SINTEF

SINTEF Ocean

Annual Report 2025

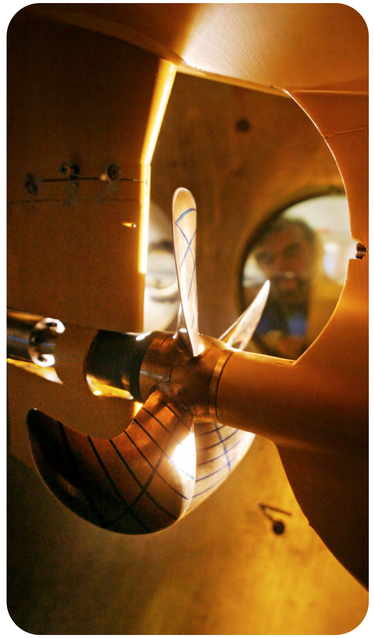
Technology for a better society

About SINTEF Ocean

SINTEF Ocean is a not-for-profit research institute within the SINTEF Group, which works with research and innovation related to the ocean for national and international clients. Our purpose is: “Together, we develop ocean industries for the future.”

Our most important activities are industry-oriented projects along the entire biomarine and maritime value chain, as well as in the energy sector and climate and environment. Our ambition is to continue Norway’s leading position in maritime engineering and biomarine research.

Together with business and authorities, we develop solutions for sustainable use of the ocean. In this way, we contribute to transformation in areas where Norway is a leader. At the same time, we help solve important national and global challenges. The green shift creates major transformation needs. This requires knowledge and innovative solutions within our core areas, which are food, energy, maritime and environment.



SINTEF Ocean’s head office is in Trondheim, but we are also represented by employees in Ålesund, Tromsø, Oslo, Bergen and Frøya. We collaborate closely with NTNU, in support of research and teaching that are naturally related to our activities.

The institute has two wholly owned subsidiaries, SINTEF Nordvest and SINTEF Nord. At the end of 2025, the subsidiary SINTEF Ocean Software was also established.

Our core areas

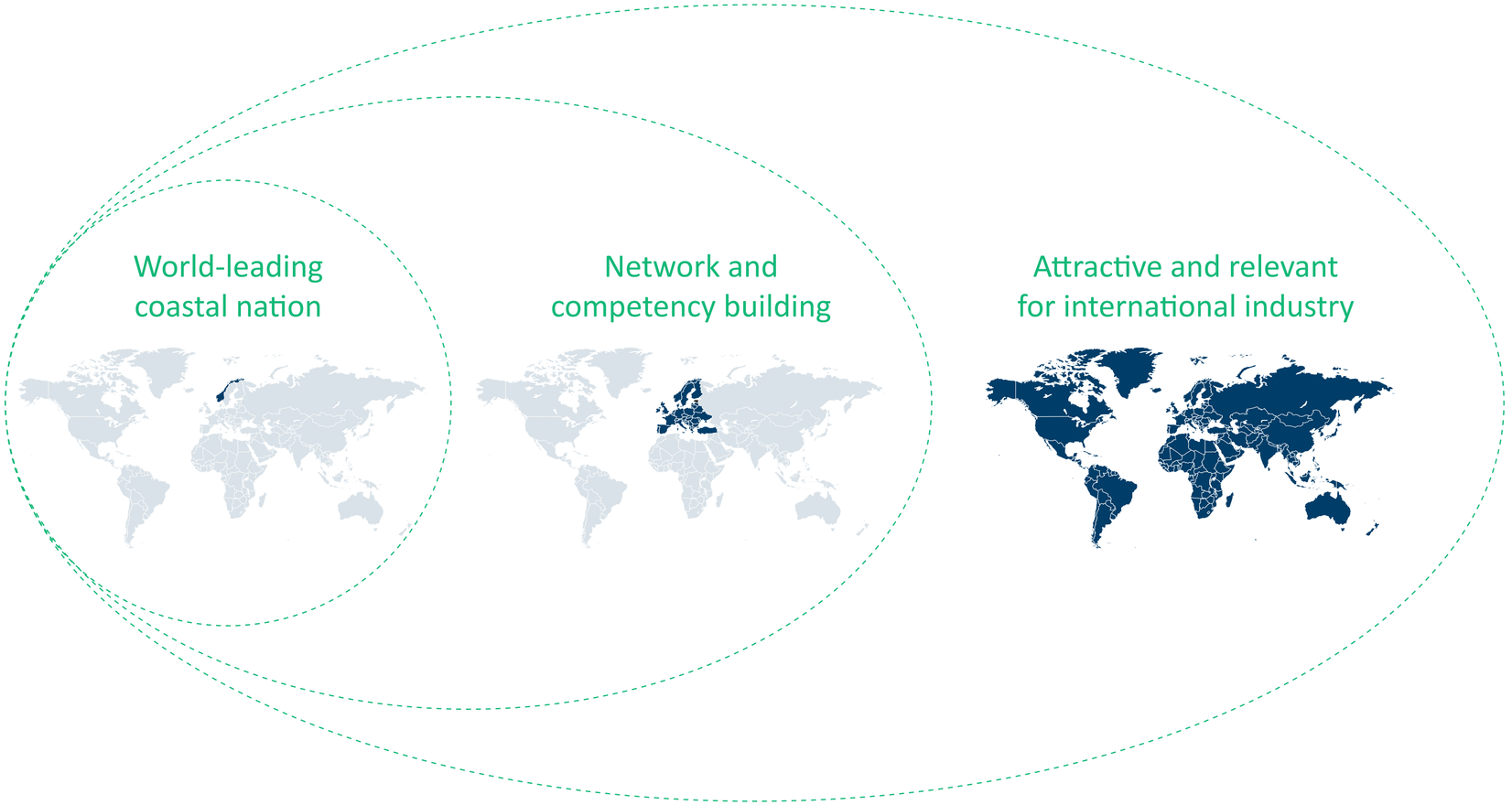
Food

Energy

Maritime

Environment

Our mission in a Norwegian, European and global perspective



A greeting from CEO Vegar Johansen

The ocean plays a crucial role in addressing some of the biggest societal challenges of our time.

