FINANCING ACTIVITIES:					
0	0		Payments on long-term liabilities to credit institutions	-378	-1 166
0	0		Net change in overdraft facility	-3 961	4 734
0	1 434		Receipts in long-term receivables	2 697	0
-5 788	0		Disbursements in long-term receivables	0	-4 860
0	0		Dividend payments	0	-931
0	0		Change in minority interests	0	3 697
-5 788	1 434		Net cash flow from financing activities	-1 642	1 474
27 314	1 665		Net change in bank deposits, cash, etc.	549 622	313 077
0	0		Cash disbursed/received on purchase/sale of enterprise	4 755	-23 960
372 856	400 170		Bank deposits, cash and similar reserves as of 01.01.	1 879 299	1 590 182
400 170	401 835		Bank deposits, cash and similar reserves as of 31.12.	2 433 676	1 879 299

SINTEF Community



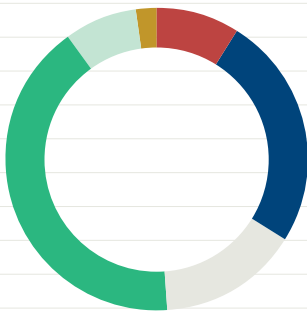
Photo by Shutterstock

SINTEF Community is a research institute dedicated to the sustainable development of buildings, infrastructure and mobility. We generate value for both our clients and wider society by means of research and development, research-based expert

consultancy, certification and knowledge dissemination. We offer specialist expertise in the fields of architecture, building and construction, water, transport and social economics. We develop future solutions for a sustainable society.

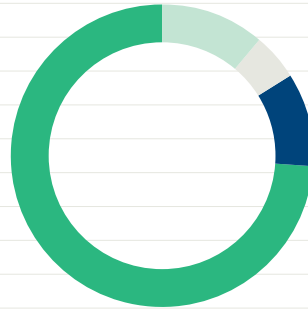
Revenue sources

(% of gross operating revenues)



- RCN basic grant funding 9%
- RCN project revenues 25%
- Public sector agencies 15%
- Norwegian business 41%
- International revenues 8%
- EU project revenues 2%

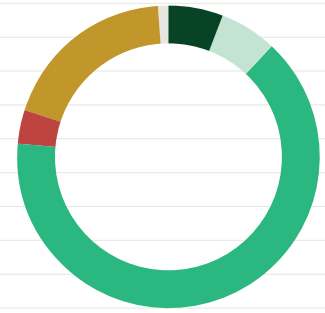
Employees



- Administrative 29
 - Technical personnel 14
 - Engineers 27
 - Research scientists 190¹
- ¹ 76 of these hold doctoral degrees

Publications

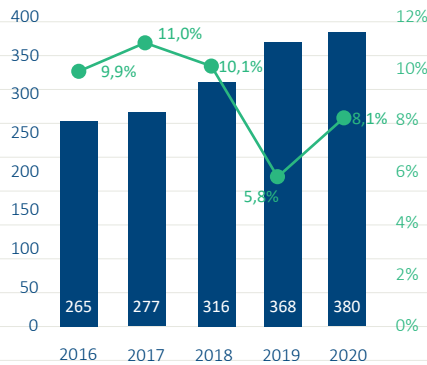
(incl. dissemination)



- Scientific articles in periodicals, series or anthologies 105
- Scientific presentations/lectures and posters 114
- Reports 1157
- Popular scientific articles and presentations 63
- Technical manuals, textbooks, etc. 2
- Media contributions (interviews, feature articles, presentations) 339
- Blogs and information materials 18

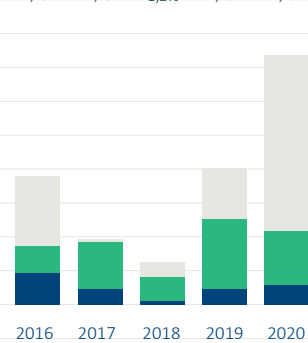
Net operating revenues (MNOK)

