

VTT

Annual and sustainability report 2025



beyond the obvious

VTT is a research organisation that creates impact

We create impact through innovations and research cooperation

VTT is one of Europe's leading technical research organisations with over 80 years of experience in top research and science-based innovation. As a multidisciplinary research and development partner, VTT helps companies and society to grow and renew themselves through technological innovations. We create sustainable growth, jobs and wellbeing.

VTT is a company owned by the State of Finland, falling within the mandate of the Ministry of Economic Affairs and Employment. Our most important mission is to create impact. We also have a business incubator, VTT LaunchPad, to help us carry out this mission. Over the years, there has been more than 60 VTT-originating startups. Finland's national metrology institute and national standards laboratory, MIKES, is part of VTT.

We stimulate renewal through applied research

We work together with our customers and partners to develop groundbreaking solutions for purposes such as smarter use of natural resources, building a carbon-neutral society, defence and space technology, and the semiconductor industry. Our customers represent a wide range of industries.

VTT maintains a research and technology infrastructure that helps companies renew themselves and scale innovations. Our top experts and infrastructure strengthen our partners' innovation capability. Working with VTT enables our customers to create new, ambitious innovations and expand their business and international networks. VTT is an international organisation, with half of our net turnover coming from abroad.

We build the world's most meaningful place to work

VTT's top experts are the foundation of VTT's success. Our goal is to build the most meaningful workplace in the world and strengthen the community spirit and employee experience. VTTers do meaningful work by solving the biggest challenges of our time. The cornerstones of VTT culture are joy, courage and curiosity.

VTT's international networks provide access to top expertise

We help Finnish companies to gain access to international networks and research projects. VTT is one of the most active European research institutes to participate in EU research programmes. It is also Finland's largest single EU research funding recipient. As an active member of the European Association of Research and Technology Organisations (EARTO), we are well-placed to influence the European research and innovation policy.

[Read more about VTT](#)



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2025 was a year of change for VTT. We had many success stories despite the instability in our operating environment.

[Read more on p. 4](#)



VTT's impact arises from the renewal of customers and society. We monitor the impact of our work closely.

[Read more on p. 9](#)



We promote sustainable renewal in business and society through research. We also work hard to develop our operations in a more sustainable direction.

[Read more on p. 20](#)



We report on the key sustainability topics for VTT in our sustainability report.

[Read more on p. 23](#)

Year 2025

Research and technology are fundamental to advancing sustainable growth. Despite significant changes and new challenges in our operating environment, 2025 has been a year of many notable achievements for VTT.

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Breakthrough research gives rise to new innovations and businesses

As of 2025, VTT has driven Finnish competitiveness for more than 80 years and laid the foundation for numerous technological advancements. Our current operating environment is turbulent, with multiple challenges for the growth of the Finnish economy. This only underlines the importance of research and innovation. VTT is actively pursuing research that is relevant to Finnish industries and increasing cooperation in the long term.

Commissions to VTT and its turnover increased in 2025; the profitable year is indicative of increased activity. The recruitment of a new CEO was one of the most important steps for VTT last year. The strategy work launched under the leadership of Kalle Härkki directs and focuses our work for the upcoming years. VTT is a strong, international agency: half of our turnover comes from abroad, and VTT is the most significant recipient of EU research funding in Finland. Our 2,000+ experts drive breakthrough research in fields ranging from quantum technology to bioeconomy.

There are signs of stronger economic growth; however, there is a delay before this translates to research commissions. It is imperative to strengthen European self-sufficiency and independence in raw materials, research and technology, and VTT is boldly seizing such opportunities. Research in dual-use

technology is developing particularly quickly, becoming an increasingly strategic part of future work at VTT.

Our corporate portfolio is broader than ever. In recent years, VTT has kickstarted technology startups for building new innovations and continuing research cooperation. Growth funding for these startups is used for operational development, employment and establishment of production facilities.

It is particularly important for VTT to produce new expertise and innovations. In addition to startups, the significant increase in the number of approved invention disclosures and scientific publications in 2024–2025 is one of the most important indicators of the impact of research at VTT.

There is a need to develop safety culture to a level similar to that of industry, and VTT has made good progress in this field. In recent years, VTT has made extensive investment decisions for new research facilities that provide businesses with opportunities to innovate, pilot and scale solutions more efficiently.