Through sustainable development of the ocean industries, we can contribute to increased food security, clean energy, safe transport and reduced greenhouse gas emissions. For Norway – a leading ocean nation with large ocean areas and long coast-lines – this entails both a special responsibility and a significant opportunity.

2025 has been a year that has clearly shown how quickly the global and national framework around us can change. Increased geopolitical unrest, greater attention to security and emergency preparedness, and stricter requirements for energy security and technological independence in Europe are also affecting the ocean industries. In this situation, the need for robust, knowledge-based solutions becomes even clearer.

SINTEF Ocean aims to develop knowledge and technology that meets the needs of the ocean industries. Our purpose, *"Together, we develop ocean industries for the future"*, is based on a conviction that close interaction between research, business and administration is crucial to success. As a business-oriented research institute, we combine commissioned research with long-term knowledge development and contribute to solutions that are put into practice – both nationally and internationally.

In 2025, SINTEF celebrated its 75th anniversary. The anniversary made visible how SINTEF and the institute sector have been a central driving force in

Shown in the background is the construction pit for the new Ocean Basin and Seakeeping Basin laboratories at Tyholt, which will be an important part of The Norwegian Ocean Technology Centre.

Norwegian social development for several decades, and have provided technological breakthroughs in a wide range of industries.

This role was also clearly recognised when Prime Minister Jonas Gahr Støre visited SINTEF in 2025. During the visit, the importance of the institute sector was highlighted in light of the geopolitical situation, the need for green and digital transformation and the demands for a more robust society.

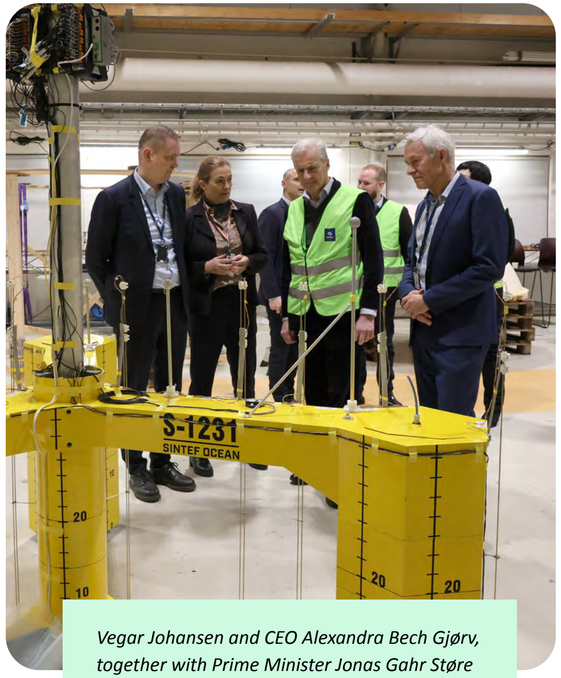
Our research infrastructure is an essential tool for exercising this role. In 2025, the construction project for The Norwegian Ocean Technology Centre in Trondheim reached several important milestones. The laboratories being built here set new international standards and provide the opportunity to imitate reality on a model scale, to test how different structures cope with conditions at sea. When the centre is completed, it will provide researchers, industry and students with access to world-class research facilities.

At the same time, we are concerned about developments in the research policy framework. Although Norway has experienced real growth in public funding for research and development overall, this growth has benefited the industry-oriented research institutes to a limited extent.

This has led to demanding restructuring for several institutes, including SINTEF Ocean, and affects our capacity to meet the needs of the business community at a time when restructuring and increased competitiveness are particularly important. It also weakens our ability to manage and further develop expensive, but absolutely necessary research infrastructure. In my view, it is therefore crucial that the framework for industry-oriented research is strengthened if Norway is to succeed in restructuring, creating value and increasing productivity.

For a small, open country like Norway, it is also crucial to actively participate in European research collaborations. Participation in the EU's framework programmes for research is therefore of great strategic importance for SINTEF. Through targeted efforts, we contribute to developing new knowledge, shaping European research priorities and connecting Norwegian players closely to international value chains.

Finally, I would like to express my sincere thanks to all our employees for their efforts in the past year. Every day, I experience a strong commitment to delivering research and solutions of high academic quality and relevance, and to developing the institute in line with society's needs. It is this interaction between people, knowledge and infrastructure that will enable SINTEF Ocean to continue to contribute to the development of the ocean industries going forward.



Vegar Johansen and CEO Alexandra Bech Gjørv, together with Prime Minister Jonas Gahr Støre when he visited SINTEF in 2025.

Kind regards,

Vegar Johansen

CEO, SINTEF Ocean
April 2026

Clients, projects and funding

SINTEF Ocean offers world-class knowledge, technology and laboratories for the development of ocean-based solutions for the future.