Net operating margin (%)



Investments

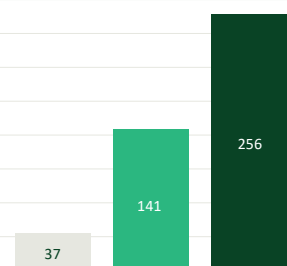
Scientific equipment and buildings
(% of net operating revenues)



- Buildings
- Scientific equipment
- Furniture, op. assets, office equipment

Project portfolio

(MNOK)



- Basic grant funding
- Collaboration research
- Contract research

SINTEF Industry



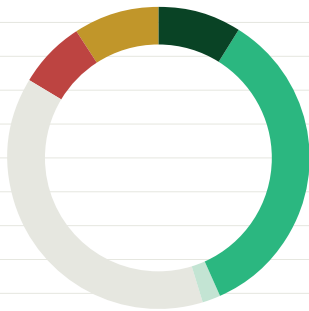
Photo by Shutterstock

SINTEF Industry is a contract-based research institute delivering research-based solutions and services that generate wealth for its clients both in Norway and overseas. Our multidisciplinary knowledge base and advanced laboratories enable us to

develop, in close collaboration with our clients and partners, technology and cross-disciplinary solutions within a wide range of technical and market segments.

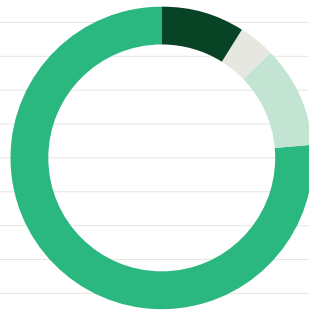
Revenue sources

(% of gross operating revenues)



● RCN basic grant funding	9%
● RCN project revenues	34%
● Public sector agencies	2%
● Norwegian business	38%
● International revenues	7%
● EU project revenues	9%

Employees

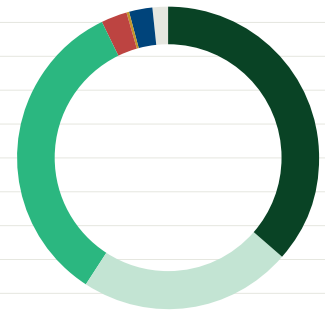


● Administrative	43
● Technical personnel	19
● Engineers	54
● Research scientists	387 ¹

¹ 287 of these hold doctoral degrees

Publications

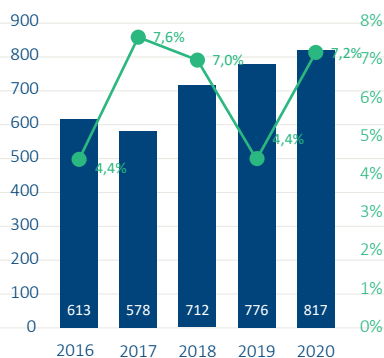
(incl. dissemination)



● Scientific articles in periodicals, series or anthologies	311
● Scientific presentations/lectures and posters	195
● Reports	285
● Popular scientific articles and presentations	24
● Technical manuals, textbooks, etc.	2
● Media contributions (interviews, feature articles, presentations)	23
● Blogs and information materials	12

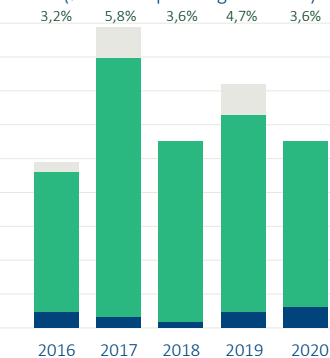
Net operating revenues (MNOK)

Net operating margin (%)



Investments

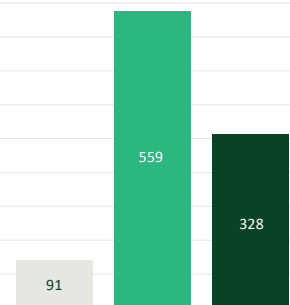
Scientific equipment and buildings
(% of net operating revenues)