I am confident in the future of VTT, with the new CEO taking the helm and the strategy in place. It has been a privilege to support VTTers in solving future challenges – the most difficult of all challenges. I would like to thank everyone for the past seven years. I wish VTT all the best in the future!

Chair of the Board
Pekka Tiitinen



”

It has been a privilege to support the people at VTT tackling the challenges of the future.

”

VTT aims to create impact by supporting Finland's growth opportunities

For VTT, 2025 was a year of change, as our strategy period came to an end. Hundreds of VTTers relocated to modern, multi-purpose facilities in Espoo, and VTT's long-serving President & CEO, Antti Vasara, moved on to new challenges. It has been a pleasure to follow in his footsteps – I am impressed by the wide range of expertise and technological capabilities at VTT.

VTT plays an important role in strengthening the resilience of society. Our task is to create technological expertise that will help existing industry renew itself and generate new startups with growth potential in Finland. Startups have an increasingly important role in renewing business life, creating jobs and building a positive view of the future.

There is a lot of demand for VTT's expertise. Large corporations, emerging growth companies and deep technology startups see us as an important partner. The creation of new startup companies is a key element in VTT's impact. VTT-originating startups attracted around EUR 400 million of equity funding in total in 2025.

VTT had a lot of success stories during the year. We cooperated with IQM to develop the largest quantum computer ever built in Europe, we were involved in six European Defence Fund projects and

participated extensively in EU projects. VTT is the largest recipient of Horizon Europe funding in Finland.

The challenging market situation and uncertain global situation has meant that our commercial operations did not develop in the desired manner. Our most important goals in 2026 include accelerating commercial business and ensuring close cooperation with companies.

Sustainability and safety are at the core of all our operations, and we made significant progress in advancing those areas. In particular, we will continue to develop safety in our experimental facilities and ensure that VTTers are doing well in their work. The most important goal of our sustainability work is to create sustainable solutions and improve our own operations.

The commitment of our personnel remained strong, and our good reputation helps us attract experts. We were also very successful in recruiting international talents.

Now we are turning our attention to creating a new strategy and putting it into practice. We will continue to do work with impact to help Finland and our customers move towards sustainable growth.

I would also like to thank all VTTers, customers and partners for their good and persistent work over the past year.

President & CEO
Kalle Härkki

”

I am very excited about taking VTT and Finland's business towards growth and success.

”



VTT 2025 in figures

As one of Europe's leading research organisations, VTT plays an important societal role. Our mission is to support the renewal of Finnish business and growth companies through our research. Our impacts are reflected in the sustainable solutions and technologies developed for our customers.

The challenging market situation and unstable global situation affected VTT's commercial operations, which did not develop in the desired manner.

However, there is demand for VTT's research and competence in a changing world, and our reputation remains good among our customers.

It was a busy year in the area of scientific research, as we received a record number of invention disclosures and published more scientific articles than ever before.

The figures on the right describe 2025 for VTT and our ability to create impact and exponential hope through high-quality research and innovations.

Total revenue, EUR million

309

Number of employees

2,349

of which 338 are international employees

Doctors and licentiates

770

Patent families

488

Scientific articles

646

Invention disclosures

276

The figures cover VTT Ltd and represent VTT's operations

Financial statements

VTT Technical Research Centre of Finland Ltd is a Finnish non-profit limited liability company owned by the state. The company falls within the mandate of the Ministry of Employment and the Economy. According to the law, VTT is an independent and impartial research organisation. VTT operates as a research, development and innovation partner to help the society and companies to grow through technological innovations.

The net turnover of VTT's commercial activities increased from the previous year. VTT has also succeeded in securing public funding for jointly-funded projects and maintained its revenues from IPR sales and licensing on a good level. Global political tensions and the possibility of a trade war have nevertheless created uncertainty in the economic outlook, causing companies to act more cautiously and slow down their decision-making processes. The jointly-funded projects are carried out in collaboration with VTT, companies, and funding bodies.

The operating income and the net turnover increased during the financial year. The operating result of the parent company and the result for the financial year were positive. The difference between group and parent company operating income and result is mainly due to in-kind investments where added value in parent company realises at the time of the investment, and in group only at exit.

