SINTEF

SUSTAINABLE DEVELOPMENT GOALS

SINTEF supports the Sustainable Development Goals

Integrated Annual Report 2024

Technology for a better society

Letter from the CEO

Technology for a better society for 75 years

January 2025 marked 75 years since the SINTEF research foundation was established. What started off as a small contract office with a staff of three people for the Norwegian Institute of Technology, has grown into one of Europe's largest and most renowned contract research institutes for technical-industrial research.

Photo: Karoline Ravndal Lorentzen/SINTEF

There is good reason to be proud of this development, which has been extensively documented in the book "The Technology Builders (Teknologibyggerne): SINTEF 1950–2025", released in connection with the Anniversary.

After 75 years, we can proclaim that SINTEF is still performing well: We achieve high scores on knowledge transfer to the business sector, and we have succeeded with a significant green transition in our own project portfolio in recent years. We acquire market share, have great success in the Research Council of Norway's programmes, and are the Norwegian actor that clearly acquires the most knowledge and project funding from the EU's framework programme. We commercialise attractive technology, and SINTEF is consistently ranked as a very attractive employer with a solid reputation.

Despite having achieved a good position, SINTEF still has a desire to contribute more to developing solutions to what is a rather formidable need for restructuring in Norway and Europe. We are well aware of the alarming report on Europe's competitiveness that was presented by Mario Draghi, former Prime Minister of Italy and President of the European Central Bank. The most important measure recommended in the report is to close the innovation gap. The steps that need to be taken in order to achieve this include investing more in research and innovation, and fostering new high-tech businesses based on, among other things, artificial intelligence, that generate greater growth, value and productivity than the current established European business sector.

These are issues that are also of vital importance to Norway, where less is invested in research and development (R&D) than in many other European countries. Business sector investments in particular are lower in Norway than, for example, in our closest neighbouring countries.

As the actor with the largest and most extensive research collaboration with Norwegian companies, we at SINTEF are attempting to help change this picture along two axes: Partly by further strengthening our own work with clients, to make research more business-critical

and attractive to invest in, and partly by contributing to government policies for restructuring, through fact-based analyses and assessments and advice from daily collaboration with more than 3,000 clients in more than 6,000 projects annually.

In our dialogue with the government authorities, SINTEF recommends that the state should shift a larger share of its R&D funding towards schemes organised by the Research Council of Norway, which involve the business sector itself investing and collaborating with Norwegian research institutions. Our observation is that companies want to invest more in research for innovation, the green transition and digitalisation. Despite their interest, they consider the risk of acting independently too high. As SINTEF sees it, the pace of innovation is being slowed by the fact that the state has reduced its contributions to the Research Council of Norway's “cost-sharing team” for industry-oriented research over 15 years, despite the state's overall R&D investments having increased. The national budget for 2025 shows that almost 70 per cent of companies wishing to invest in projects through the scheme for innovation projects for the business sector in 2023 were rejected, and that around half of the rejected applications were of high quality and represented significant potential for restructuring and value creation.

At a strategic and overarching level, our aim is to contribute to a broad discussion on how the state's ownership interests in the Norwegian business sector can contribute to a more long-term perspective for R&D and access to capital for high-tech start-ups in the early seed phase that is in line with the role played by the largest business owners in our neighbouring countries.

War, geopolitical tensions and new political regimes are creating uncertainty, and it has become obvious that Europe needs to invest more in strengthening its own security. For decades SINTEF has conducted research focussed on security and defence, and we are committed to there being good interaction between defence and civil society. Both civil research groups and the high-tech supplier industry need to be key resources for Norwegian security, preparedness and productivity.

SINTEF’s corporate strategy, which was revised in 2024, is a strategy for sustainable development. We target societal benefit and competitiveness by realising the UN Sustainable Development Goals (SDGs). This report provides examples of the contribution made by our research, of ethical dilemmas and an overview of how we work to strengthen sustainability in our own operations.

In many ways, the present-day challenges surpass those that characterised society 75 years ago. Hypercomplex circumstances require solutions that are based on knowledge and research. This is where SINTEF will make a contribution, including for the next 75 years.

Alexandra Bech Gjørv, CEO

Contents

Photo: Geir Mogen/SINTEF

About the report

This is SINTEF's Integrated Annual Report, which was published in Norwegian in May 2025, and in English in July 2025. The report covers 2024. The report presents our financial performance and our corporate governance. It highlights those aspects of our activities that we believe have the greatest impacts on society, both through our research and innovation in collaboration with clients and partners and through our own operations.

SINTEF has published an annual sustainability report since 2019. In 2023 we integrated the Annual and Sustainability Report for 2022. We take a systematic approach to improving our reporting based on our own ambitions, the external expectations of clients, partners and society at large, and future requirements and standards.

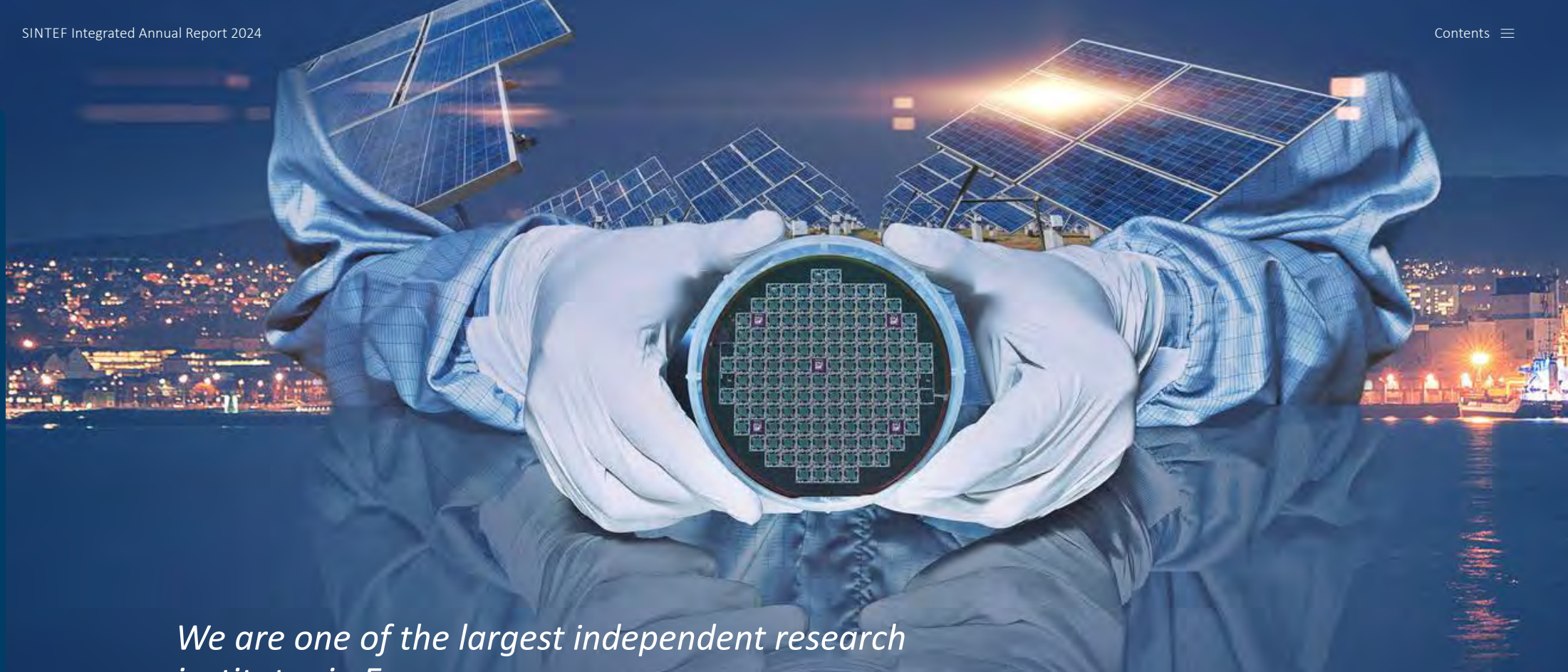
During 2025 we will work on developing the sustainability reporting in accordance with the European Sustainability Reporting Standards (ESRS), in line with the EU's Corporate Sustainability Reporting Directive (CSRD). SINTEF is in the process of raising the reporting to new standards. This report, for 2024, is an "interim report", in which we start by reflecting new standards (ESRS) for how we report sustainability in our own operations (Chapter 5).

For further information on our reporting, see Chapter 5.1 General information (Reporting basis) and 'Additional details regarding the report.

All of the figures in the report are from 2024, unless otherwise stated.

Artificial intelligence was partly used for language refinement of the report.

SINTEF is a member of the UN Global Compact and supports the UN Sustainable Development Goals. The contents of this report have not been presented to the UN for approval and do not reflect the views of the UN, its representatives or member states.



We are one of the largest independent research institutes in Europe

TURNOVER

NOK 4.4 billion

EMPLOYEES

2,200

PROJECTS

6,300

CLIENTS

3,300

INTERNATIONAL TURNOVER

NOK 934 million

NATIONALITIES

80

PUBLICATIONS (INCL. DISSEMINATION)

5,900

Photo: Geir Mogen/SINTEF

Key metrics

	2024	2023
Contribute to the societal benefits and competitiveness by realising the UN Sustainable Development Goals (SDGs)		
Gross turnover (NOKm)	4,397	4,205
Co-create with clients and link the research front to their needs		
Number of clients	3,300	3,300
Turnover- contract research (NOKm)	1,400	1,450
Foster outstanding research environments and infrastructure and create new businesses		
Publications per research scientist per year	0.8	0.8
Investments lab/infrastructure (NOKm)	86	89
Commercialisation	1	4
Investments in start-ups (NOKm)	669	411
Develop SINTEF as an attractive, learning and efficient organisation		
Number of employees	2,186	2,170
Turnover	5.8 %	9.0 %
Proportion of women (all employees)	38 %	37 %
Total recordable injuries frequency – H2/TRIF [1)]	3.1	3.1
Build trust and financial flexibility as an independent research institute		
Net operating income (NOKm)	3,809	3,617
Operating margin	3.1 %	2.8 %
Profit margin	7.1 %	6.7 %
Return on equity	5.9 %	5.7 %
Breach of compliance	0	0
Overall impression of SINTEF (reputation and brand) [2)]	61 %	62 %
Climate footprint (total emissions in tCO_2e) [3)]	24,473	24,627
Property investments (NOKm)	121	231

1) TRIF = The sum total of the number of injuries resulting in absences and other personal injuries (excluding injuries requiring first aid) per million hours worked.
2) Source: IPSOS
3) Source: MoreScope

Chapter 1

This is SINTEF

Photo: Sune Eriksen/Tinagent/Innovation Norway

1.1 An independent research institute

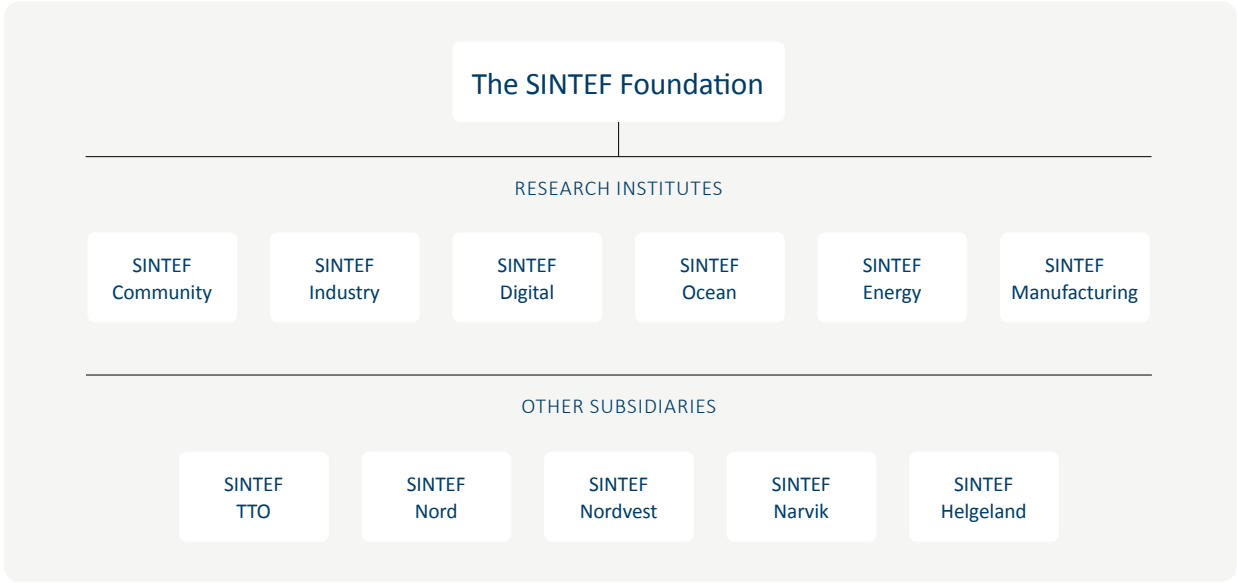
We are the largest independent research institute in Norway and one of the largest in Europe. SINTEF carries out research and innovation projects for and with industry in Norway and abroad, with an emphasis on applied research. Since 1950, our research has produced solutions and innovation for society and clients around the world. SINTEF is a not-for-profit foundation with no owners. We are organised as a group of six research institutes, as described in more detail on the following pages. In addition to these come, SINTEF Nord, SINTEF Nordvest, SINTEF Narvik and SINTEF Helgeland. SINTEF TTO (Technology Transfer Office) operates our commercialisation business and manages ownership in start-ups.

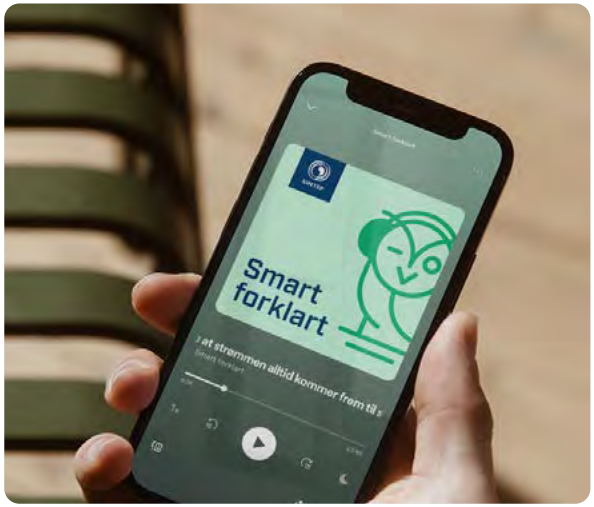
SINTEF carries out research as a partner of industry and the public sector and is one of the largest institutes for contract research in Europe. We are by far the largest Norwegian participant in EU research programmes.

Our head office is in Trondheim, where most of our employees are based. We also have substantial activities in Oslo and Raufoss, plus a presence across Norway and an office in Brussels. We work with a number of research partners, especially the Norwegian University of Science and Technology (NTNU).

SINTEF offers world-leading laboratory and testing facilities within a wide range of technology areas. In collaboration with clients and other partners, these are used for research, as well as projects involving technology verification, prototype development and claims services. The laboratories are also an important contribution to Norway's national research infrastructure.

SINTEF is a broad, multidisciplinary research institute with internationally leading expertise within natural sciences, technology (including construction and civil engineering disciplines), as well as health and social sciences, from the ocean space to outer space. Our research is intended to facilitate the transition to a sustainable society.





You can get glimpses of SINTEF's current research by listening to our podcast, 'Smart Forklart'. You risk becoming a little wiser and gaining a little bit more faith in the future.

Our institute structure ensures research strength and market relevance

Six research institutes carry out SINTEF's research activities and run our laboratories.
Three of the research institutes are organised in the wholly owned subsidiary, SINTEF AS.

SINTEF Industry

SINTEF Industry is facilitating the sustainable industry of the future. In collaboration with clients and partners, we develop solutions that have a major impact on society. We achieve this through excellent scientific research, where we use multidisciplinary expertise, with an emphasis on materials, chemistry, geosciences, biotechnology and industrial economics – advanced physical and digital laboratories. This has contributed to new solutions within areas such as the circular economy, batteries, hydrogen, CO_2 management, material technology, nanotechnology and process technology, medicine, solar, wind, biotechnology, metal production, energy production, as well as analyses of sustainability, economic and technical factors. This results in climate-neutral production in existing and new value chains for products and services that a sustainable society needs.

SINTEF Digital

SINTEF Digital works on research and innovation within digital technologies, technology-oriented social sciences and health. We have delivered everything from the first Norwegian-built computer and early research on AI to groundbreaking sensor technology. We have national cybersecurity expertise and deliver world-leading 3D cameras for industry. Our research-based knowledge of digitalisation and the digital transition strengthens industry and the public sector. Our research also contributes the best solutions for ensuring tomorrow's health sector is sustainable. Our multidisciplinary knowledge base is used across all sectors, and our aim is to help SINTEF's clients move into the digital green transition with both greater sustainability and competitiveness.

SINTEF Community

SINTEF Community works on the sustainable development of buildings, infrastructure and mobility. We create value for our clients and society through research and development, research-based consulting, certification and knowledge dissemination. Both the Building Research Series (Byggforskserien) and the Wet Room Standard are important products for the construction industry. We have leading expertise in future mobility, climate change adaptation, energy and zero emission solutions for buildings and areas, architecture and area development, zero emission construction sites, construction materials, structures and water. We use this expertise to develop tomorrow's solutions for the built society in which people meet, live and work, and in which we travel as we move from one place to another. By tackling climate change, the circular economy and digitalisation, we want to be at the forefront of the development of a sustainable society.

The other three research institutes are organised as limited liability companies in which SINTEF holds the majority of shares. These entities also include additional stakeholders beyond SINTEF. None of the owners of these companies can take out dividends. All surpluses, including from these, are reinvested in our core operations.

SINTEF Energy

SINTEF Energy is an applied research institute dedicated to creating innovative energy solutions. We offer leading research-based knowledge and infrastructure, nationally and internationally, in order to provide clients with solutions and services that add value and strengthen their competitiveness. Our research should contribute to energy solutions with high security of supply and a low carbon footprint, while also being efficient and profitable. SINTEF Energy is working on energy solutions that balance the need for energy and nature considerations. Our strategic priorities are smart grids, power transmission, integrated energy systems, offshore wind, energy efficiency, CCS, hydropower, bioenergy, hydrogen and zero emission transport.

SINTEF Ocean

SINTEF Ocean is a strong driving force in the development of Norwegian ocean industries and works for Norwegian and international clients. Our most important activities are industry-oriented projects along the entire biomarine and maritime value chain, as well as in the energy sector, climate and environment, food security, security and preparedness. Norway is an important maritime nation, with one of the world's longest coastlines. Many of the societal challenges of our time can be solved through sustainable utilisation of the seas and oceans, which is why we are developing these solutions together with the business sector and society. This is how we contribute to transition in areas where Norway is a leader. At the same time, we are helping to solve important national and global challenges. This requires knowledge and innovative solutions in our market areas, which are food, energy, the environment and shipping.

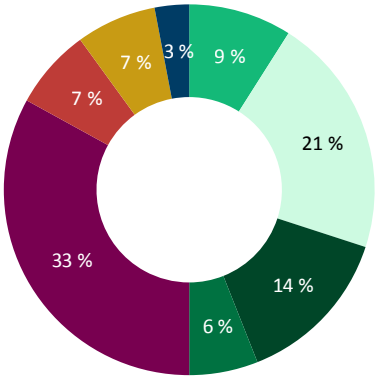
SINTEF Manufacturing

SINTEF Manufacturing creates sustainable and competitive production solutions for the future in collaboration with our clients. Our ambition is to be a world leader in industry-oriented research in the area of manufacturing technology. We have leading expertise within advanced materials technology, robotics and automation, productivity and value chains, 3D printing, industry 4.0 and the circular economy in relation to industrial production. We create value for clients and society through research, research-based advice and advanced laboratory and workshop services. We collaborate with clients in various industries and sectors in order to contribute to a digital green transition, and thereby support the SDGs.

1.2 Key figures 2024

More than 90 per cent of income is secured in open competitions

Sources of funding as a percentage of gross operating income

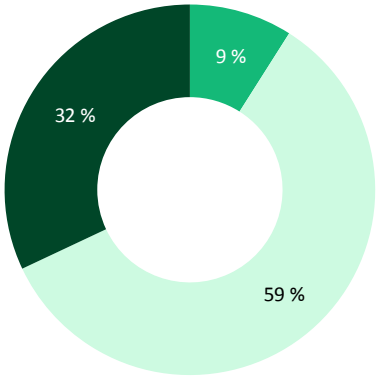


- Basic grant
- Research Council of Norway
- EU
- Retur-EU
- Norwegian industry
- Norwegian public sector clients
- International clients
- Other

Source: SINTEF

We have a portfolio of collaborative research and contract research

Portfolio type

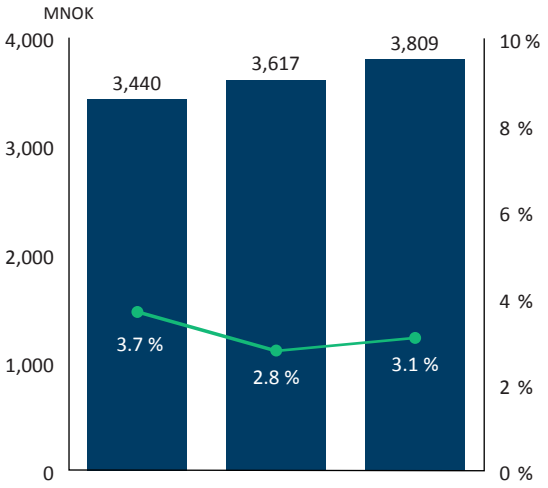


- Basic grant
- Collaborative research
- Contract research

Source: SINTEF

We have experienced good growth in net operating income over the past 3 years

Net operating income, net operating margin

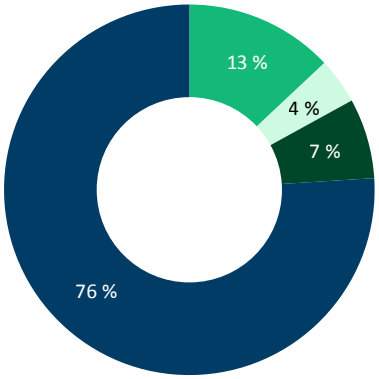


- Net operating income
- Net operating margin

Source: Financial statements SINTEF

Three out of four employees are scientific staff, of whom 63 per cent have a PhD

Employees

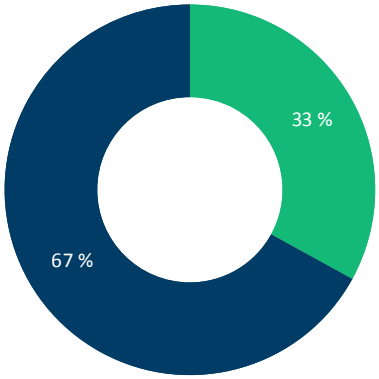


- Administration and management
- Technical personnel
- Engineers
- Scientific personnel [4]

Source: SINTEF

33 per cent of SINTEF's employees are from abroad [5] – from 80 different countries

International diversity

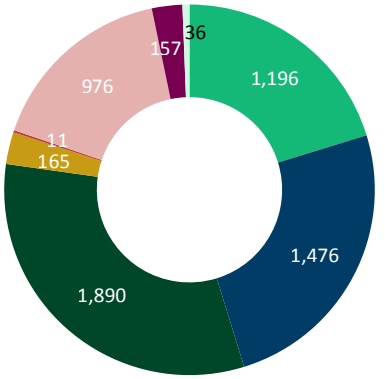


- International employees
- Norwegian employees

Source: SINTEF

We contribute with knowledge – close to 1,200 articles and 1,900 reports published

Publications and other dissemination



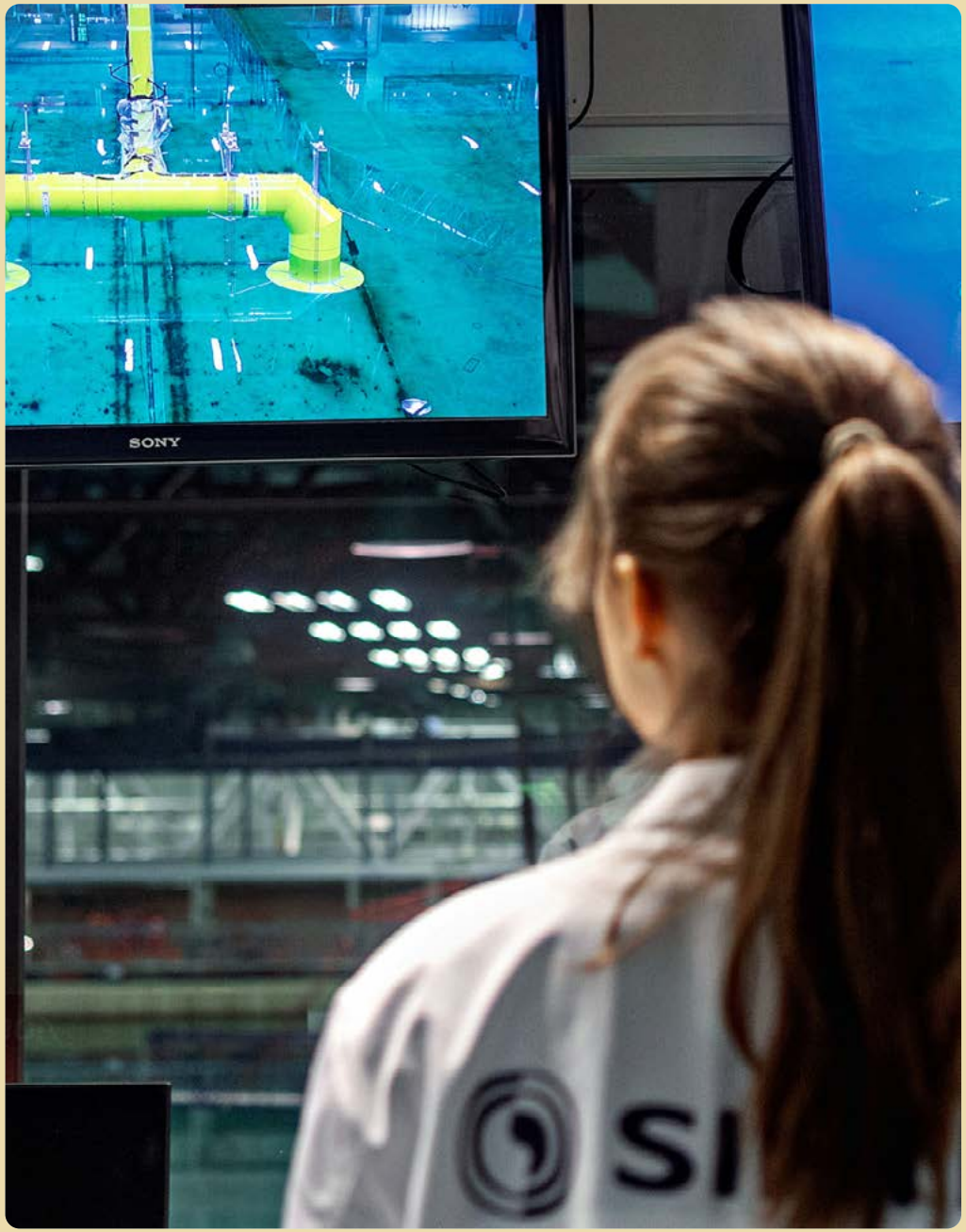
- Scientific article in journals, periodicals or anthologies
- Scientific lectures and posts
- Reports
- Popular science articles and lectures
- Textbooks, etc.
- Media contributions (interviews, opinion pieces and posts)
- Blogs and information material
- Multimedia products (podcasts and videos)

Source: Publications data; Cristin, other data (incl. publication data reports); SINTEF

4) Scientific personnel include research scientists, research managers and research directors.
5) "from abroad" defined as having a country of birth other than Norway.

Chapter 2

On the agenda 2024



The ocean basin is used for both basic and applied research into marine structures and operations. The basin gives us the ability to simulate all kinds of environments and weather conditions, including wind, waves and currents. This provides a unique opportunity for testing models under realistic conditions. Photo: Sune Eriksen

2.1 Impact over 75 years

January 2025 marked 75 years since SINTEF was established. In close cooperation with the business sector, NTNU and other research communities, SINTEF has helped solve many of the most serious challenges faced by Norwegian companies. This has made a significant contribution to the welfare society that we have today. In the following pages are a number of examples of the positive impact SINTEF has had on society over the past 75 years.

An important part of your mobile phone comes from Trondheim

The technology that carries the signals to and from your mobile phone has saved Norway billions. The solution was created by SINTEF and the company that is now called Telenor. Thanks to this technology, mountainous countries can manage with fewer base stations than they otherwise would have required.

Galina wants to grow food on the moon

NASA has the plan ready. Humans will return to the moon. On a manned base. If we are to succeed in this endeavour, we will need to be able to grow our own food up there. SINTEF researcher Galina Simonsen is part of the research team that is making this possible.

The petroleum technology that became a climate initiative

All experts agree. Without safe storage of CO_2, we will not be able to prevent further global warming. SINTEF researchers Erik Lindeberg and Torleif Holt showed the world how it can be done. They were inspired by American oil companies that captured CO_2 and pumped the greenhouse gas underground to squeeze more oil out of the reservoirs.

The world's most important pillow

The airbag came into being in the 1980s. A sensor based on technology from SINTEF made it possible. According to the US government, as of 2024 airbags had saved 50,000 human lives in the US alone.

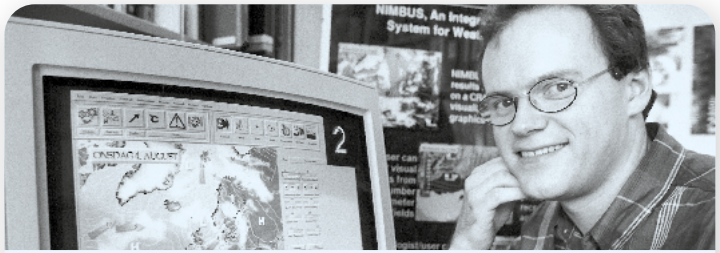
Tiny beads saving lives every day

They are microscopically small, round and are estimated to have helped save 40 million lives. The “Ugelstad particles” were developed at NTNU and SINTEF. They are now used globally – including for early detection of cardiovascular disease, cancer and infections.

Photo: Jens Petter Sørаа/SINTEF, Jana Pavlova. Illustration photo: Getty Images, iStock

Housing quality is quality of life

A great deal of research is built into your home. In walls, ceilings and floors. For almost 70 years, architects and consulting engineers, tradespeople and hobby carpenters have used the SINTEF publication Byggforskserien (Building Research Series). The series has contributed towards good building solutions, a good indoor climate, and saved you having to worry about the cost.



The Weather God

In 1993, high-tech weather from SINTEF's Karl Eggestad premiered on the Norwegian television station TV2. Time-consuming drawing work had been replaced by technology that became part of weather forecasters' calculation tools and created animations of the results. By the end of the decade, 65 television companies with a billion viewers had purchased the Norwegian solution.

From grey to green concrete

The production of cement, which has been the "glue" in all concrete up until now, makes up eight per cent of global CO_2 emissions. We have now created a new concrete. It has up to 80 per cent lower CO_2 emissions than today and can have an infinite life-span without the need for maintenance.

Sensor aimed at Mars

An artificial "nose" from SINTEF alerts astronauts if toxic gases infiltrate the inside air onboard the International Space Station ISS. This is important, because up there you cannot simply open a window. This unique instrument is now also being introduced for Gateway, the station that will orbit the moon. The next journey the Norwegian nose undertakes could be all the way to Mars.

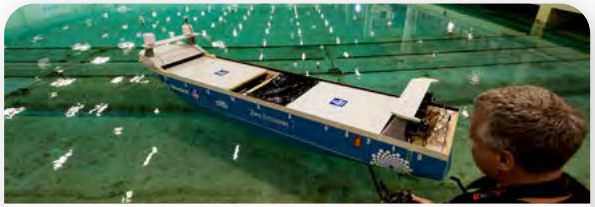
Photo: Jens Petter Søraa/SINTEF. Illustration photo: Øystein Lie, iStock

When the United Nations became a SINTEF supporter

In 2016, the United Nations awarded SINTEF one million dollars for its work on innovative energy technologies. The award was presented to CEO Alexandra Bech Gjørv by UN Secretary General Ban Ki-moon in New York. The money went towards developing our solar-powered ferry – which now transports passengers along the coast of Tunisia.

With a heart for ultrasound

Heart surgery took a big leap forward in the 1960s and 1970s. However, the development of diagnostic tools that could provide good information about heart valve defects was lagging behind. The solution was produced by pioneering work carried out at NTNU, SINTEF and St. Olav's Hospital from the late 1970s, which made ultrasound the gold standard in the field. 300,000 heart patients are now checked daily using ultrasound equipment originating from this research.



The ship that moved 40,000 trucks off the road

What can be seen sailing here is a model of the world's first electric, self-propelled ship – Yara Birkeland. The actual ship was then later constructed. It transports mineral fertilizer from the factory in Porsgrunn to the export port in Brevik. When operating at full capacity, the vessel saves the environment 40,000 truck journeys a year. SINTEF contributed with model experiments of the ship to examine speed and performance in different types of wave conditions.

Garbage mountain becomes a cure for the climate

We have shown countries in Asia an important way out of two crises – a common cure for plastic pollution and global warming. We have demonstrated how some of today's coal consumption in cement factories can be replaced with non-recyclable plastics. This prevents plastic from entering the ocean while also reducing coal consumption and thus cutting CO_2 emissions.

When an oil spill threatens we get the call

When the Deepwater Horizon oil platform in the Gulf of Mexico exploded in 2010, SINTEF was called up, and our research scientists went to assist in the clean-up work. For over 40 years, we have been testing how oils react under different weather conditions. We are particularly good at identifying oil types – and have helped to develop international regulations for oil protection.