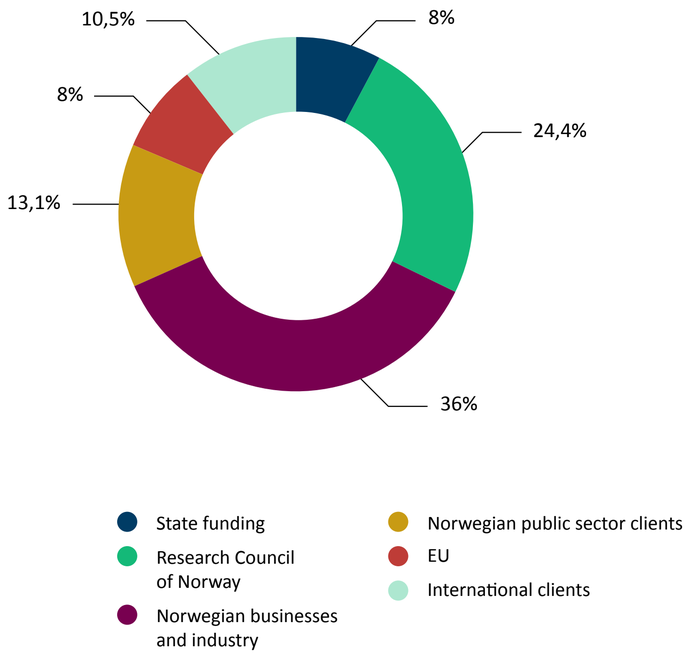
We collaborate with industrial clients, knowledge communities, public enterprises and agencies, both nationally and internationally.

Around 8% of SINTEF Ocean's budget is funded by the state through a so-called 'basic grant'. The rest of our income is obtained through open competition. The Research Council of Norway and the European Union are the largest funders of research when it comes to both knowledge development projects and applied and business-oriented research. The institute is a natural applicant in many programmes. Direct projects with industry also constitute a significant proportion of the portfolio. In 2025, SINTEF Ocean carried out 1067 projects for 379 clients, large and small.

A significant number of projects are carried out across SINTEF. An interdisciplinary approach involving different areas of specialisation provides unique opportunities to develop good solutions.