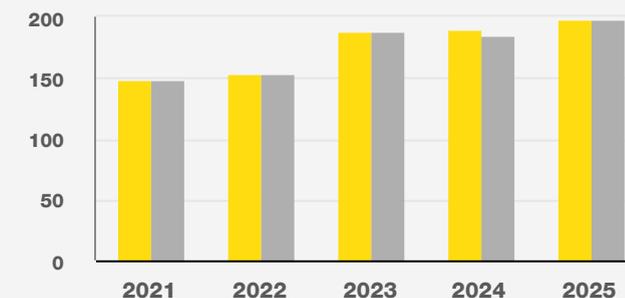
Finland's first 50-qubit quantum computer built by VTT was unveiled at the beginning of 2025. The development of the quantum computer will continue towards achieving 300 qubits during the years 2025–2027. The development of the Kvanttinova pilot environment progressed as planned. The funding for the acquisition and deployment of co-owned equipment within the Kvanttinova pilot environment is provided with equal payment shares by the EU and Finland. The first funding decisions for the pilot lines under the EU's Chips Act were received during 2024 and 2025. Furthermore, VTT continues its research investments that promote the clean transition, resource wisdom and security of supply, and accelerate the renewal of companies and competitiveness.

Key financial figures

| | VTT Group | | | Parent Company | | |
|---|-----------|-------|-------|----------------|-------|-------|
| | 2025 | 2024 | 2023 | 2025 | 2024 | 2023 |
| Operating income | 305.8 | 288.2 | 283.8 | 308.6 | 296.4 | 285.0 |
| Net turnover | 197.7 | 184.9 | 187.6 | 198.0 | 189.7 | 187.6 |
| Other operating income | 108.0 | 103.4 | 96.2 | 110.6 | 106.7 | 97.4 |
| Government grant | 99.7 | 93.6 | 87.1 | 99.7 | 93.6 | 87.1 |
| Government special grant | 0.1 | 1.8 | 2.0 | 0.1 | 1.8 | 2.0 |
| Other | 8.2 | 8.0 | 7.1 | 10.8 | 11.3 | 8.3 |
| Operating result before special items* (operative, unaudited) | 0.6 | -6.1 | -0.7 | 3.6 | 2.2 | 0.8 |
| Operating result | -0.6 | -8.0 | -1.1 | 2.4 | 0.3 | 0.3 |
| Operating result (%) | -0.3 | -4.3 | -0.6 | 1.2 | 0.1 | 0.2 |
| Result of the financial year | -1.2 | -4.0 | 5.5 | 2.9 | 2.8 | 2.5 |
| Return on equity (%) | -0.5 | -2.0 | 3.0 | 1.8 | 1.6 | 1.8 |
| Equity ratio (%) | 77.0 | 78.3 | 74.7 | 74.0 | 75.2 | 70.5 |

VTT Technical Research Centre of Finland Ltd's net turnover consisted of 64 % public sector revenue and 36 % private sector revenue. The domestic revenue accounted for 49 % and foreign revenue for 51 % of the net turnover. *Comparable operating result before special items does not include the income received and costs paid by VTT Ltd, which are incurred by the company but are not related to its core operations. In VTT Group, the figures for the parent company represent the company's operations.

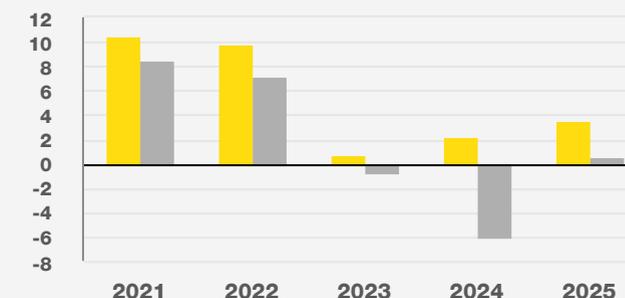
Net turnover M€



The parent company's **net turnover increased 4%** during the financial year.

■ Parent company
■ VTT Group

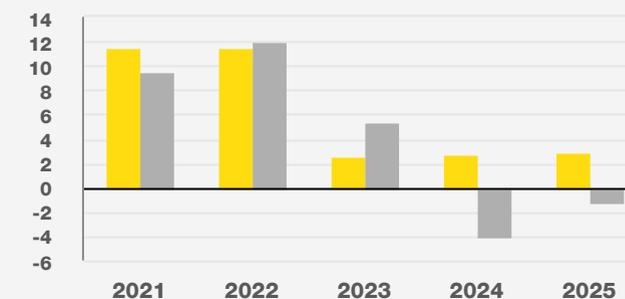
Comparable operating result M€



The comparable (adjusted) operating results* of the parent company and the group were positive.