Photo: Johannes Berg/NTB Production, Ned Alley/NTB. Illustration photo: Shutterstock, iStock

How Norway gets the most out of rainy weather

Regardless of whether it is dry or wet in Norway, you always have power in your socket when you need it. One of the reasons for this is that the hydropower industry stores and uses rainwater from the mountains in the right place at the right time. We have created the tool to ensure this. The solution has generated revenues of close to NOK 7 billion over a ten-year period. That is enough money to build half a St. Olav's Hospital. These funds benefit the entire community because the power companies are largely owned by our municipalities, counties and the central government.

Zero emissions at the supermarket

We have created the first freezer and refrigerator cabinets that do not require chemicals that are harmful to the climate or environment in order to function. That means that these are zero-emission solutions that also save energy. The supermarket chain Rema and SINTEF worked together to make the breakthrough in this field. Several other retail chains in Norway and abroad have now also adopted this technology.

More space for salmon, less pressure on the fjords

This is one of the world's largest cages – and it flows safely off our coast. These types of areas provide the fish with clean water and more space. It also means less impact on our fjords. Research carried out at our marine laboratory has helped ensure that this cage can withstand the enormous forces of nature in open waters.

This is Norway's most important invention

The Norwegian newspaper Aftenposten has designated multiphase technology to be Norway's most important innovation since 1980. Created through testing at Nidelva, this invention made it possible to transport untreated oil and gas in pipes along the seabed. This meant that fewer platforms were then needed. The solution cut costs, energy consumption and CO_2 emissions, opened up the development of fields that would otherwise not have been profitable – and therefore had a major impact on Norwegian prosperity.

Photo: Ørn E. Borgen/NTB, Ocean Farm 1. Illustration photo: Getty Images, iStock

2.2 Ethical sustainability dilemmas

SINTEF's goal is to contribute to sustainability and "Technology for a Better Society" through outstanding research communities that interact with clients in the private and public sectors and thereby produce new solutions and technology. In our corporate strategy, we have put into words what we refer to as SINTEF's strategic beliefs, which provide direction for this work. At the same time, we recognize that the direction also presents a number of ethical sustainability dilemmas. Different sustainability goals may conflict with one another. Technology that solves one or more problems can also have negative side effects. As a knowledge intensive organisation, it is motivating to work on finding solutions to this and reconcile seemingly irreconcilable goals.

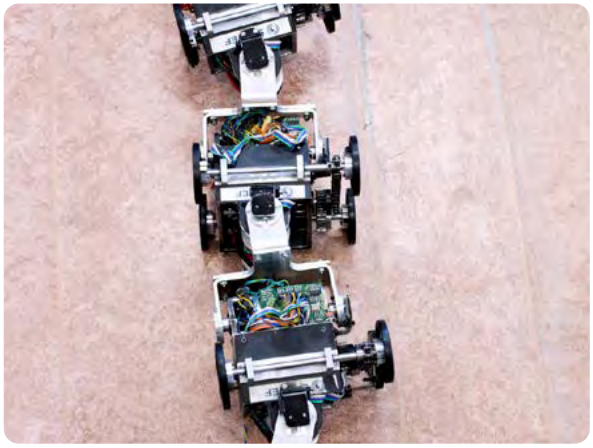
The corporate management team and the organisation often discuss these types of dilemmas. In this brief overview, we highlight dilemmas that touch upon our five strategic beliefs. These are areas in which we at SINTEF perceive there to be major opportunities, where we can make a particularly positive difference. However, they also involve difficult choices and risks for us and society, which we actively work on assessing and managing.

At SINTEF, we are working to make solar energy cheaper, more efficient, more environmentally friendly, more accessible, and better integrated into our energy system. Photo: Gaute Stokkan / SINTEF

Zero emissions in the value chains

We believe in demand for zero emissions in all value chains and in solutions that safeguard both security of supply and biodiversity, and which can manage new market risks. This requires collaboration between many specialist fields and actors.

For example, SINTEF works with renewable energy such as hydropower and offshore wind. Renewable energy contributes to reducing emissions and strengthens energy security. However, the utilisation of natural resources and energy installations will also involve intervention in nature. Solutions need to be developed that preserve biodiversity.



Automation and robotization are used in many areas to increase productivity and solve tasks that are not suitable for manual work. Photo: Lars Andreas Berg / SINTEF

The greenest energy is that which remains unused. Research into energy efficiency, circularity and better resource utilisation is important for the transition.

SINTEF has long worked to address the dilemmas related to our assistance to the oil and gas industry. Our policy is that SINTEF wants to contribute to a rapid transition to a zero emission society and an energy transition in which oil and gas production is reduced in line with the 1.5°C target, while production is also kept efficient and safe during this transition period. These considerations can be difficult to balance, particularly in a time of war and pressure on supply chains. Through leadership and awareness in the organisation, we strive to find the best solutions for society, clients and SINTEF.

We also contribute studies, including ripple effects analyses and cross-discipline analyses, that show the social impacts of different company decisions or political priorities.

This can expose SINTEF to major conflicts of interest, but is also an opportunity to allow the knowledge possessed by our research scientists to influence societal development. Our involvement in different sectors, and specific assignments that cause us to face major dilemmas, are dealt with not only internally, but also in dialogue with our clients and stakeholders.

Artificial intelligence and digitalisation

From a global perspective, we believe in increased automation, Artificial Intelligence and digital technologies across all industries. We therefore believe there will be

strong demand for new, secure “Internet-of-Things”-solutions and data-driven services. We believe the business sector and government authorities will demand integrative domain and technology expertise and new supplier industries that can increase productivity and ensure competitiveness in all sectors.

By making a contribution to productivity and competitiveness, SINTEF will help create value and welfare. At the same time, the development of technology must take nature and social standards into consideration, including SINTEF’s Code of Conduct (ethics compass). Artificial intelligence and digitalisation also present dilemmas in the form of increased demand for power, while we work to reduce emissions.

Access to raw materials is also important for digital development. Despite more circular reuse, we require more minerals, both from land and perhaps from the sea. Mining involves major interventions in nature and the associated risk of harmful environmental impacts. Therefore, every project will require thorough and multi-disciplinary assessments.

There are also dilemmas related to geopolitics and security of supply. Technological development is influenced by the growing tension between dominant companies and states. Contributing to the sustainable development of materials and technology in Europe has to take these needs into account.

Planetary boundaries

We believe that climate change adaptation and planetary boundary considerations will require major changes in relation to lifestyle, food, mobility and the built environment. We also believe that restrictions on the consumption of resources will impact living conditions.

SINTEF's work on biodiversity and land use is intended to place the focus on the preservation of biodiversity, including in the face of technological development. Photo: Getty Images

SINTEF's focus on biodiversity and land use will facilitate technological development and increased value creation on nature's terms. This presents us with many dilemmas. For example, all energy harvesting leads to some forms of intervention in nature. We have long col laborated with clients and environmental institutes on sustainable hydropower production with good environmental solutions for both nature and society. In the same way, we are looking for sustainable coexistence solutions for offshore wind, marine life and the fishing industry. This is taking place, for example, at the FME Northwind research centre.

Developing circular processes and technologies is also critical to safeguarding the planetary boundaries. SINTEF faces dilemmas in assessing the overall impact of solutions that we contribute to. Through our interactions with clients and partners, we need to contribute

towards avoiding, reducing or delaying consumption through the development of new technologies. We also have to ensure that consumption and environmental footprint in connection with the development and implementation of new technologies are as low as possible. The footprint from introducing new technology, for example, by constructing new industrial facilities or new infrastructure, cannot be greater than the subsequent reductions in consumption and environmental footprint of the new processes.

New approaches to health and security

We believe that society's costs for functions critical to societal security and public health will increase. We also believe the government authorities will realise that new technology and collaboration with the business sector are necessary in order to increase productivity and quality. SINTEF will work to highlight how other ways of utilising the research communities can have a great impact on society.

The security policy situation for Norway and Europe has deteriorated sharply, not least due to the ongoing war in Ukraine. Democratic principles are under pressure around the world. A number of ethical trade-offs are associated with defence-related R&D. In SINTEF's opinion, robust defence that can safeguard peaceful societies and security in a troubled world must be a long-term goal. We have, therefore, established a new corporate initiative regarding total defence. This will contribute to greater civil-military cooperation in line with the advice of the Norwegian Total Preparedness Commission and the Norwegian Defence Commission. This is one of SINTEF's contributions to SDG16: Peace, Justice and Strong Institutions.

Based on our expertise and collaboration with the defence idustry, the initiative will also support a sustainable transition within the defence sector. Several countries have formulated zero emission ambitions for military operations, although much work remains to be done in this area.

The healthcare sector's needs are significant. Demographic and medical developments suggest the need for major investments in the coming years. SINTEF wants to contribute, especially to how technology and process improvements in the healthcare system can contribute to greater efficiency, and better health for every krone that is spent. Priorities in the healthcare sector are becoming crucial to society's competitiveness, transition, welfare and safety in the years ahead.

Good health and welfare solutions are required if future healthcare services are to be financially sustainable. Photo: Getty Images

Transition policy

SINTEF's corporate strategy aims to create societal impacts and sustainable development. At the same time, we can see that the world's green transition is moving too slow and that major societal challenges are not receiving enough impetus to be solved. We have great expertise and emerging technologies that can contribute to necessary transition and upscaling. We believe SINTEF is relevant because the authorities will see that applied research, access to advanced laboratories, multidisciplinary solutions and open innovation in collaboration between actors are necessary prerequisites for rapid transition and competitiveness among our clients.

We are surrounded by an ecosystem of knowledge-building organisations, the business sector, investors and authorities that share our global analysis and understanding of the needs. However, it is a paradox that the sum of the decisions is not capable of changing society quickly enough. It is also a paradox that, despite this shared understanding, there is not enough support for a policy that strengthens the funding of the research collaboration that all parties believe is important for greater security and a quicker transition.

In our value chains, we are experiencing market failure that is delaying development. We are working to address this challenge through technological advances and a dialogue with society. We want to do everything possible to achieve results and effects now. That means that we also have to deal with the difficult choices of direction and dilemmas we face.

Chapter 3

SINTEF's contribution to sustainability

In the MicroLEACH project, the researchers are analysing plastic materials that may contain chemicals that could be dangerous to humans and animals when they end up in nature. Researcher Amaia Igartua is studying plastic that was included in the project. Photo: Thor Nielsen/SINTEF

Sustainability at SINTEF

Sustainability is at the core of SINTEF's activities. Ever since we were established in 1950, our ambition has been to contribute to competitiveness and societal benefits. In 2019, SINTEF's Board of Directors decided that our activities would be guided by the UN Sustainable Development Goals (SDGs) and that the SDGs would be used as performance indicators for competitiveness and the common good.

We contribute to sustainable development through projects and research collaborations with companies and public bodies, nationally and internationally. Our projects benefit from our laboratories and other physical and digital infrastructure. Much of this research is based on SINTEF's in-depth expertise in technology and fields in a number of sectors. At the same time, SINTEF also performs a wide range of social research into sustainable innovation and transitioning.

We also contribute knowledge, ideas, and recommendations in public debates and policymaking. We do this by participating in committees, commissions and seminars, as well as through publications. In areas where no strong industry sector currently exists, we reap the commercial potential of our research results through licensing, technology sales and company start-ups.

Researchers at SINTEF Industry are developing materials, electrode structures and electrolytes for next-generation batteries at the SINTEF Battery Lab. Photo: Thor Nielsen/SINTEF

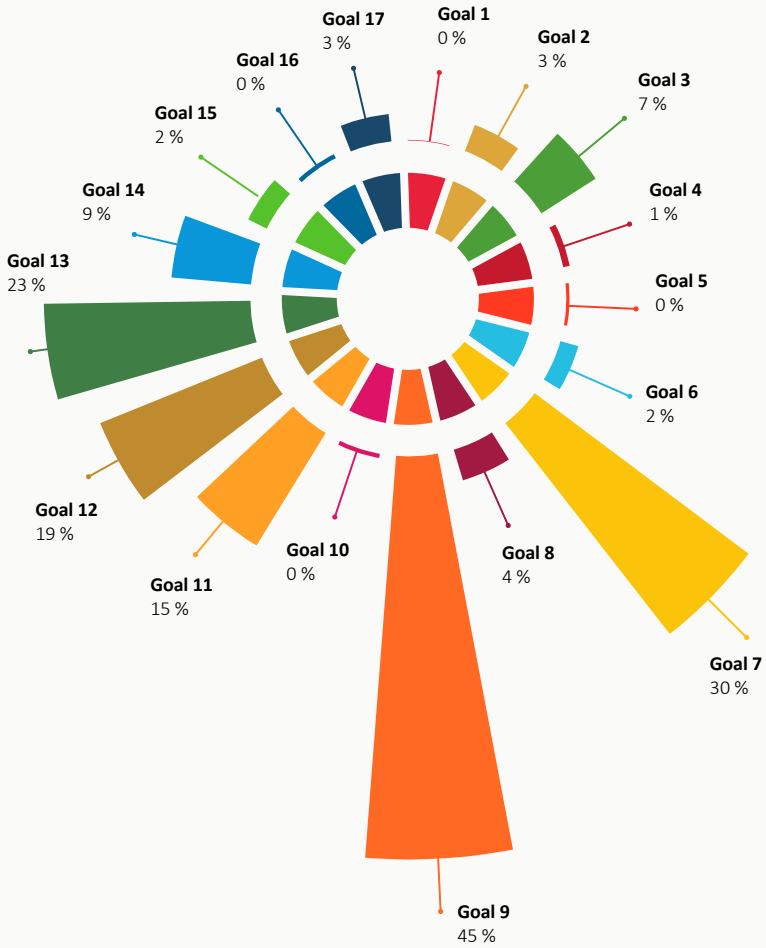
3.1 We are working to realise the UN Sustainable Development Goals

SINTEF has tagged all new research projects in relation to the SDGs since 2019. Each project can be tagged with up to three SDGs. This is to demonstrate how a solution can contribute to multiple goals at the same time. In 2024, more than 94 per cent of our total turnover was linked to specific SDGs.

This is primarily a bottom-up process in which the quality of the results depends on the expertise, awareness and efforts of our research environments. We recognise that this model presents methodological challenges. For example, tagging practices in different parts of the organisation can vary. Uncertainty and different assessments may also have an impact on the tagging. For example, there are challenges in linking projects to SDG13 Climate action. Despite the fact that much of the research at SINTEF involves halting or adapting to climate change, there is little activity that directly supports the goal (as defined by the UN). This is due to the goal´s emphasis on political changes, national commitments, and global cooperation – areas beyond SINTEF´s primary focus on corporate and technological measures.However, we believe that the analysis of the project portfolio conducted using this model provides a good picture of which SDGs our projects contribute to in thematic terms. The analysis shows a clear correlation between which SDGs are most important to our turnover and which SDGs are most relevant in the research areas with the greatest impact on sustainability (described in Chapter 4).

Information about projects that illustrate our contributions to sustainability in society is publicly available via sintef.no, gemini.no, and free subscription to our newsletter.

Gross turnover per SDG



The figure illustrates the extent of SINTEF´s 2024 activities targeting specific SDGs, ranked by their associated share of total turnover. [6]

Goal 9 Industry, Innovation and Infrastructure
Goal 7 Affordable and Clean Energy
Goal 13 Climate Action
Goal 12 Responsible Consumption and Production
Goal 11 Sustainable Cities and Communities
Goal 14 Life Below Water
Goal 3 Good Health and Well-being

6) The model shows the proportion of gross turnover for research projects in SINTEF's six institutes in 2024 that contribute to the various SDGs, with up to three SDGs tagged per project. 'Other/outside' tags" and projects that have not been tagged (6.5 per cent in total) are not included in the model. Source: SINTEF

3.2 Sustainability expertise – from ethics to good material choices

At SINTEF, we have expertise in assessing how choices concerning everything from materials and areas of use to logistics solutions and location impact the sustainability of technologies, processes, activities and value chains. We also have experts who are working on how sustainable transitions can be realised. For all of this, we make use of disciplines such as economics, natural sciences, industrial ecology and social sciences. We combine research and methods from these with expertise in technology, data analysis and knowledge of the SDGs.

How we assess the impact on sustainability

In several projects, we systematically assess the impact various technologies, sectors and value chains have on sustainability. At a regional and global level, we analyse how these impact carbon and environmental footprints, land use, employment, social factors and economics. The results can be used to evaluate the effects of possible industrial decisions, various policymaking processes and expected trends. These impacts can be linked to the SDGs, targets and selected indicators.

We are experts in the methods used for these assessments, including environmentally expanded, multi-regional cross-discipline analysis. This provides a good comprehensive picture of the macro effects. The method is based on national and international statistics on industries' deliveries to each other, and on data sets about what these mean for value creation, employment and emissions. To map processes and products more precisely, we use methods such as life cycle analysis (LCA), social life cycle analysis (S-LCA) [7] and material flow analysis (MFA). An LCA documents the carbon footprint. The method can be used to compare different solutions/products in areas such as carbon footprints, land use, nutrient pollution in ecosystems and social footprints in relation to human rights. S-LCA assesses the social conditions and impacts throughout the entire value chain of a product or service. This includes examining how production, distribution, use and disposal impact people and society, both positively and negatively. The goal is to gain a comprehensive understanding of the social consequences for all parties involved, from workers to local communities. Overall, these methods help illustrate the social and environmental impacts systems have and the potential for improvement.

Green roofs are very effective at handling stormwater, though they provide less space for solar panels and other uses. At Økern Portal in Oslo, they have managed to accommodate a bit of everything.

Photo: Remy Eik/SINTEF

7) The summary of S-LCA was created by an AI service (Copilot) and quality controlled by SINTEF.

The EU Taxonomy – a transition tool

We also have expertise in the EU Taxonomy and provide advice on how organisations can adapt to the Taxonomy. The EU Taxonomy is a useful framework for the classification of sustainable economic activities. Given the industry code used by SINTEF, we expect to be able to link our activities to research, development and innovation that make material contributions to the six identified environmental objectives for, for example, the climate, circular economy and biodiversity. Because we are a closely integrated part of a number of clients' R&D work, our projects may also be eligible for other Taxonomy activities. SINTEF has not conducted an overall assessment of its own portfolio in relation to the Taxonomy, however will further refine this in line with the proposals for how the taxonomy is implemented.

We believe that our greatest contribution to the Taxonomy lies in the research expertise our employees have and apply in collaboration with clients. It is clear to us that the knowledge we bring to projects regarding the Taxonomy's criteria helps shape clients' future business strategies. In turn, this will contribute to more sustainable products and more competitive business models. Over the last three years, we have developed an internal network of employees who work professionally with the Taxonomy criteria within projects, for example in projects for clients in the construction industry. This is a strategic area that we want to develop further. The Taxonomy Compass developed by the European Commission is a useful tool in our professional interaction with clients.

We explore barriers, opportunities and ethical dilemmas

We have expertise in helping companies/sectors and public actors identify which of the SDGs and targets are relevant to them and assessing their status. Such measurements enable continuous improvement. We also have expertise in developing ethical frameworks. To this end, we have a process for identifying ethical dilemmas and considering different views when developing a basis for making a decision. Closely related to these activities, we use methods called responsible research and innovation (RRI) and stakeholder engagement. Common to them both is the fact that they are about transparent data and results; the social impacts of research and innovation; reciprocal learning between research, industry, public decision-makers and the public; and involvement.

SINTEF has strong research environments within innovation and transition research. These use different quantitative and qualitative methods, often in collaboration with research scientists in more technology-intensive disciplines. This is how we improve our knowledge about drivers, barriers and opportunities for environmental innovation and sustainable transition. For example, we conduct scenario analyses related to climate goals and resource consumption. We also conduct in-depth studies of innovation processes in individual organisations, clusters or industries.

Within the area of the climate and environment, we have ecological and biological expertise on various types of pollution and their environmental impacts, in addition to experts in environmental measurements and monitoring and in nature restoration. We also provide advice on how organisations can adapt to climate-related and nature-related risks.

3.3 Infrastructure for research, testing, piloting and damage assessments

Access to outstanding infrastructure has a significant impact on how we carry out assignments for clients and develop excellent research environments. We are further developing the infrastructure through our own investments, as well as through contributions from national and international infrastructure schemes, including from the Research Council of Norway and Innovation Norway. This helps ensure that our investments have a major impact with respect to triggering public funding for the development of research infrastructure. SINTEF has invested NOK 1.9 billion of its own funds in research infrastructure from its surplus in the last 10 years. We now have more than 100 laboratories.

Our research infrastructure does not just consist of laboratories, it also includes testing and demonstration facilities and catapults. Some are highly specialised, although several of SINTEF's largest laboratories are used for many different purposes: from basic and applied research to prototype testing, damage assessments and small-scale production.

Over the course of 2024, SINTEF invested NOK 207 million of its own funds in research infrastructure.

The Research Council of Norway's national infrastructure roadmap project commenced in 2022. This work was closely followed up by SINTEF through participation in various thematic groups and consultative input. The roadmap has not been finalised yet and is part of the strategic development of Norwegian research. SINTEF believes that the roadmap will result in clearer infrastructure prioritisation aimed at sustainable solutions.

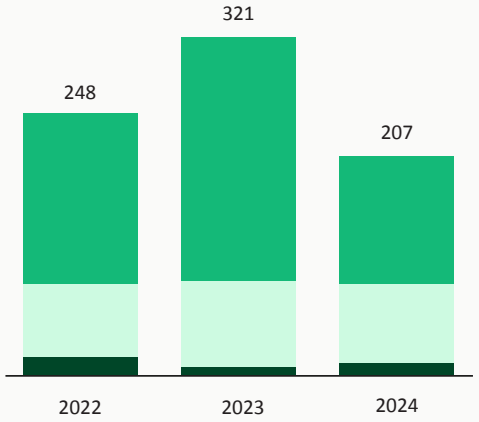
NOK 1.9 billion

SINTEF's investment in research infrastructure over the last ten years

The Norwegian Centre for Plankton Technology is an experimental facility that contributes towards generating new insights into the production and harvesting of plankton biomass, and processing of the biomass for further use. These organisms are low in the food chain and can be utilized in areas such as nutrition, animal feed, and eco-friendly bioplastics. The Centre's laboratories in Trondheim have several species of microalgae, macroalgae, zooplankton and benthic animals. Photo: Karoline Ravndal Lorentzen/SINTEF

We are investing in new laboratories, scientific equipment and other research production equipment

Annual investments in laboratories, scientific equipment and other research production equipment in NOKm



Source: SINTEF

The laboratories are our cornerstones

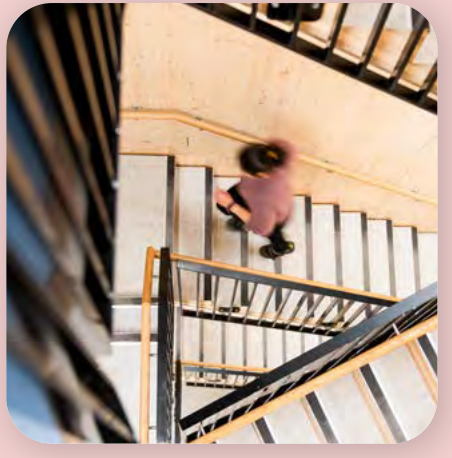
SINTEF has more than 100 laboratories, and several of them are world leaders. They provide the basis for our research. Together, they cover a wide range of technology areas. These are a few of them:

The Ocean Basin

MiNaLab (microsystems and nanotechnology)

Fermentation

Zero emission building



CO_2-Lab

Construction Laboratory

Energy Lab

Manufacturing processes

Photo: SINTEF, Construction Laboratory: Kai Torgeir Dragland

We have put a lot of work into the further development of existing heavy research infrastructure, such as the Multi-Phase Laboratory in Tiller in Trondheim and MiNaLab in Oslo. One of the drivers behind the further development of SINTEF's Tiller facility, which turned 40 in 2023, is a change in direction for the research portfolio. That is, a change from primarily oil and gas projects to green transition projects. One important factor behind MiNaLab's increased capacity is our greater focus on developing knowledge about microchips. This is being driven by the EU's European Chips Act.

The Norwegian Ocean Technology Centre is particularly important infrastructure that we have been working on since 2005. Together with NTNU, we want to help make Norwegian ocean industries more sustainable and productive through the development of knowledge and technology, the establishment of world-leading educational environments, knowledge dissemination and restructuring industry. This major construction project started in 2022. The Parliament (Stortinget) had just approved the project, with a cost frame of NOK 11.0 billion at the end of 2024. The centre's main location will be in Trondheim, and shall include wet and dry laboratories, a workshop, teaching facilities, office space and meeting rooms. The "Fjordlab" infrastructure in Trondheimsfjorden, Ålesund is also being further developed at Hitra and Frøya. Parts of the centre (Laboratory for Maritime Energy Systems and Construction Laboratory) are already operating in SINTEF's property at Torgaard (south of Trondheim city centre), with equipment financed through the project.

The centre is entirely funded by the state. Its ownership is administered by NTNU, and it is designed to ensure value creation for Norway by increasing the competitiveness of Norwegian ocean industries. SINTEF will play a key role as the operator of the largest laboratories in the centre. The state funding was based on the ESA's decision prior to the Parliament´s decision. SINTEF is also contributing with its own investment of NOK 250 million for the facilitation of M-lab (maritime propulsion systems) and K-lab (maritime structures) at Torgaarden, which is located south of Trondheim. The facilities at Torgaarden were opened by the Minister of Fisheries in August 2024.

3.4 Commercialisation of research results

Carrying out research for clients in the business and public sectors is SINTEF's traditional core activity. In addition, we contribute to start-up companies. These spin-offs also result in innovations that contribute to the common good and improve competitiveness.

Commercialising research results that are not exploited by clients is part of SINTEF's social responsibility. At the same time, the wave of digitalisation and sustainability is creating a need for technologies that will sustain the industries of tomorrow. Therefore, in our long-term research, primarily financed with public funds, we develop solutions that can produce completely new companies.

These spin-offs are highly competitive because their operations are based on expertise and leading technology. Together, these companies therefore represent a significant contribution to the renewal of Norwegian industry.

In our commercialisation activities, we mainly focus on the pre-seed phase and the seed phase. However, we continue to monitor the companies during the later phases as well. This activity helps to realise SINTEF's vision of 'Technology for a better society'.

While the potential return on investments during these phases is significant, the associated risk remains equally high. Given this, SINTEF has developed a profitable and acknowledged model for commercialising research results.

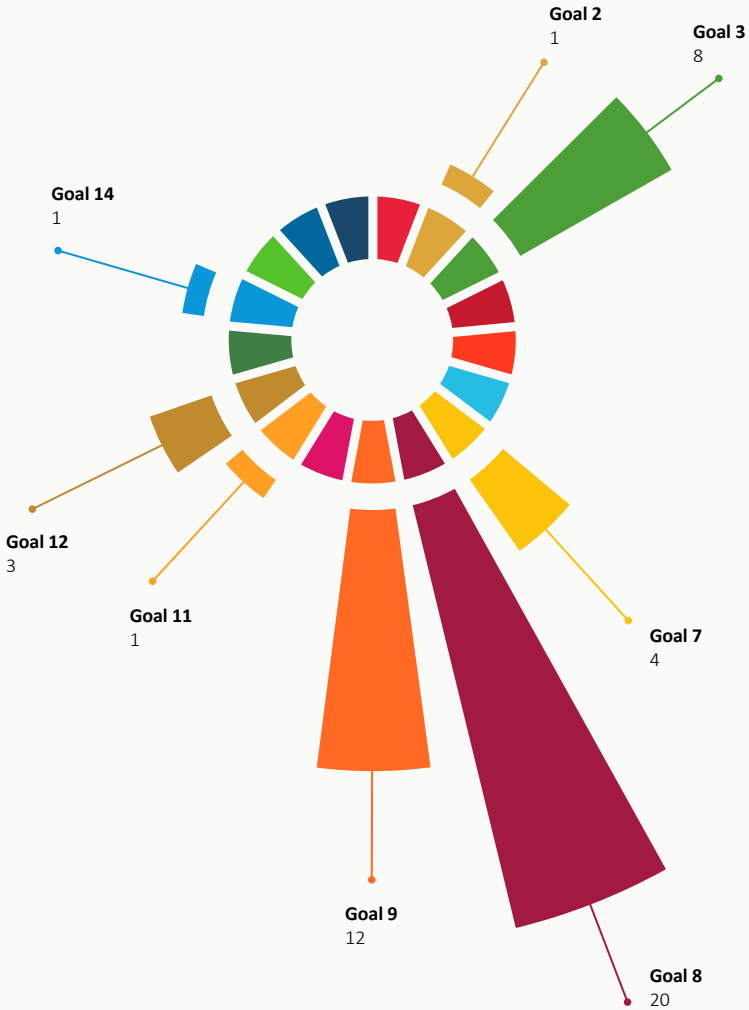
Access to early-stage capital for start-ups is an important part of the commercialisation activity. In our investment funds, we have a strong investor corps, which provides us with the financial capacity to boost this work further. In 2024, we completed the final closure of our most recent investment fund, SINTEF Venture VI, with a total of NOK 500 million in investment capital. The fund helps us to realise our strategy, which is to commercialise technologies through start-up companies. We are honored by the trust investors show in SINTEF and our commercialization strategy through their investment in the fund.

Our concept is based on close cooperation between SINTEF's research environments, our commercialisation company SINTEF TTO and competent partners. Our mission in this area is commercial value creation followed by exiting.

The proximity to our research environments' markets, previous commercialisation experience and outreach networking have afforded us good market penetration. We have started several new companies as a result of establishing the investment funds SINTEF Venture I and II (2002), SINTEF Venture III (2006), SINTEF Venture IV (2014), SINTEF Venture V (2018) and SINTEF Venture VI (2023).

Our sustainability profile is being strengthened by SINTEF's work on our portfolio of start-ups. When spin-offs are established,

Number of spin-offs per SDG



Source: SINTEF

we require the companies to comply with, and be governed by, the same principles as SINTEF. In our experience, investors include sustainability in their investment criteria both because they want to contribute to positive impact and to better assess and price risk.

Our commercialisation activities, which include investment funds and their management, are subject to the Sustainable Finance Disclosure Regulation (SFDR). This EU regulation was incorporated into the EEA Agreement through the Sustainable Finance Act, which came into force in January 2023. SINTEF's investment funds and start-ups are managed in line with SINTEF's ethical principles and policy on commercial activities. Both our funds and start-ups are based on the UN Global Compact. The aim of this is to ensure that the companies we contribute to operate responsibly within the areas of human rights, labour, the environment and anti-corruption. Our newest fund, SINTEF Venture VI, is an 'Article 8 fund' under the SFDR. More information about the fund's focus on sustainability can be found here.

We have mapped SINTEF's current portfolio of 20 start-ups in relation to their relevance to the 17 SDGs. The companies are all in an early phase where their commercial potential will be developed and realised over time. Assuming that the companies are successful and are scaled up, they will be in a position to contribute to the SDGs.

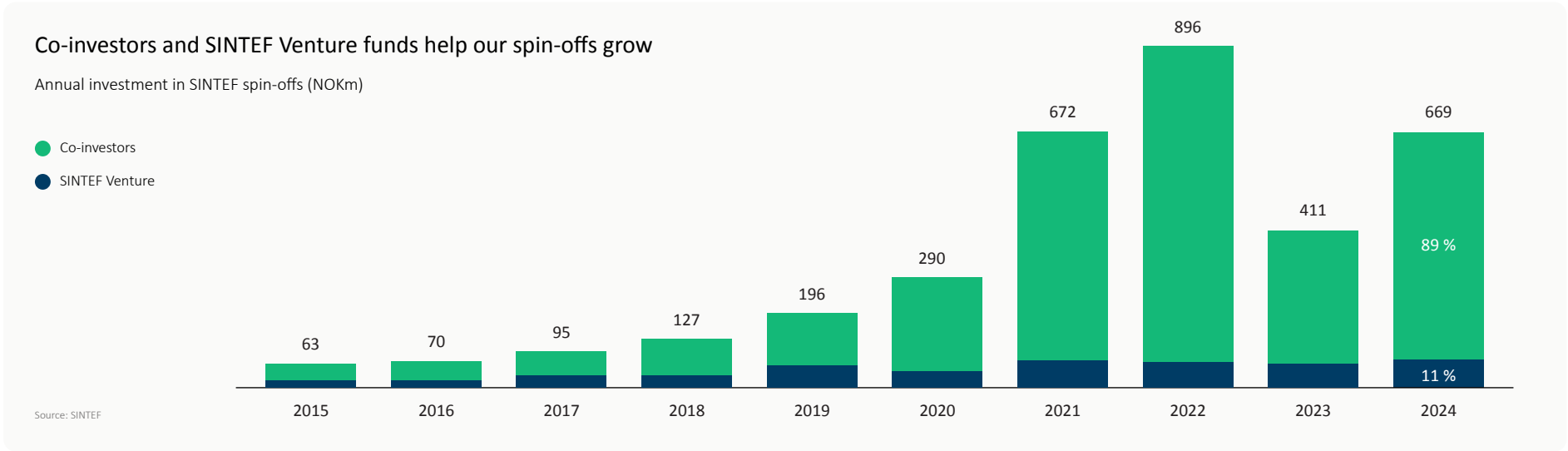
All companies contribute to SDG 8 "Decent work and economic growth" through the use of key technologies in areas such as IT, biotechnology and nanotechnology, for the production of new products, services and value chains for sustainable innovation and economic growth.

In recent years, we have contributed to a significant increase in start-ups targeting goals 9) Industry, innovation and Infrastructure, 3) Good Health and Well-being, 7) Affordable and Clean Energy and 12) Responsible Consumption and Production. SINTEF has achieved good results from this commercialisation. The sale of start-ups has resulted in both returns for owners and the further development of the companies. The companies Nacre, GasSecure, Spermvital, Resman, SpinChip Diagnostics and CFEED are good examples of this.