● Buildings
● Scientific equipment
● Furniture, op. assets, office equipment

Project portfolio

(MNOK)



● Basic grant funding
● Collaboration research
● Contract research

SINTEF Digital



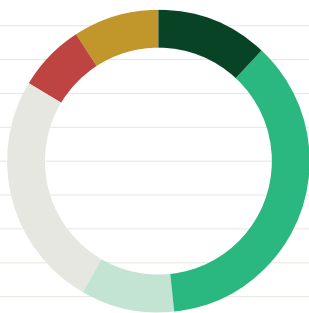
Photo by Shutterstock

SINTEF Digital carries out research and innovation in the fields of digital technology and the technology-oriented social sciences. Our multidisciplinary expertise is applied across all sectors, and

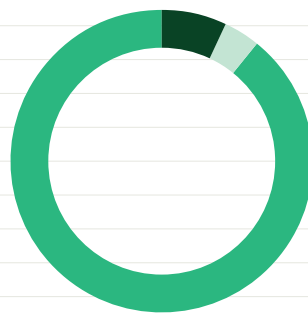
helps our clients to address and exploit the opportunities inherent in digitalisation and the digital transformation.

Revenue sources

(% of gross operating revenues)

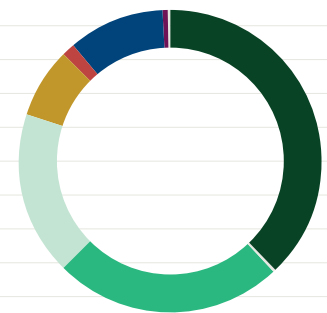


Employees



Publications

(incl. dissemination)



- RCN basic grant funding 12%
- RCN project revenues 36%
- Public sector agencies 10%
- Norwegian business 25%
- International revenues 7%
- EU project revenues 9%

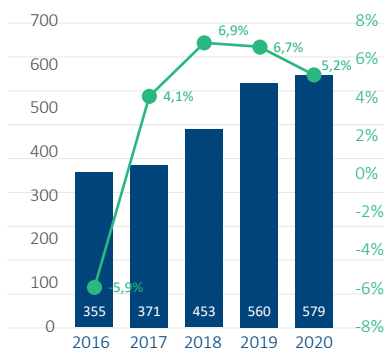
- Administrative 33
- Technical personnel 2
- Engineers 16
- Research scientists 367¹

¹ 226 of these hold doctoral degrees

- Scientific articles in periodicals, series or anthologies 276
- Scientific monographs 2
- Scientific presentations/lectures and posters 179
- Reports 129
- Popular scientific articles and presentations 54
- Technical manuals, textbooks, etc. 9
- Media contributions (interviews, feature articles, presentations) 76
- Blogs and information materials 4
- Multimedia products (podcasts/videos) 1

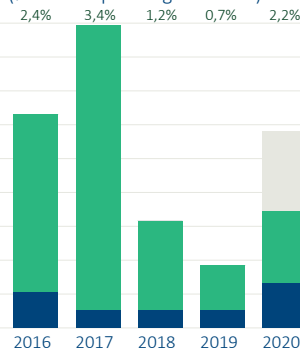
Net operating revenues (MNOK)

Net operating margin (%)



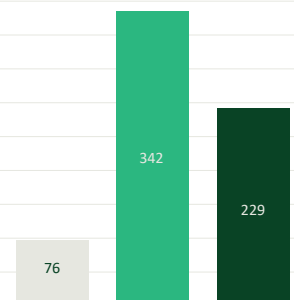
Investments

Scientific equipment and buildings
(% of net operating revenues)



Project portfolio

(MNOK)