■ Parent company
■ VTT Group

Result of the financial year M€



The parent company's **result of the financial year was positive**, but the group's result for the financial year was negative.

■ Parent company
■ VTT Group

Our impact

VTT's impact stems from the renewal of customers and society. Our customers make use of our research and the technologies we develop. We strive to create a positive impact by building a sustainable world.

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VTT's task is to support Finland's growth and renewal

The Finnish economy has not grown in 17 years, and productivity development in the business sector is mixed: half of companies have increased their production while the other half have experienced a corresponding decrease. Economic growth cannot be achieved without long-term research and innovation activities.

Finland is committed to increasing research and development (R&D) funding to 4% of GDP by 2030. There has been an increase in private R&D investments, and fast-growing startup companies are becoming visible at the national economy level.

The [Through the Valley of Death – How can Finland grow?](#) review that VTT published in 2025 examines Finland's growth potential. In order to accelerate growth in Finland, we need internationally competitive, high added-value products and services as well as technology-based growth sectors and new growth companies. We also need investments in strategic centres of excellence and goal-oriented research and business cooperation in those centres.

VTT's task is to promote the renewal of Finnish business life and support growth companies through research and innovations. VTT also contributes to the creation of new deep technology companies.

VTT's expertise and technologies are utilised in companies and on a broader scale in society

The impact goals for 2025–2028 set for VTT in the ownership strategy are to accelerate business RDI investments and renewal, offer growth companies unique expertise and the latest technology, develop solutions for sustainability challenges, and increase the number of skills and experts in Finland. The primary aim of VTT's activities is to ensure that research results and new technological expertise is utilised in companies and on a broader scale in society.

VTT helps companies develop and scale up technological innovations. R&D cooperation renews production processes and creates new business. Customer satisfaction with VTT is high (NPS 81). VTT is active in EU research and innovation programmes and cooperates with more than 4,000 partners. This will help us create new, unique expertise and develop technological breakthroughs. According to a recent European Patent Office (EPO) report, VTT is the 14th most active public research organisation in Europe in terms of patenting and the only Nordic organisation in the top 15.

There has been more than 60 VTT-originating startups, which have attracted more than EUR 1.2 billion in equity funding – with most of that coming from the private sector. The total number of employees has increased from less than 10 to almost 900. In 2025, several VTT-originating startups advanced industrial production plants, which included Enifer's mycoprotein factory and Onego Bio's facility to product egg whites

without chickens, and a test plant for Steady Energy's small nuclear reactor.

Six VTT-originating startups together attracted around EUR 400 million in equity funding in 2025.

VTT invests in world-class research and piloting environments

Finland has strong technological expertise and good opportunities to create growth in several sectors, such as semiconductors and microelectronics, quantum technology, space technology, biomaterials and biotechnology, energy transition and energy technology, defence and dual-use technologies, renewing industry, and sustainable use of natural resources.

VTT offers companies in these sectors its expertise and technologies as well as its research and piloting environments. In 2023, VTT launched an extensive investment programme aimed at promoting growth in the Finnish economy through scientific breakthroughs and innovations.

For example, Kvanttinova is an ecosystem consisting of research organisations and companies that focus on chip innovations. At its core is the cleanroom environment for microelectronics, photonics and quantum technology located in Otaniemi, Espoo. Investment projects related to energy, sustainable materials and healthcare have made significant progress not only in Espoo but also in Tampere, Oulu and Jyväskylä. More than 140 companies and a large number of partners and research networks are already involved in the projects.



Senior Vice President, Strategy
Laura Juvonen

Our strategy 2021–2025: The path of exponential hope

OUR PEOPLE

Top professionals capable of systemic and technological breakthroughs that can bring about fundamental transformation.

The **choices** we make every day



OUR PURPOSE

We bring together people, business, science and technology, to solve the world's biggest challenges, creating sustainable growth, jobs and wellbeing.

5. Always build the world's most **meaningful** place to work



4. Always drive **sustainable** business

OUR AMBITION

We bring exponential hope to a world that needs to deal with the climate crisis, achieve resource sufficiency, drive industrial renewal, provide safety and security, and enable good life for all.