2024 was a year characterised by continued turbulence and uncertainty in the capital markets. War, geopolitical uncertainty and continued high interest rates reduced access to capital, including for early-phase start-ups.

Despite these challenging markets, NOK 669 million was invested in SINTEF's 20 start-ups in 2024, NOK 74 million of which came from SINTEF Venture funds. In the period 2015-2024, a total of NOK 3.5 billion was invested in our start-ups, of which SINTEF Venture funds invested NOK 470 million.

The next page provides examples of how our spin-offs contribute to sustainability.



Our spin-offs contribute to sustainability

A few examples from 75 years of developing technology for a better society.

Cartesian has created the world's largest "biobattery".

Capturing the wind and light

Energy from the sun and wind has thus far proven difficult to store. However, with the help of biological wax based on a vegetable oil that is unsuitable for food, Alexis Sevault and his colleagues have succeeded in doing so.

The result: the world's largest biological heat bank for buildings. They are now launching the technology globally through the SINTEF spin-off Cartesian.

NaDeNo will give us more effective cancer medicines

Precision cancer treatment

Imagine if we could give 100 times as much medicine to a cancerous tumour without increasing the total dose. Ýrr Mørch has created a solution that makes this possible: nanoparticles loaded with large doses of medicine- which accumulate in tumours. This will provide more precise and effective cancer treatment.

Ýrr is now working to launch the technology globally through the SINTEF spin-off NaDeNo.

Photo: Smidesang&Lyng, Christina Benjaminsen/SINTEF

3.5 National research centres – an ecosystem for innovation and value creation

Together with partners from universities, research institutes and industry, as well as public actors, we are building up capacity, expertise and innovation that solve major social challenges. Good examples of this include centres for research-driven innovation (SFIs) and centres for environment-friendly energy research (FMEs). These centres are important for Norway's efforts to develop sustainable solutions in key areas, from new processes for the metallurgical industry to CO_2 management and autonomous ships. These centres are unique incubators for the development of new solutions and have a long-term focus with collaboration from industry. Here, R&D active companies and outstanding research environments are given the opportunity to collaborate on long-term research. This results in knowledge that is important for innovation and value creation and that strengthens technology transfer, internationalisation and the training of research scientists.

The interaction between SINTEF and NTNU is important in these centres. We are building national teams in collaboration with other outstanding knowledge environments, both national and international. Since the SFI scheme was established in 2005 and the first FMEs saw the light of day in 2008, NTNU and SINTEF have been awarded 46 out of 92 centres, i.e. half the number awarded. NTNU and SINTEF each lead/have led 23 centres, i.e. the same number. In the most recent allocation of FME centres in 2024, NTNU and SINTEF were awarded 7 out of 8 centres. SINTEF is involved in all 8 of the centres.

Together, we are building capacity, expertise and innovation that address major social issues.

Centres for research-driven innovation (SFIs)

Centres for research-driven innovation (SFIs) develop expertise that is important for innovation and value creation. Long-term research in a close collaboration between R&D active companies and outstanding research environments strengthens technology transfer, internationalisation and the training of research scientists.

Centres for environment-friendly energy research (FMEs)

Centres for environment-friendly energy research (FMEs) work on long-term research aimed at renewable energy, improving energy efficiency, CO_2 management and social sciences. The research takes place in a close collaboration between research environments, industry and the public sector.

50 %

NTNU and SINTEF have been awarded 46 out of 92 centres since the schemes were established

3.6 Industry clusters keep us close to local and regional industries

The digital and green transition transforming our society demands extensive applied research, as well as new constellations and partnerships. SINTEF is not just an important part of the national innovation system in Norway, we also contribute to expertise that is important for local and regional industry. That is why SINTEF collaborates with a large number of clusters. This includes in places other than where we have offices, such as Raufoss, Mo i Rana, Porsgrunn, Ålesund, Bergen and Tromsø.

SINTEF is a partner in a number of cluster initiatives in various sectors across the country (see figure). We are also a member of several other clusters that were not part of Innovation Norway's cluster programme when the assessment was made, including Kongsberg Technology Cluster, NCE Manufacturing and the Røros cluster, Rørosklyngen. It is clear to us that large, established enterprises are able to make greater use of research than newly established and smaller enterprises. Therefore, to ensure that we can support SMEs, it is important that we have a presence in rural areas and regions.

Even closer interaction between R&D environments and society in general is needed for innovation and transition. For this reason, we are also heavily involved in the development of innovation districts in major cities, especially in Trondheim and Oslo. Trondheim Tech Port and Oslo Science City bring key actors together to increase the social impact of these strong knowledge environments. This is done through initiatives centred around the respective cities' strengths.

9 NCE/GCE-clusters

16 ARENA clusters

SINTEF participates in the following industry clusters: [8)]

Ocean Hyway Cluster, ARENA Pro	Energy in the North, ARENA
NCE Maritime CleanTech	Cod Cluster, ARENA Pro
NCE Seafood Innovation	ACT Arctic Cluster Team, ARENA Pro
Energy Transition Norway, ARENA Pro	Woodworks!, ARENA Pro
Nordic Edge, ARENA Pro	NCE Aquatech Cluster
Norwegian Smart Care Cluster, ARENA Pro	GCE Blue Maritime Cluster
Stiim Aquacluster, ARENA Pro	Solar Energy Cluster, ARENA Pro
Norwegian Offshore Wind, ARENA Pro	Circular Packaging Cluster, ARENA
Vital Infrastructure Arena, ARENA Pro	NCE Norway Health Tech
NCE Eyde	NCE Oslo Cancer Cluster
	H2Cluster, ARENA
	Norwegian Centre of Circular Economy, ARENA
	NCE Energy Valley
	Norwegian Wood Cluster, ARENA
	NCE Blue Legasea

8) The overview was prepared in connection with SINTEF's Annual and sustainability Report for 2023, and any subsequent changes in participation are not reflected in the overview.

3.7 World-leading research – our participation in EU research programmes

Transition needs created by global challenges require us to work locally, regionally, on a European level and globally with research-based technology development, problem-solving and innovation. The EU programmes are central to this work. Participation in these is crucial when it comes to SINTEF's ambition to conduct world-leading research and maintain competitiveness.

Norway's participation in these programmes is important for our ability to link partners from industry and the public sector to the international research front. Collaborating with us in the EU's industry-oriented research projects gives Norwegian companies access to expertise, networks and funding that accelerates their transition in a greener, more digital and more sustainable direction. This increases their competitiveness.

Participating in the development of Europe

The policies and regulations proposed by the European Commission are based on research results and impact analyses. The Horizon Europe programme thus contributes directly to the development of research and innovation policies and to strengthening cooperation across borders, sectors and disciplines. Therefore, active participation in the EU's research projects gives Norwegian actors a chance to participate in the development of Europe.

For 10 years, SINTEF has had a dedicated European office in Brussels to participate in knowledge sharing in Europe and contribute towards ensuring that Norwegian and European research and research policy are supported with actual projects. European technology platforms and partnerships linked to the EU programmes are an important arena for strategic research influence. Our extensive participation in these protects Norwegian interests in this field.

Horizon Europe is the world's largest research programme, with a budget of around EUR 96 billion for the period 2021–2027. SINTEF is the largest Norwegian participant, with EUR 186 million in funding. This represents 14.7 per cent of the funds brought home to Norway. Most of our participation in Horizon Europe takes place through collaborative projects with Norwegian actors and involves solving global challenges and building competitive businesses.

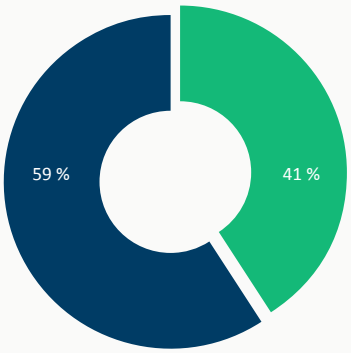
High success rate

The total funding for research and innovation in the EU projects Norway is participating in amounts to EUR 7.2 billion. However, the value of the R&D that Norway has access to is 7.4 times greater than the funding awarded to Norway and SINTEF since we gain access to the research of the other partners in our collaborative projects.

Since the start of Horizon Europe, we have been successful in almost every third application, while the average success rate for applicants in Europe is 17 per cent. Our success rate is even higher in our primary area, Pillar 2 – Global Challenges and European Industrial Competitiveness. The projects we have won funding for involve 169 other Norwegian project participants. This means that we are involved in 41 per cent of the collaborative projects in which Norwegian enterprises are participating (see figure). This is how we are building international competitiveness within Norwegian industry.

EUR 7.2 billion Total funding for research and innovation in the EU projects Norway is participating in

SINTEF is participating in 41 per cent of the volume of Norwegian industry's collaborative projects under the EU programme, Horizon Europe. [9]



Source: eCorda. October 2024

9) The graph shows the project volume for Norwegian industry's collaborative projects under the EU's Horizon Europe programme in 2024, with and without SINTEF cooperation. These are EU projects with two or more Norwegian partners, i.e. exclusive of mono contracts and projects in which the Norwegian business sector or SINTEF is the sole Norwegian participant. eCorda is the official source for EU reporting.

We need predictable framework conditions

Our goal is to double our turnover from the EU (from the level in 2019) up to the end of Horizon Europe in 2027. This assumes that the national framework conditions for our participation will improve and not deteriorate. We are already well on our way to doing this, although to achieve the goal, we need predictable framework conditions. Horizon Europe is growing and taking an increasingly stronger global position. Canada and New Zealand are already associated with the programme, and further expansions are in sight. This provides Norway with a springboard for realising the green and digital transition in a global context.

Next generation defence systems

The war in Ukraine is influencing research programmes in the EU. Synergies between civilian and military technology and knowledge development have become an important topic. We contribute to research into defence technology in Norway and the EU. In the European Defence Fund, we have helped to win projects where the total contribution from the Defence Fund is EUR 173 million. Our share of this is EUR 7.6 million. Here we collaborate closely with the Norwegian defence industry on the next generation of European defence systems. The other Norwegian participants in these projects receive EUR 16.5 million. In total, this means EUR 24.1 million for Norway. This is important for Norwegian actors' access to the European defence market.

Contribution to increased European competitiveness

The EU wants to strengthen Europe's competitiveness and develop solid value chains using a new strategic framework known as the Competitiveness Compass. Research and innovation are key elements in this plan. It is the first major initiative of the new Commission and builds upon the recommendations in the Draghi Report. The objectives are to reduce the innovation gap with the US and China, create a common plan for decarbonization and competitiveness, as well as reduce Europe's dependencies and strengthen security. This is supported by five principal measures: fewer regulations, expansion of the internal market, increased funding, increased expertise and better cooperation between member states. The EU is working at full speed to establish the structure and content for the next framework programme for research and innovation (FP10). The first draft will be presented in autumn 2025. SINTEF has contributed to the commission in its own right, from the Norwegian and European institute community and through Norwegian government authorities.

It is currently uncertain as to what a new framework programme will look like. The high-level reports from Draghi and Heitor signal a strengthening of the pillars of basic research (European Research Council) and innovation (European Innovation Council), however are less explicit in their reference to prioritised research collaboration, which is currently in Pillar 2. This raises concerns about whether this type of shift in research policy will come at the expense of research into solving global challenges and building competitiveness. A united European institute sector and Business Europe have urged members of parliament to vote against proposals that weaken the most important pillar of research collaboration.

EUR 7.6 million

The value of our contribution won from the European Defence Fund

3.8 Global aid projects can combat both poverty and environmental problems

Over the past five years, SINTEF has undertaken 38 projects with primary activities in low- and middle-income countries (LMICs). The projects cover a wide range of topics and SDGs, as shown in the figure.

LMICs have a pressing need to manage the consequences of the global crises, which are a greater threat to them than to the rest of us. This includes challenges related to the climate, nature, poverty, health and food safety, which the UN summit discussed in 2023. To succeed in the green transition while ensuring fairness and respecting nature, it is essential that all countries are involved.

This was the backdrop for establishing SINTEF's corporate initiative Global Sustainable Development. SINTEF has good expertise and motivated research scientists within important topics relating to a green and fair transition. The goal is to raise awareness internally about these issues, become a major player in the market and increase our portfolio of collaborative projects with partners in LMICs.

We are seeking project funding via existing actors such as Norad, the UN system and Horizon Europe. At the same time, we have initiated a dialogue with the Ministry of Foreign Affairs and Norad on the development of models for innovation partnerships devoted to transition/building green value chains with selected countries.

Applied research, teaching and market introduction are the building blocks for the comprehensive innovation expertise required to get the necessary global transition underway. To achieve good interaction between the teaching and research components of this 'triangle', the corporate initiative established the Gemini Centre Global Impact together with NTNU.

One of our Norad projects, OPTOCE, is all about establishing circular supply chains for plastics that would otherwise end up in the ocean in South East Asia. Thanks to the project, we have helped reduce the flow of plastic pollution into the world's oceans by close to 1 million tonnes by collecting and using low-quality plastic waste as an input factor in the cement industry instead of coal.

38 projects involving low and middle-income (LMIC) countries

Innovation and job creation

Waste management and the circular economy

Food and nutrition safety

Stakeholder involvement and policy development

Digitalisation of public services

Renewable energy

Clean water

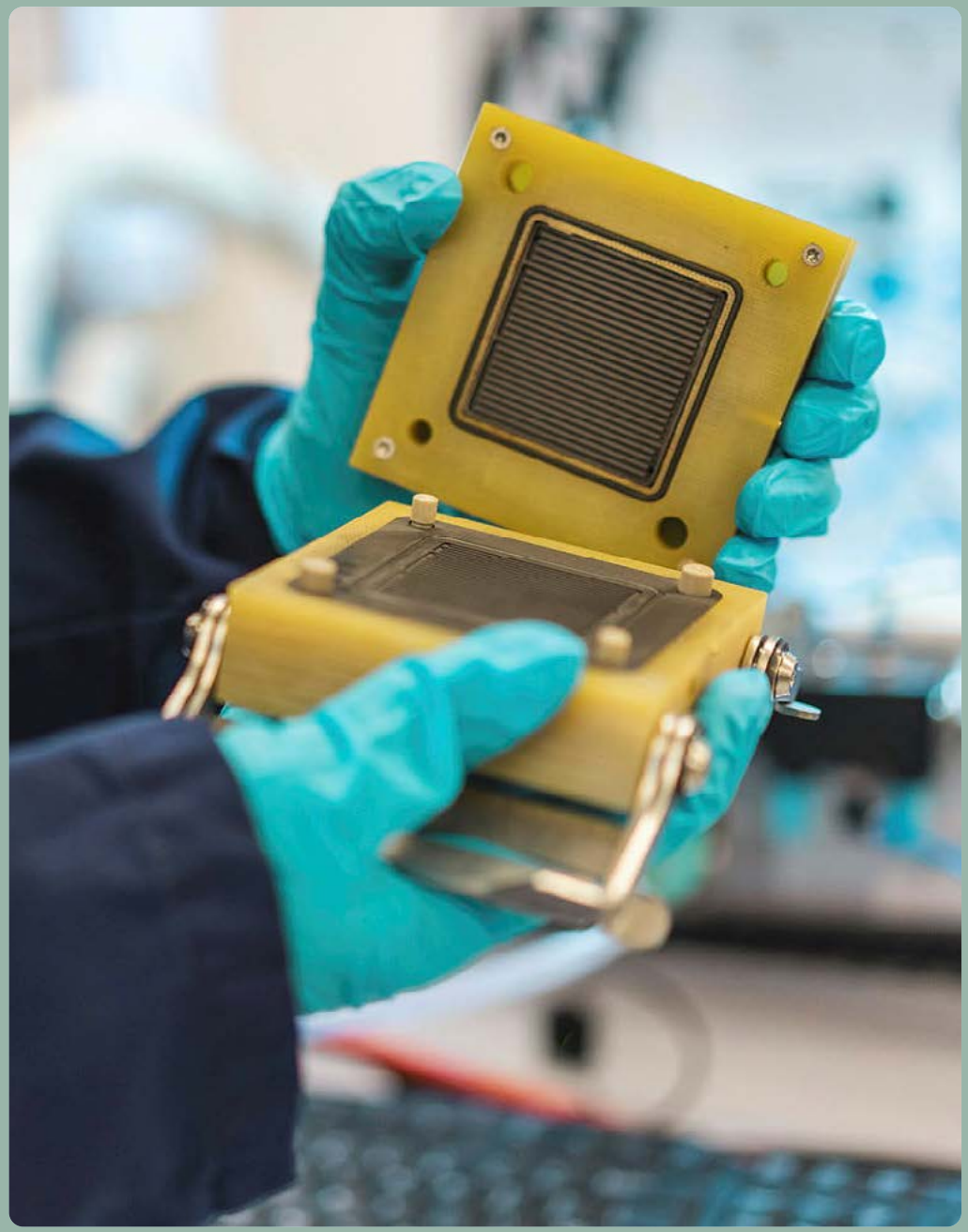
Sustainable oceans

Access to education and health services

People with disabilities and assistive technologies

Chapter 4

Where SINTEF's research has the greatest sustainability impacts

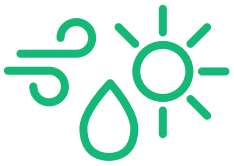


SINTEF is conducting research into key areas of pure hydrogen's entire value chain, from production to transport and storage and end use. Knowledge of these areas provides Norway with a golden opportunity for developing a new green industry that the world will need to overcome the climate crisis.

Photo: Smidesang & Lyng/SINTEF

These are the areas where SINTEF's research has the greatest sustainability impacts

Our main contributions to society are the research and innovation we carry out in collaboration with clients and partners. A basic materiality analysis was conducted in 2021. The group management team was heavily involved in this process. The analysis resulted in six research areas being highlighted as areas where SINTEF can make particularly large contributions to clients and society in general. These continued to guide our contributions in 2024. During 2025, we will continue to work on our double materiality analysis (ref. Chapter 5) to ensure that this reflects the impacts, risks and opportunities associated with SINTEF's research areas.



Clean energy and climate action

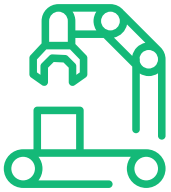
(goals 7, 9 and 13)

Life below water and on land

(goals 14 and 15)

Circular economy

(goal 12)

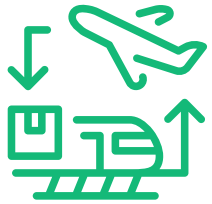


Green innovation, responsible consumption and production

(goals 9 and 12)

Health

(goal 3)



Infrastructure and mobility

(goals 9 and 11)

Integrated energy system for lower costs and less intervention in nature

FME InterPlay has the ambition of becoming Norway's national hub for integrated energy system analyses. The project brings together researchers, industry and public stakeholders to develop world-leading knowledge, expertise and tools that promote the energy transition.

By offering open planning tools, InterPlay will help to upscale and decarbonize the energy system – with lower costs for both society and nature.

In order to achieve climate targets while also preserving biodiversity, we need to work more holistically in the future. This involves coordinated planning and operations across energy carriers, infrastructures and consumers, all of which is essential for ensuring both value creation and security of supply towards 2030 and 2050.

Read more here.

4.1 Clean energy and climate action

Challenge

The global situation is making security of energy supply increasingly more important. However, in order to meet the world's climate targets and ensure a competitive business sector, we need to produce more renewable and emission-free energy, develop sustainable technology and improve energy efficiency. We need to do all of this while preserving biodiversity and sustainable land use.

SINTEF's expertise and contribution

SINTEF has extensive experience and knowledge from a variety of different disciplines and technologies related to climate and clean energy. We are working to find holistic solutions that reduce emissions while strengthening security of supply and competitiveness.

SecurEL and gigaCCS are two new centres for environment-friendly energy research (FME) that started in 2025, and both work with climate, clean energy and security of supply:

SecurEL is further developing the results from FME CINELDI, which was a project that ended in 2024. SecurEL will work towards achieving a secure, resilient and sustainable power grid as the backbone of a changing energy system. Electrification of industry, transport and other sectors is among the most important measures for being able to achieve the 2030 and 2050 climate targets. The aim of the centre is to facilitate this electrification – while also ensuring security of supply. Security of supply is the ability of the power system to continuously supply electricity with the desired quality to the end user. New challenges, such as electrification, climate change, cyber threats and geopolitics, are putting security of supply to the test. Read more here.

Achieving emissions targets in Norway, Europe and globally will be impossible without carbon capture and storage (CCS). There are currently only a few full-scale projects with the capacity to handle millions of tons of CO_2 annually – the world needs this to be in the billions to achieve a net zero future. With 40 years of experience in CCS, SINTEF leads the FME gigaCCS research centre, which promotes global implementation at gigaton scale through industry-driven research and training of future experts. Read more here.

Project turnover

1,255

NOKm

Spin-offs

4

Project turnover

1,892

NOKm

Spin-offs

12

Project turnover

970

NOKm

Spin-offs

0

Illustration: Daniel Albert

The project is funded by Horizon Europe

We build tools that help restore nature

Marine ecosystems are threatened by direct and indirect anthropogenic pressures, which in turn result in losses of biodiversity and ecosystem functions. Ecological restoration is required to restore degraded and destroyed marine ecosystems.

This is the backdrop for the CLIMAREST research project. In this we are developing and demonstrating restoration tools and activities at five demonstration sites across Europe, from Svalbard in the north to Madeira in the south.

The project is funded by the EU, and 18 partners along Europe's coastline are taking part. The project belongs to the EU Mission Restore our Ocean and Waters and is a member of the Lighthouse for the Arctic and Atlantic Basin.

4.2 Life below water and on land

Challenge

How can we achieve value creation and technological development on nature's terms? Biodiversity on land and in water is being threatened by various human-made factors. The world's countries have agreed to preserve 30 per cent of both oceans and land, and in the EU, business and industry are obligated to report their dependence on and use of – and impact on – nature.

SINTEF's expertise and contribution

Knowledge and innovation are required for being able to preserve and use ecosystems on land and in the oceans. This necessitates close collaboration between interdisciplinary research institutions, the business sector and society at large.

SINTEF is working on the preservation and restoration of biodiversity in the face of technological development. Technological solutions shall safeguard welfare and value creation, and nature and society. SINTEF's corporate initiative for biodiversity and land use covers the interaction between industrial development and life on land and below water.

With environmental design of renewable energy, we can contribute to the development of new projects and to making environmental improvements in existing production. Within hydropower in particular, our methods have contributed to more power and better ecological conditions.

Our researchers are also working with data and decision-making support related to impact on nature in order to contribute to the restructuring of companies and public enterprises.

SINTEF helps Norwegian agriculture and forestry to develop, especially within processing and the total utilisation of raw materials. We are also heavily involved in ocean industries. In cooperation with governments and industry, we are contributing to the development of fisheries, based on the SDGs. We participate in environmental research and restoration of ecosystems through national and international partnerships.

Project turnover

375

NOKm

Spin-offs

1

Project turnover

97

NOKm

Spin-offs

0

Photo: Susi Schaefer, ARDITIskrāMARE-Maderia

Demolition of Curlew, morgensol (morning sun)

Green Platform project Oppsirk (Upcycle)

The Green Platform project Oppsirk upcycles maritime metal from ships and oil platforms to new eco-friendly construction products. The project will establish a new Norwegian upcycling industry and thereby solve challenges related to the development of circular business models, decommissioning, testing, recertification and production of new construction products and environmental and climate documentation.

SINTEF contributes expertise in connection with decommissioning, production, material technology and climate and environmental accounting.

After the project ends, Oppsirk will have helped solve offshore disposal issues, reduced the demand for raw material extraction, and supplied the construction sector with sustainable, low-emission building materials.

Read more here

4.3 The circular economy

Challenge

Sustainable consumption and production are about producing more with less. According to the UN, if everyone in the world was to use the same quantity of resources as Europe, we would need 2.8 earths to meet this consumption. The core idea behind the circular economy is using the earth's resources in the best possible way to ensure sustainability and value creation in the long term too. Transitioning to a circular economy will be crucial for economic growth and waste and resource management in the coming decades.

SINTEF's expertise and contribution

SINTEF contributes comprehensive research expertise on the circular economy, from strategies, business models and environmental and economic analyses to specific technological solutions. The framework for our development of expertise in this field is the EU Taxonomy for sustainable activities. The Taxonomy contributes standardised criteria that are fundamental for the development of new and more sustainable activities. We use and analyse these criteria in both established projects and project development.

In the corporate initiative on the circular economy, we are bringing together expertise from across SINTEF to strengthen the transition to a circular economy in Norway. The initiative is also contributing to effective value creation in collaboration with clients. The circular economy will determine how industry and business are run in the future. We have a broad portfolio of projects that contribute to better resource utilisation both on land and in water.

SINTEF has an extensive and varied project portfolio within circular economy. The green platform Excon develops solutions to extend the service life of existing concrete structures. In the Refiba project, SINTEF develops recyclable packaging for dried and salted cod and frozen seafood, together with R&D partners and industry. The EU project Reeproduce is conducting research to establish a recycling value chain for rare earth metals.

Project turnover

819

NOKm

Spin-offs

3

Photo: AF Gruppen/Henning Rønnevik

The project is funded by Horizon Europe

Mecalo – metal production with carbon looping

The primary challenge being addressed is to reduce CO_2-emissions from the production of silicon and manganese by replacing fossil carbon with renewable hydrogen through carbon reuse.

This involves:

1. Capturing carbon oxides from exhaust gases produced by the process.
2. Converting the carbon oxides into solid carbon using renewable hydrogen.
3. Reusing the recovered carbon as a reducing agent in the metal production.

This innovative approach aims to make the production of these critical raw materials free of CO_2-emissions, which is crucial to achieving the EU's goal of climate neutrality by 2050.

The project will also help strengthen the EU's capacity and flexibility in the value chain for critical raw materials.

Read more here.

4.4 Green innovation, responsible consumption and production

Challenge

Norwegian and European industry are facing a period of fundamental change, especially in connection with the transition to zero emissions. Critical raw materials such as silicon and manganese are used in electric vehicles, batteries and windmills, among others. Access to these raw materials is therefore crucial for a green transition. They are currently produced through carbothermic processes in which fossil carbon is used as a reducing agent. This produces significant CO_2-emissions. A completely new production process is necessary.

SINTEF's expertise and contribution

From 75 years of multidisciplinary knowledge and advanced expertise in enabling technologies, we have delivered vital insights into how energy and raw materials are produced and create value.

Within minerals and metals, our research encompasses the entire value chain, from the extraction of minerals from the earth, via the production of metals and materials, to the application and properties of materials and end products. The recycling, recovery and upgrading of materials, process by-flows and waste constitute an important part of our activities.

The primary focus in our work with the processing industry is the sustainable development of both new and existing processes for metal production from raw materials into metals using metallurgical processes and electrolysis.

In the Mecalo project, SINTEF will contribute to the development of new catalysts for the first step in the conversion of CO_2. We will also conduct extensive testing of the produced carbon raw material and ensure that it can be used in metal production, as well as demonstrate scalability by producing several hundred kilograms of manganese in our pilot-scale smelting furnace, which is one of many advanced laboratories for research into metal production. In addition, we are the coordinator of the project, which has 13 partners from all over Europe.

Project turnover

1,892

NOKm

Spin-offs

12

Project turnover

819

NOKm

Spin-offs

3

Photo: Elkem

AI that ensures better efficiency and accuracy

Cardiovascular diseases claim over 10,000 lives in Norway each year and have major personal and societal costs. Correct diagnostics are essential for optimal treatment and reducing morbidity and death.

Ultrasound is one of the most important methods for checking the heart, but experience is required to control the probe correctly and it is very time-consuming to then analyse the images. Artificial intelligence can help by capturing the perfect image every time, while also being able to analyse the images as they appear on the screen – and help determine what is wrong with the heart.

Some patients are already benefiting from our project, which is helping to shorten waiting times and deliver more of the essential care they need.

Read more here.

4.5 Health

Challenge

The Norwegian health service is among the best in the world. Maintaining good and sustainable health and care services requires constant innovation. We need new digital services and technological solutions that ease the workload of healthcare professionals and improve treatment efficiency. The health industry and institutes could play key roles in this work, if it was made easier for actors outside the health sector to contribute.

SINTEF's expertise and contribution

Health is a multidisciplinary research activity in SINTEF. Nearly 200 research scientists work on topics ranging from developing new anticancer nanomedicines to research on initiatives that allow nurses to dedicate more time to direct patient care. We contribute to the development of medical technology and digital solutions for public health, the health sector and the health industry.

The areas we focus on include ultrasound technology, AI in specialist health services, personalised digital home care services for an aging population, prevention, occupational health, better healthcare for children under the supervision of child welfare services and mental health work in municipalities. We are also working on future medicine production, including within cancer medicines and antibiotics.

The healthcare industry is a key industry for sustainable restructuring and value creation, and vital to Norway's export ambitions. We are working closely with product and production developments to enable Norwegian innovations and new innovative medicines and treatments to be produced efficiently, safely and sustainably.

2024 was the year in which we saw the emergence of many AI strategies and action plans in the healthcare sector, and our expertise is being actively used by key players. We are convinced that SINTEF will play an important role in tackling the challenges facing the Norwegian health services in the years to come, however this will require the sector itself to open up to more external collaboration.

Project turnover

302

NOKm

Spin-offs

8

Photo: William Husby Hoven/SINTEF

Captain

The CAPTAIN project aims to produce knowledge that can contribute to a sustainable transition for the transport sector.

The project focuses on strategies that reduce the need for transport or shift this to means of transport with lower energy consumption and emissions. Such measures are often controversial and require broad involvement to be given legitimacy.

In the project we will:

- Show government authorities how they can implement controversial processes related to climate change transition.
- Identify barriers that hinder transition.
- Explore how inclusion of users strengthens the legitimacy of Norway's climate policy.

The project is supported by the Research Council of Norway and is being carried out in collaboration with NTNU, municipalities and the Norwegian Public Roads Administration.

Read more here.

4.6 Infrastructure and mobility

Challenge

Good infrastructure and efficient, safe transport services are important for both people and the business sector. However, infrastructure development and mobility also present challenges in relation to CO_2-emissions, traffic safety, biodiversity and costs. Therefore, the current infrastructure and vehicles need to be better utilised. Green transport also requires new energy infrastructure. We need to make this infrastructure last longer. This will save CO_2-emissions, nature and costs.

SINTEF's expertise and contribution

We are shaping the infrastructure of the future by developing cheap and sustainable mobility solutions with zero-emission mobility projects, automated transportation, physical and digital infrastructure, hubs, as well as mobility data and artificial intelligence.

The following are examples of projects:

- TEST ARENA FOR RAIL TECHNOLOGY: Together with the industry, we will develop, test and implement solutions on the Ofot and Malm rail lines for extreme operational challenges.
- EssPORT: The project develops energy systems for industrial processes and transport systems in ports.
- TRAFF-IATS: Traffic management for traffic flow at traffic lights with Smart AI and CAM messages via mobile communication.
- FME MARTRANS: Green transition of the maritime sector
- HE-ART: will develop hybrid electric propulsion systems for regional aircraft.

We are working on better framework conditions for applied research, development and innovation in the field of transportation. During Arendal Week, we actively participated in topics such as "Data-driven emissions cuts in the transport sector", "Infrastructure for zero-emission mobility" and "The place of cars in a city". In 2024, we worked towards realising a dedicated research centre via Transport 2050 and the Centres for Research-based Innovation (SFI) scheme.