- Buildings
- Scientific equipment
- Furniture, op. assets, office equipment

- Basic grant funding
- Collaboration research
- Contract research

SINTEF Ocean AS

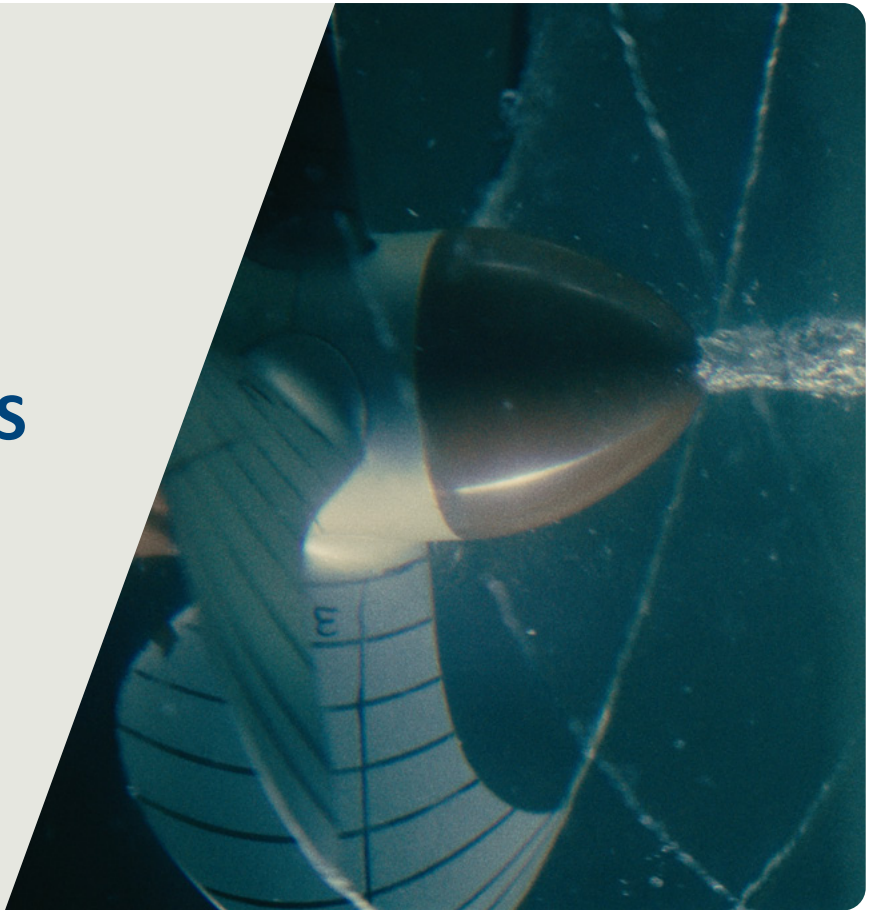


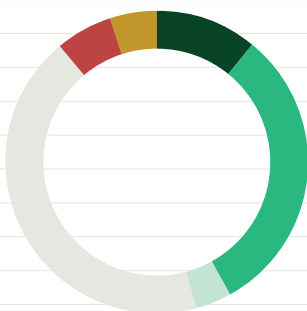
Photo by Tyd/SINTEF

SINTEF Ocean carries on research and innovation linked to ocean space on behalf of Norwegian and international industrial clients in the maritime, offshore petroleum, fishing and aquaculture sectors. The institute also has one of the world's leading research groups in the field of marine environmental technology.

Our ambition is to maintain Norway's leading position in marine technology and biomarine research by combining outstanding professional research and our position at the global cutting edge in the fields of analysis and concept development.

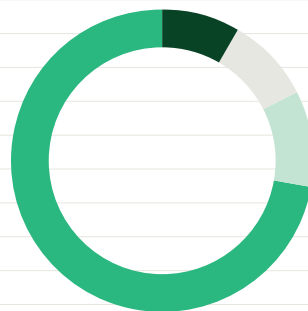
Revenue sources

(% of gross operating revenues)



● RCN basic grant funding	11%
● RCN project revenues	31%
● Public sector agencies	5%
● Norwegian business	43%
● International revenues	5%
● EU project revenues	5%