1. Always aim for **impact**

2. Always create impact together with a **customer**

3. Always lead for **excellence**



The eight challenges we focus on to create sustainable growth

We commit ourselves to focus all our energy and expertise on those systemic and technological challenges where we can make the biggest possible impact. Read more about our challenges on our [website](#). Currently, we focus on the following eight challenges:

Systemic challenges

Technological challenges

| | | | | | | | |
|--|--|--|---|--|---|---|---|
| | | | | | | | |
| 1. Carbon neutrality | 2. Productivity leap | 3. Societal resilience | 4. Quantum leap | 5. Synthetic biology | 6. Super-performing materials | 7. Superior digital systems | 8. Energy technologies |
| <p>Climate change mitigation requires swift action in all sectors. Working together with our customers, we promote the transition to a clean energy system and the transition of stepping forward from the fossil economy.</p> | <p>With effective solutions, renewable raw materials and the circular economy, we can ensure that there will be enough resources for everybody.</p> | <p>We ensure the functioning society, financial sustainability and well-being also during transformation. We promote the well-being of citizens through healthcare and diagnostics solutions.</p> | <p>Quantum technology provides tools for solving humanity's most meaningful challenges.</p> | <p>Synthetic biology enables intelligent and efficient biotechnological production, which is a significant enabler of sustainable development.</p> | <p>Virtual material design makes industrial manufacturing more sustainable and environmentally friendly.</p> | <p>Digitalisation brings new potential and innovations to our society and business.</p> | <p>We accelerate the clean transition with carbon neutral energy technologies: hydrogen and nuclear energy.</p> |
| <p>Focuses:</p> <ul style="list-style-type: none"> • Carbon negative process industry • Low-carbon and smart transport • Smart and sustainable built environment • Sustainable food production • Carbon-neutral and flexible energy system | <p>Focuses:</p> <ul style="list-style-type: none"> • Recycling of materials from secondary streams • Sustainable manufacturing • High-impact renewable materials | <p>Focuses:</p> <ul style="list-style-type: none"> • Secured connectivity • Personalised health and wellness • Defence and security • New space • Future proof decision-making | <p>Focuses:</p> <ul style="list-style-type: none"> • Scaling up quantum computing | <p>Focuses:</p> <ul style="list-style-type: none"> • Bioinspired production | <p>Focuses:</p> <ul style="list-style-type: none"> • High throughput material design and performance optimisation | <p>Focuses:</p> <ul style="list-style-type: none"> • Integrated flexible electronics • Specialised microelectronics • Photonics sensing | <p>Focuses:</p> <ul style="list-style-type: none"> • Safe and sustainable nuclear power • Competitive hydrogen |

Key achievements 2025

73%

of our customers quickly utilise the results of a project done with VTT

2

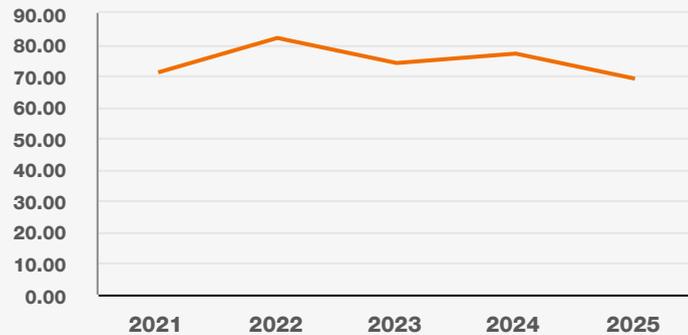
new VTT-originating startups

81

VTT's net promoter score (NPS)*

* NPS is based on a customer feedback survey.

Commercial project order intake*, M€



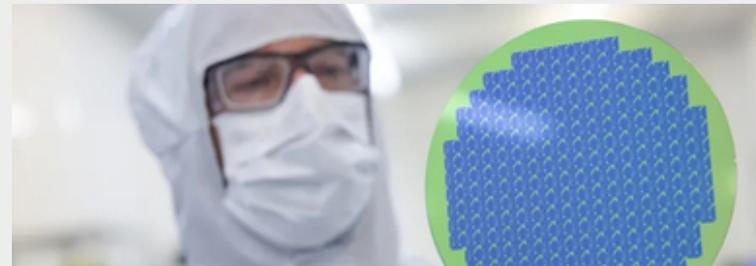
* The estimated total invoicing of new won project contracts

VTT strengthened Finland's chip and quantum expertise

VTT upgraded its cleanroom in the Micronova pilot environment to support the [processing](#) of 200 mm wafers, and preparations are also being made for the transition to the 300 mm wafer size. The investments support Finland's goal of strengthening its position as a leading country in European specialised microelectronics. One example of chip cooperation is NordAmps, which is working with VTT to develop next-generation RF semiconductors to enable artificial intelligence and 6G technology.