Project turnover

1,892

NOKm

Spin-offs

12

Project turnover

620

NOKm

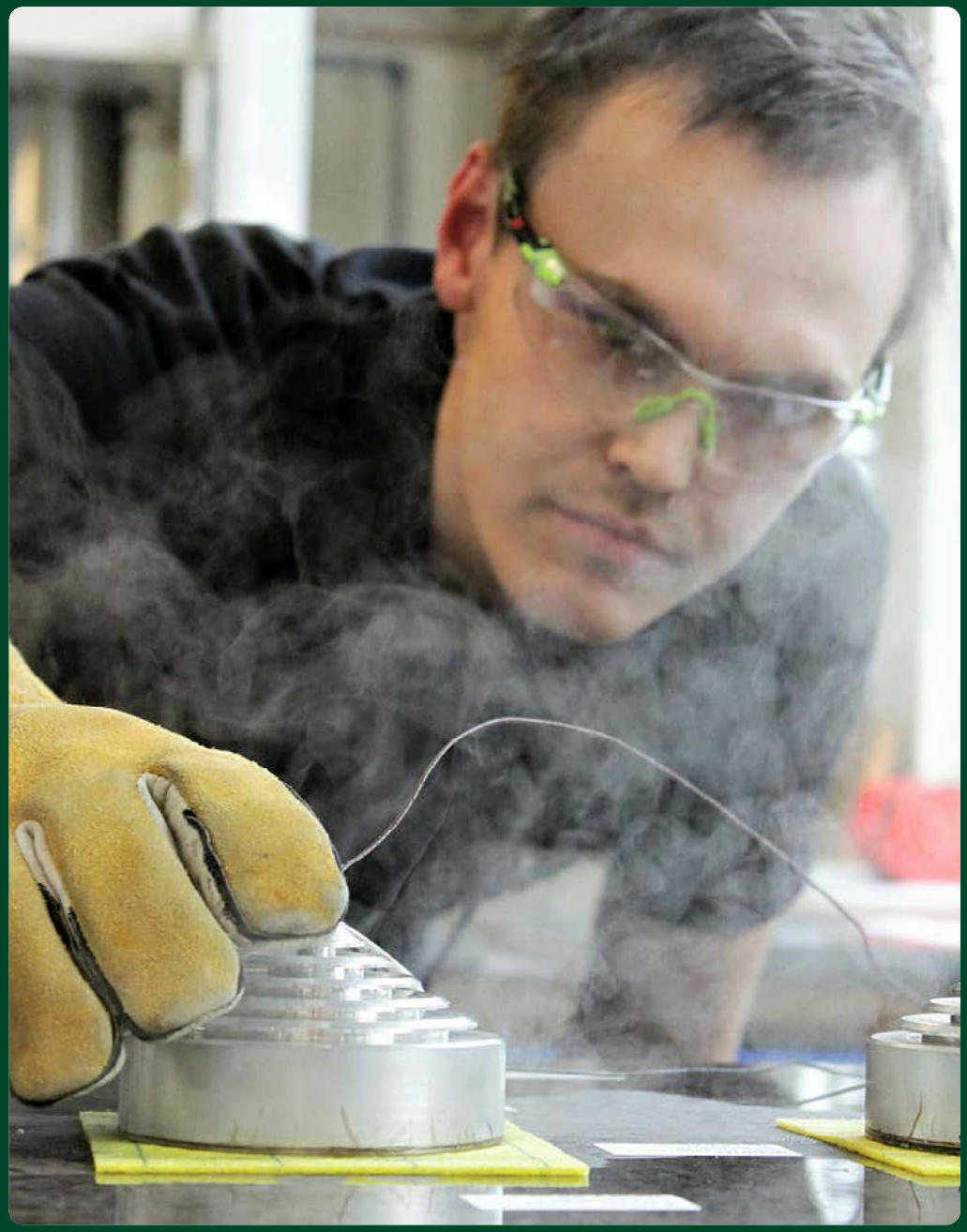
Spin-offs

1

Photo: Stock images

Chapter 5

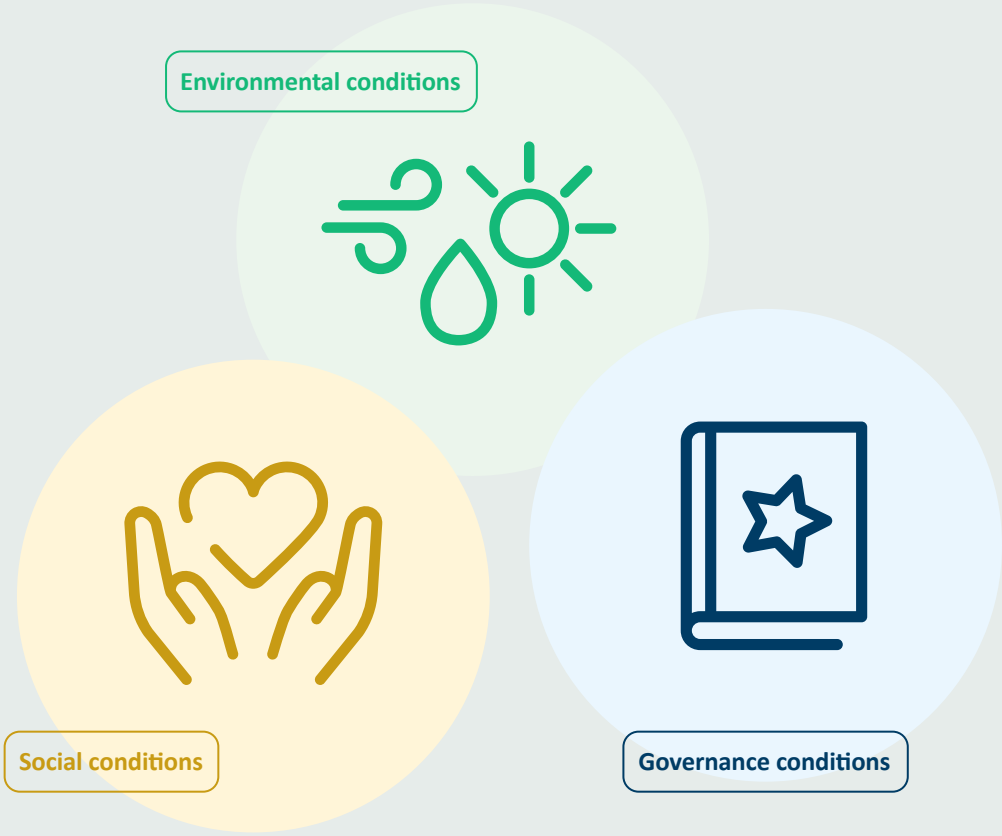
Safeguarding sustainability in our internal operations



In the Natural Stone Laboratory, we test natural stone products for CE labelling and annual checks for manufacturers and suppliers. The Natural Stone Laboratory has assisted with testing assignments for the Opera House and National Museum of Norway in Oslo, the Millennium Site (Tusenårsstedet) in Stavanger and Town Square (Torvet) in Trondheim. Photo: SINTEF

Sustainability Statement

This chapter describes how SINTEF safeguards sustainability in our internal operations. The structure reflects the different dimensions of sustainability – environmental, social and governance (ESG) conditions. General information is provided on topics including the preparation of the statement, how SINTEF is managed and, our strategy and stakeholders. The report also introduces the first version of our double materiality analysis.



5.1 General information

Reporting basis

BP-1 – General basis for preparation of sustainability reports

SINTEF has published its own sustainability statement since 2019. We have established integrated annual and sustainability reporting since 2022. SINTEF is preparing to comply with the EU Corporate Sustainability Reporting Directive (CSRD) and report sustainability information in line with the new European Sustainability Reporting Standards (ESRS). As a foundation, we are exempt from reporting obligations. However, we have underlying limited liability companies that exceed the threshold values for reporting. SINTEF will continue to conduct joint group reporting in order to comply with the reporting obligations and monitor the timeline and scope of reporting required in the future through the EU's new “omnibus” proposal.

Our management is therefore in the process of raising the reporting to new standards. This report, for 2024, is an "interim report", in which we start by reflecting new standards for how we report sustainability in our own operations. The information is presented with new headings and actions that prepare us for new reporting. This is based on a first version of a double materiality analysis conducted as a desktop analysis.

The materiality analysis will be completed and established with internal and external stakeholders during 2025. Gaps in information, data and practices for responding to new requirements shall be identified and closed.

SINTEF has lifted sustainability reporting to new standards in line with EU requirements. The 2024 report is an important milestone on the path towards compliance with the CSRD and the new European reporting standards. Photo: Berre/SINTEF

Governance (GOV)

GOV-1 – The role of the administrative, management and supervisory bodies

The SINTEF Foundation is a not–for-profit foundation with no owners, although it is subject to public supervision by the Norwegian Gambling and Foundation Authority pursuant to the Norwegian Foundations Act. The SINTEF Foundation is SINTEF's parent institution.

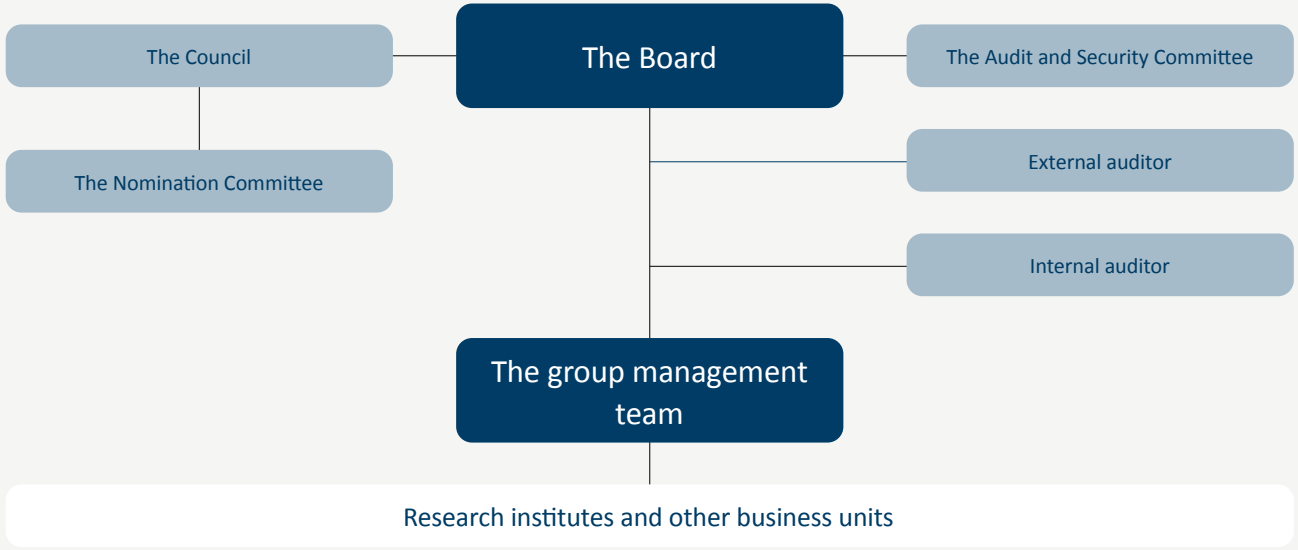
SINTEF's activities are also supervised by the Foundation's highest bodies, SINTEF's Board of Directors and SINTEF's Council, as well as our external auditors. The activities are regulated by the Articles of Association, shareholder agreements in part-owned subsidiaries, group agreements and the Instructions for the Board.

SINTEF's CEO is also the managing director of the SINTEF Foundation and SINTEF AS, as well as the chair of the boards of SINTEF Energi AS, SINTEF Ocean AS and SINTEF Manufacturing AS. SINTEF's group management team is responsible for the strategic management of our overall activities.

One key goal of our corporate governance is to safeguard SINTEF's independence and integrity so that we can fulfil our purpose. At the same time, we have to ensure that we are regarded as having a high degree of legitimacy, by our stakeholders, national and international authorities and society as a whole.

Dividends cannot be paid out. The entire surplus is used to strengthen SINTEF's solvency and capacity for research and innovation through upskilling, investing in research infrastructure and strategic initiatives, including in seed funds.

SINTEF's governance structure



SINTEF's goal is to generate a minimum operating margin of 5 per cent over the business cycle, as a basis for fulfilling its purpose in both the short and the long term.

SINTEF's work is based on formal certifications. We must always strive to meet the requirements and expectations of our clients and other partners. Therefore, we have a management system designed to ensure that we deliver products and services of the agreed quality, take account of the external environment, and work systematically on our working environment and safety. The requirements in the management system apply to all employees and contract personnel who carry out work under the auspices of SINTEF. More detailed information about certifications can be found on page 56.

The Board's responsibilities and composition

The Board is the Foundation's supreme decision-making body. It exercises the Foundation's ownership interests in wholly and part-owned subsidiaries and is responsible for ensuring that the activities of the SINTEF Foundation and the SINTEF Group are prudently organised and managed. The Board decides on overall policies, targets and strategies for SINTEF in collaboration with the CEO. The Board approves SINTEF's business plans and budgets. The Board shall also appoint the CEO of the SINTEF Group.

The Board's responsibilities and obligations are set out in the Foundations Act, Private Limited Liability Companies Act, the Articles of Association and the Instructions for the Board.

The Board finds that its role is to:

- Supervise the day-to-day management and general activities of the Foundation
- Ensure – at a board level – that SINTEF is achieving its' goals
- Strengthen, support and challenge the group management team
- Balance priorities and contribute to the improvement work
- Act as a sparring partner for the group management team

The Board holds eight ordinary meetings a year, and otherwise meets as required. The Board consists of nine members with the following composition:

- Two members and one deputy member are appointed by the Norwegian University of Science and Technology (NTNU) from among people in senior positions at NTNU.
- Four members and two deputies must come from industry or the public sector. They are appointed by SINTEF's Council.
- Three members must be permanent employees of SINTEF AS and be elected in line with the provisions for employee board representation in the Private Limited Liability Companies Act.

5 %

SINTEF's target is a minimum 5 per cent operating margin over a business cycle

100 %

of the Board consists of independent board members [10)]

33 %

Employees represent 33 per cent of board members

0/9

Board members have management responsibilities at SINTEF

10) Independent board members are defined as the percentage of independent board members without management responsibilities at SINTEF.

As of 31 December 2024, SINTEF's Board of Directors consists of:

Members

Chair Tore Ulstein, Chair of the boards of the Ulstein Group and others

Deputy Chair Øyvind Weiby Gregersen, Dean of the Faculty of Natural Sciences, NTNU

Lars Christian Dahle, CEO, Vnnor AS

Hanne Refsholt, chair of the boards of NMBU and others

Siri Forsmo, Dean of the Faculty of Medicine and Health Sciences, NTNU

Kristin Misund, SVP R&D and Business development, Borregaard

Bård Myhre, Senior Research Scientist, SINTEF Digital

Bendik Sægrov-Sorte, Senior Engineer, SINTEF Industry

Malin Sletnes, Senior Research Scientist, SINTEF Community

Deputy members

Ragnhild Apeland Katteland, Managing Director, Luminos AS

Ingelin Steinsland, Professor, Vice Dean of the Faculty of Information Technology and Electrical Engineering, NTNU

Erlend Skagseth, senior partner, Sarsia Seed Management AS

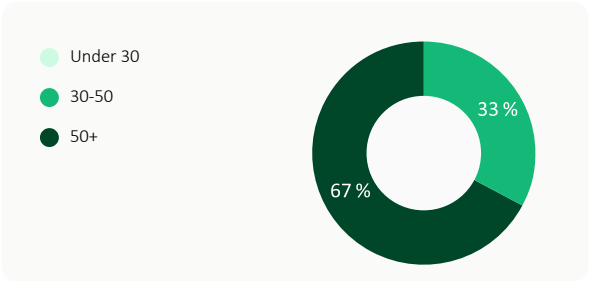
Øystein Wiggen, Senior Research Scientist, SINTEF Digital

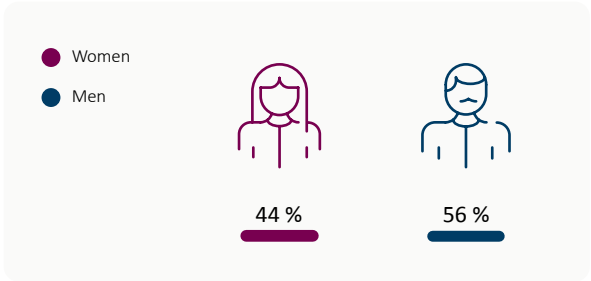
Sverre Gullikstad Johnsen, Senior Research Scientist, SINTEF Industry

Maria Gellein, Senior Technician, SINTEF Industry

From the left: Hanne Refsholt, Bård Myhre, Kristin Misund, Øyvind Gregersen, Lars Christian Dahle, Malin Sletnes, Bendik Sægrov-Sorte, Siri Forsmo, Tore Ulstein. Photo: SINTEF

AGE AND GENDER DISTRIBUTION ON THE BOARD





Source: SINTEF

The Council

SINTEF's Council is responsible for ensuring that the Foundation's objectives are pursued in accordance with its Articles of Association and the Council's own decisions. The Council is also an advisory body to the Board. The Council meets at least twice a year, although it can meet more frequently if necessary or desired. The Council consists of 28 members. 25 of these are appointed by NTNU's board of directors, the organisations Tekna, NHO, LO, and UiO, and the Board of SINTEF, respectively. Three council members are elected from among the employees of SINTEF's research companies.

NTNU's rector chairs the Council. The Council otherwise consists of businesspeople, experts from NTNU and UiO, employer organisations, trade unions, and people with a background from the public sector. Council members thus have close links to key groups of stakeholders.

The appointing bodies must take gender balance and diversity into account when appointing members and deputies to the Council. Members of the Council serve terms of four years. Re-election is permitted, although a term limit of eight consecutive years in office applies. This rule does not apply where the rector has been a member of the Council in some other capacity.

Other bodies

The Foundation's Nomination Committee has three members who are appointed by and from SINTEF's Council. The chair of the Council serves as the chair of the Nomination Committee. Members of the Nomination Committee are elected by the Council for terms of two years, although these terms are limited by their term of office on the Council. Members can be re-elected twice. The Nomination Committee's job is to propose the four candidates to SINTEF's Board that must be appointed by the Council in line with the Articles of Association.

In 2021, the Board decided to establish a board subcommittee, the Audit and Security Committee, to strengthen the Board's work within finance and particularly within security and information security. A specific mandate has been established regarding the committee's roles, responsibilities and tasks. The committee reports to the Board and holds three ordinary meetings a year.

SINTEF has an external auditor, elected by the Council, and an external internal auditor, elected by the Board. SINTEF is audited in relation to the ISO certification of our management systems for quality, the external environment, the working environment and security.

Responsibilities and composition of the Group Management Team

The day-to-day operations at SINTEF are managed by the CEO and Deputy CEO, together with the Executive Vice Presidents of the Institutes at SINTEF AS, the Managing Directors of the subsidiaries and Chiefs of Staff. Together they make up SINTEF's group management team. The group management team holds four meetings a month, and otherwise as required.

As of 31 December 2024, SINTEF's group management team was as follows:

Members
Alexandra Bech Gjørv: CEO
Reidar Bye: Deputy CEO/CFO
Siri Hunnes Blakstad: Executive Vice President, SINTEF Community
Silje Helene Aschehoug: Managing Director, SINTEF Manufacturing AS
Eli Aamot: Executive Vice President, SINTEF Industry
Inge Røinaas Gran: Managing Director, SINTEF Energi AS
Vegar Johansen: Managing Director, SINTEF Ocean AS
Trond Runar Hagen: Executive Vice President, SINTEF Digital
Anders Lian: Managing Director, SINTEF TTO AS
Gunn Jorun Widding: Executive Vice President, Organization and Joint Services
Nils Anders Røkke: Director, Sustainability
Morten Dalsmo: Executive Vice President, Customers and Market
Vincent Wego Fleischer: Executive Vice President, Strategy and Communications

From the top left: Inge Røinaas Gran, Silje Helene Aschehoug, Vegar Johansen, Vincent Wego Fleischer, Morten Dalsmo, Anders Lian, Nils Røkke, Trond Runar Hagen, Siri Hunnes Blakstad, Gunn Jorun Widding. Bottom from the left: Reidar Bye, Alexandra Bech Gjørv, Eli Aamot.

Photo: Karoline Ravndal Lorentzen/SINTEF

Every day, the entire group management team works on how sustainability impacts their areas of responsibility; in particular within the specialist and market areas in which the institutes operate.

AGE AND GENDER DISTRIBUTION IN THE GROUP MANAGEMENT TEAM

Source: SINTEF

GOV-2 – Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies

During 2024, the Board and group management team actively worked on SINTEF's sustainability ambitions.

In March, the Board adopted a new corporate strategy for SINTEF. The commitment to the UN Sustainable Development Goals has been maintained. A shared ambition has been set for the Group to: "Provide even stronger contributions to sustainable development. We highlight SINTEF's sustainability ambition and how we will deliver on external and internal expectations."

Efforts to realise this ambition have been organised as a joint group project consisting of three work streams:

1. Strengthen the contribution of SINTEF's research and innovation into sustainable development
2. Strengthen the sustainability of SINTEF's own operations, particularly with regard to operationalising the expectation in the Group Strategy that SINTEF defines a quantitative climate target in line with global climate commitments
3. Strengthen SINTEF's sustainability reporting

The project was one of the main topics at the Board and group management team's strategy meeting in June 2024, and was also discussed at SINTEF's annual management meeting for the wider management team (approximately 200 middle and senior managers). Throughout the year, the group management team was informed about the status of and defined ambition levels for the sustainability work. The decision was made to intensify the reporting work for 2025 and that improvements in own operations be guided by the gaps and needs revealed by enhanced reporting.

As part of SINTEF's ongoing operations, the group management team and other management shall actively work with areas such as health, safety, and environment for employees, security, export controls and privacy in the business activities, as well as ethical sustainability dilemmas. Among other things, these dilemmas can arise in connection with the projects that SINTEF should take on, or how projects are best framed together with clients and partners. The ambition for SINTEF's management team is to ensure that positive impacts on people and the environment are optimised and that negative impacts are reduced or removed. This is further described in Chapter 2.2.

As is further specified in GOV-5 Risk Management and Internal Controls, the Board and group management team review SINTEF's overall risk picture every four months. Specific risks are also subject to in-depth follow-up when this is deemed necessary.

GOV-3 - Integration of sustainability-related performance in incentive schemes

Incentive schemes for the Group Management Team and CEO

Salaries for the CEO, Deputy CEO/CFO and institute directors on the group management team consist of a fixed base salary and variable remuneration. The incentive scheme is linked to a number of criteria that include both financial and non-financial targets. One of the criteria is follow-up of the UN Sustainable Development Goals and SINTEF's own sustainability goals, which are integrated into the category "Strategy and One SINTEF".

The performance of managers is also assessed in areas such as financial development, HSE, ethics, client satisfaction, research quality and employee development. This approach ensures that sustainability-related results are not only part of the strategy but also an integral part of the incentive schemes for executive management. This is intended to foster a culture in which sustainability is a natural part of our day-to-day operations and strategic decisions.

GOV-4 – Statement on due diligence

SINTEF has committed to monitoring working conditions in the value chain through risk assessments, due diligence and dialogue with our suppliers. This includes requirements for fair wages, safe working conditions, freedom of association and gender equality. See Chapter 5.3 Social conditions (S2 Employees in the value chain) for more information about the Transparency Act.

GOV-5 – Risk management and internal control

Risk management and internal control are an integral component of SINTEF's corporate governance and cover strategic, market and operational factors.

Responsibilities

SINTEF's Board of Directors has overall responsibility for ensuring that the Group has good risk management and internal control procedures. SINTEF's Audit and Security Committee was established as a preparatory body for the Board. The committee supervises the Group's internal audit and exercise of risk management and internal control, as well as security and emergency preparedness. The group management team is responsible for operationalising the Group's risk management and internal control. The corporate staff responsible for quality are responsible for facilitating risk management and internal control, including frameworks and appropriate tools. This is done in close cooperation with other corporate staff areas.

SINTEF has also established a barrier model with four barriers to ensure that our activities are conducted in compliance with laws, regulations, internal policies and our business model.

SINTEF's barrier model

First line of control
Managers and employees in the line and in project groups

Second line of control
Control activities and corporate staff functions

Third line of control
Internal auditor (Deloitte)

Fourth line of control
External auditor (KMPG), external audits of certification bodies and supervisory authorities

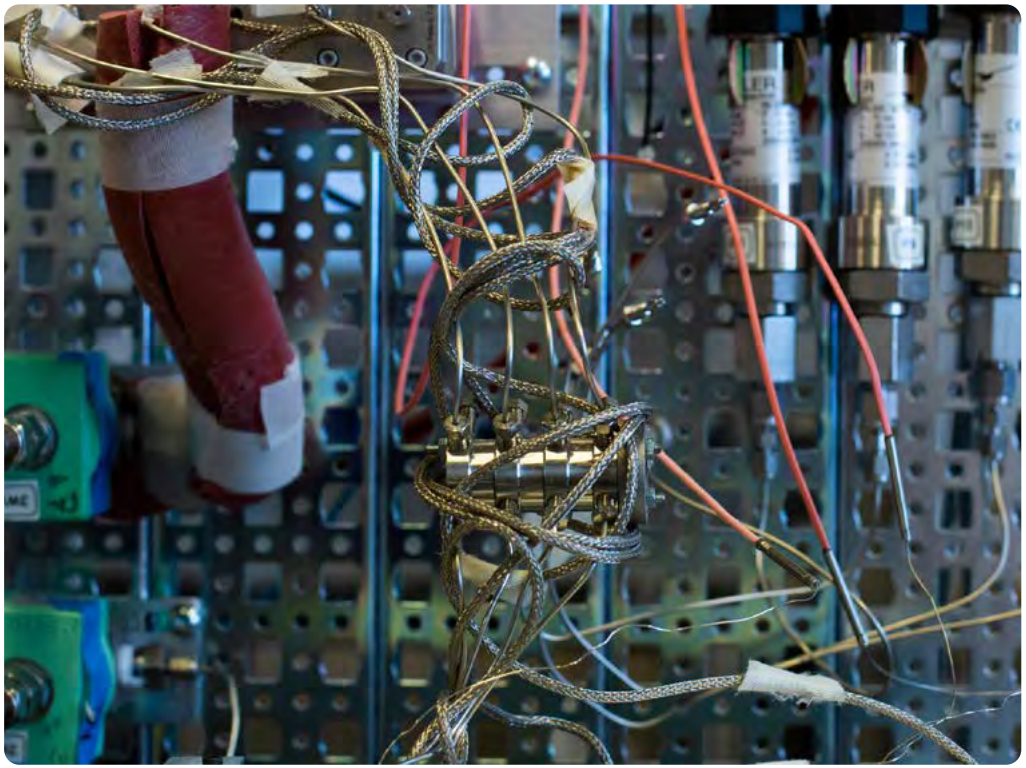
Framework and implementation

Risk management and internal control are based on the principles in the framework provided by the Committee of Sponsoring Organisations of the Treadway Commission (COSO) and the risk management guidelines set out in ISO 31000. SINTEF is also certified in line with the requirements of Quality Management Systems (ISO 9001), Environmental Management Systems (ISO 14001) and Occupational Health and Safety Management Systems (ISO 45001). Risk management and internal control are described in specific processes in the Group's management system.

The risk picture is discussed by the management and board of each of the research institutes, as well as by the group management team and the Board of Directors. Risk mitigation measures are defined and implemented on an ongoing basis. The group management team and the Board review the risk picture every four months. An annual internal audit report is prepared for the group management team and the Board.

Internal audit conducted a number of audits in 2024. This included an audit related to our systems and routines for export control, and our systems and routines for following up on external and internal regulations. The audits produced several follow-up points that may contribute to improvements in how SINTEF works to comply with external and internal requirements.

SINTEF is working on developing processes and procedures for appointments and vulnerability interviews. A system for complying with export controls is a priority.



In the In Situ laboratory, we study how powder materials react under real processing conditions. We analyse the materials while they are being exposed to high temperatures, pressure and gases – in exactly the same way as in the industry. This provides important knowledge for developing better catalysts and other advanced materials.

Photo: Lars Andreas Berg/SINTEF

Strategy and stakeholders (SBM)

SBM-1 – Strategy, business model and value chain

SINTEF's purpose is to contribute to the development of society by conducting research within the natural sciences, technology and health and social sciences. SINTEF's vision is 'Technology for a better society', and this involves SINTEF being a driving force behind the transition and development of Norwegian society. This shall be achieved by partnering with our clients to enhance innovation and value creation. Our activities are guided by our ambition to contribute to sustainable solutions. This is reflected in our updated corporate strategy and in our vision, which describes where we want to go and what we want to achieve.

Since 2019, we have used the UN Sustainable Development Goals as a framework to clarify our vision and guide our activities. This expands the obligations we have had as a member of the UN Global Compact since 2009. The 17 SDGs specify what we and the global community have to achieve in order to improve society. The goals have 2030 as a time horizon. However, we realise that we need to look even further ahead when designing the solutions of the future.

Contributing to sustainable development is at the head of our vision. We want to contribute to competitiveness and the common good. To achieve this, we need to produce results and value in collaboration with clients and build outstanding research environments, laboratories and new activities. A strong organisation and good corporate governance are prerequisites for fulfilling this role.

We will achieve our vision through research that reconciles competitiveness and the common good. In this way we want to contribute to a sustainable transition and ensure that clients achieve profitability and their goals.

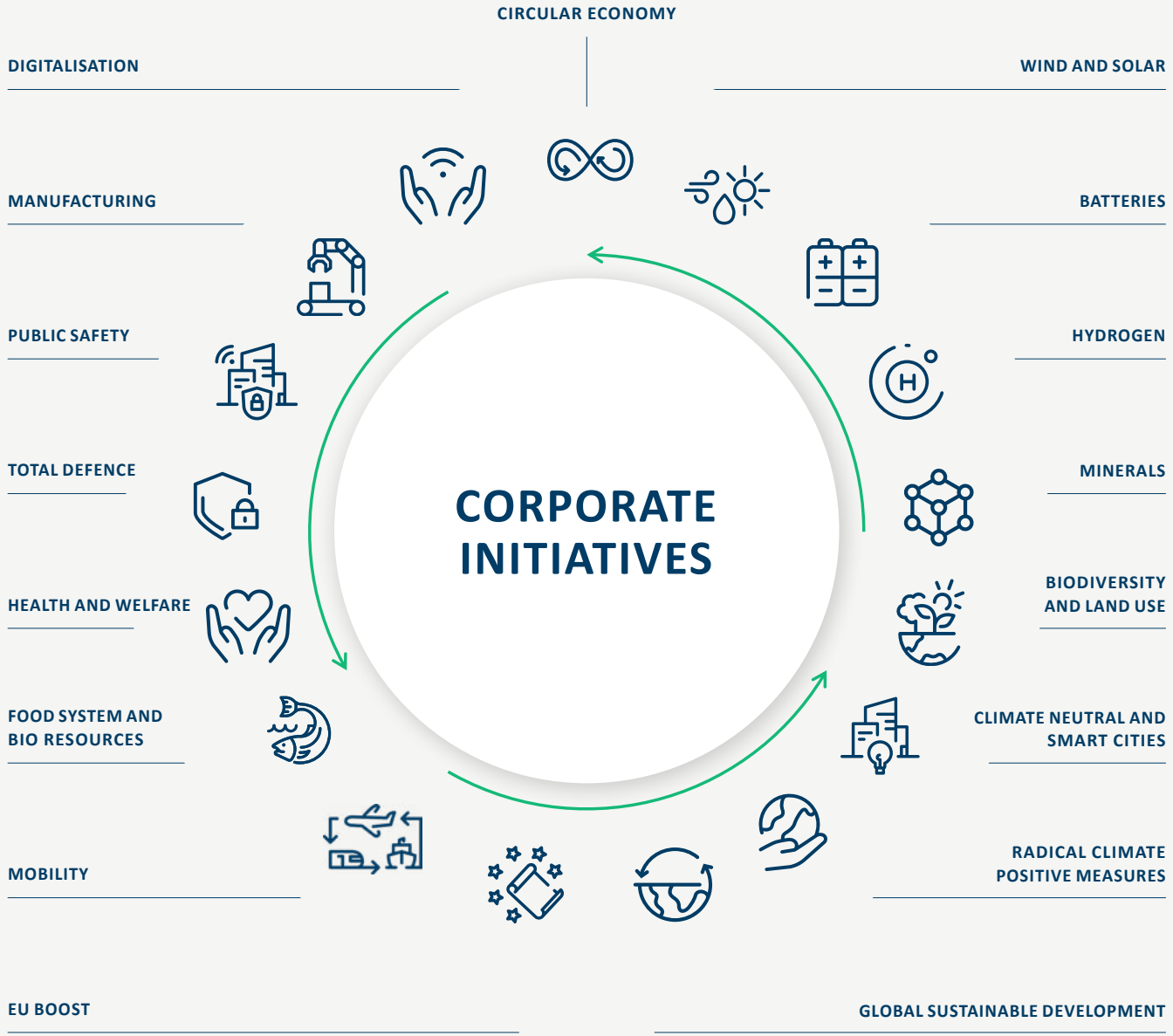
Our activities focus on nine overarching priorities. Here we unite outstanding research environments with our clients through partnerships, as illustrated in the figure below. The central column shows three perspectives that impact all areas of society: *Digitalisation*, *sustainability* and the need for *productivity*. We also deliver solutions for a number of domains and market areas: energy, food, industry and construction, health, smart and secure societies, and mobility. For Norway, as a major maritime nation, many of the current solutions are relevant both at sea and on land.

In addition to this, since 2017, we have boosted corporate initiatives in order to reinforce our contribution to green, digital and safe social development.

These corporate initiatives invite collaboration across disciplines to meet complex societal and client needs, as well as to solve demanding sustainable development dilemmas (read more in Chapter 2.2 Ethical sustainability dilemmas).

The portfolio of corporate initiatives matures over time. As we become aware of new or more pressing societal and client needs, new group initiatives are launched. For example, total defence (total-forsvar) is one of the most recent initiatives, and we see that the need for new approaches to security has become even more applicable in the past year.

As of March 2025, SINTEF has the following 17 corporate initiatives, all of which will contribute to sustainable development in their fields:



SBM-2 - Interests and views of stakeholders

Our main stakeholders

We are in regular contact with our stakeholders through formal and informal conversations and meetings, structured client and employee surveys, and formal reporting. Our double materiality analysis will be supplemented and established with external and internal stakeholders during 2025. This will enable the views of our stakeholders to be better detailed in subsequent reports.

Clients	The business sector and public bodies (including county authorities and municipalities) in their capacity as contracting authorities for research projects, as well as partners in research projects or research centres.
Partners	Primarily research institutes and universities (NTNU, UiO) as well as organisations (especially the NHO, Norsk Industri and Abelia, LO and Tekna), as well as supporters and investors in our commercialisation activities (especially European Investment Fund, Sparebank 1 SMN, KLP, Gjensidige, Sparebankstiftelsen DNB and Reitan Kapital).
Research Council of Norway	Central to the application of adopted policies and distribution of allocated research funds in Norway.
EU research authorities	Leading stakeholders and policy advisers for joint European research programmes. Vital to shaping policy and the direction of research, and in distributing research funding allocated by the EU.
The authorities and politicians	National authorities (government and ministries) and politicians, as well as regional and local authorities and politicians. In some cases, the authorities are also clients in their capacity as contracting authorities for, or partners in, research projects.
Employees and potential employees	Employees of SINTEF and those who can provide SINTEF with new skills and labour in the future.

Management of Impacts, Risks and Opportunities (IRO)

SBM-3 - Material impacts, risks and opportunities and their interaction with strategy and business model; IRO-1 – Description of the processes to identify and assess material impacts, risks and opportunities; IRO-2 – Disclosure requirements in ESRS covered by the undertaking's sustainability statement.