Employees

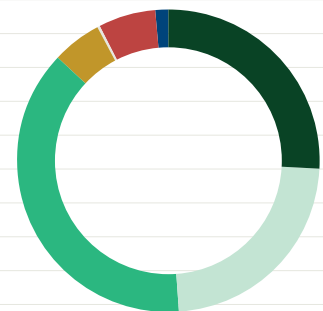


● Administrative	30
● Technical personnel	32
● Engineers	35
● Research scientists	252 ¹

¹ 144 of these hold doctoral degrees

Publications

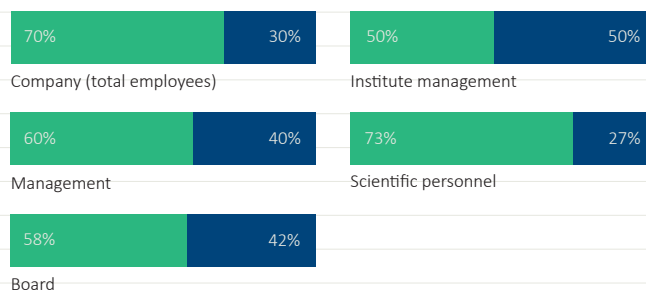
(incl. dissemination)



● Scientific articles in periodicals, series or anthologies	195
● Scientific presentations/lectures and posters	174
● Reports	286
● Popular scientific articles and presentations	40
● Technical manuals, textbooks, etc.	1
● Media contributions (interviews, feature articles, presentations)	47
● Blogs and information materials	9

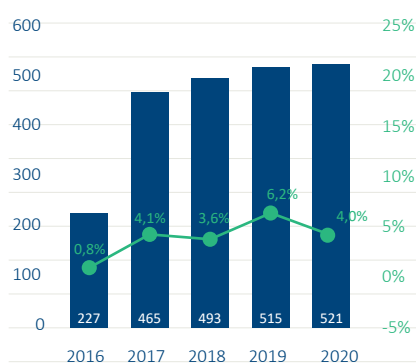
Equal opportunity

👤 % women | 👤 % men



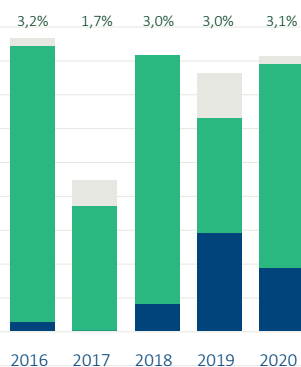
Net operating revenues (MNOK)

Net operating margin (%)



Investments

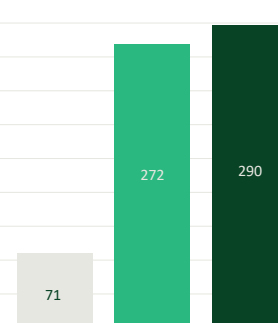
Scientific equipment and buildings
(% of net operating revenues)



- Buildings
- Scientific equipment
- Furniture, op. assets, office equipment

Project portfolio

(MNOK)



- Basic grant funding
- Collaboration research
- Contract research

Key financial figures

MNOK

FINANCIAL RESULT	2016	2017	2018	2019	2020
Gross operating revenues	279	602	629	670	633
Net operating revenues	227	465	493	515	521
Operating profit	2	19	18	32	21
Annual profit/loss	1	18	19	34	29
BALANCE					
Non-current assets	88	177	185	152	152
Current assets	262	581	629	709	775
Total assets	369	758	814	860	927
Equity	223	385	404	438	467
Liabilities	127	373	410	422	460
Total liabilities and shareholders' equity	369	758	814	860	927
PROFITABILITY					
Operating margin (%)	0.8 %	4.1 %	3.6 %	6.2 %	4.0 %
Total return on investment (%)	3.8 %	5.5 %	3.8 %	5.4 %	9.8 %
Return on equity (%)	1.7 %	8.4 %	6.6 %	9.2 %	7.3 %
LIQUIDITY					
Net cash flow from operational activities	41	118	40	109	80
Working capital ratio (1)	2.2	1.6	1.6	1.7	1.7
CAPITAL ADEQUACY					
Equity (%)	60.6 %	50.8 %	49.6 %	50.9 %	50.3 %
Operative working capital	141	226	237	304	328