At the beginning of the year, VTT and IQM announced the completion of the largest superconducting [quantum computer](#) developed and built in Europe. The 50-qubit quantum computer was launched in Espoo and it is now available for research and business use. This cooperation will continue: first with a 150-qubit and later a [300-qubit](#) superconducting quantum computer. The international visibility of the project was enhanced by the [EARTO prize](#) awarded to SemiQon and VTT.

Designing of the Kvanttinova Hub, a pilot environment for microelectronics, photonics and quantum technology, is progressing, and we are expanding our collaboration and service models with companies. The new pilot environment is scheduled for completion in 2028.



VTT-originating startups broke records

Startups with their roots in VTT account for a significant share of the Finnish growth company field. Six VTT-originating startups together attracted ca. EUR 400 million in equity funding in 2025*.

[Hypermine](#), a VTT-originating startup, successfully closed its seed funding round. The company's technology, which was developed at VTT, can increase mining profitability by 3–10% and decrease environmental impacts through more efficient mineral sorting and by reducing the use of energy, water and acids.

Another significant milestone was the USD 320 million (EUR 275 million) funding round of IQM Quantum Computers, which has its roots in VTT and Aalto University. At the time of the announcement, this was reported as the largest Series B round ever in the quantum industry, both in Europe and outside the United States.

*Based on data from PitchBook.

Key achievements 2025

Significant defence industry funding for VTT

VTT is participating in six European Defence Fund (EDF) [projects](#) that have collectively received a total of EUR 218 million from the EU. VTT has established itself as an active player in European Defence Fund projects. Along with Patria, VTT is the most important Finnish contributor of projects to the European Defence Fund, and the new projects will further strengthen VTT's position as a developer of defence technologies. In addition to this year's projects, several from the last three years are still ongoing. In total, VTT is developing technologies for 14 different projects.

These projects aim to enhance the EU's cutting-edge competence in defence technology development in the fields of electronic situational awareness, drone navigation, underwater communication solutions, minesweeping, virtual battlefields and next-gen helicopter development. VTT brings extensive expertise to European Defence Fund projects, especially in the field of digital technologies. We are also involved in several projects that develop systems that utilise artificial intelligence.

In November, VTT and Millog Oy signed a [cooperation agreement](#) in which the companies commit to promoting innovation in the defence sector. The aim is to: support research, development and innovation (RDI) in the defence sector both in Finland and internationally.



VTT creates electric truck charging systems in Europe

An international [project](#) led by VTT aims to revolutionise the electrification of heavy-duty transport in Europe. The project is developing megawatt hybrid charging systems to improve the electrification and charging infrastructure of heavy-duty transport. It will also serve passenger cars in addition to the logistics sector. Among other things, the pilot stations will examine the practicality, safety and reliability of charging stations in different operating situations. Tests will be performed over the next four years. The aim is to build a comprehensive charging network for electric trucks by 2030.

One of the partners is the Finnish company Kempower, which designs and manufactures fast-charging solutions for electric vehicles. The project is based on an extensive cooperation network supported by the European Commission, which includes 19 companies, universities and research institutes from across Europe. The project is also part of the EU's sustainable development programme, which aims to create a new electric transport ecosystem that supports a 90% reduction in transport-related emissions by 2050.

AI-powered tram senses mood on board and prevents disturbances

In the future, a tram or bus may be able to sense the atmosphere inside the vehicle. Coordinated by VTT Technical Research Centre of Finland, the research [project](#) explores how artificial intelligence, cameras, sensors, and analytics can be used to build situation-aware services. On public transport, it would enable the measurement of the passenger experience, improving both safety and comfort on board while preserving privacy.



Key achievements 2025



VTT developed a new bio-based packaging material with Henkel

Henkel, a German multinational company operating in the chemical industry, sought to replace fossil-based foams used in packaging with a recyclable and renewable alternative made from cellulose foam. VTT has been at the forefront of developing sustainable alternatives through foam forming technology, which allows wood-based fibres to be formed into lightweight, versatile materials. This innovation opens up possibilities to replace conventional plastics with renewable solutions in packaging and beyond.

The pilot line built by VTT [made it possible](#) to scale up Henkel's material recipe from lab to industrial level. The pilot also helped demonstrate technical feasibility and business value. As the end result, Henkel has a viable product, new intellectual property rights, and a technology that can be transferred to customers' production lines.