As mentioned above, the double materiality analysis was initially conducted as a desktop analysis. This was based on existing strategies and reporting, risk picture, HSE assessments, due diligence, working environment surveys, etc., to provide a comprehensive, initial compilation of SINTEF's material impacts, risks and opportunities. During the first stage, most of the attention has been focused on our own operations, and to a lesser extent the impact through research into clients, partners, end users, consumers and local communities. A more complete analysis will be conducted during 2025.

Once the first version of double materiality analysis has been completed and better established, the impacts, risks and opportunities associated with each topic can be described in more detail in the Integrated Annual Report for 2025.

This is emphasised by the fact that relevant policies, measures, goals and achievements in 2024 are described for each material topic, but that these do not provide complete reporting of quantitative or qualitative data for each sub-area in accordance with what is expected from reporting that aligns with CSRD/ESRS.

In a first version, the following topics were identified as being material to SINTEF's internal operations:

Environmental Information	E1 Climate change
	E2 Pollution
	E4 Biodiversity and ecosystems
Social conditions	S1 Own workforce
	S2 Employees in the value chain
Governance conditions	G1 Business conduct

5.2 Environmental information

E1 Climate change

Climate change mitigation

SINTEF is making strong efforts to contribute to zero emissions in the value chains through our research and innovation, see in particular Chapters 2.2 and 4. At the same time, we also need to contribute through our own operations.

Negative impacts from our own operations are particularly caused by the consumption of gas in our laboratories and energy in laboratories and office buildings. However, as a research institute, the largest emissions are the indirect emissions within Scope 3. These are the sum total of our purchased goods and services, as well as capital goods, where we build and modernise buildings that can house both our own research and business activities and those of other parties. This also includes emissions from travel, which continues to be an important tool for co-creation with clients, partners and a geographically dispersed organisation, despite having transferred much of our collaboration over to digital channels in the past five years.

Positive impacts from own operations include SINTEF's climate fund, in which the SINTEF Foundation invested NOK 21 million between 2021 and 2024 to promote research into climate positive solutions. These are emerging technologies that can extract greenhouse gases from the air and water, which is what is required in order to achieve the 1.5 degree target. This contribution is based on SINTEF's desire to take its climate responsibility beyond the ordinary value chains we are part of, and has also mobilized external partners.

In terms of ordinary operations, there are financial opportunities for reduced costs through, for example, energy efficiency and reduced travel activity, and, in the same way as for society at large, there is a risk associated with extreme weather or lack of climate adaptation. However, the greatest financial opportunities and risks concern the research activities and our interactions with clients and partners. This is further described in other parts of the report, including Chapters 2.2. These climate risks concern both physical and transitional risks, whereby activities in some of the industries we work for can conceivably be subject to stricter regulations or that input factors in the research, such as gases, could be taxed.

Over the years, we have systematically worked to reduce our impact on the climate and act in line with our decision to be guided by the UN Sustainable Development Goals. At the same time, we have wanted to live up to the expectations our employees, clients and society in general have of us.

Our environmental policy governs how we operate our buildings and conduct our research activities. Our procurement policy sets requirements for sustainability and ethics. Larger suppliers are monitored for climate and the footprint that purchased goods and services generate.

The group management team has decided that we want to set quantitative, science-based climate targets. So far, we have established that we want to cut emissions and have then implemented the associated measures. We have been reluctant to quantify our targets and to indicate how rapidly they will be achieved before we have conducted further analyses of the current status of emissions and levers for reductions.

Internal sustainability work was reinforced in 2024 as a measure based on the updated corporate strategy. In order to strengthen the sustainability of our own operations, we place particular emphasis on:

- Ensuring the division of responsibilities and ability to execute assignments among SINTEF's corporate staff and SINTEF Eiendom.
- Strengthening climate accounting, frameworks and areas for reducing greenhouse gases.
- Determining quantitative climate targets.
- Strengthening sustainability goals and plans for property activities.

The 2024 climate accounts reflect these efforts through greater precision and more emissions categories being added to this year's reporting in order to have the most complete baseline upon which to set climate targets. This lays the foundation for targeted work on new measures, which may lead to further reductions in the climate accounts in the future.

SINTEF's climate accounts

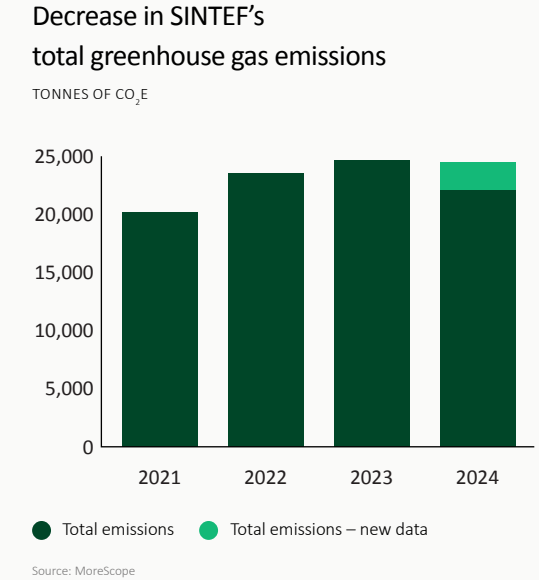
SINTEF has produced climate accounts for its operations since 2021. SINTEF reports its emissions in line with the Greenhouse Gas Protocol, supported by Morescope. Based on data and technology originally developed through research at SINTEF, this start-up company provides carbon accounting and other sustainability services to a number of companies. SINTEF Venture VI is an investor in the company.

SINTEF's total emissions in 2024 amounted to 24,473 tCO_2e. This represents a decrease of approximately 1 per cent from last year's reporting. However, the actual decline is greater, because in this year's climate report SINTEF has added emissions categories for which there had not previously been data.

When viewed in relation to the number of FTEs, we had greenhouse gas emissions of 11.9 tCO_2e per FTE in 2024, compared to 12.1 tonnes in 2023, when less

Climate accounts 2024	Greenhouse gas emissions 2024 in tonnes of CO_2e	2024 percentage share of total greenhouse gas emissions	Greenhouse gas emissions 2023 in tonnes of CO_2e
Scope 1			
1.1 Fuel combustion [11]	97	0 %	32
1.2 Process emissions [12]	330	1 %	
1.3 Gas [13]	973	4 %	45
Total Scope 1	**1,400**	6 %	**77**
Scope 2 [14]			
2.1 Purchased electricity (location based)	394	2 %	302
2.1 *Purchased electricity (market based)* [15]	15,716	39 %	7,986
2.2 District heating	329	1 %	113
Total Scope 2 (location based)	**723**	3 %	**415**
Total Scope 2 (market based) [15]	16,045	40 %	8,099
Scope 3			
3.1 Purchased goods and services	14,570	60 %	14,453
3.2 Capital goods	3,863	16 %	7,048
3.3 Fuel and energy-related activities upstream [16]	817	3 %	110
3.4 Upstream transport and distribution	265	1 %	277
3.5 Waste from operations	266	1 %	71
3.6 Business travel[17]	2,521	10 %	2,128
3.7 Employee commuting [18]	N/A	N/A	N/A
3.8 Upstream leased assets	48	0 %	48
Total Scope 3	**22,350**	91 %	**24,135**
Total (location based)	**24,473**	100 %	**24,627**
Total (market based) [15]	39,795	100 %	32,311

Source: MoreScope



11) More data collected than previously. All financial transactions from fuel suppliers and costs recognised in the accounts as fuel are used to estimate consumption and emissions.
12) Propane is used as an energy source in local heating systems for heating buildings at a location. Emissions estimated from all propane consumption, however, some of the consumption is used for research.
13) Calculated from actually purchased volumes of gas from Nippon and Linde, as well as financial transactions from other gas suppliers. In 2024, a rough estimate was also made for emissions from SF_6 gas. This amounts to 588 tCO_2e.
14) For 2024, kWh consumption data was collected from several buildings, and an estimate was made of kWh consumption in several leased buildings. For certain locations there is an absence of data and estimated emissions for electricity and district heating.
15) In accordance with the ESRS and GHG protocol, in 2024 SINTEF included a market-based calculation of CO_2 equivalents from purchased electricity in the table for the climate accounts. As previously, SINTEF uses location-based calculations in visualizing and describing the development of emissions and calculating key figures.
16) Upstream emissions related to purchased fuel, gas, electricity and district heating were included in 2024 because methodological assessments suggest that this provides more complete and correct climate accounts.
17) In addition to air travel, calculations were made for emissions from hotel stays, taxis, trains, car rentals, buses and driving allowances for business trips in 2024.
18) There is no available data for employee commuting.

data was included. When viewed in relation to turnover, we had emissions of 5.6 tCO_2e per NOK million in gross revenue in 2024.

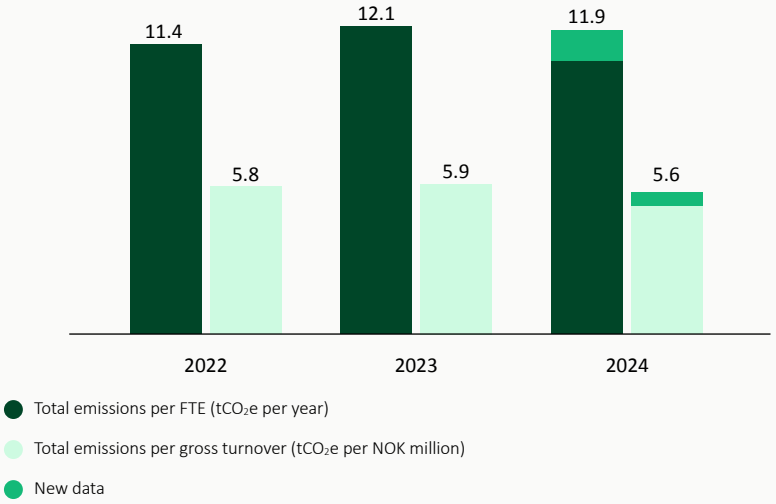
When broken down, total emissions were 1,400 tonnes (6 %) for Scope 1, 723 tonnes (3 %) for Scope 2 and 22,350 tonnes (91 %) for Scope 3. In this year's report, Scope 1 has a calculation that is assumed to be somewhat high compared to a more exact calculation of combustion and emissions from all gases, and is also significantly higher than the previous year's report, which had less data included. Scope 2 has also been supplemented with new data however, still lacks input from some of SINTEF's locations. This means that, in reality, emissions from energy use are slightly higher than reported in the climate accounts. Scope 3 continues to be the largest emissions category in SINTEF's climate accounts. Here we saw a decrease of 7 per cent in 2024, despite additional data having been added. The drop was primarily due to a lower investment level, i.e. emissions from capital goods. SINTEF expects to report lower Scope 3 emissions going forward as more activity-based data is included, and we follow up and identify measures realised in cooperation with suppliers.

Direct emissions – Scope 1

Greenhouse gas emissions within Scope 1 include direct emissions from SINTEF's own operations, such as fuel combustion, process emissions and the use of gases, and in 2024 accounted for 6 % of SINTEF's greenhouse gas emissions. As part of our efforts to improve targets and measures related to our own climate impact, we have worked to obtain a more complete set of emissions data. Fuel combustion amounted to 97 tonnes of CO_2. Calculations in previous years only included a limited number of company cars, however, this year all fuel transactions were included. Process emissions amounted to 330 tonnes of CO_2, whereby propane, which is partly used for research and partly for heating at a location, is now included in this category, after previously being reported under gas emissions.

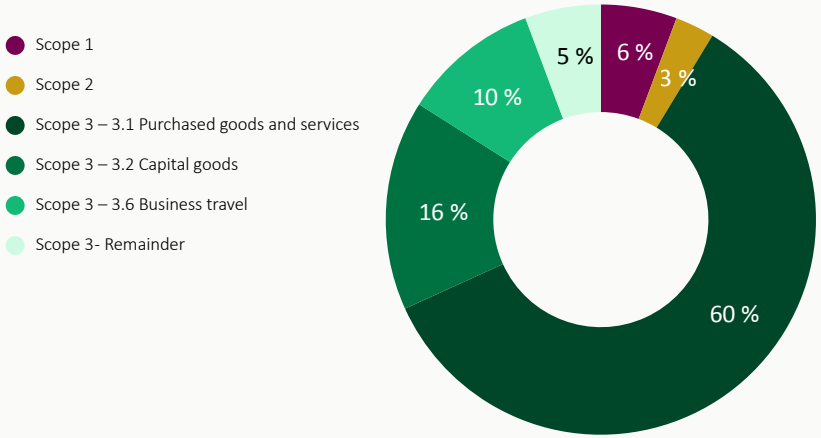
Gas emissions amounted to 973 tonnes of CO_2, with gas purchased from suppliers such as Linde and Nippon

Emissions relative to FTEs and turnover



Source: Morescope, SINTEF

Emissions according to Scope 1, 2 and 3



Source: Morescope, SINTEF

included, in addition to SF_6 gas, which has not previously been part of our climate accounts. SF_6 gas alone accounts for 588 tCO_2e. SF_6 is used for the production of semiconductors at our MiNaLab laboratory. The process results in microchips that are used in sensors which are important for the green transition. Meanwhile, SF_6 is a very potent greenhouse gas, even when used in small quantities, like we do. When SF_6 is used in production in SINTEF's laboratory it is converted into new compounds with a much lower carbon footprint. However, an unknown quantity of the gas turns back into SF_6 after it is used. The emitted volumes of these new compounds and the residual SF_6 have not yet been calculated. A rough estimate calculated from gas consumed per year indicates an emission range of up to 600 tonnes of CO_2, if we assume that half of the gas goes to emissions. This is a highly uncertain estimate, however has been included in the 2024 climate accounts to highlight it as being a significant emissions category and its impact. We have investigated how we can measure, report and hopefully depollute these residual emissions in the future. During 2025, we will consider making an investment to depollute 95-99% of emissions. We also have an ongoing long-term research project to replace SF_6 for some processes in order to reduce the negative climate impact, however the most important measure is depollution.

Indirect emissions from energy consumption – Scope 2

Scope 2 covers emissions from purchased electricity and district heating. Emissions from purchased electricity amounted to 394 tonnes of CO_2 (location-based calculation). The reporting has been expanded to include more locations, such as SINTEF Ocean's Brattørkaia and SINTEF Energy's Energy Lab, as well as electricity in leased buildings. However, there are still some buildings for which electricity consumption is not recorded. District heating accounted for 329 tonnes of CO_2, and the same challenges apply here, whereby there is an absence of data for some locations. We will be working to obtain data that provides a complete picture of all electricity and energy consumption in future climate accounts.

Several measures have been implemented in recent years to reduce the energy consumption and carbon footprint. The effect of two major initiatives at Forskningsveien 1 and MiNaLab in Oslo alone contributed to reducing SINTEF's energy consumption by 2.3 GWh/year. Forskningsveien 1 features a renovated facade covered with solar panels, helping to reduce energy purchases, along with other efforts. The overall result for the property portfolio managed by SINTEF Eiendom has been a 31 per cent reduction in energy consumption from 2017.

Other indirect emissions – Scope 3

Scope 3 represents the largest share of SINTEF's total emissions, with 22,325 tonnes of CO_2. This includes purchased goods and services, capital goods (investments) and business travel. Purchased goods and services accounted for 14,570 tonnes of CO_2. Reporting in this category has been improved by obtaining more accurate figures from suppliers, for example for IT equipment supplied by Atea. The largest reduction in emissions relates to capital goods, for which emissions in 2024 fell to 3,863 tonnes of CO_2 due to lower investments.

Purchased goods and services constitute the largest emissions category for SINTEF both in total and within Scope 3. SINTEF works with suppliers to reduce the need for transport and energy use, for example through the use of electric vehicles for delivery, reducing the number of deliveries and services from suppliers, and transport using gas-powered trucks. We also seek to gain insight into the climate accounts of suppliers and how SINTEF can report and influence its share of emissions in a positive direction. A large proportion of Scope 3 emissions are estimated based on average factors for emissions from the relevant supplier's industry and country (transaction based calculation) [20]. We are continuously working to improve and increase the level of accuracy in our reporting. In all framework agreements and for individual procurements, sustainability shall be part of the assessment that forms

Energy consumption in buildings [19] owned by the SINTEF FOUNDATION

	2024	2023	2022
Total energy GWh	22.5	23.6	24.2
Reduction (from 2017) in energy consumption kWh/m²	31 %	27 %	23.1 %
Consumption of non-renewable energy (gas in GWh)	1.45	0.89	1.28
Consumption of electricity (GWh)	14.70	15.90	15.21
Consumption of district heating (GWh)	6.30	6.80	7.70
Energy consumption per square metre (kWh/m²)	259	272	279

Source: SINTEF

19) The table only shows data for buildings owned by the SINTEF Foundation (approximately 60 per cent of total area).
20) In Scope 3 of SINTEF's climate accounts, 12.5 per cent is activity-based data, which reproduces actual consumption/emissions per supplier, while 87.5 per cent is transaction based.

the basis for the choice of supplier. SINTEF also works together with suppliers in our framework agreements to jointly find more climate-friendly solutions. This includes selecting more climate-friendly products, reducing packaging, sustainable food in our canteens and reducing food waste.

Capital goods are the second largest emissions category at SINTEF. SINTEF's property activities aim to achieve sustainable development and operations, defined as the minimum certification of new buildings according to BREEAM NOR Excellent, and modernisation of buildings with the aim of achieving BREEAM NOR in use. This involves strict requirements for the choice of materials and processes, when viewed from a climate perspective.

By investing in laboratories and property, SINTEF seeks to create physical infrastructure that makes it possible to conduct world-leading research and contributes to good ecosystems for innovation, where we can also house important partners in our buildings. A decrease in investments in 2024 had a positive effect in the form of reduced greenhouse gas emissions at this moment in time, however SINTEF will continue to build and develop the properties in accordance with strict targets for climate and environmental profile to ensure that our core activities can continue to have a societal impact, including by contributing to technologies that can reduce and solve climate challenges.

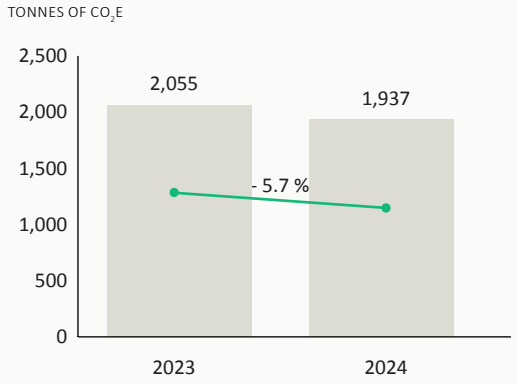
An important investment for SINTEF is the commitment to the Norwegian Ocean Technology Centre. Together with NTNU, this initiative involves us contributing towards Norwegian ocean industries becoming more sustainable and productive through the development of knowledge and technology, the establishment of world-leading educational environments, knowledge dissemination and restructuring of the business sector. This is described in more detail in Chapter 3.3. The centre is being developed by the state and has therefore not been included in SINTEF's climate accounts in the form of capital goods in the development phase. Associated investments made by SINTEF are part of the accounts.

Emissions from business travel represented the third largest emissions category for SINTEF in 2024, with a total of 2,496 tonnes of CO_2. This previously only included air travel, but now also includes hotel stays, driving allowance, taxis, trains, buses and car rentals.

Climate emissions from air travel, measured in kilograms of CO_2 per FTE, fell by 6.6 per cent compared to 2023, and by 36 per cent compared to the last normal year before the pandemic, which was 2019. In total, the previous year's decrease in emissions from air travel was 5.7 per cent – from 2,055 tonnes in 2023 to 1,937 tonnes in 2024.

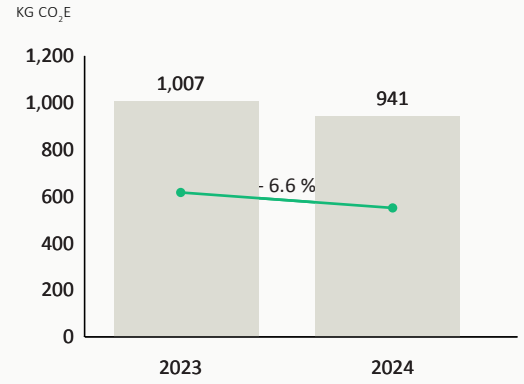
Travel activity is assessed on a monthly basis. More thorough analyses are carried out every four months. For awareness purposes, we provide the organisation with statistics on our travel activity and assessments of it. In line with our ambitions in the area of sustainability and our desire to set quantitative climate targets, in 2025 we will continue the work on assessing what other measures will help ensure that SINTEF's employees travel in an environmentally responsible manner. SINTEF is a geographically dispersed organisation with clients and partners across Norway and abroad. The development of good research scientists and good research still requires that research

Total emissions from air travel



Source: Berg Hansen reisebyrå, SINTEF

Emissions from air travel per FTE



Source: Berg Hansen reisebyrå, SINTEF

scientists and clients meet, discuss, develop networks and learn from each other. At the same time, it is important that we are aware of the climate footprint our travel leaves and that we prioritise what journeys should be made. The pandemic taught us that travel activity could be significantly reduced, and we have brought this into our post-pandemic working day.

As previously, *employee commuting* is not reported because we do not have complete data on travel habits as of the present date. As part of efforts to improve the climate accounts and assess targets and measures for reducing greenhouse gas emissions, we have made a preliminary, rough estimate, which indicates emissions of between 750 and 1,500 tonnes of CO_2, which are not included in the accounts.

Downstream emissions are not part of the climate accounts. Our contribution through research and innovation is largely aimed at measures that can reduce or remove emissions by other parties, and thus concerns so-called Scope 4, avoided emissions. Other downstream activities include SINTEF's start-up companies, which are not included in SINTEF's climate accounts due to materiality. The most recent fund, SINTEF Venture VI, is classified as an Article 8 fund under the Sustainable Finance Disclosure Regulation. The fund's statutes make an assessment that negative impacts, including CO_2, shall not be measured and reported due to the companies' size and structure.

Further measures and improvements

SINTEF is also working on improving the climate accounts through more precise data and methodology. The continued work will emphasise further mapping of gas consumption and associated emissions, obtaining complete data for electricity and district heating consumption, transitioning from cost-based data to activity-based data, and including employee commuting in the climate accounts.

Based on the insights in the climate accounts, further work is being done to define quantitative climate targets for SINTEF and enhanced measures that can have an impact on the targets. By understanding and reducing its carbon footprint, SINTEF takes active responsibility for a more sustainable future.

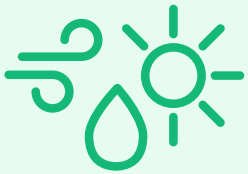
E2 Pollution

The materiality analysis shows that SINTEF can potentially have a negative impact on the external environment through pollution.

Our research activities involve us handling chemicals, gases and biological factors that can cause irreversible damage to the external environment if a larger spill occurs. Potential harm includes pollution into the air, water, soil and food resources, as well as negative impacts on living organisms. We have not had any emissions that have impacted the external environment in the last three years.

SINTEF must consider the external environment in all parts of our activities, and the external environment policy is the cornerstone for this. Our management system is certified in accordance with ISO 14001 and we have an overall HSE goal of zero emissions.

Incidents involving emissions, and near-incidents or observations with the potential for emissions, are reported weekly to the group management team. If the potential for emissions falls into the critical risk area, it must be considered whether investigations or learning reviews should be carried out. Tools are used as one-pagers for experience sharing internally and externally.



We have not had any emissions that have impacted the external environment in the last three years

E4 Biodiversity and ecosystems

Protecting biodiversity and ecosystem services is central to SINTEF's corporate strategy. In our research activities, we place an emphasis on the planetary boundaries, and have established a corporate initiative for biodiversity and land use, which works to develop technology on nature's terms. SINTEF's research scientists contribute to the debate on nature risk and the business sector's preservation of nature, through organisations such as the Norwegian Nature Risk Committee and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). We address potential negative impacts on nature, mitigation measures, such as marine restoration, and possible nature-based solutions for, among other things, the development and upgrading of power infrastructure and mineral extraction, cf. Chapter 2.2 Ethical sustainability dilemma and 4.2 Life on land and in water.

We also wish to take biodiversity and ecosystems into consideration in our own operations, and have deemed this to be material for reporting purposes. The development and operation of real estate activities have potential negative impacts on nature and land use. The impact of our suppliers on nature also comes into play through purchased goods and services. SINTEF has research licences and owns research infrastructure for aquaculture, where there is a risk of escape and negative impact on biodiversity. This is followed up in collaboration with an external partner that owns and operates the facilities where the research takes place.

We monitor climate and nature risks for SINTEF's activities as part of the risk picture and the work with the double materiality analysis.

When concerning property development, the ambition for new buildings is, at a minimum, certification according to BREEAM NOR *Excellent*. BREEAM NOR *in use* is set as the target for the modernisation of buildings. The framework includes issues related to biodiversity and ecosystem services. In 2024, two major property projects were developed at SINTEF in Trondheim, for which the extension of Energibygget was certified as *Excellent* and Professor Mørchs Hus was certified as *Outstanding*. Forskningsveien 1B in Oslo is being planned as a new building certified as BREEAM *Outstanding*. The plan is to reuse the exterior cladding, which will consist of recycled bricks. The plan also includes the use of special concrete; low-carbon extreme concrete, which will collectively produce a lower carbon footprint. In order to strengthen biodiversity and protect cultural heritage, a flower meadow has been established in connection with our buildings at Forskningsveien 1, Oslo. In our real estate operations, we incorporate a flexible workplace concept, which will contribute to efficient land use.

This results in a reduced area requirement for SINTEF as an organisation, and thus a lower footprint in our surroundings. We are continually working to identify and implement measures that reduce water consumption and contribute to increased sorting and reduction of waste from our properties.

Information on environmental policies and measures in the procurement of goods and services is described under Subchapter E1 Climate Change.

We are assessing whether we can compile additional quantitative or qualitative data that documents the impact of our activities on nature. Unlike climate, which can be measured in CO_2 equivalents, it is more challenging to find good indicators of the impact on nature. SINTEF's research scientists are working with data and decision-making support related to impact on nature in order to assist with the restructuring of companies and public enterprises. In the continuation of this work, we will also draw attention to how we can even better quantify and visualise our own footprint through future annual reports.

Water consumption and sorting in buildings [21] owned by the SINTEF Foundation

External environment	2024	2023	2022
Source separation rate Trondheim and Oslo	49	43	36
Mains water consumption in millions of litres	30	32	30

Source: SINTEF

21) The table only shows data for buildings owned by the SINTEF Foundation (approximately 60 per cent of total areas).

5.3 Social conditions

S1 Own workforce

Our workforce is our most important resource and we have a responsibility for ensuring there is a safe, diverse and inclusive working environment for all of our employees. At the same time, the security of our employees is our top priority. The materiality analysis shows both positive and negative impacts on the workforce, and these impacts require continuous attention and action to ensure that we both safeguard employee health and well-being, and build a workplace characterised by high levels of expertise and sustainable development.

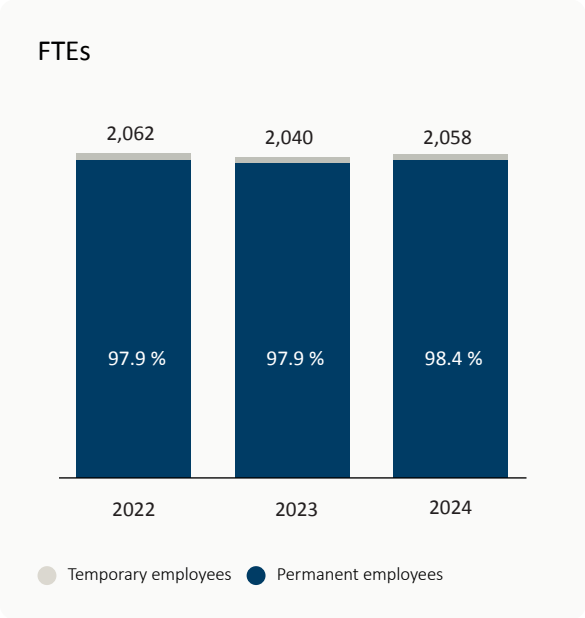
SINTEF has a strong and diverse workforce that is typified by a high level of stability and many permanent positions. SINTEF is committed to facilitating a good relationship with trade unions and there is a high proportion of unionisation among employees. This provides us with a solid foundation for having a good working environment. Furthermore, the annual working environment survey shows that our employees experience a high level of engagement and significant influence in their everyday working lives, which contributes to increased well-being and productivity.

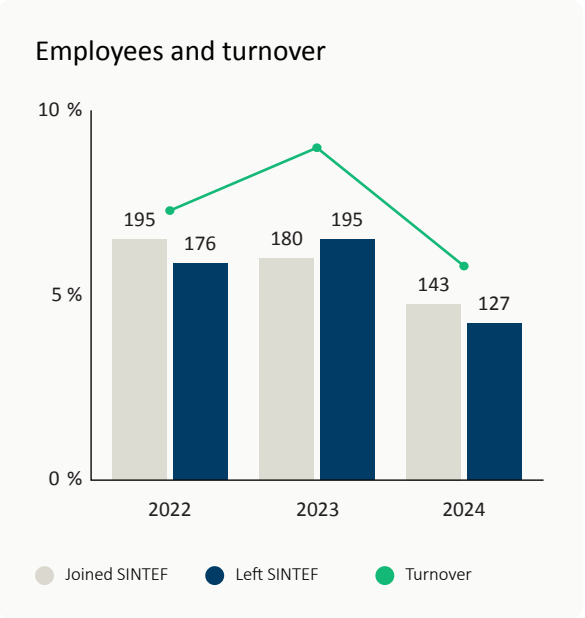
However, we also see certain challenges that require targeted work. The working environment survey reveals that topics such as balance, ability to execute, clarity of role, perceived meaning and shared understanding of tasks are areas of development. There are some minor wage differences between women and men, and a need for better gender balance in certain parts of the organisation. As a research institute that operates with complex laboratory infrastructure, we are exposed to risks related to health and safety. Without continuous commitment to health, safety and the environment, chemicals, gases and equipment can pose significant risks to health and life. We also encounter risks in connection with the battle for manpower.

Working conditions

Employees

At the end of 2024, SINTEF had 2,186 permanent employees who amounted to 2,058 FTEs. The majority of our employees are scientific personnel (76 per cent), including research managers and research directors, and 63 per cent of our scientific personnel have a PhD. SINTEF rarely uses temporary positions; and in 2024 only 1.6 per cent of the workforce were employed on a temporary basis. The most common reasons for temporary employment are temporary positions or special expertise being brought in for specific projects. The high proportion of permanent positions is a competitive advantage compared with the university and university college sector. It is crucial for SINTEF to attract and retain the right expertise. We have many qualified applicants within most areas. We also





Source: SINTEF

view it as positive and part of our social mission, that SINTEF's employees develop insights and skills that are valuable to the business sector and other organisations. This makes them a resource that helps strengthen these organisations.

Working hours

Due to the fact that we are an organisation with a high degree of diversity, we are aware that our employees have different needs. SINTEF, therefore, facilitates flexible solutions to meet the needs of individuals. Wherever possible, we make adaptations for employees who develop or have disabilities. When recruiting, we focus on competencies, not limitations due to a disability. Another important area requiring facilitation is employees with children. In practice, all employees have flexible working hours, with the core hours being between 09:00 and 15:00. During the core hours, employees are expected to be present, with flexitime periods between 07:00-09:00 and 15:00-17:00. This is practised liberally. Most employees are able to make use of flexitime within core hours as well. Employees also have the option of working from home following agreement with their manager.

Sickness absence

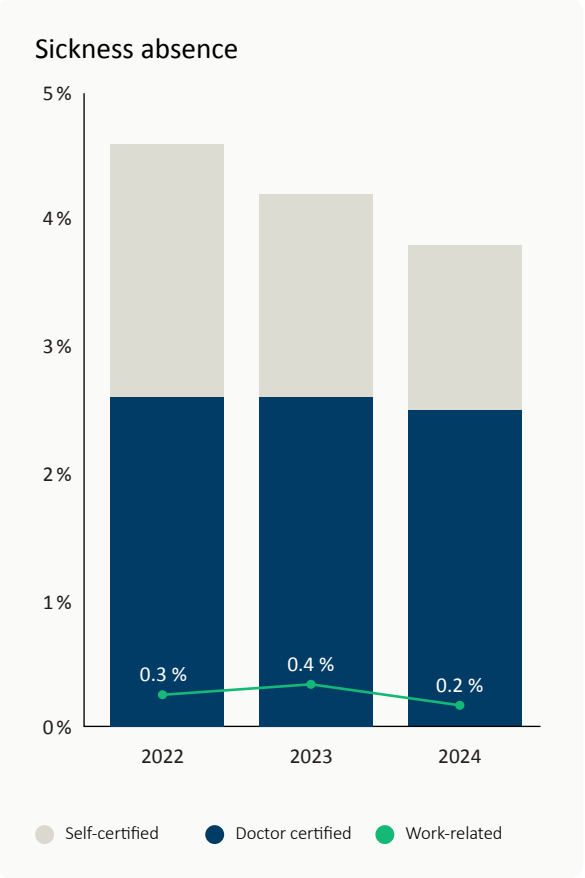
The sickness absence rate for 2024 was 3.8 per cent. The work-related sickness absence rate was 0.2 per cent. Sickness absence is systematically followed up by each unit. The development in sickness absence leave tracks with the general trend for this in Norway, however is lower than both the general level of sickness absence in Norway, and is also lower than in comparable companies (SSB's industry 72 research and development work). All sickness absence that is long-term and/or work-related is closely followed up. This follow-up takes place in the form of managers having close contact and dialogue with the person who is on sick leave. Sickness absence is prevented through sound implementation of management principles and appropriate facilitation measures for increasing work attendance.

Working Environment Survey

At SINTEF, we conduct an annual working environment survey (AMUS) to assess the psychosocial working environment. The survey is an important tool in the work of creating a good and health-promoting working environment. A good working environment is necessary for our employees to thrive, work efficiently and thereby contribute to achieving SINTEF's goals.