Funding sources

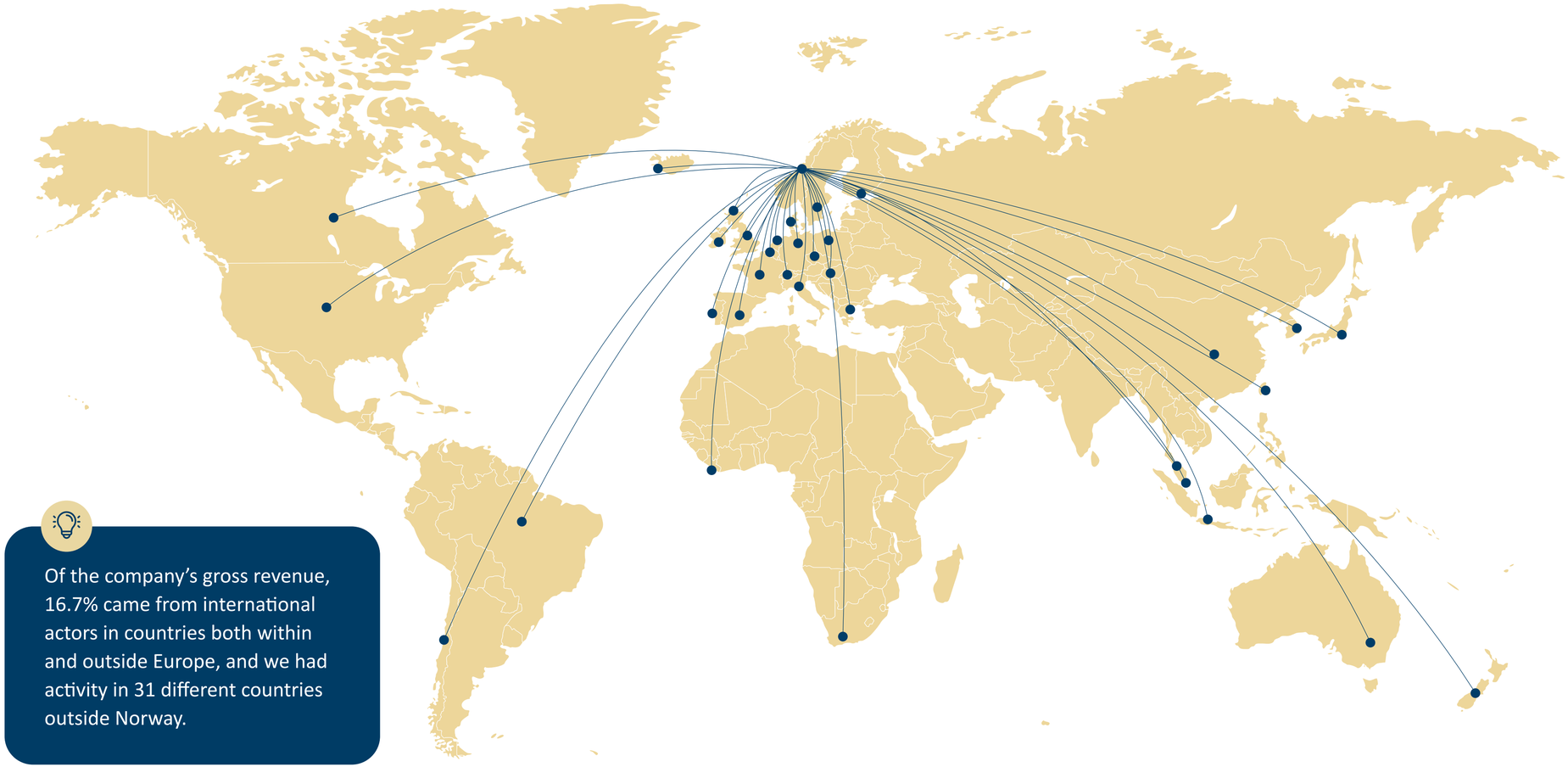
% of gross operating income



1067
PROJECTS

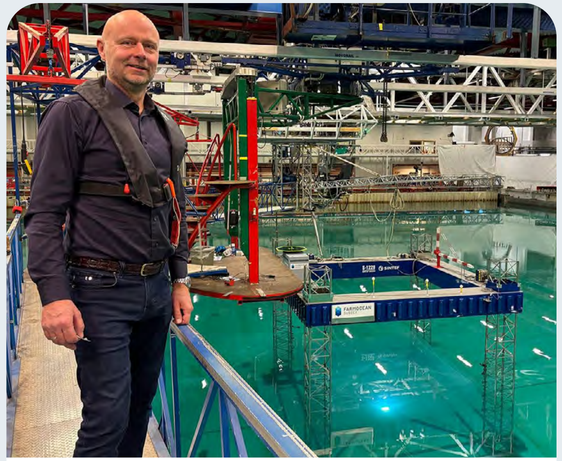
379
CLIENTS

SINTEF Ocean has clients and projects in Norway and across the world



Of the company's gross revenue, 16.7% came from international actors in countries both within and outside Europe, and we had activity in 31 different countries outside Norway.

Highlights from 2025



Testing new aquaculture technology in the Ocean Basin Laboratory

Using well-known offshore technology from the oil industry and a new idea of attaching a net between the poles, the founders of Farmocean Subsea want to create equipment for offshore aquaculture. Here, it is smart to test whether all calculations and drawings can actually withstand the rough weather conditions of the open sea.

Read more

SINTEF with concrete safety measures for fishermen

To achieve the authorities' zero vision for maritime safety, accidents in the fishing fleet must be prevented. SINTEF has described measures that can be implemented by both fishermen themselves and those around them.

Read more

Robot scientists for a day

What? Are you controlling the underwater robot with a gaming controller? The seventh graders were surprised when they got to be robot scientists at SINTEF.

Read more

Reduced noise pollution from ships

The EU project LOWNOISER will work to protect marine ecosystems from underwater noise pollution from ships. SINTEF Ocean is leading two of the work packages.

Read more

This is what we need to do to restore our oceans

It could take up to 200 years for damaged marine environments to fully recover if we just stop the destruction and leave them to heal themselves. Immediate action is essential for successful marine restoration, scientists conclude.

Read more

Seaweed and kelp as everyday food? Yes, please!

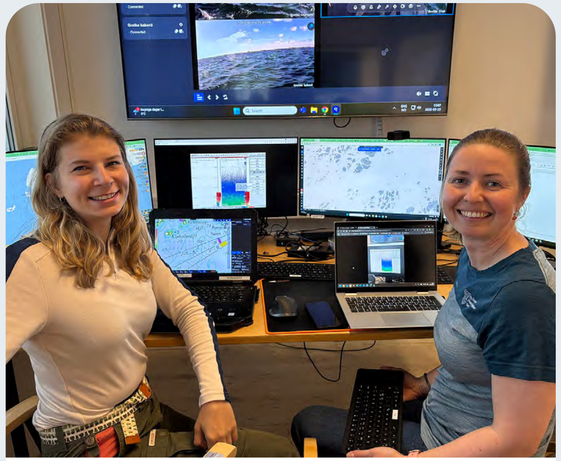
The world's food systems are under pressure, and it is more important than ever to utilise our food resources efficiently. So the question is, will you be tempted by Korean rice balls with tuna and nori, or will you go for fish cakes with Ulva and cornflakes?

Read more

Standing upright, this ship will be as tall as the Eiffel Tower

In the sea, it can take over five kilometres to stop. Perhaps not so strange - the ship is 62 meters wide and will protrude 21 meters below the water surface. SINTEF has tested how it will behave at sea.

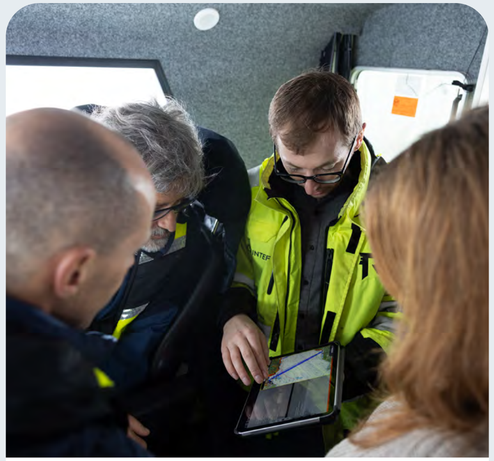
Read more



Piloting boats and drones 180 km away so fishermen can find Calanus finmarchius

Calanus in dense shoals can be seen from space, but traditional fishing methods are not suitable for locating and harvesting redfish. The innovation centre SFI Harvest is working to develop new mapping methods.