SINTEF Energy Research



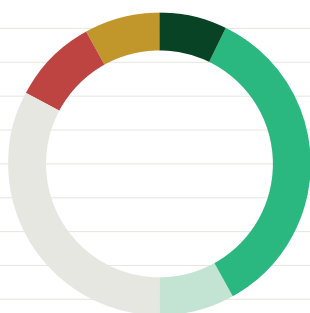
Photo by Geir Mogeny SINTEF

SINTEF Energy Research’s objective is to shape the energy systems of the future. This we do from three main perspectives:

- Norway: supply security and competitiveness
- Europe: innovation that contributes towards achieving energy and climate change targets
- Global: sustainable energy systems

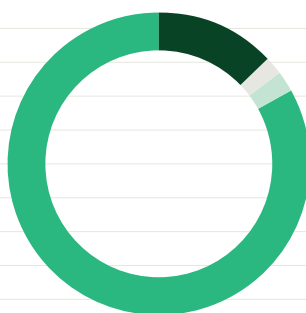
SINTEF Energy Research’s strategic areas of focus include energy efficiency, CCS, hydropower, offshore wind power, bioenergy, transmission, smart grids, offshore energy systems, eco-friendly transport and hydrogen. Research in our areas of focus is currently contributing towards achieving tomorrow’s sustainable energy systems.

Revenue sources
(% of gross operating revenues)



● RCN basic grant funding	7%
● RCN project revenues	35%
● Public sector agencies	8%
● Norwegian business	33%
● International revenues	9%
● EU project revenues	8%

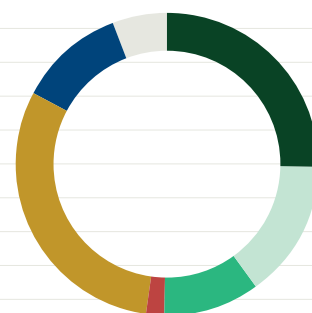
Employees



● Administrative	35
● Technical personnel	5
● Engineers	6
● Research scientists	223 ¹

¹ 146 of these hold doctoral degrees

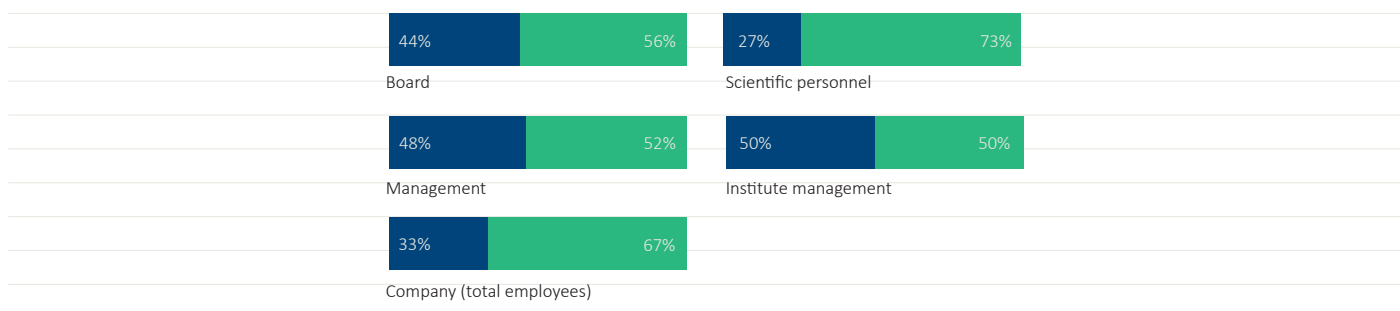
Publications
(incl. dissemination)