The AMUS for 2024 was completed in April 2024 and had a response rate of 94 per cent. This is very high and gives the survey a strong degree of legitimacy and makes it a good starting point for representative analyses. The results are at the same level as other companies in Norway that are included in the supplier's database (external benchmarking). The topics with the highest scores were engagement and influence, while the areas with the lowest scores were balance and ability to execute.

SINTEF has committed employees who experience having a high degree of influence and development opportunities, autonomy, and freedom to generate new ideas. Employees generally have good relationships with colleagues and managers, and find management to be supportive. The survey also reveals that topics such as balance, ability to execute, clarity of roles, perceived meaning and shared understanding of tasks are areas of development for SINTEF. Since balance is an area of development (scored slightly below the benchmark), we have taken a more detailed look at workload through the use of a requirement-control-support model upon which the survey is based. The analyses have led us to identify some units that had low scores for both support and control and thereby have a higher risk of experiencing negative stress at work. These units are followed up by the HR departments in each unit.



Source: SINTEF

Trade unions and liaison

SINTEF has a good and regulated relationship with the trade unions. Our HR Policy states that we must "work actively to maintain and further develop cooperation with all elected representatives, promote an organised working life and ensure compliance with all collective bargaining agreements that are entered into". We have full freedom of association, on a par with other Norwegian companies. A trade union representative attends all courses for new employees, both Norwegian and international. The representative informs them about the work of the trade union, what it is and why it is important. In 2024, 76 per cent of our employees were members of a trade union and thereby covered by collective bargaining agreements. SINTEF treats all employees equally, regardless of whether or not they are members of a trade union. A high degree of participation and involvement is important to us at SINTEF thus we strongly focus on facilitating good cooperation between the different parties. This takes place in many arenas, and we often conduct information and discussion meetings to discuss various issues in order to gain insight and input into development and change processes.

HSE

The safety and working environment of our employees is our top priority. Our vision is zero work-related accidents and we work systematically to prevent incidents that may cause physical and psychological harm to our employees. Through our learning and improvement system, we ensure that we learn both from incidents and from our daily work to ensure that we can continuously improve our procedures and work processes.

Entries in our learning and improvement system provide important insights. In addition to incidents that impact people and the environment, we place particular focus on entries that have the potential for serious personal injury. In 2024, we had seven incidents and near incidents that could have resulted in serious or very serious personal injury/death. Two observations were assessed as having a critical risk of serious to very serious personal injury related to working at heights and storing equipment at heights. There were internal learning reviews of both observations, which revealed the need to clarify, among other things, procedures and descriptions of responsibilities.

Out of the approximately 400 reports in 2024, 43 were incidents and 42 were near-incidents. There was a total of 29 injuries, five of which resulted in absence from work. Seven employees required medical care. This results in an LTI of 1.5 and a TRIF of 3.1 for 2024. None of the incidents resulted in serious injury, nor were they considered to have the potential for serious injury.

Incidents with the potential for causing personal injury, and personal injury frequency (LTI and TRIF rates)

Year	2024	2023	2022
Incidents with the potential for causing personal injury [22]	7	14	23
Lost time injuries (LTI rate) [23]	1.5	0.6	1.2
Total recordable injury frequency (TRIF rate)[24]	3.1	3.1	2.8

Risks and risk-mitigating activities/ HSE measures:

Serious accident: SINTEF has complex activities with unique research infrastructure that carry the potential for serious accidents, with consequences for people and the environment. These activities include working with chemicals and gases, electrical installations, cranes and lifting equipment and working at heights.

Our employees, clients and partners that manage this infrastructure must be confident that we have adequate safety capacity in place. To achieve this, we work systematically to map and follow up on activities that are potentially high risk. We assess the strength of the existing organisational, operational, technical and individual barriers. In most cases, work with these types of risk factors is strictly regulated by law, and we have a management system and support tools that are in accordance with the applicable statutory requirements in these areas.

22) Number of incidents and near-incidents with the potential for causing serious and very serious injury/death.
23) Number of injuries causing absence from work per million hours worked.
24) Number of injuries per million hours worked (excluding first aid injuries). Source: SINTEF

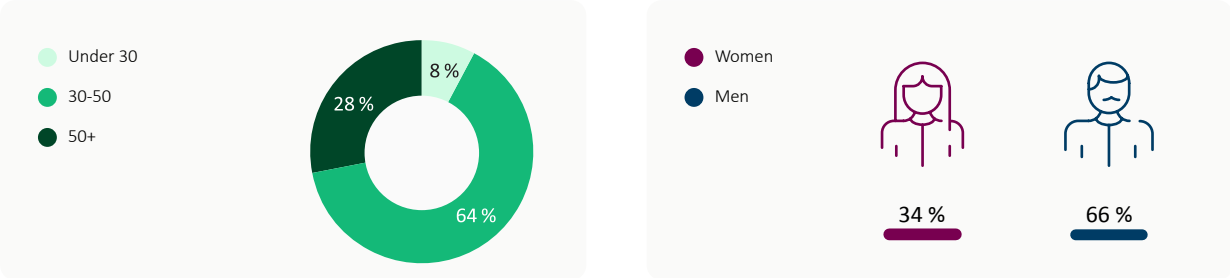
Equal treatment and equal opportunities for all

Gender equality/gender balance

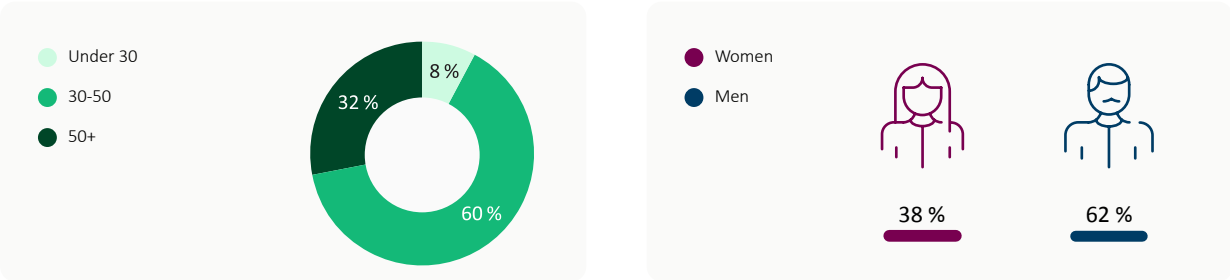
SINTEF's goal is to increase the proportion of women among our research scientists and managers. We strive to recruit women when hiring and to develop female managers and research scientists internally. Nevertheless, the structural biases that exist between fields in educational institutions continue to be reflected in the recruitment base. We have approved a "Gender Balance Plan" in line with the requirements of the EU and the Research Council of Norway. The plan will help us improve the gender balance and diversity at SINTEF. One of the goals is that there should be no differences in pay between genders. SINTEF has also produced its own gender equality report in line with its activity and reporting obligations. Employees who have been on parental leave for more than three months in the last year receive at least an average pay rise. This may only be deviated from with reasonable cause, which cannot be the parental leave. There are some differences between the genders in the length of parental leave at SINTEF. Further details can be found in the gender equality report.

We strive for equality and diversity

AGE AND GENDER DISTRIBUTION – SCIENTIFIC PERSONNEL [25]



AGE AND GENDER DISTRIBUTION ALL EMPLOYEES



Training

The SINTEF Academy is an important tool for developing employees and the organisation. Our goal is to provide employees and managers with the knowledge that they require to succeed in their roles and to achieve SINTEF's goals. The SINTEF Academy is also an important meeting place where employees from all over SINTEF can get together and network across the organisation. This helps us to create a common practice, culture and understanding. In 2024, 338 employees attended our mandatory classroom courses, of which 161 were new employees who attended the two-day "Welcome to SINTEF" course. We also offer leadership programmes and training in project management, as well as courses in artificial intelligence, communication and research methodology. This training provides employees with important skills in addition to their professional expertise. Digital training is also an important element of the training we offer, which includes mandatory e-learning courses within health, safety and environment, IT security, privacy and export controls. In 2024, a total of 27,304 unique digital courses were completed at the SINTEF Academy.

Diversity

In order for a research institute to successfully deliver the on major social challenges, it is important to have a diverse range of experience, approaches and perspectives. SINTEF's "Strategy for people" underlines the fact that diversity and a good gender balance are important. We achieve these by having a diverse workforce in terms of their scientific expertise, gender, age, nationality, cultural

25) Scientific personnel include research scientists, research managers and research directors. Source: SINTEF

background and personal attributes. The diversity work is anchored in SINTEF's Board and the group management team. SINTEF's managers are responsible for building up, developing and using the resources that diversity and gender balance represent. They are also responsible for allocating pay, development opportunities and other benefits in a manner that ensures equality between men and women.

Diversity leadership is an important theme in the SINTEF Academy's management development programme. SINTEF's strategy for people also states that all employees are expected to contribute their own qualities and appreciate the unique contributions and expertise of others, as well as to comply with SINTEF's core values, honesty, generosity, courage and solidarity, in their everyday work.

International employees provide SINTEF with access to valuable scientific and cultural competence. In 2024, 33 per cent of all of SINTEF's employees were born outside of Norway. These employees are from 80 different countries, with the majority being from Germany, Italy, France and Sweden. SINTEF has established a programme for integrating international employees and their families to ensure international employees are properly looked after. The programme offers expat services, free Norwegian language courses and teaching in English in the SINTEF Academy. The annual working environment survey shows that international employees enjoy working at SINTEF. The risks related to intelligence activities and illegal knowledge transfers have increased thanks to Russia's war in Ukraine. This impacts the work on protecting SINTEF's assets and increases the risk of our employees being put in situations where they are vulnerable to extortion and threats. This is further described in Chapter 5.4 Governance conditions.

At SINTEF we promote gender equality and strive to counter discrimination. The work is performed in accordance with section 26 of the Equality and Anti-Discrimination Act. It has been reported on in SINTEF's gender equality report.

Other work related rights

Private life at the workplace

We respect the right of our employees to workplace privacy. Our privacy policy is in accordance with the GDPR and Norwegian privacy laws.

SINTEF has established a larger lab for battery research in Trondheim. Here we further develop our expertise and expand the scope of research into materials for different battery technologies.

Photo: Thor Nielsen/SINTEF

S2 Employees in the value chain

Working conditions

The materiality analysis shows that SINTEF can have a significant negative impact on employees in the value chain through the purchases that we make. The risk of negative impact is higher when we make purchases from specific countries and industries, so-called "high-risk countries" and "high-risk industries". These are countries and industries where there is a high risk of human rights violations and poor working conditions.

SINTEF purchases a variety of goods and services from over 4,000 different suppliers each year. As a major research institution, we have an extensive value chain that includes collaboration with a number of external stakeholders, such as subcontractors, consultants and partners worldwide. 8.4% of our purchases come from foreign suppliers, while 91.6% come from Norwegian suppliers.

SINTEF actively works to promote good working conditions throughout the entire value chain. We therefore work with our suppliers and partners to promote workers' rights in line with ILO conventions and the United Nations Guiding Principles on Business and Human Rights.

SINTEF's procurement policy demonstrates this by ensuring that ethics and sustainability are the first principle. "SINTEF promotes human rights and decent working conditions in connection with the production of goods and services. This also applies to our, procurements, and subcontractors at home and abroad."

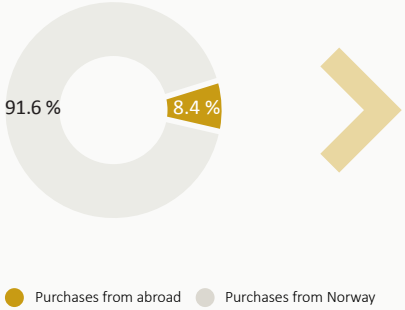
We are committed to monitoring working conditions in the value chain through risk assessments, due diligence and dialogue with our suppliers. This includes requirements for fair wages, safe working conditions, freedom of association and gender equality.

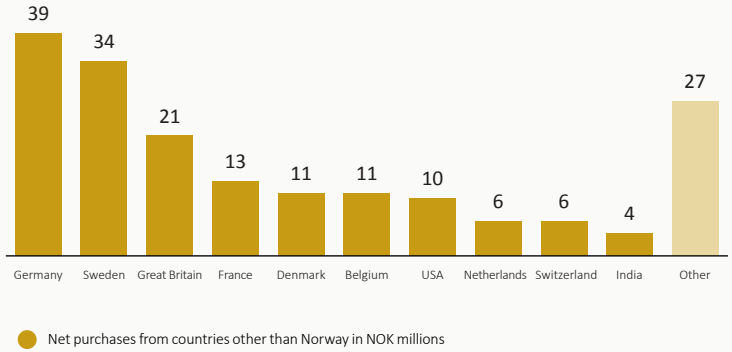
SINTEF actively works on identifying and assessing possible adverse impacts on fundamental human rights and workers' rights in the supply chain. We require our suppliers to respond to a supplier evaluation when procurements exceed NOK 250,000. SINTEF's suppliers are subject to risk-based due diligence processes. A risk-based approach involves identifying suppliers from high-risk countries and industries with a high risk of having negative impacts on human rights and decent working conditions. Based on this assessment, background checks are carried out of the suppliers that we consider to have the highest risk.

We update these assessments at least once a year to ensure we always have up-to-date information about

Purchases from abroad accounted for 8.4 per cent of our purchases

Total net purchases in 2024
(Norway and abroad)





Source: SINTEF

our suppliers. If an adverse impact is identified, we open a dialogue with the supplier to remedy this and determine measures that are proportionate to the extent of the adverse impact. In high-risk cases, we may also have an assessment carried out by our internal auditor, Deloitte. In order to minimise the risk of future irregularities, we will, wherever possible, make purchases via framework agreements. We will also continuously evaluate and attempt to reduce purchases from high-risk countries.

SINTEF also conducts annual supplier reviews to ensure compliance with our guidelines.

We set clear requirements for our suppliers through contracts and ethical guidelines. In our agreements and standard terms and conditions, we include a declaration on business ethics and supplier evaluation.

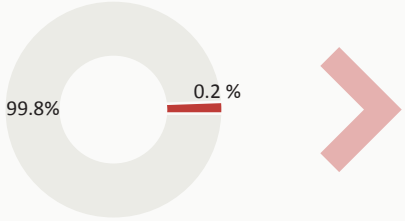
In addition to the duty of disclosure, transparency and external whistleblowing channel transparency@sintef.no, SINTEF has internal whistleblowing channels through which employees can report suspected violations and problematic conditions associated with our suppliers and agreements. SINTEF has a dedicated Compliance Task Force that follows up on any such reports. In 2024, for example, products from Hewlett Packard supplied through Atea AS were subject to an extensive assessment due to the supply of products to Israel, and the ongoing Israel-Palestine conflict.

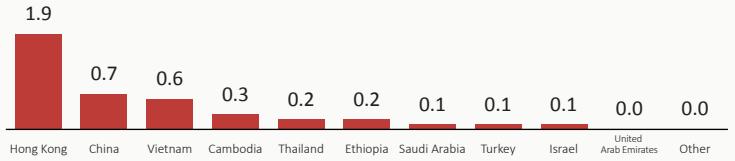
As part of our improvement work, we have created an overview of high-risk countries. The overview of high-risk countries can be used for assessing purchases, export controls, money laundering controls, background checks when recruiting, and assessments of partners and suppliers. High-risk countries are countries with a high or very high risk of violations of basic human rights. This includes countries with high levels of slavery, low levels of human development, high corruption index, countries classified as “not free” and/or countries on the Norwegian Government’s sanctions list or in the Norwegian Police Security Service’s (PST) threat assessment. When making purchases from high-risk countries, there is a risk that SINTEF will have a negative impact on workers in the value chain. As shown in the figure on this page, purchases from high-risk countries accounted for 0.2% of SINTEF’s total purchases in 2024, equivalent to just under NOK 5 million.

We use the Norwegian Agency for Public and Financial Management’s (DFØ) “high-risk list” to iden-

Purchases from high-risk countries [26] account for 0.2 per cent of our purchases

Total net purchases in 2024
(Norway and abroad)





Purchases from high-risk countries Purchases from other countries Net purchases from high-risk countries in NOK millions

26) High-risk countries are defined as countries with a high or very high risk of violations of basic human rights. This includes countries with high levels of slavery, low levels of human development, high corruption index, countries classified as “not free” and/or countries on the Norwegian Government’s sanctions list or in the Norwegian Police Security Service’s (PST) threat assessment. Source: SINTEF

tify industry risks, and have used Compliance Catalyst to determine industry risks for foreign suppliers. Among Norwegian suppliers this primarily concerned building and construction businesses, while manufacturers of electronics and components were most prominent when concerning foreign suppliers. As illustrated in the figure on this page, purchases from Norwegian suppliers from building and construction businesses accounted for 9% of SINTEF's net purchases in 2024, equivalent to approximately NOK 185 million.

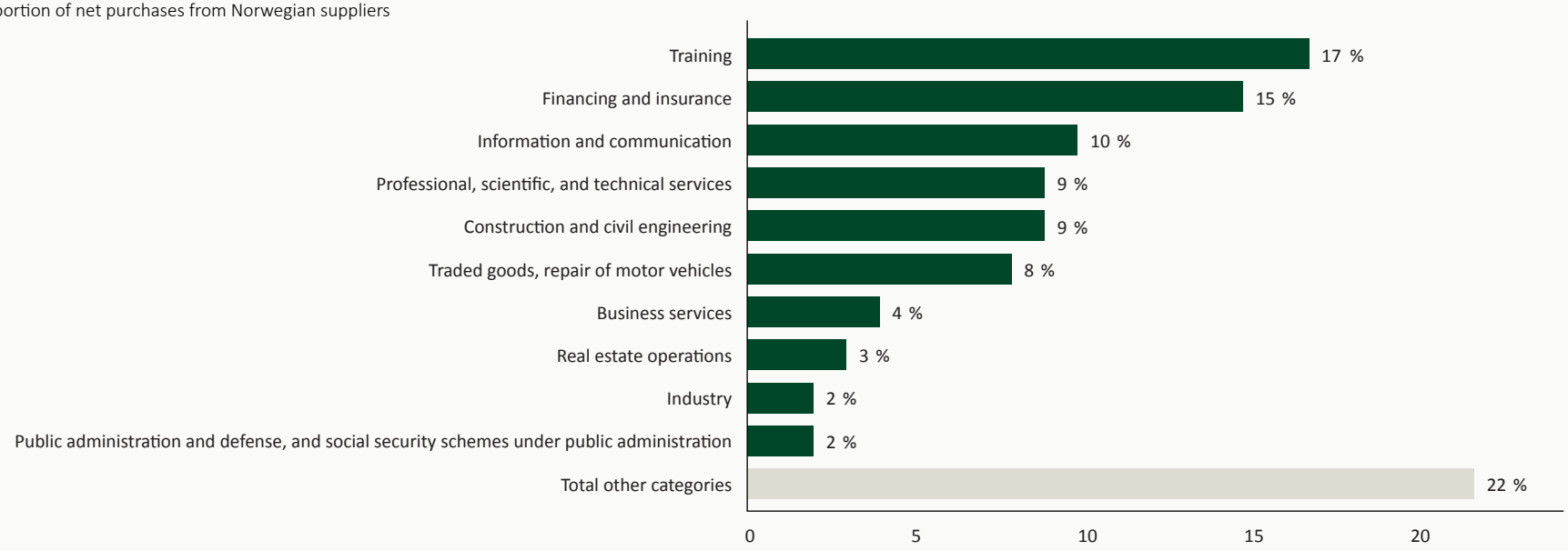
After a risk-based assessment of 4,600 suppliers, background checks were conducted on 203 suppliers, of which 16 were subject to further follow-up, with checks of purchases and measures taken against the supplier.

SINTEF did not uncover human rights violations in the due diligence processes that we carried out during 2024. Reference is also made to SINTEF's due diligence report in accordance with the Transparency Act, which is published annually. SINTEF is working to have systems in place that automate controls and documentation of compliance with procedures in this area.

We acknowledge that there are still challenges associated with transparency in global supply chains. As part of our improvement work, we will continue to partner with industry stakeholders, government authorities and civil society to strengthen responsible business practices and promote ethical and sustainable working conditions throughout our entire value chain.

SINTEF's suppliers grouped by industry [27)]

Proportion of net purchases from Norwegian suppliers



27) SINTEF's net purchases from Norwegian suppliers in 2024 by industry. The graph shows the top ten purchasing categories and their respective proportions of total net purchases. Source: SINTEF

5.4 Governance conditions

G1 Business conduct

As a research provider, high demands are set on us providing our services with a high degree of integrity and in compliance with applicable standards and principles of good business conduct and research ethics. SINTEF is an independent, not-for-profit research institute which has the purpose of contributing to the development of society through research. The independence of research is a fundamental pillar of research ethics, and SINTEF's operations are based on the trust clients, suppliers, partners and society place in us and our research services. Read more about SINTEF's independence here.

The Research Ethics Act and the general research ethics guidelines require both the individual research scientist and the research institutions to ensure that all research is conducted in accordance with recognised standards for research ethics. This includes the principle of impartiality. In addition to the statutory framework, SINTEF has internal guidelines to ensure that SINTEF and SINTEF's employees diligently strive to maintain neutrality, impartiality and independence insofar as possible, and to act in accordance with standards for research ethics.

Our impacts and risks in connection with business conduct particularly relate to our own activities, but also to our value chains. Based on assessed influences and risks, we have identified corporate culture, whistleblower protection, research-based input into policy formulation, as well as corruption and bribery, illegal activities, intelligence activities and illegal knowledge transfer as being the most material topics for SINTEF.

Corporate culture

Ethics is an integral part of SINTEF's activities.
Ethics at SINTEF is about demonstrating good judgment and behaviour to ensure that we can fulfil SINTEF's social mission and safeguard our integrity and reputation. SINTEF faces ethical challenges in everyday work, business operations and in contact with colleagues, clients and connections. It is not sufficient to simply follow Norwegian and international law, because ethical practice requires reflection and every dilemma is different. To ensure such practices are in place at SINTEF, systematic efforts are made through training, with ethics being an important topic within the SINTEF Academy's learning process.

SINTEF's management system also includes a requirement regarding the proper management of ethics and social responsibility, and this is reflected in our ethical guidelines "Ethics Compass" and 15 overarching policy documents. Ethics is an integral part of our business practices and ethics are assessed in all phases of a project, from sale to completion.

SINTEF has an Ethics Committee that functions as an advisor to management and others, and as a whistleblowing authority. The group management team frequently discusses ethical dilemmas (see also Chapter 2.2 for examples of ethical sustainability dilemmas), and internal meetings must always be initiated with HSE, safety and ethics as agenda items.

We place particular emphasis on three main areas:

Relationship ethics: Good conduct at work and in interactions with others is important for developing a good work culture, well-being and the quality of the work that we do. The manner in which we present ourselves also influences how others perceive SINTEF's accountability and position in society. Research, and research collaboration with clients and academic partners, which often takes place hand-in-hand with government authorities, entail that SINTEF's employees often have to grapple with different and strong opinions, and different priorities.

We cultivate a culture of tolerance and openness to the views of others, provided this is consistent with our integrity and independence. SINTEF's values – courage, honesty, generosity and solidarity – provide good guidelines in an organisation that seeks interaction on knowledge-based social development.

Research ethics: SINTEF's management is responsible for ensuring that the research is carried out in accordance with laws and regulations, ethical guidelines and agreed financing frameworks. The individual research scientists are responsible for ensuring that the research is carried out in accordance with recognised scientific and ethical principles and agreed frameworks. Everyone has a responsibility for complying with our reporting and financial management obligations. There are internationally recognized standards with regard to, among other things, independence, quality, verifiability, integrity, social responsibility and sustainability. Our research ethics are based on the policies issued by national research ethics committees, the principles promoted by the European Group of Ethics in Science and New Technologies, and international conventions and Norwegian law. When publishing, we adhere to the Vancouver Recommendations. In 2021, we established an Integrity Committee to safeguard research ethics practices in accordance with the Research Ethics Act. The committee meets at least once a year and if suspected irregularities are reported. The committee supports the Ethics Committee when required, and the Ethics Committee functions as the secretary for the Integrity Committee. No cases were presented to the Integrity Committee in 2024.

Business ethics: Our opportunities for creating value depend on us at SINTEF being well trained in ethical dilemmas. We follow ethical standards such as the Research Ethics Act, the Research Ethics Guidelines, the principles in the Norwegian Corporate Governance Board's (NUES) recommendations on corporate governance and our own "ethics compass". We treat our clients with respect and transparency.

SINTEF is a member of the following international organisations that work to achieve ethical practices:

- Charter and code: The European Charter for Researchers.
- UN Global Compact This membership involves managing our operations in accordance with ten principles for responsible business and the UN Sustainable Development Goals.
- Transparency International: This organisation identifies corruption and helps its members avoid corruption.

Policies/Governing documents:

- SINTEF's Ethics Compass
- 15 overarching policy documents
- Guidelines for SINTEF's Integrity Committee

Protecting whistleblowers

SINTEF has procedures for whistleblowing and how whistleblowing reports must be processed, and all employees are explicitly informed about this in mandatory onboarding courses. The description of these procedures is available to everyone on SINTEF's internal website; and it is made clear that everyone has the right, and in some cases the duty, to report censurable conditions. Descriptions are also provided of what legally constitutes a whistleblowing report and the provisions in the Working Environment Act's pertaining to whistleblower protection. As part of our continuous improvement efforts, we will be revising our reporting procedures during 2025.

Policies/Governing documents:

- SINTEF's Whistleblowing Guidelines

Research-based input into policymaking

SINTEF provides research-based input into a number of areas of society. This includes consultation statements, and by contributing to government transition policy through fact-based analyses, as well as assessments and advice from daily collaboration with clients in multiple research projects. In collaboration with others, we also provide input and opinions that can strengthen research and collaboration between the business sector and research. SINTEF is politically neutral, however the knowledge we possess as a research organisation is important to the public debate and SINTEF must ensure that communication is characterised by honesty, transparency and accessibility.

Nationally competitive R&D funding through the Research Council of Norway is an important source of financing for Norwegian research institutes and SINTEF. The phasing out of extraordinary funds that were allocated during the pandemic, as well as cost savings at the Research Council of Norway to bring their financial situation under control, therefore have a direct impact on SINTEF's activities and finances. Furthermore, apart from an increase during the pandemic, the grants to

the public policy instruments that stimulate and ensure collaboration between companies and SINTEF are currently at the same level as in 2009, despite a significant increase in government support for the business sector's R&D activities. This represents an overall financial risk for SINTEF. To ensure a there is a good level of understanding and to communicate a clear message regarding not only the importance of, but also the development in grants to business-oriented research over the years, as well as developments in the business sector's R&D activities and collaboration with research communities, we have increased our internal analysis capacity.

European research collaboration is of critical importance to SINTEF, and we are directly impacted by the structure of the EU framework programme and national co-financing of EU projects, and, together with national R&D funds, this constitutes a financial risk for SINTEF. The EU's next framework programme for research and innovation is currently being formulated, and there is uncertainty regarding how much funding will be allocated to the programme and how much will go towards research collaboration between the business sector and research communities. Ensuring national co-funding through the Retur-EU scheme is essential to SINTEF's participation in EU-funded research. SINTEF is actively working on both its presence in Brussels and nationally to highlight the value of this research.

Corruption and bribery, illegal activities, intelligence activities and illegal knowledge transfer

Preventing corruption and bribery

Corruption undermines trust in the rule of law and democratic institutions, weakens ethical and moral values, hinders rationalisation and efficiency, and impedes all forms of commercial activity and free competition. Corruption has a destructive impact on reputation and exposes SINTEF and the individual to risk, and SINTEF rejects all forms of corruption and actively works to ensure that this does not occur in our business operations.

Our Code of Conduct clearly states that it is prohibited to engage in bribery and corruption of any type, and anti-corruption is part of our internal ethics training. In accordance with our Code of Conduct, all employees also have a duty to report potential violations of anti-corruption work or other unethical conduct. SINTEF also conducts risk-based background checks of business partners to avoid collaboration with business partners that may be involved in corruption or other financial crime or that are impacted by financial sanctions.

SINTEF is a member of Transparency International, which cooperates with governments, businesses and civil society to develop anti-corruption measures.

Policies/Governing documents:

- Ethics Compass, Chapter 3

Prevention of possible cooperation with businesses that fail to comply with laws and regulations

SINTEF collaborates with a number of clients, suppliers and partners in our research projects. SINTEF has established a process for managing risk where background checks are carried out of business partners, including agents and intermediaries, and which includes assessments of the ownership structure, links to politically exposed persons, sanctions, environmental crime and reputational risks related to the business partner's history. Our due diligence process also includes a risk-based check of suppliers for potential violations of human rights and decent working conditions. SINTEF has a multidisciplinary task force, known as the Compliance Task Force, to assess difficult findings made in background checks.

We conduct advance checks of foreign companies in accordance with the compliance procedures. This involves us investigating whether ompanies have received criminal sanctions for corruption or fraud such as bribery, price fixing and child labour. Such checks must be carried out before any collaboration starts. The Transparency International database is used for this work, and information from the Ministry of Foreign Affairs and the Norwegian Police Security Service (PST) are also important sources. The wars in Europe and the Middle East have made us especially aware of the fact that employees with unique knowledge and/or various backgrounds could be subject to unwanted pressure. Our policy for defence-related R&D is an important factor here. This describes our attitudes and principles in relation to the dilemmas inherent in such research.

Policies/Governing documents:

- Policy for Defence-Related R&D

Prevention of intelligence activities and illegal knowledge transfers

Potential intelligence activities and illegal knowledge transfers represent possible negative impacts on the wider world. SINTEF has technology and knowledge that falls under the export control regulations, and there is thus a risk that technology and knowledge from SINTEF could

be used to develop weapons programmes for states that are subject to sanctions.

SINTEF has defined specific security measures for reducing the possibility of negative deliberate incidents. These regulate specific measures within physical security, information security and personnel security, and are available in our management system.

Our export control process involves us carrying out checks to ensure that SINTEF prevents the illegal transfer of knowledge of goods and technology that may be of importance to other countries' development, production or application of products for military use or that may directly serve to develop a country's military capability, as well as goods and technology that may be used to carry out terrorist acts.

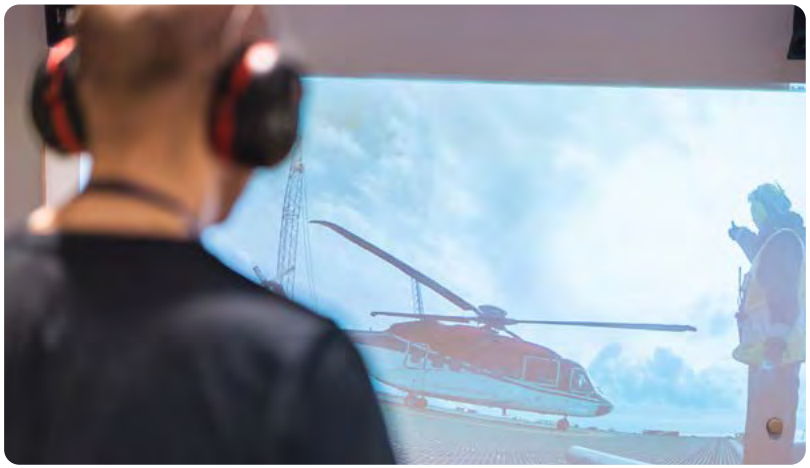
Policies/Governing documents:

- Security Policy
- Information Security Policy
- Emergency Preparedness Policy
- Policy for Defence-Related R&D
- Procedure for Export Controls and Sanctions

SINTEF faces a high risk from government intelligence services, which can compromise the information and technology of clients, and the turbulent security policy situation necessitates having robust emergency preparedness procedures.

SINTEF is actively working to strengthen security in the form of physical, technical and organisational measures, developing a security culture, assessing risk when recruiting, working together with PST and the Ministry of Foreign Affairs, and improving emergency preparedness through exercises and incident management.

Increased geopolitical tension and a demanding threat landscape mean that SINTEF must continuously work to develop strength and resilience within the information security domain. This is necessary for protecting our reputation among and trust from clients and society, managing increased risk of attacks, and ensuring that information is subject to correct classification and access management. SINTEF has therefore intensified security testing, improved logging and continuity plans, and is systematically working towards ISO 27001 certification in order to comply with new EU regulations.



The sound room at the Department of Sustainable Communication Technologies enables us to create different types of noise at realistic levels, for example, helicopter landings. We can also measure how well people hear in the room, which is important for ensuring that hearing protection is working properly. Photo: Smidesang & Lyng/SINTEF

Chapter 6

The results for 2024

The Norwegian Centre for Plankton Technology is an experimental facility that contributes towards generating new insights into the production, harvesting and processing of plankton biomass, both from sea and land-based production. The centre is operated in collaboration between NTNU and SINTEF Ocean. Photo: Sune Eriksen/Tinagent /Innovation Norway

6.1 Board of Directors' report for 2024

SINTEF is an independent, not-for-profit research foundation with more than 2,000 employees who represent a wide range of expertise. We develop knowledge that benefits society and creates competitiveness through the realisation of the UN Sustainable Development Goals. Our vision is 'Technology for a better society'.

We deliver independent world-leading research in close collaboration with industry, public bodies and other research environments. We create value with our clients by linking their needs to the research front, building outstanding research environments and infrastructure, and by creating new businesses.

SINTEF is organised as a foundation with wholly and part-owned subsidiaries. Dividends cannot be paid out. The organisation retains all of the surplus. Our head office is in Trondheim, where the largest group of our employees work. We also have significant activities in Oslo and Raufoss. SINTEF also has a presence in Tromsø, Narvik, Mo i Rana, Steinkjer, Verdal, Frøya, Ålesund, Molde, Bergen, Kongsberg, Grenland and Arendal. We also have an office in Brussels.