Read more



SINTEF assists new centre for ocean technology in Portugal

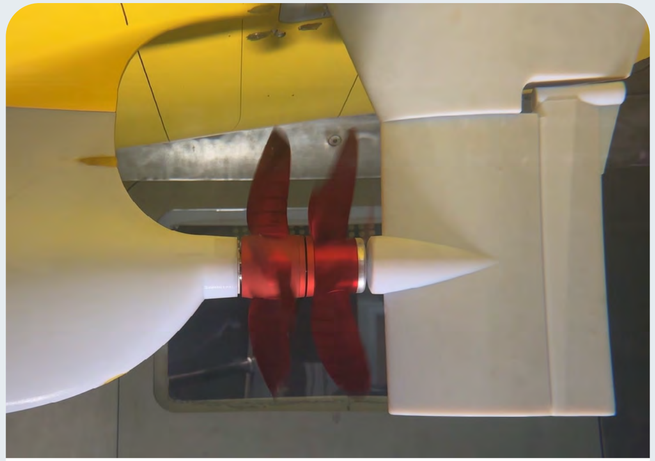
Through the EU project INSECTEC.OCEAN, SINTEF Ocean will assist Portuguese INESC TEC with the establishment of a 'Centre of Excellence' for marine research and engineering.

Read more

These little bugs could be our secret emergency squad

Norway imports over 90 percent of its salmon feed ingredients. Now researchers instead want to use raw materials such as feathers, wood chips and grass to produce more locally grown proteins.

Read more



Counter-rotating propellers can make ships more efficient

By using two propellers that rotate in opposite directions, a ship can use less energy to move forward. Now, new knowledge means that more ships can use the technology, which Hurtigruten, among others, is investing in in its Sea-Zero project.

Read more

Sustainability

The UN Sustainable Development Goals guide SINTEF and SINTEF Ocean's activities for achieving our vision "Technology for a better society".

The institute works for a sustainable transition based on scientific foundations. Our foremost contribution to sustainable development is our offer to business and society, which is to create new technological solutions and innovations that provide an international competitive edge - on nature's terms.

SINTEF Ocean is also often represented in important collaboration arenas and negotiation processes, including under the auspices of the UN. In addition, we work continuously with our internal environmental work.

Our research activities make the greatest contributions to the following goals:

Negotiations for a global plastics agreement

In 2022, it was decided that the UN would create the world's first binding agreement to stop plastic pollution, including in the marine environment.

Despite the fact that over 180 countries have been negotiating the plastics agreement for several years, it is still not in place. There is considerable disagreement about the path to the goal, partly because countries have different needs, challenges and access to technology to achieve a transition from plastics to more sustainable materials.

SINTEF has participated as an observer in all negotiation rounds, including in 2025. When participating in such international arenas, we have a particular focus on multilateral cooperation between the world's countries to find common solutions to global challenges, in this case plastic pollution.

Photo: Rachel Haug Fossbakk

Research centres

SINTEF Ocean led three national research centres in 2025:

- SFI BLUES (2020-2028)
- SFI Harvest (2020-2028)
- FME MarTrans (2025-2033)

And participated in:

- SFI Dsolve (2020-2028)
- SFI Autoship (2020-2028)
- FME NorthWind (2021-2029)
- FME HYDROGENi (2022-2030)

Centres for Research-Driven Innovation (SFI) is an instrument established by the Research Council of Norway that provides opportunities for long-term cooperation, innovation and development between industry and research environments.

Research Centres for Environmentally Friendly Energy (FME), also under the Research Council of Norway, carry out long-term research into renewable energy, energy efficiency, CO_2 management and the social sciences.

From the official opening of FME MarTrans in February 2025.

Photo: Shutterstock

SFI Blues

SFI Blues will enable Norwegian industry to develop, build and operate floating structures for future needs within renewable energy, aquaculture and coastal infrastructure. This will contribute to the diversification of Norwegian ocean industries and thereby increase their robustness and competitiveness to help solve global challenges.

SFI Harvest

SFI Harvest develops knowledge and technology for responsible harvesting and processing of low-trophic marine resources, thus contributing to sustainable and profitable growth in the Norwegian biomarine industry. The technological innovations in SFI Harvest will make it possible to produce food for the world's growing population from hitherto underexploited marine species.

FME MarTrans

FME MarTrans is working to accelerate the transition to carbon-neutral shipping and increase the competitiveness of the Norwegian maritime industry. With over 60 partners from industry and research, and total funding of over 300 million kroner from the Research Council of Norway and industrial partners, this is the world's largest maritime research program of its kind.

SFI centre for seaweed

At the end of 2025, the Research Council of Norway announced the awarding of eight new SFIs. One of them is SFI Seaweed, which will be led by SINTEF Ocean.

The centre will utilise the Trondheim community's many years of expertise in seaweed cultivation and help solve challenges throughout the entire value chain, from cultivation to final product. There will be close collaboration with universities and industry. The goal is to create sustainable biomass that can reduce environmental impact and contribute to a greener shift by 2035.

SINTEF will collaborate with, among others, NTNU, NIVA, 13 Norwegian companies, two municipalities/county authorities and two foreign companies.

Our laboratories

SINTEF Ocean has many **laboratories and test facilities**, which form the basis for our research.

Several of them are world-leading and are actively used in collaboration with industry and research actors. The research infrastructure covers a wide range of applications – from controlled laboratory experiments at micro- and mesoscales, model experiments and simulations, to full-scale testing and field measurements at sea.