● Scientific articles in periodicals, series or anthologies	226
● Scientific presentations/lectures and posters	133
● Reports	91
● Popular scientific articles and presentations	17
● Media contributions (interviews, feature articles, presentations)	273
● Blogs and information materials	102
● Multimedia products (podcasts/videos)	50

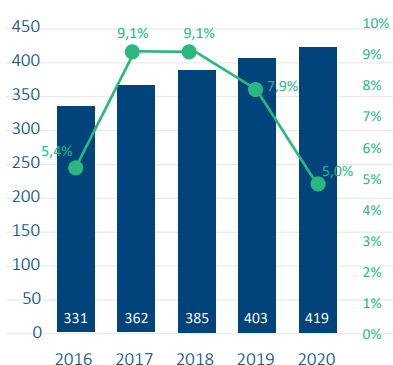
Equal opportunity

👤 % women | 🧑 % men



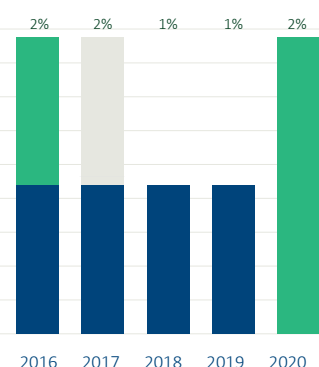
Net operating revenues (MNOK)

Net operating margin (%)



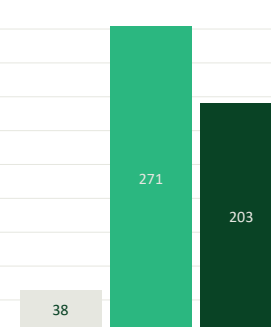
Investments

Scientific equipment and buildings
(% of net operating revenues)



Project portfolio

(MNOK)



Key financial figures

MNOK

- Buildings
- Scientific equipment
- Furniture, op. assets, office equipment
- Basic grant funding
- Collaboration research
- Contract research

FINANCIAL RESULT	2016	2017	2018	2019	2020
Gross operating revenues	439	438	494	552	512
Net operating revenues	331	362	385	403	419
Operating profit	18	33	35	32	21
Annual profit/loss	14	28	28	32	23
BALANCE					
Non-current assets	237	221	210	202	200
Current assets	288	384	408	470	568
Total assets	524	605	618	672	768
Equity	339	368	396	428	451
Liabilities	185	237	222	244	317
Total liabilities and shareholders' equity	524	605	618	672	768
PROFITABILITY					
Operating margin (%)	5.4 %	9.1 %	9.1 %	7.9 %	5.0 %
Total return on investment (%)	4.6 %	7.0 %	6.5 %	6.4 %	3.8 %
Return on equity (%)	6.1 %	10.6 %	10.0 %	10.1 %	6.3 %
LIQUIDITY					
Net cash flow from operational activities	33	98	14	63	109
Working capital ratio (1)	1.6	1.6	1.8	1.9	1.8
CAPITAL ADEQUACY					
Equity (%)	64.7%	60.8%	64.1%	63.7%	58.7%
Operative working capital	104	148	187	227	252

SINTEF Manufacturing AS

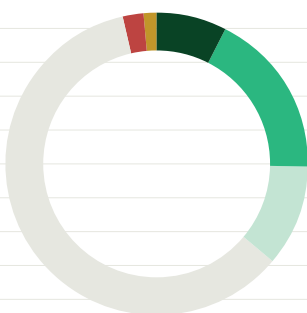


Photo by Shutterstock

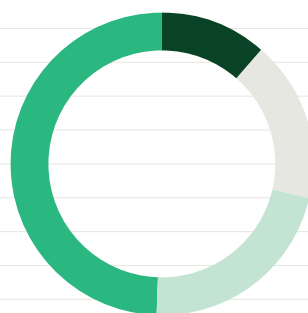
SINTEF Manufacturing is Norway's leading expert centre in research into manufacturing. Our ambition is to develop sustainable and effective solutions that provide competitive benefits for the Norwegian manufacturing sector.