SINTEF works closely with NTNU with which it has a strategic operational partnership. On the 75th anniversary in January 2025, SINTEF and NTNU signed an updated collaboration agreement which extends until 2032. We also work closely with the University of Oslo (UiO) and with a number of other universities and research institutions, nationally and internationally.

SINTEF has considerable assets at its disposal, partly thanks to our investments and partly thanks to hosting important publicly funded infrastructure, which we use in connection with our activities. The fact that the research environments in SINTEF and the universities share premises is an important factor in successful scientific collaboration and innovation. Developed and undeveloped leasehold sites in the areas around the universities in Trondheim and Oslo account for a large proportion of the Foundation's assets. Significant government investments are taking place in these areas, and we are making strong efforts to ensure that SINTEF makes a positive contribution towards increasing society's innovative power in connection with this.

SINTEF's position on its 75th anniversary

January 2025 marked 75 years since the SINTEF research foundation was established. In close cooperation with the business sector, NTNU and other research groups, we have helped solve many of the greatest challenges faced by Norwegian companies. This has made a significant contribution to the welfare society that we have today.

SINTEF ACE is a full-scale laboratory facility designed to develop and test new aquaculture technology. Facility users are researchers and others who want to conduct practical experiments and tests under realistic conditions.

Photo: Magnus Oshaug Pedersen/SINTEF

The Board can declare that SINTEF is performing well on its 75th anniversary.

- We have succeeded in achieving a significant green transition in our own portfolio of assignments. A large drop in assignments from the oil and gas industry since 2013 has been more than offset by growth in other areas. For 11 of the 15 most R&D-intensive industries in Norway today, the growth in SINTEF's assignments has been equal to or greater than the growth in these industries' own R&D during the period.
- We commercialize attractive technology. Since 2014, the SINTEF Foundation's investment of NOK 300 million in funds to capitalize our start-up companies has triggered a total of NOK 3 billion in capital being raised for research-intensive startups and scaleups.
- We acquire market shares. Our revenues from the business sector are growing more than in proportion to the business sector's purchases of R&D from Norwegian and foreign universities, colleges and institutes.
- Together with our clients and partners, SINTEF is achieving great results in the programmes managed by the Research Council of Norway. This makes a strong contribution towards increasing Norway's transitional capacity.
- We are the Norwegian actor that clearly brings the most knowledge and project funding home to Norway from the EU framework programme, and are an important partner for Norwegian companies and public stakeholders that have ambitions of entering into research collaboration in the EU. SINTEF is the second largest research institute in Horizon Europe within the discipline of research collaboration with the business sector, beaten only by Fraunhofer in Germany.
- In a recent comparison with 15 of the largest research institutes in Europe, SINTEF achieved high scores for knowledge transfer to the business sector. We have three times the share of contract research and three times the number of spinoffs than the average when viewed in relation to our size. 95 per cent of these spinoff companies are still in existence after five years, which is significantly higher than the average for European research institutes.
- We achieve consistently high scores on various rankings of employer attractiveness and reputation.

However, it is also a fact that the business sector's purchases of R&D from Norwegian and foreign research institutions have been declining for several years. There has only been weak growth in the Research Council of Norway's grants for business sector R&D, despite strong growth in public grants to the sector as a whole. SINTEF's assignments for the business sector and society do not currently align with the serious need for transition.

Strategy

In March 2024, the Board adopted a new corporate strategy. This sets the direction for the organisation when the current environment is characterised by significant turbulence and uncertainty. War and geopolitical instability, sustainability challenges, and society's need for higher productivity are creating significant new requirements for knowledge development and innovation. The major technological change of pace can provide solutions, but also opens the door to new vulnerabilities.

At the corporate level, SINTEF bases its decisions on five strategic beliefs for how SINTEF can best fulfil its role in the world around it. We will contribute to or with:

- Zero emissions in the value chains
- Artificial intelligence and digitalisation
- Safeguarding planetary boundaries
- New approaches to health and security
- Transition policy

The strategy also describes our strategic objectives and how SINTEF will implement strategic measures for clients, research, people and good operations. This is to enable the organisation as a whole to deliver in line with the ambitions set out in the strategy for creating a societal impact and contributing towards sustainable development.

During 2024, the six institutes at SINTEF developed local institute strategies which detail the direction the various research groups will need to take

to deliver on our common goals and ambitions, and respond to specific development trends in their markets and disciplines.

The Board is particularly interested in understanding SINTEF's risk situation, both to balance the organisation's vulnerability and to analyse how SINTEF can vigorously contribute to the required transition. The major investments SINTEF makes in infrastructure, knowledge development, commercialisation and organisational development shall provide verifiable societal benefits and competitiveness in the business sector and society at large.

Framework conditions

In September 2024, Mario Draghi, former Prime Minister of Italy and President of the European Central Bank, presented an alarming report on Europe's competitiveness. The report declares that Europe's competitiveness has fallen behind. It reveals that the USA invests about twice as much in research and innovation as the EU countries. The report has resulted in a strong focus and debate on competitiveness and productivity, and many countries are signalling their intention to invest more in research and innovation. One of Draghi's main recommendations is to double the EU's framework programme for research.

Norway invests significantly less of its gross domestic product in research and development (R&D) than our neighbouring countries. Private sector investments in particular are lower in Norway. In 2022, the Norwegian business sector invested 0.8 per cent of GDP in R&D, while the equivalent in Sweden was 2.6 per cent. The state's total grants to the companies' R&D have more than doubled in recent years, but this has not resulted in the desired transitional effect.

Statistics Norway (SSB) is not finding that employment in highly productive industries is increasing, and there are no signs of changes in industry structure. Statistics Norway has also revealed that the business sector's utilisation of the results of publicly funded research is declining, and that the business sector is purchasing less research than before from both Norwegian and international research groups. On the whole, this provides grounds for claiming that Norwegian transitional policy has failed and that measures need to be taken to increase the innovative power of the private sector.

Double-sided solar panels that trap sunlight directly and from the surrounding environment. The solar panels follow the sun's location in the sky with the help of a solar tracker.

Photo: Edvin Wiggen Dahl/SINTEF

The Board takes this situation seriously and is focused on government authorities strengthening and accelerating efforts related to innovation-oriented research. A concerted effort is required in order to focus on research that will bring about radical transition in the business sector. SINTEF has therefore further intensified its work with clients and markets. This is to increase the reliability of meeting client needs that trigger private investment in research and innovation.

At the same time, we see that state policy instruments are a strong trigger for private investment in research. In the short term, SINTEF will continue working to ensure that the state diverts a larger share of its own R&D funding towards schemes under the direction of the Research Council of Norway which involve the business sector itself investing and collaborating with Norwegian research institutions. At a strategic and overarching level, it is SINTEF's goal to contribute to a broad discussion on how the state's other policy instruments and the state's large ownership interests in enterprises can contribute to a more long-term perspective in R&D that is in line with the role played by the largest business owners in our neighbouring countries.

Participating in EU research and innovation programmes is very important, and SINTEF does very well in these competitions. The Retur-EU scheme is essential when it comes to ensuring that research institutes can contribute to the success Norway has enjoyed in EU research and innovation programmes. SINTEF is pleased that the scheme was strengthened in 2024 through the Storting's (Norwegian Parliament) review of the revised national budget and the national budget for 2025. It is very important that the framework for this scheme is also tailored to the institutes' success rate in future budgets. This is necessary to ensure predictability, long-termism and a high level of activity in the EU arena, with a high return rate for Norway, including in the years to come.

Sustainability, HSE and ethics

SINTEF's corporate strategy is a strategy for sustainable development. Our objective is to create an impact by delivering world-leading research for innovation. We target societal benefit and competitiveness by realising the UN Sustainable Development Goals (SDGs).

The sustainability ambitions also apply to our own activities. We endeavour to operate SINTEF in a manner that promotes the environment, social conditions and good governance. HSE, safety and ethics are the first items on meeting agendas.

It is a goal to reduce the environmental footprint of own operations linked to offices and laboratories. Several measures have been implemented in recent years to reduce our energy consumption and carbon footprint. Two major initiatives at the office and laboratory buildings Forskningsveien 1 and MiNaLab in Oslo alone contributed to reducing SINTEF's energy consumption by 2.3 GWh/year. Energy consumption for the property portfolio as a whole has been reduced by 31 per cent from 2017.

In 2024, climate emissions from air travel, measured in tonnes of CO_2 per FTE fell by 6.6 per cent[28] compared to 2023, and by 36 per cent compared to 2019, which was the last normal year before the pandemic. In addition to travel, emissions from purchased goods and services and capital goods are SINTEF's largest emission categories. This is further detailed in Chapter 5.2 of the report.

As part of its corporate strategy, during 2025 SINTEF will work to set specific climate targets in line with global climate commitments. The dilemmas we must therefore deal with include the desire to reduce emissions from travel despite the fact that an important part of the research and innovation process involves people meeting and having discussions. Similarly, we will be faced with choices between spending money on reducing our own emissions, rather than strengthening research that may have a significantly greater impact on the climate.

SINTEF's activities are complex and involve rapid changes and constantly new experimental setups that often aim to test physical limits. SINTEF is responsible for the operation of unique infrastructure that sometimes carries with it the potential of high risk. HSE has the highest priority, and learning forms the basis for proactive improvement work. We are committed to learning both from incidents and from our day-to-day work.

In 2024, five injuries resulted in absence and five personal injuries (not including injuries requiring first aid) did not result in absence. This results in an LTI of 1.5 and a TRIF of 3.1 for 2024. An update of the HSE risk picture has highlighted which risk factors may lead to particularly serious consequences. Based on the risk picture, internal audits have been conducted in all departments related to the use and operation of cranes and lifting equipment. The audits showed that requirements are largely being complied with, and that there is a strong focus on risk in connection with lifting operations. Some areas of improvement were detected and followed up.

SINTEF has introduced a new learning and improvement system known as "Better", which has replaced injury and non-conformity system Synergi. One of the most important changes is that the new system gives the person who submits a report to better access and opportunity to follow their own case, and to provide input and suggestions for how this should be followed up. This is expected to strengthen motivation and contribute to a good safety culture.

SINTEF has a clear ethical platform, which is also set out in our Ethics Compass. The main areas for our work on ethics are research ethics, business conduct and relationship ethics. SINTEF's employees receive training in connection with onboarding, project management and management development.

28) Figures adjusted after signing date.

120 NOKm

operating profit in 2024, compared with NOK 102 million the previous year

207 NOKm

invested in research infrastructure and other research production equipment

The ethics ombudsman receives and considers enquiries. Most of these result in a requirement for advice on business, research and interpersonal relationships.

In line with the Transparency Act, we take a proactive approach to identifying and assessing possible adverse impacts on fundamental human rights and labour rights in our supply chains. A report on our follow-up of the Act is published as part of the reporting on sustainability in the annual report and on SINTEF's website.

Our work on HSE, sustainability, the external environment and ethics is described in chapters 3-5 of the Annual and Sustainability Report.

Researcher Andreas Åslund is researching nanotechnology to improve drug delivery to patients. Here he is analysing the size of nanoparticles that contain pharmaceuticals using Nanoparticle Tracking Analysis (NTA). Photo: Smidesang & Lyng/SINTEF

Financial room for manoeuvre

SINTEF's operating profit for 2024 was NOK 120 million, compared with NOK 102 million for 2023. The financial result before tax was NOK 149 million, compared with NOK 142 million for 2023. Profit before tax was NOK 269 million, compared with NOK 243 million for 2023.

There are significant differences between the institutes, with particularly good results at SINTEF Energy and SINTEF Industry. SINTEF Digital is implementing a necessary restructuring process to reduce costs, however changes are still required to create profitable operations. A restructuring process was initiated at SINTEF Community after revenues declined midway through 2024, and structural measures are being considered to strengthen the operating situation at SINTEF Manufacturing.

The liquidity situation at the end of 2024 remained good. SINTEF has established a common system within the Group for the placement of liquidity reserves. At the end of 2024, we had NOK 400 million under management, compared with NOK 440 million in 2023. The return was 4.8 per cent in 2024. The Board approves the annual 'Rules for financial management at SINTEF'.

SINTEF's financial surplus is invested in upskilling, buildings, research infrastructure and start-ups. In 2024, SINTEF invested NOK 207 million in research infrastructure and other research production equipment. The corresponding figure for 2023 was NOK 321 million. The largest own investments in 2024 were the extension at Gløshaugen at SINTEF Energy and the completion of the mechanical and construction laboratories at Torgard, which will be part of the Norwegian Ocean Technology Centre. The truly large infrastructure project under construction is the Norwegian Ocean Technology Centre at Tyholt, which is being carried out under the direction of Norwegian Directorate of Public Construction and Property and financed by the state. As the future operator of the largest laboratories, SINTEF is expending considerable resources on providing support and quality control to the project.

SINTEF enjoys a robust financial position. As of 31 December 2024, SINTEF had equity of NOK 3,610 million (NOK 3,405 million in 2023), which represents 52 per cent of total assets (47 per cent in 2023). The corresponding figure for the SINTEF Foundation is NOK 3,200 million (NOK 3,024 million in 2023), which

represents 98 per cent of total assets (97 per cent in 2023).

The SINTEF Foundation's annual surplus amounted to NOK 176 million. The corresponding figure for 2023 was NOK 166 million.

Equity and operational factors, combined with satisfactory orders on hand, provide a good basis for continued operation. The boards of the subsidiaries have conducted similar assessments, all of which conclude that there is a basis for continued operation. The Board is not aware of any material circumstances that have arisen since the end of the financial year that affect the assessment of the Foundation's or the Group's financial position. Given this, the financial statements have been prepared based on the assumption that SINTEF is a going concern.

SINTEF's commercialisation activities have developed positively. The year was characterised by very challenging capital markets and instruments for project financing. At the end of 2024, SINTEF had 20 start-ups in its portfolio. A total of NOK 669 million was invested in the companies by investors over the course of the year, of which NOK 74 million came from the SINTEF Venture funds. NOK 3,532 million has been invested in the portfolio companies since 2014, of which NOK 524 million has come from the SINTEF Venture funds. In July, the European Investment Fund (EIF) and Bernh. Brekke invested in SINTEF Venture VI, taking the total investment capital in that fund to NOK 500 million, which was in line with the target. The EIF's investment of NOK 210 million is its third and thus far largest in SINTEF's seed funds.

In early 2025, the last portfolio company in SINTEF Venture III, SpinChip Diagnostics, was sold for NOK 1.6 billion. Following the sale, the fund, which had been established in 2006, could be closed with a very satisfactory annual return of 20 per cent.

Clients

In 2024, SINTEF carried out 6,287 projects for 3,271 clients, large and small. This includes projects for both private and public clients.

SINTEF conducts client satisfaction surveys after projects are completed. The average score in 2024 was 4.6 on a scale of 1 to 5, which was at a similar level to the previous year. Detailed results are available to managers on an ongoing basis and are reported every four months to the group management team and followed up locally.

In 2024, a strategic initiative was launched to strengthen insight into what value SINTEF can create for clients, employees and government authorities, and which will also increase the community's understanding of research and SINTEF's role. As part of this initiative, a survey was conducted of what is required to improve client experiences, as well as increase their understanding of SINTEF's role and value for our clients. This process included 40 in-depth interviews within four industries: building and construction, fisheries and aquaculture, industry and energy. The survey shows that SINTEF has a strong position, and that clients' R&D demands are changing. The objective of R&D is to contribute to achieving business goals, and there is a demand for more rapid processes. Clients want closer strategic dialogue, and they want "One SINTEF". Key areas for improvement were also identified to

From SINTEF Digital's department for Sustainable Communication Technologies.

Photo: Smidesang&Lyng/SINTEF

meet the changing needs of clients and generate more impact within sustainable transition. This work will continue in a dedicated client project in 2025.

To strengthen the strategic dialogue and interaction with key clients, significant effort is being assigned to following up on defined key clients, in the form of dedicated key client managers at SINTEF. As part of this work, senior management meetings with key clients are also planned and conducted to ensure there is a good strategic foundation for this collaboration.

Participation in large, long-term research centres that are partly financed by the public sector based on open tenders provides considerable opportunities to create innovation through research, in interaction with Norwegian and international clients. SINTEF participates with a number of centres for research-driven innovation (SFIs) and centres for environment-friendly energy research (FMEs) that will run until 2028, 2029 and 2033.

In April 2024, the Research Council of Norway granted funding for eight new FME centres and SINTEF benefited greatly from this. SINTEF hosts four of the centres and is involved with all eight of the new centres. Collectively, these centres have close to 200 partners from the business sector and research.

Laboratory for Nuclear Magnetic Resonance (NMR) spectroscopy.

Photo: Lars Andreas Berg/SINTEF

An important task is to develop international networks and globally competitive solutions that provide our clients with up-to-date knowledge and connect them to the international research front. Access to participation in EU research programmes is of paramount importance. SINTEF is by far the largest Norwegian participant in the EU's research and innovation programmes. The results in the Horizon Europe framework programme, which was launched at the start of 2021, have been very good. As of October 2024, SINTEF had been granted funding for 192 projects, with income for SINTEF of NOK 2,200 million at the current exchange rate. This represents 14.7 per cent of the signed off funds brought home to Norway. These research projects have helped solve significant research challenges for the Norwegian business sector in collaboration with some of the foremost research communities in Europe

SINTEF was awarded three projects from the European Defence Fund in 2024. SINTEF is the coordinator of one of the projects. The total cost framework is NOK 756 million, of which SINTEF's share is NOK 22 million.

International turnover amounted to NOK 934 million in 2024 (NOK 808 million in 2023). This amounts to 21 per cent of SINTEF's total turnover. EU projects account for 66 per cent of our international projects. We delivered projects for clients in 59 countries.

Research

SINTEF's capacity for scientific renewal requires a good balance between competence-building research that can be published and commissioned research. The most important dissemination of our research results takes place through new technology and new solutions being adopted by clients and society. However, major importance is also attached to scientific publication. The aim is to publish at least one peer reviewed scientific publication per research scientist per year. In 2024, the figure was estimated to be 0.76, compared with 0.80 in 2023. The proportion of internationally co-authored publications was 48 per cent.

Artificial intelligence (AI) and increasingly more advanced digital language models are impacting all parts of society and industry globally. Developments continued at an accelerating pace during 2024. There is a great deal of pent-up

Everything from idea to production takes place at SINTEF MiNaLab. This is the only independent, complete line for the development and manufacture of microchips in Norway. Photo: Lars Andreas Berg / SINTEF

potential for AI in operational and industrial applications, and SINTEF works closely with clients in the business sector and public administration on the development of good new solutions. The Norwegian Government has made the decision to increase its research investments within AI by a total of NOK 1.3 billion over the next five years. In March 2024, the Ministry of Education and Research announced four to six five-year, multidisciplinary AI centres, which will focus on social consequences, technology and innovation. SINTEF is involved in a large number of applications. A decision on how the grants are to be allocated is expected to be made in 2025.

The ambition of the European Chips Act is to double the EU's production capacity for advanced microchips and sensors. SINTEF has advocated that Norway should take a greater part in the further development of this underlying technology, which is, among other things, a prerequisite for artificial intelligence. SINTEF MiNaLab in Oslo conducts world-leading research and also develops and produces advanced sensor and microchip based solutions. SINTEF is exploring the option of an upgrading of MiNaLab becoming an important element of a national boost in research, innovation and infrastructure for the development of specialised microchips and sensors.

In 2024, SINTEF, four Norwegian universities and the independent industry association, Electronic Coast, were designated as one of 27 European competence centres for microchips, with support from the EU and the Research Council of Norway. One of the goals of the centre is to make it easier for small and medium-sized businesses to access advanced technological development and facilities in Norway and Europe.

Recent years have brought increased international attention to research related to societal security and defence. In 2024, the Storting adopted a new long-term plan for the Norwegian Armed Forces in which appropriations to the defence sector will be increased by over NOK 600 billion from 2025 to 2036. In January 2025, the Norwegian Government presented the Total Preparedness Report. Both of these actions emphasize the increased need for research and cooperation between the defence sector and civil society. SINTEF has established an interdisciplinary corporate initiative for total defence and aims to actively contribute to strengthening total defence and societal security. The Norwegian Government will prepare a Norwegian security strategy which, in SINTEF's view should be based, insofar as possible, on the capacity, expertise and infrastructure that exist in civil society. This will ensure cost-effectiveness, maintenance and positive spillover effects for the business sector, municipalities and civil society in general. Civil research groups and the high-tech supplier industry should be key resources for Norwegian security, emergency preparedness and productivity.

SINTEF participates in international scientific collaborations. Together with NTNU, we have strategic collaborations with leading research environments in Japan and the US within areas such as energy, materials science and ocean spaces. A great deal of importance is attached to the collaborations in the European Energy Research Alliance (EERA) and the European Association of Research and Technology Organisations (EARTO). Both of these collaborations play important strategic roles in European research. The collaboration

with our largest sister institutes in Europe, under the auspices of Eurotech, is also of great value to SINTEF.

Laboratory investments are crucial if Norway is to develop further as a knowledge nation, assert itself in a competitive global arena and attract the best students and research scientists. In the past 10 years, SINTEF has invested NOK 1.9 billion in laboratories, scientific equipment and buildings.

2024 was characterised by major construction work in connection with the realisation of the Norwegian Ocean Technology Centre. The construction is being funded by the state and is crucial if SINTEF and NTNU is to maintain their position as a world-leading research environment for ocean industries. In 2024, the major groundworks at Tyholt were completed, and construction of the new basins began. The new office and teaching building in Professor Mørch's Hus is almost complete and NTNU and SINTEF will start using the building in spring 2025. The machinery and construction laboratories in the SINTEF-owned property at Torgarden opened as part of the Norwegian Ocean Technology Centre in August 2024.

The development of NTNU's campus in Gløshaugen is complicated, and is also of great significance for SINTEF. Good dialogue between NTNU and SINTEF is necessary to ensure good future-oriented solutions. At the end of 2024, NTNU and SINTEF reached an agreement on the realisation of and cooperation on a new building for the process metallurgical groups in the P2 building in the Campus Project.

People

As of 31 December 2024, SINTEF had a total of 2,186 permanent employees, which was 16 more than at the beginning of the previous year. 63 per cent of scientific personnel hold a PhD. 34 per cent of SINTEF's employees come from a total of 82 countries other than Norway. The largest percentage comes from Germany, followed by Italy and France.

SINTEF is very successful in the competition for skilled employees. We consistently score well in surveys in which students rank the attractiveness of places to work. In 2024, SINTEF recruited 143 new employees. Some 61 of these come from 29 countries other than Norway.

Every summer, SINTEF recruits summer research interns; students who get a summer job in one of the institutes. This programme is very popular. In 2024, there were several thousand applicants for 101 summer jobs. Summer research interns can participate in research projects, and the initiative is an important element of SINTEF's recruitment strategy for talented students.

86 per cent of our workforce are full-time employees. SINTEF has no employees who work part-time on an involuntary basis. At the end of the year, 1.6 per cent were employed on a temporary basis.

The sickness absence rate for 2024 was 3.8 per cent compared to 4.2 per cent in 2023. The work-related sickness absence rate was 0.2 per cent. Sickness absence is systematically followed up in the institutes.

The 2024 Working Environment Survey was conducted in April. This differed from previous surveys in that it contained fewer, but more precise, questions directly related to specific factors in the working environment. The participation rate of 94 per cent was considered to be a very high level that provides a good opportunity for conducting representative analyses. The external benchmark is "Norwegian working life", other companies in Norway. The main results show that SINTEF is at the level of external benchmark within all thematic areas, that SINTEF has committed employees who experience a high degree of influence and development opportunities, co-determination and scope for suggesting new ideas; that employees generally have good relationships with both colleagues and immediate superiors, and that supportive management is perceived as being a strength. The survey shows that topics such as ability to execute, clarity of roles, perceived meaning and shared understanding of tasks are areas for development.

Gender equality and family policies

Gender equality efforts are anchored in the Board and group management team. SINTEF has adopted a Gender Balance Plan in accordance with the requirements of the EU and the Research Council of Norway, which specify that we have to increase SINTEF's proportion of women from 33 per cent, the requirement in 2021, to at least 40 per cent in 2031. The plan sets out specific targets that lay the groundwork for a systematic and binding development of

gender balance and gender equality in the organisation.

The proportion of women at SINTEF has decreased slightly since 2023. At the end of the year, 34 per cent of our scientific personnel were women. The gender balance is at the lowest rung of the research scientist ladder, although the further up the ladder one looks the greater the imbalance becomes. Among managers, there is a relatively skewed gender distribution at the level of research director, while the percentage distribution between men and women at the level of research manager is closer to 40-60. The working environment survey shows no significant differences in how men and women perceive their work situation.

SINTEF has established an integration programme for international employees and their families to ensure international employees are properly looked after.

SINTEF's work on its activity and reporting obligations is discussed further at www.sintef.no/arp.

Risk management and internal control

SINTEF is certified according to ISO 9001, ISO 14001 and ISO 45001 through certification processes under the auspices of DNV. In November 2024, DNV conducted a periodic audit of SINTEF Ocean and SINTEF Manufacturing, as well as corporate staff and the group management team. Several suggestions concerning improvements were followed up, although no serious non-conformance was identified. This means that the certification is maintained.

In November 2024, CEO Alexandra Bech Gjørv received the European Quality Leader Award from the European Organization for Quality. The award is given to people who have experienced success in providing leadership and delivered on quality and risk management. The Board views the award as recognition of the targeted work carried out throughout SINTEF in these areas over a period of many years.

SINTEF has a system for reporting risk every four months with an update on the overall picture. The risk picture is discussed by the management and boards of each of the research institutes, as well as by the group management team and the Board of Directors. Risk mitigation measures are defined and implemented on an ongoing basis. Important topics include state aid rules, framework conditions for research, the General Data Protection Regulation (GDPR), anti-money laundering rules, the Export Control Act, information security and exposure to technological intelligence gathering. These are factors that have become more demanding to deal with in recent years.

SINTEF contributes knowledge that makes society better equipped to face climate change, demographic shifts and the increased need for societal security. Photo: Shutterstock

A separate threat assessment for SINTEF was established in 2023 and revised in 2024. The starting point is the most relevant threats and vulnerabilities we have uncovered through our own overarching risk assessments, as well as the government's public threat assessments, and dialogue with the Norwegian Police Security Service. At the same time, commercial risk is high on the agenda, and this is linked, among other things, to geopolitical uncertainty that impacts the global economy. Framework conditions are prominent in SINTEF's risk picture due to a negative and uncertain trend in the government's focus on industry-oriented research. Since the research institutes in Norway have low

operating margins, the institutes face significant financial risk associated with uncertain framework conditions.

SINTEF is exposed to currency fluctuations because some of its project income is in foreign currency, while all or most of the project costs are in Norwegian kroner. Forward contracts are used to hedge currency risk. Surplus liquidity is invested in accordance with the 'Rules for financial management at SINTEF'. The Board receives regular reports on financial performance.

The Board has established a three-member Audit and Security Committee to strengthen the work on security and information security in particular. Reports are prepared for all internal audits. An annual internal audit report specifying the implementation status of recommendations is submitted to the group management team and the Board. An annual data protection report is produced with an action plan for the group management team and the Board.

Insurance has been taken out for board members and the CEO that covers the personal liability they could incur for damage to assets in connection with the exercise of their office (directors and officers liability insurance). The insurance has been taken out with an insurance company with a solid rating. The insurance covers the insured's personal legal liability for damage to assets caused by a board member/deputy board member or the CEO of the organisation named on the insurance certificate. The insurance does not cover liability for personal injury or property damage, including financial loss as a result of such damage. The insured are defined as any natural person who has been, is or becomes the CEO of the Group, a board member of the Group, a member of the group management team or a member of an equivalent governing body in the Group. The same applies to any former, current or future employee of the Group who may take on independent management responsibilities.

Future opportunities and challenges

The world must succeed in radically changing energy and food supply, logistics and consumption patterns to mitigate global climate change and safeguard biodiversity. At the same time, there is a strong need to prioritise productivity, competitiveness, security and defence. The crises of recent years have shown that the world needs smart and secure societies, circular economies, digitalisation, user-adapted services and sustainable solutions for security, health and mobility in the face of demographic changes and geopolitical tensions.

The Draghi report clearly demonstrates that Europe has to improve its competitiveness, and that concerted efforts on research are required that generate higher productivity growth and radical innovation in the business sector.

In SINTEF's anniversary year, Norway is facing challenges that can be compared to those that characterized society 75 years ago. Together with our clients in the Norwegian business and public sectors and our partners at the universities, we see that SINTEF has important roles to fill in 2025 in order to contribute to solutions to the significant and complex crises related to nature, climate, demographics and societal security. The Board expects that SINTEF will also have an important role to play in the next 75 years, since many of the solutions – but also the challenges – lie in mastering technology, digitalisation and artificial intelligence. It is clear to the Board that when it comes to work on finding solutions to these challenges, SINTEF is highly sought after as a partner by the business and public sectors.

At the start of 2025, most of SINTEF's research institutes have acceptable orders on hand for the coming year. The organisation is well positioned, with our very high level of expertise, our professional networks, our world-class infrastructure, good client relations and our attractiveness for employees at a time when institutes are fighting for talented staff. Nevertheless, the Board is concerned about how the situation will develop over the next year or so at a time of pressure on framework conditions and significant uncertainty associated with, among other things, the geopolitical situation and potential trade restrictions. Demanding conditions are affecting the scope of opportunity for our clients to engage in research and innovation. An increasing imbalance between growth in expenses and income is challenging our business model as a competitive, European, industrial technology research institute with important and expensive laboratory infrastructure.

SINTEF's success in the strong competition for European research funds continued in 2024. This is evidence that our activities are highly competitive internationally, and the business and public sectors are very interested in collaborating with SINTEF. However, the Norwegian research model means that

public calls for proposals, including for national funding for EU programmes, determine the amount of research-based transition work to which the institutes can contribute. Therefore, the Board believes that the review of the Norwegian research and innovation system and the Norwegian research funding system that the government has initiated will be of great importance for our future prospects.

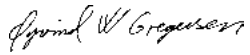
Ensuring that SINTEF contributes knowledge and analyses for good policymaking that can in turn trigger an increase in business sector investment in R&D is a top priority for the Board and group management team. This will improve the ability of companies to implement a digital, circular and green transition and contribute to overall security and more sustainable public services. It will also help the Board help SINTEF fulfil its' vision: "Technology for a better society".

Thank you

In connection with the anniversary, the Board finds it appropriate to not only thank all employees and partners for their efforts and collaboration in 2024, but also the many people who have contributed over the past 75 years and who have made SINTEF the organisation that it is today. We would also like to thank all of the co-owners of subsidiaries and all 78 representatives from business and civil society who sit on SINTEF's many boards and committees.