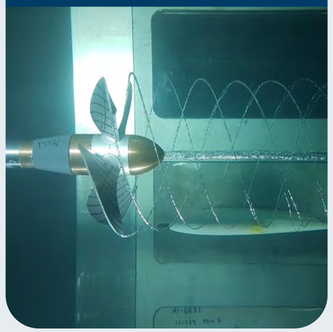
The institute also develops software and digital tools, such as ShipX, SIMA, SINMOD, OSCAR and DREAM, which are used both in our own research and by industry.

Together, this provides a unique combination of physical and digital research infrastructure, which makes it possible to study complex issues in the ocean industries.

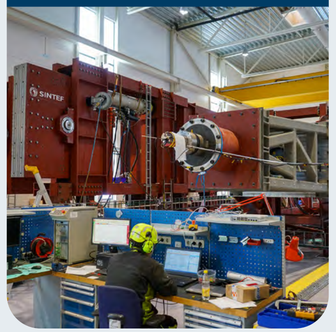
Here are some of our laboratories and test facilities:

Ocean Basin Laboratory

Cavitation Tunnel



Marine Structures Laboratory



ACE
(full-scale aquaculture laboratory)

Norwegian Centre for Plankton Technology

OceanLab

Photo: Live Oftedahl, NTNU

Towing Tank

Model Production

Oil Laboratory

Norwegian Seaweed Centre

New software company

At the end of 2025, the new software company SINTEF Ocean Software was established to collect and focus the institute's cutting-edge expertise within SIMA and make the software more accessible to customers.

SIMA is a simulation and analysis tool for maritime and floating structures and is based on good physics models from SINTEF and NTNU. These have been largely validated through model tests conducted in the hydro-dynamic laboratories operated by SINTEF Ocean.

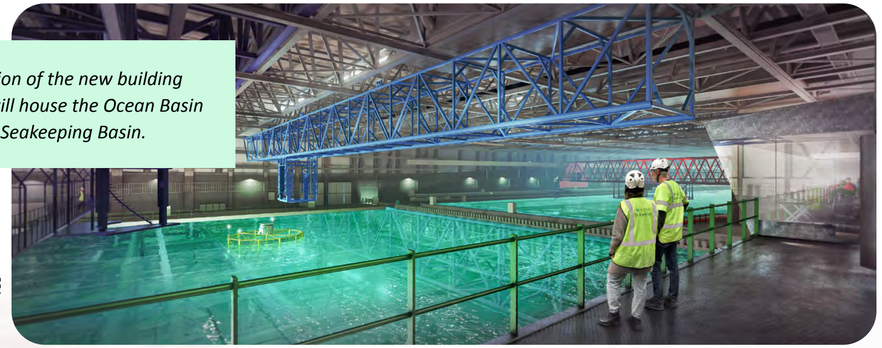
The company is fully owned by SINTEF Ocean and will initially consist of employees from the research and development environment around SIMA. In the long term, it will also be possible to collect several of the institute's software programs in the company.

The Norwegian Ocean Technology Centre

SINTEF Ocean is heavily involved in the development of **The Norwegian Ocean Technology Centre**, which will become one of the world's most advanced research and education facilities for marine technology.

The centre's main location will be in Trondheim, with wet and dry laboratories, workshops, teaching facilities, offices and meeting rooms. In addition, infrastructure will be further developed in the Trondheim fjord, Ålesund, Hitra and Frøya. The centre will contribute to the development and transformation of ocean industries locally, nationally and globally, and will provide SINTEF Ocean and NTNU with access to world-class facilities and premises.

The construction project for The Norwegian Ocean Technology Centre is well underway. The centre is scheduled to be completed in 2030 and will, among other things, provide opportunities for better monitoring of the ocean and the development of more sustainable food, renewable energy and climate-friendly ships.



Statsbygg/LINK Arkitektur

Illustration of the new building which will house the Ocean Basin and the Seakeeping Basin.

Illustration of the completed centre at Tyholt in Trondheim.

The construction pit at Tyholt where the new Ocean Basin and Seakeeping Basin will be located, seen from the Tyholt tower. These pools will hold a total of 1.2 million litres of water – 24 times as much as Pirbadet in Trondheim.

Opening of Professor Mørchs' House

The new office and teaching building at The Norwegian Ocean Technology Centre, Professor Mørch's Hus, was completed in the spring of 2025. The building houses both employees from SINTEF Ocean and NTNU, and NTNU's students in marine engineering.

The opening marks an important milestone in the construction project. Professor Mørch's House is also defined as Norway's most environmentally friendly university building, with the BREEAM Outstanding certification.

The building is named after the father of the Towing Tank, Professor Hans Mørch. As early as 1913, he started the work of establishing the Towing Tank, which was completed in 1939.