We deliver specialist expertise in the fields of automated production, product and production development, 'lean' and value chain management, materials technology, and laboratory and workshop services.

Revenue sources
(% of gross operating revenues)

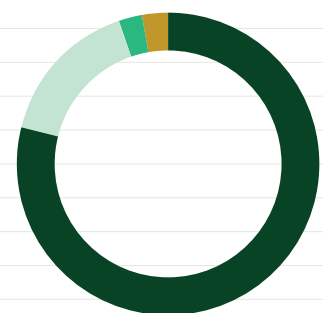


Employees



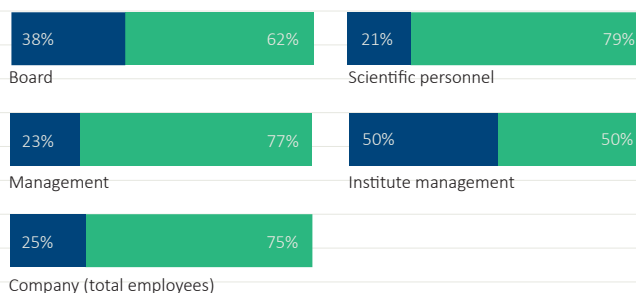
¹ 23 of these hold doctoral degrees

Publications
(incl. dissemination)



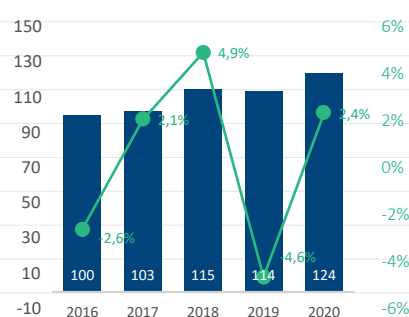
Equal opportunity

👤 % women | 👤 % men



Net operating revenues (MNOK)

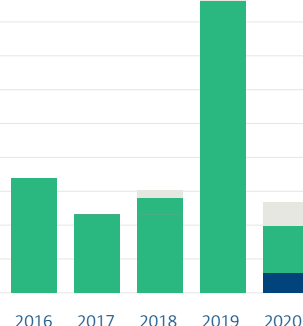
Net operating margin (%)



Investments

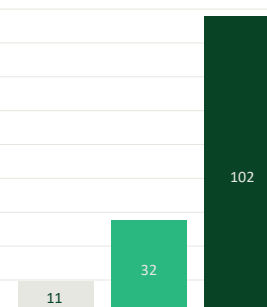
Scientific equipment and buildings
(% of net operating revenues)

2.9% 2.0% 2.6% 7.9% 2.3%



Project portfolio

(MNOK)



- Buildings
- Scientific equipment
- Furniture, op. assets, office equipment

- Basic grant funding
- Collaboration research
- Contract research

Key financial figures

MNOK

FINANCIAL RESULT	2016	2017	2018	2019	2020
Gross operating revenues	128	132	146	145	145
Net operating revenues	100	103	115	114	124
Operating profit	-3	2	6	-5	3
Annual profit/loss	-2	1	4	-4	0
BALANCE					
Non-current assets	14	13	12	20	17
Current assets	47	53	73	53	89
Total assets	60	66	85	73	106
Equity	16	17	21	17	17
Liabilities	45	48	64	56	89
Total liabilities and shareholders' equity	60	66	85	73	106
PROFITABILITY					
Operating margin (%)	-2.6%	2.1%	4.9%	-4.6%	2.4%
Total return on investment (%)	-4.2%	3.4%	7.6%	-6.7%	3.6%
Return on equity (%)	-4.9%	7.2%	7.0%	-6.6%	1.0%
LIQUIDITY					
Net cash flows from operational activities (A)	3	1	2	-14	49
Working capital ratio (1)	1.2	1.2	1.1	1.0	1.0
CAPITAL ADEQUACY					
Equity (%)	26.2%	26.2%	24.8%	23.3%	15.7%
Operative working capital	9	10	9	0	3



SINTEF

Technology for a better society

www.sintef.no