Trondheim, 20 March 2025

Tore Ulstein
Board Chair



Øyvind Weiby Gregersen
Deputy Chair

Lars Christian Dahle
Board member

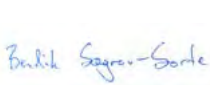
Bård Myhre
Board member

Hanne Refsholt
Board member

Kristin Misund
Board member

Siri Forsmo
Board member

Malin Sletnes
Board member



Bendik Sægrov-Sorte
Board member

Alexandra Bech Gjørv
CEO

6.2 Key financial figures

Amounts in NOK millions

Income and expenses	2020	2021	2022	2023	2024
Gross operating income	3,399	3,744	4,050	4,205	4,397
Net operating income	2,974	3,248	3,440	3,617	3,809
Operating profit	**158**	**268**	**127**	**102**	**120**
Financial income	62	71	89	164	177
Financial expenses	46	11	27	22	27
Profit before tax	174	329	190	243	269
Net income	**145**	**262**	**144**	**189**	**205**

Balance sheet					
Non-current assets	1,215	1,457	1,550	1,865	1,986
Current assets	3,912	4,178	5,039	5,306	4,885
Total assets	**5,127**	**5,635**	**6,588**	**7,170**	**6,871**
Equity	2,812	3,074	3,216	3,405	3,610
Non-current liabilities	34	104	100	95	93
Current liabilities	2,282	2,457	3,272	3,670	3,168
Total equity and liabilities	**5,127**	**5,635**	**6,588**	**7,170**	**6,871**

Profitability					
Operating margin (%)	5.3 %	8.2 %	3.7 %	2.8 %	3.1 %
Profit margin %	5.9 %	10.1 %	5.5 %	6.7 %	7.1 %
Return on total assets (%)	4.5 %	6.3 %	3.5 %	3.9 %	4.2 %
Return on equity (%)	5.3 %	8.9 %	4.6 %	5.7 %	5.9 %
Liquidity					
Net cash flow from operating activities	653	448	897	614	-143
Current ratio	1.7	1.7	1.5	1.4	1.5
Solvency					
Equity ratio (%)	55 %	55 %	49 %	47 %	53 %
Working capital	1,631	1,721	1,766	1,635	1,717

6.3 Financial statements 2024

Income statement

Amounts in NOK thousands

The SINTEF Foundation			SINTEF	
2023	**2024**	**Operating income and expenses**	**2024**	**2023**
0	0	Income from external projects	3,912,680	3,733,356
0	0	Basic grant funding from the Research Council of Norway	378,399	373,036
364,551	369,543	Other operating income	106,390	98,125
364,551	**369,543**	**Gross operating income**	**4,397,468**	**4,204,517**
0	0	Direct project expenses	588,078	587,070
364,551	**369,543**	**Net operating income**	**3,809,390**	**3,617,447**
75,265	74,798	Personnel expenses	2,745,418	2,595,064
29,816	25,581	Depreciation and amortisation	143,207	144,469
234,060	216,941	Other operating expenses	800,987	776,162
339,141	**317,319**	**Total operating expenses**	**3,689,612**	**3,515,695**
25,410	**52,224**	**Operating profit**	**119,778**	**101,752**

The SINTEF Foundation			SINTEF	
2023	**2024**	**Financial income and expenses**	**2024**	**2023**
120,235	103,073	Income from subsidiaries and associated companies	-8,966	-5,867
17,961	24,315	Other interest income	146,025	125,443
13,085	18,092	Interest received from group companies	0	0
17	0	Other financial income	1,459	10,455
8,469	7,521	Changes in fair value of financial current assets	29,033	27,842
-737	-1,797	Other interest expenses	-7,563	-8,602
-881	-1,124	Other financial expenses	-10,772	-7,668
158,149	**150,081**	**Net financial income**	**149,215**	**141,604**
183,559	**202,305**	**Profit before tax**	**268,994**	**243,355**
17,700	26,482	Income tax	63,798	54,762
165,859	**175,823**	**NET INCOME**	**205,195**	**188,593**
		Attributable to minority interests	**29,605**	**22,942**
		Attributable to controlling interests	**175,591**	**165,651**
		Allocations:		
139,864	105,683	Transferred to fund for valuation differences		
25,994	70,141	Allocated to other equity		
165,859	**175,823**	**Total allocations**		

Balance sheet

Amounts in NOK thousands

The SINTEF Foundation			SINTEF	
2023	**2024**	**ASSETS**	**2024**	**2023**
		Non-current assets		
		Intangible assets		
0	0	Development	92,930	60,210
0	0	Concessions, patents, licence, trademarks, etc.	6,227	7,168
103,495	104,175	Deferred tax asset	224,514	229,053
0	0	Goodwill/(badwill)	8,967	8,607
103,495	**104,175**	**Total intangible assets**	**332,637**	**305,037**
		Tangible fixed assets		
392,033	372,325	Plots, buildings and other real estate	801,511	791,297
308	0	Facilities under construction	355,776	300,575
0	0	Scientific equipment	243,607	237,675
646	120	Equipment and other movables	22,164	23,150
392,987	**372,446**	**Total tangible fixed assets**	**1,423,057**	**1,352,698**
		Financial assets		
1,716,956	1,820,029	Investments in subsidiaries	0	0
274,671	121,106	Loans to group companies	0	0
0	0	Investments in associated companies and joint ventures	112,884	109,974
0	0	Loans to joint ventures	304	304
137	137	Investments in shares	12,311	11,304
0	0	Pension funds	0	0
30,512	28,964	Other non-current receivables	105,005	85,387
2,022,275	**1,970,236**	**Total financial assets**	**230,504**	**206,968**
2,518,757	**2,446,856**	**Total non-current assets**	**1,986,198**	**1,864,704**

The SINTEF Foundation			SINTEF	
2023	**2024**	**ASSETS**	**2024**	**2023**
		Current assets		
		Inventories		
0	0	Inventories of finished goods	17,211	17,773
0	0	Work in progress	610,822	630,628
0	**0**	**Total inventories**	**628,032**	**648,400**
		Receivables		
4,964	6,009	Accounts receivable	627,987	606,242
37,847	42,717	Group current receivables	0	0
17,587	11,964	Other current receivables	133,223	179,204
60,398	**60,690**	**Total receivables**	**761,210**	**785,446**
		Investments		
182,286	97,273	Market-based bonds and other securities	209,520	439,870
0	0	Other financial instruments	22,655	18,755
182,286	**97,273**	**Total investments**	**232,176**	**458,625**
348,844	**670,564**	**Cash and cash equivalents**	**3,263,105**	**3,413,074**
591,528	**828,526**	**Total current assets**	**4,884,523**	**5,305,544**
3,110,286	**3,275,383**	**TOTAL ASSETS**	**6,870,721**	**7,170,248**

Balance sheet

Amounts in NOK thousands

The SINTEF Foundation			SINTEF	
2023	**2024**	**EQUITY AND LIABILITIES**	**2024**	**2023**
		Equity		
		Paid-in equity		
71,350	71,350	Foundation's capital	71,350	71,350
71,350	**71,350**	**Total paid-in equity**	**71,350**	**71,350**
		Retained earnings		
1,470,608	1,576,290	Fund for valuation differences	0	0
1,482,114	1,552,255	Other equity	3,127,308	2,951,718
2,952,722	**3,128,545**	**Total retained earnings**	**3,127,308**	**2,951,718**
		Minority interests	411,444	381,840
3,024,072	**3,199,895**	**Total equity**	**3,610,103**	**3,404,907**

The SINTEF Foundation			SINTEF	
2023	**2024**	**EQUITY AND LIABILITIES**	**2024**	**2023**
		Liabilities		
		Provisions		
0	0	Pension liabilities	19,982	21,122
0	0	Other provisions	19,897	18,895
0	**0**	**Total provisions**	**39,879**	**40,017**
		Other non-current liabilities		
0	0	Liabilities to credit institutions	53,000	55,000
0	**0**	**Total other non-current liabilities**	**53,000**	**55,000**
		Current liabilities		
38,970	26,728	Accounts payable	275,617	333,474
19,343	21,514	Tax payable	53,613	63,497
4,561	4,881	Tax deducted and other public duties	269,015	243,759
0	0	Advance payments from clients	1,168,606	1,149,924
510	12,384	Group current liabilities	0	0
22,830	9,980	Other current liabilities	1,400,889	1,879,670
86,214	**75,488**	**Total current liabilities**	**3,167,739**	**3,670,324**
86,214	**75,488**	**Total liabilities**	**3,260,618**	**3,765,341**
3,110,286	**3,275,383**	**TOTAL EQUITY AND LIABILITIES**	**6,870,721**	**7,170,248**

Statement of cash flows

Amounts in NOK thousands

The SINTEF Foundation			SINTEF	
2023	**2024**		**2024**	**2023**
		Cash flow from operating activities:		
183,559	202,305	Profit before tax	268,994	243,355
-120,235	-103,073	Share of profit from ass. companies, less distributions	8,966	6,374
-13,681	-24,991	Income taxes paid	-69,145	-56,774
29,816	25,581	Ordinary depreciation and amortisation	143,207	144,468
0	0	Recognition of badwill	-2,140	-440
0	0	Write-downs of property, plant and equipment	-70	254
0	0	Pension expenses with no cash flow effect	-1,140	1,654
0	0	Net loss/(-)gain sale assets	-1,350	3,021
-8,026	-7,521	Net change in value of financial current assets	-29,089	-21,002
0	0	Change in inventories of finished goods	562	-325
0	0	Change in work in progress	19,806	-8,345
325	-1,045	Change in accounts receivable and advance payments from clients	-3,063	-9,713
11,852	-12,242	Change in accounts payable	-57,857	41,755
1,275	7,003	Change in intragroup balances	0	0
-2,773	-6,906	Net change in other accruals	-421,073	269,431
82,113	**79,111**	**Net cash flow from operating activities**	**-143,392**	**613,713**

The SINTEF Foundation			SINTEF	
2023	**2024**		**2024**	**2023**
		Cash flow from investing activities:		
324	0	Proceeds from sales of tangible fixed assets	1,700	21
-7,210	-5,039	Purchases of tangible fixed assets	-206,905	-320,623
0	0	Purchases of intangible assets	-37,009	-59,432
0	193,565	Proceeds from loan to Group companies	0	0
-40,000	-40,000	Payments on loans to Group companies	0	0
0	154,535	Proceeds from sale of financial assets	372,903	15
0	-62,000	Purchases of financial assets	-136,814	-21,705
-46,886	**241,061**	**Net cash flow from investing activities**	**-6,125**	**-401,724**
		Cash flow from financing activities:		
0	0	Payments on non-current liabilities to credit institutions	-2,000	-4,499
2,133	1,548	Proceeds from non-current receivables	1,548	2,133
2,133	**1,548**	**Net cash flow from financing activities**	**-452**	**-2,366**
37,360	321,720	Net change in cash and cash equivalents	-149,969	209,623
0	0	Effect of revised ownership interest from subsidiaries to associated companies	0	-5,944
311,485	348,844	Cash and cash equivalents as of 1 January	3,413,074	3,209,395
348,844	**670,564**	**Cash and cash equivalents as of 31 December**	**3,263,105**	**3,413,074**

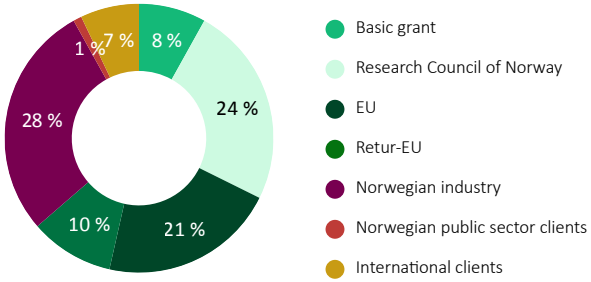
6.4 Results per institute

Mina Elise Øieren Holter is a student at the Norwegian University of Life Sciences (NMBU). In collaboration with SINTEF Industry, she is researching how solar rays from the surrounding environment affect the electricity production of the solar cells. Here she is darkening the back of the double-sided solar panels. Photo: Edvin Wiggen Dahl/SINTEF

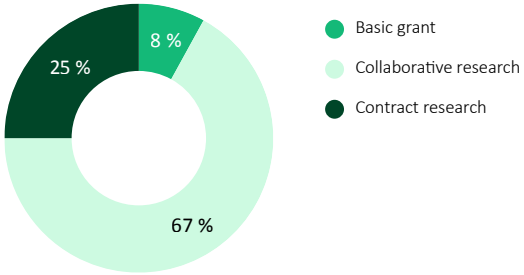
SINTEF Industry

Funding sources

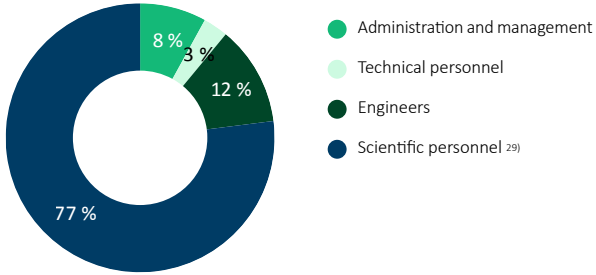
% of gross operating income



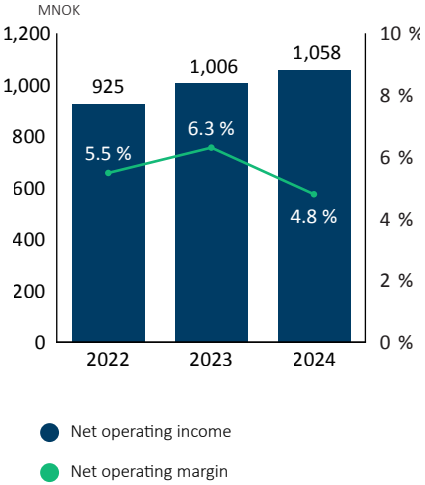
Portfolio type



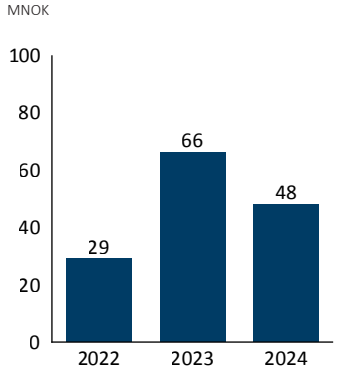
Employees



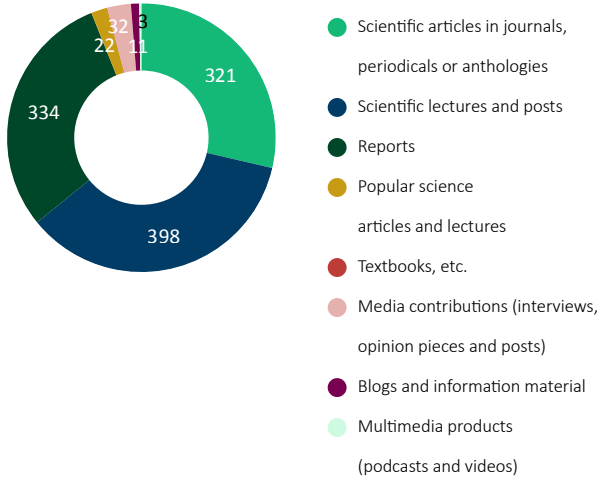
Net operating income, net operating margin



Investments in laboratories, scientific equipment and other research production equipment



Publications and other dissemination



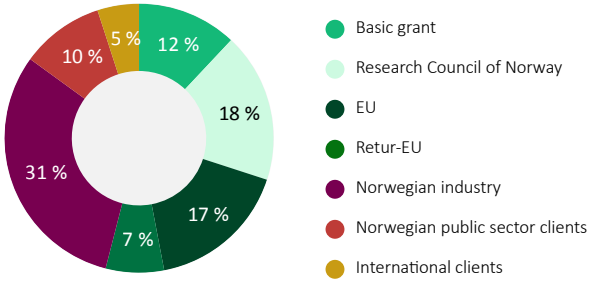
29) Scientific personnel include research scientists, research managers and research directors.

Sources: Publications; Cristin, other data (incl. publication data reports); SINTEF.

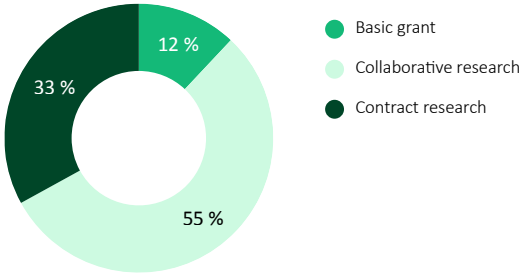
SINTEF Digital

Funding sources

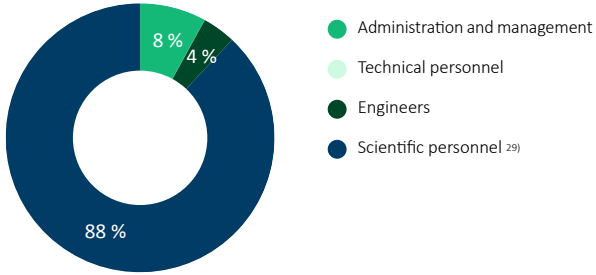
% of gross operating income



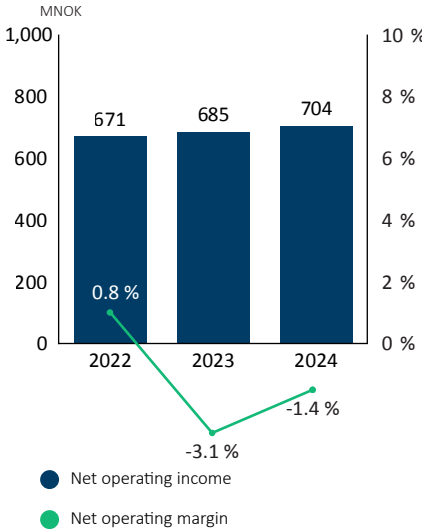
Portfolio type



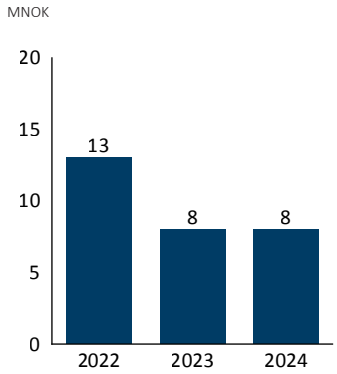
Employees



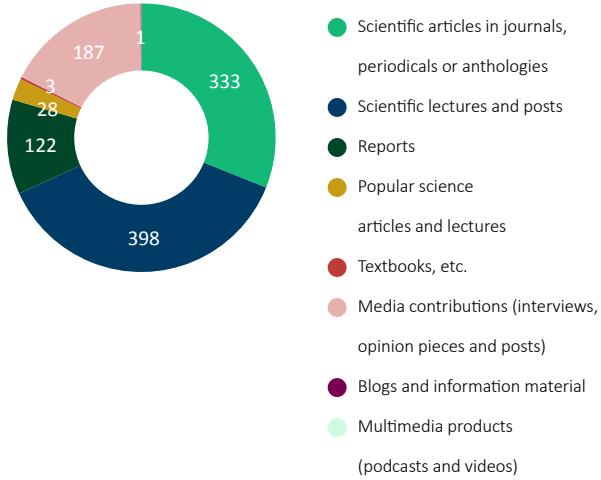
Net operating income, net operating margin



Investments in laboratories, scientific equipment and other research production equipment



Publications and other dissemination



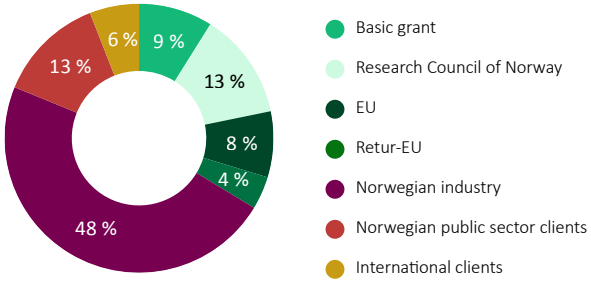
29) Scientific personnel include research scientists, research managers and research directors.

Sources: Publications; Cristin, other data (incl. publication data reports); SINTEF.

SINTEF Community

Funding sources

% of gross operating income



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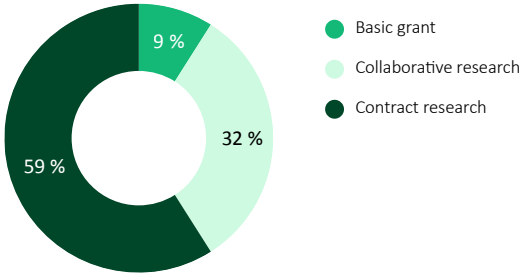
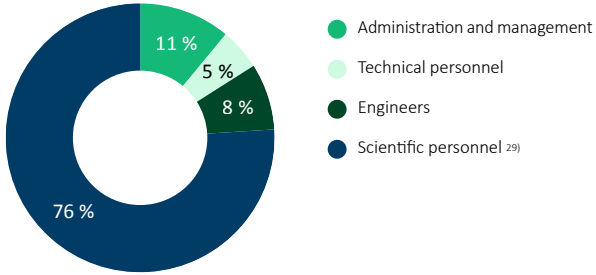
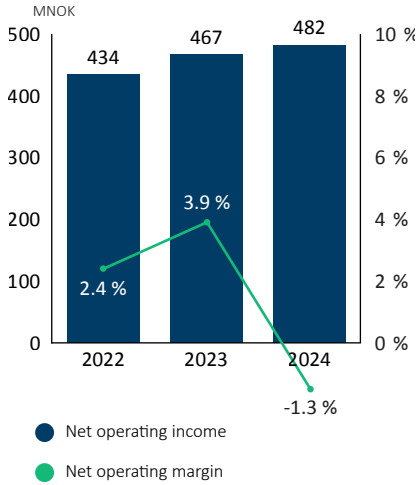


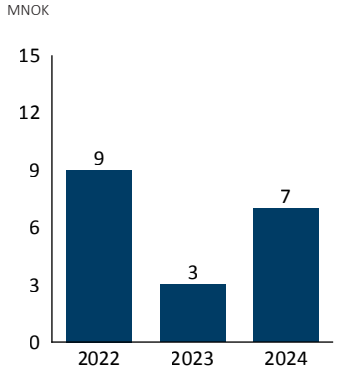
Employees



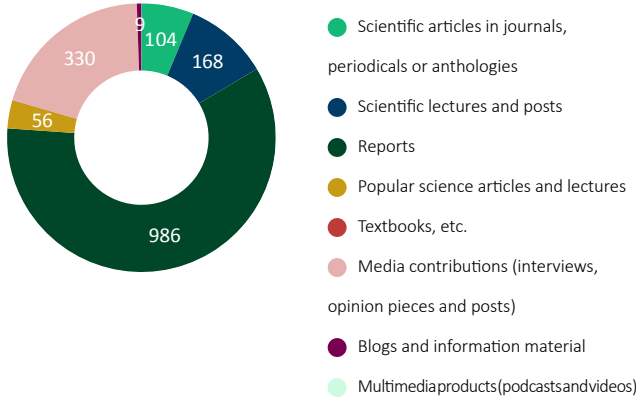
Net operating income, net operating margin



Investments in laboratories, scientific equipment and other research production equipment



Publications and other dissemination



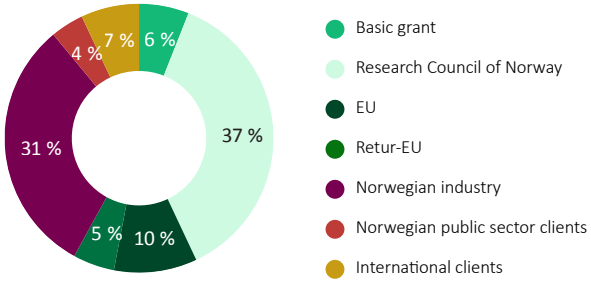
29) Scientific personnel include research scientists, research managers and research directors.

Sources: Publications; Cristin, other data (incl. publication data reports); SINTEF.

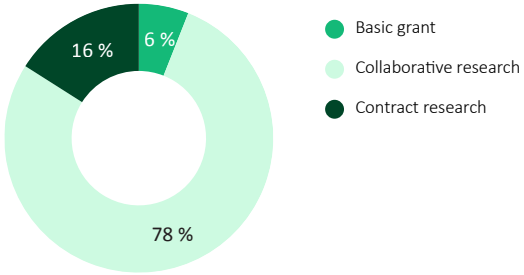
SINTEF Energi AS

Funding sources

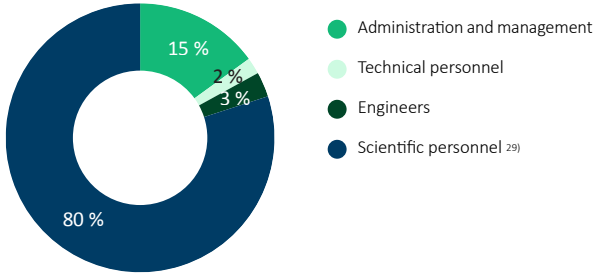
% of gross operating income



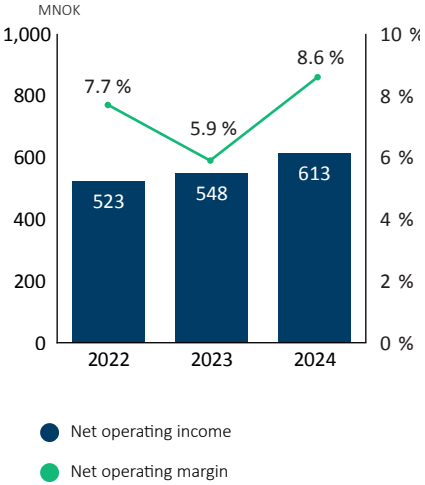
Portfolio type



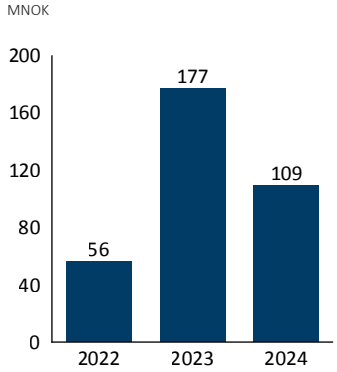
Employees



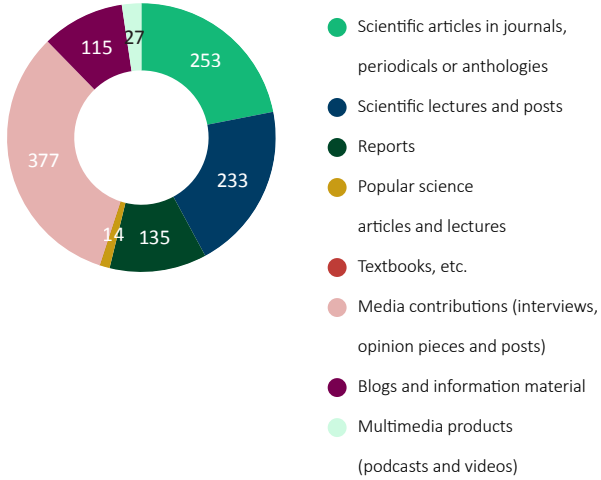
Net operating income, net operating margin



Investments in laboratories, scientific equipment and other research production equipment



Publications and other dissemination



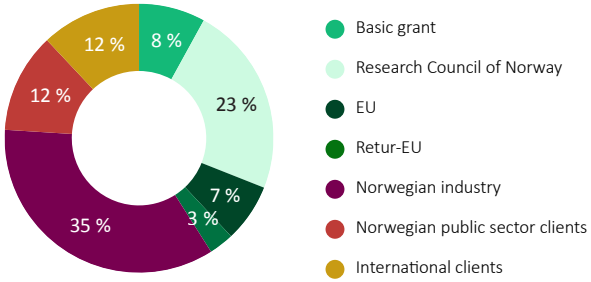
29) Scientific personnel include research scientists, research managers and research directors.

Sources: Publications; Cristin, other data (incl. publication data reports); SINTEF.

SINTEF Ocean AS

Funding sources

% of gross operating income



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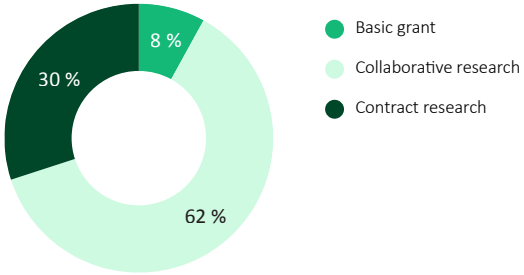
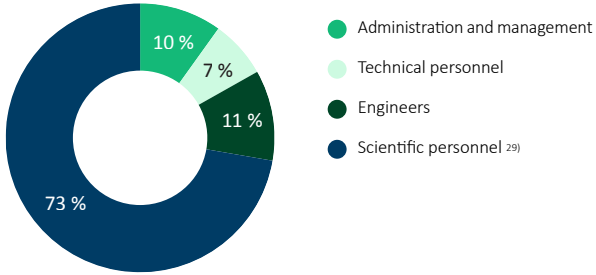
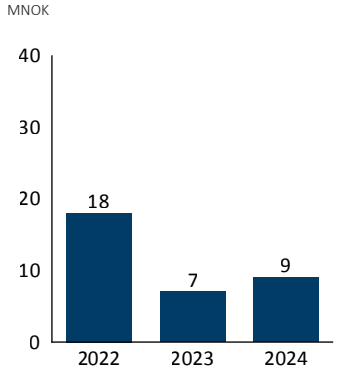


Employees

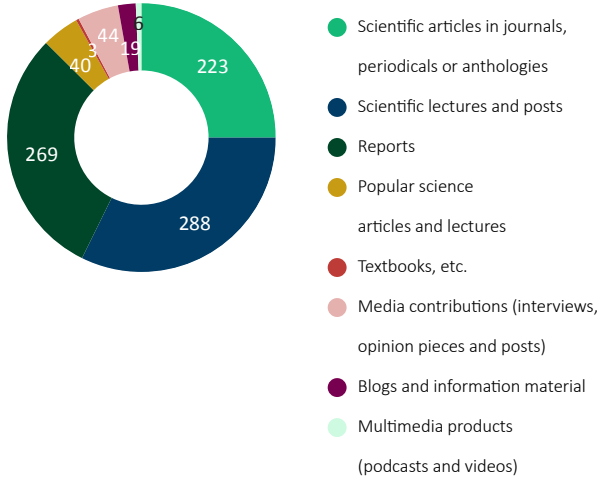


Net operating income, net operating margin

Investments in laboratories, scientific equipment and other research production equipment



Publications and other dissemination



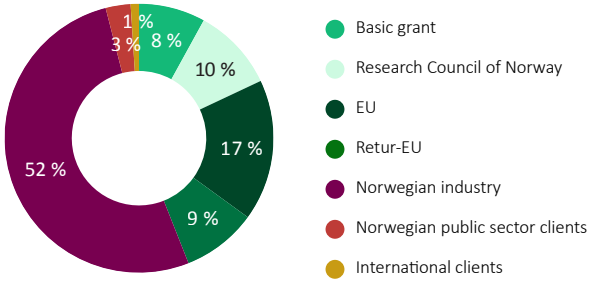
29) Scientific personnel include research scientists, research managers and research directors.

Sources: Publications; Cristin, other data (incl. publication data reports); SINTEF.

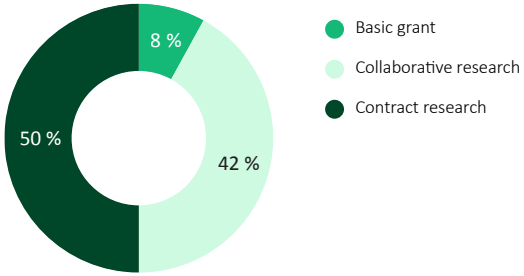
SINTEF Manufacturing AS

Funding sources

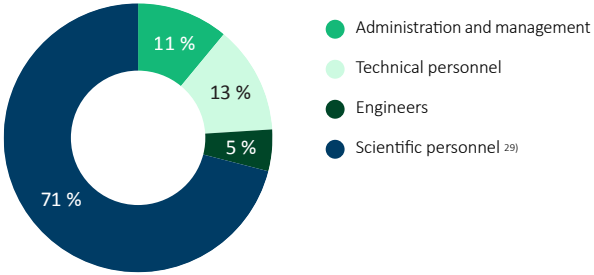
% of gross operating income



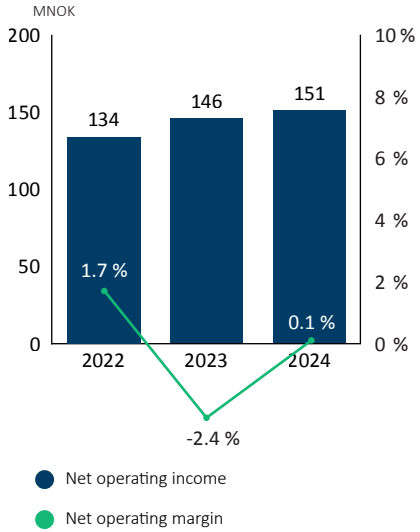
Portfolio type



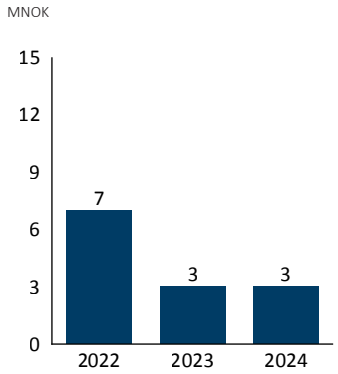
Employees



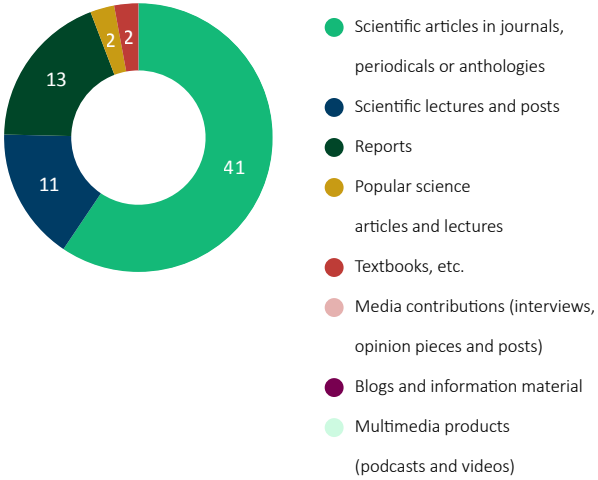
Net operating income, net operating margin



Investments in laboratories, scientific equipment and other research production equipment



Publications and other dissemination



29) Scientific personnel include research scientists, research managers and research directors.

Sources: Publications; Cristin, other data (incl. publication data reports); SINTEF.

Additional details regarding the report

The following companies are included in the financial figures we report in the Integrated Annual and Sustainability Report: The SINTEF Foundation and the following subsidiaries:

- SINTEF AS and the following subsidiaries:
  SINTEF Flowtech AS, SINTEF Narvik AS and SINTEF Helgeland AS.
- SINTEF Energi AS
- SINTEF Ocean AS and the following subsidiaries:
  SINTEF Nord AS og SINTEF Nordvest AS.
- SINTEF Manufacturing AS.
- SINTEF Holding AS and the following subsidiaries:
  SINTEF TTO AS and SINTEF Venture AS
  (and the subsidiary SINTEF Venture III AS).
- SINTEF Eiendom Holding AS and the following subsidiaries:
  Torgardsveien 12 AS.
- SINTEF Sustainability Accelerator Fund AS.

This applies to both the accounting figures themselves, but also to, for example, portfolio analyses, investments etc. All companies are included in Scope 1 and 3 of the climate accounts. Scope 2 does not include energy consumption for Torgard, SINTEF Energi AS and SINTEF Ocean's leased buildings and all locations apart from Trondheim and Oslo. Scope 2 includes the SINTEF Foundation and SINTEF AS (with the exception of Torgard) in addition to SINTEF Energy Lab and Brattørkaia SINTEF Ocean.

Figures related to energy consumption, property, water and waste include the buildings owned and managed by the SINTEF Foundation and SINTEF AS. Information on the proportion of gross turnover for research projects that contribute to the various SDGs comes from SINTEF's six research institutes (Industry, Digital, Ocean, Energy, Community and Manufacturing).

The sustainability information for 2024 has not been certified by an external auditor.

OTHER NOTES:

Page 42:
The CLIMAREST project received support from the EU's research and innovation programme Horizon Europe under grant agreement no. 101036996.
SINTEF is solely responsible for the contents of this project description, and it does not necessarily reflect the EU's understanding.

Page 44:
The Mecalo project received support from the EU's research and innovation programme Horizon Europe under grant agreement no. 101177480.
SINTEF is solely responsible for the contents of this project description, and it does not necessarily reflect the EU's understanding.

SINTEF

Technology for a better society