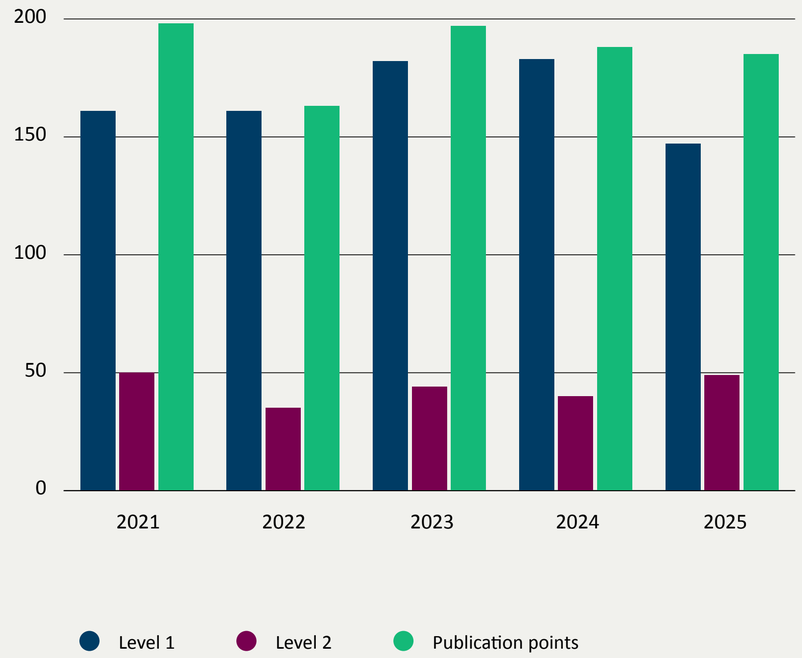
Minister of Digitalisation and Public Governance Karianne Tung officially opened the office and teaching building Professor Mørchs Hus.

Scientific publishing and visibility

High scientific quality combined with the application of research results is the basis for SINTEF's activities.

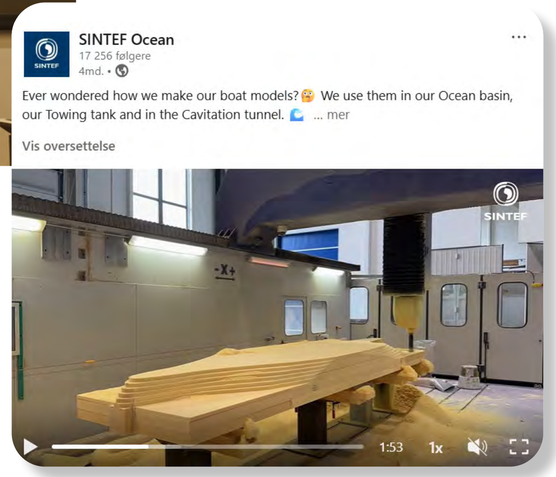
In order to add value and innovation for society and clients, SINTEF's researchers must be at the forefront of international research. Scientific quality is documented through scientific publication and citations.

The publication channels are divided into two levels: Level 1 provides normal scoring and covers the channels that publish 80 percent of the publications. Level 2 provides extra scoring and includes the most significant and quality-demanding channels, which publish 20 percent of the publications.



The researchers at SINTEF Ocean are strongly committed to making our research accessible to the public, and they make an effort to communicate knowledge and findings in an understandable way. The research is disseminated through many different channels, such as the media, open meetings, debates, webinars, social media, as well as via SINTEF's own channels such as the **SINTEF blog**, the podcast **Smart Forklart**, the research magazine **Gemini**, newsletters and the SINTEF website. SINTEF Ocean's researchers also organise and participate in a number of conferences and events of various kinds throughout the year.

Screenshot from **Gemini article**



Screenshot from article in DN **DN**

Employees

At the end of 2025, SINTEF Ocean had 396 employees from 36 different countries.

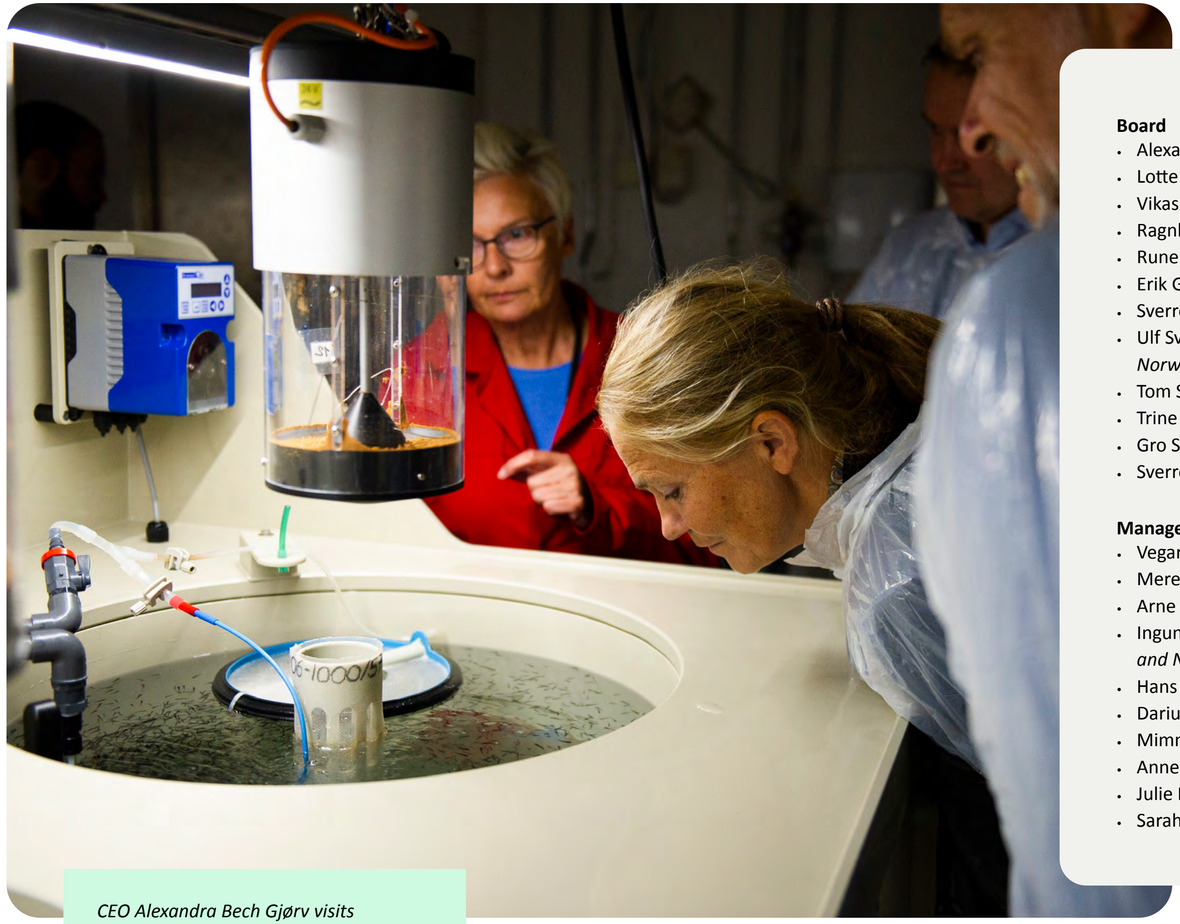
The institute works deliberately with recruitment to ensure growth in the organisation and to fulfil our societal mission. We are very proud of our employees, who contribute to bringing SINTEF's vision and purpose to life, and shape the ocean-based solutions of the future.

Our motto is that SINTEF is a workplace for people with knowledge and determination. Our core values are honesty, generosity, courage and unity, and HSE and ethics are particularly important to us.

396
EMPLOYEES

36
NATIONALITIES

Board and management



CEO Alexandra Bech Gjørv visits one of SINTEF Ocean's laboratories.

Board

- Alexandra Bech Gjørv (leader), *President and CEO, SINTEF*
- Lotte Forså Aas, *Corporate Financial Manger, SINTEF*
- Vikas Thakur, *Dean, Faculty of Engineering, NTNU*
- Ragnhild Høvik, *Senior Project Manager, Grieg Edge*
- Rune Torhaug, *Director for contact with EU authorities, DNV*
- Erik Gjerdene, *Executive director, Norwegian Shipowners' Association*
- Sverre Johansen, *General secretary, The Norwegian Fishermen's Association*
- Ulf Sverdrup, Professor, *Department of Law and Governance, Norwegian Business School (BI)*
- Tom Ståle Nordtvedt, *Senior research scientist, SINTEF Ocean*
- Trine Thorvaldsen, *Senior research scientist, SINTEF Ocean*
- Gro Sagli Baarholm, *Senior research scientist, SINTEF Ocean*
- Sverre Tangen Langolf, *Senior technician, SINTEF Ocean*

Management

- Vegar Johansen, *CEO*
- Merete Øverli Moldestad, *Deputy CEO*
- Arne Fredheim, *Research director, dept. Energy and Transport*
- Ingunn Marie Holmen, *Research director, dept. Fisheries and New Biomarine Industry*
- Hans Vanhauwaert Bjelland, *Research director, dept. Aquaculture*
- Dariusz Eirik Fathi, *Research director, dept. Ships and Ocean Structures*
- Mimmi Throne-Holst, *Research director, dept. Climate and Environment*
- Anne Berit Heieraas, *Communications director*
- Julie Brandhaug, *Financial manager*
- Sarah Sandvær Eva, *Adviser*

Key financial figures

SINTEF Ocean is organised as a limited company, where the owners are:

The SINTEF Foundation (71,6%)
The Norwegian Shipowners' Association (16,2%)
DNV (5,4%)
The Federation of Norwegian Industries (2,7%)
The Norwegian Maritime Directorate (2,7%)
The Norwegian Fishermen's Association (0,8%)
NHO Shipping (0,5%)

SINTEF Ocean does not make acquisitions for its purpose and does not distribute dividends to its owners. The resources generated by our activities are exclusively used to fulfil the purposes of the institute.

Result in MNOK	**2021**	**2022**	**2023**	**2024**	**2025**
Gross operating income	704	778	805	810	806,2
Net operating income	575	623	643	664	717,9
Operating profit	**25**	**7,7**	**2,7**	**3,6**	**10,9**
Profit for the year	**30**	**9,9**	**15,3**	**13,4**	**22**
Balance					
Fixed assets	161	168	166	156	151
Current assets	804	959	931	836	808
Total assets	**966**	**1128**	**1096**	**992**	**959**
Equity	497	507	522	535	557
Liabilities	469	621	574	457	402
Total equity and liabilities	**966**	**1128**	**1096**	**992**	**959**
Profitability					
Operating margin %	4,4	1,20	0,40	0,60	1,50
Return on total assets %	4,3	1,80	2,0	1,72	3,36
Return on equity %	7,5	2,69	3,0	2,55	4,04
Liquidity					
Net cash flow from operating activities	32	29	1,2	96	138,8
Liquidity ratio	1,8	1,57	1,65	1,83	2,07
Solvency					
Equity in %	51	45	48	53	58,10
Operating working capital	348	350	367	379	418

SINTEF

Technology for a better society

46 41 50 00
ocean@sintef.no
www.sintef.no/en/ocean