VTT identified new plant-based ingredients for the cosmetics industry

Together with 16 partners from 11 European countries, VTT researchers have discovered new [plant-based ingredients](#) with proven anti-inflammatory and anti-ageing effects. Extracts from *Cochlearia danica*, *Capsicum chinense*, and *Ocimum basilicum* showed promising results in terms of their biological effects and ecologically sustainable production.

The findings are part of the EU-funded InnCoCells project coordinated by VTT, which is the most extensive scientific study ever conducted on plant-based cosmetics ingredients.

The project emphasises the importance of responsible and scalable production, which aligns with consumer demand and supports the long-term goals of Europe's bioeconomy while also opening up new business opportunities.



Cell factories boost Finland's food exports

Cellular agriculture in Finland and the use of cell factories as part of food production and the circular economy can significantly enhance Finnish food export and the development of biotechnological innovations. A [report](#) by VTT Technical Research Centre of Finland, Natural Resources Institute Finland and the University of Helsinki outlines eight strategic measures to advance cellular agriculture in Finland, including investments, development of education programmes and actions to support export.

Cellular agriculture involves the use of cell cultures, such as microbial, algae, plant, insect, or animal cells, and bioreactors for food production.

Cellular agriculture is a strategically important sector that, in addition to economic growth, increases food self-sufficiency, resilience, and strategic autonomy. The report estimates the export potential for Finland to be EUR 500–1,000 million by 2035.

Key achievements 2025



VTT study shows Finland is the best location for a fusion reactor

Novatron Fusion Group is preparing a pilot project to build a commercially viable fusion reactor in the Nordic countries during the 2030s. Fusion energy is considered a promising solution for reducing the use of fossil fuels and meeting the growing energy demand.

A new [study](#) conducted by VTT shows that Finland would be the leading choice in terms of regulatory readiness for fusion energy. VTT's analysis examined regulatory, environmental, operational and societal factors in each country to identify both challenges and opportunities relevant to fusion deployment.

The study emphasises that the best locations for a reactor are in existing industrial areas, such as the Helsinki metropolitan area in Finland, the Stockholm area and the Copenhagen-Malmö corridor. Finland's advanced regulatory environment and updating of the nuclear energy legislation make us an attractive country as a location for fusion energy.

VTT developed an impact leadership model for Espoo to positively impact the quality of life of the citizens

Espoo wanted to understand the true, long-term effects of its decisions on the economy, environment and wellbeing, and to ensure its strategy could be managed holistically.

In collaboration with VTT, Espoo created an impact leadership [model](#) and a pioneering approach to holistic city management that includes a framework and indicators for data-driven, systemic decision-making. VTT supported Espoo through strategic guidance, modelling and capacity building across the entire city organisation. The operating model helps to understand cause-and-effect relationships, improve the quality of decision-making and steer actions toward sustainable citizen wellbeing.

Espoo now has the tools to positively impact the quality of life in the city. Pilot projects on, for example, city planning, early education and elderly fitness have improved the everyday lives of citizens.



VTT enabled Vantaa Energy's path to carbon neutrality

Vantaa Energy aims to be the leading circular energy company in the Nordic countries by 2035.

In the heating system to be built in Vantaa, the world's largest thermal energy storage, waste heat and electric boilers provide the most competitive heating for the company's clients. The system also includes advanced material recycling concepts, along with carbon capture and storage.

[Strategic partnership](#) with VTT helped Vantaa Energy speed up its innovation process and provided access to cutting-edge innovation networks and the latest technology. This resulted in a concept for activities related to achieving carbon neutrality that combines the deep expertise of both organisations.

Key achievements 2025



VTT has developed a degradable solar cell module to be attached to a plant leaf

Globally, the digitalisation of agriculture requires the increasing use of measurement electronics in farming. However, power supply and electronic waste pose problems. VTT has now developed a new type of biodegradable [solar cell module](#) that can be attached to plant leaves or stems.

The solar cell and related sensor technologies can monitor the state of the environment and collect energy, which supports growing needs for data collection and regulatory requirements in agriculture. The biodegradable solar cell is part of an international research project aimed at developing environmentally friendly electronics for agricultural applications in cooperation with several research institutes.

A billion-dollar business is brewing in textile waste

The [Telavalue project](#) that studied textile recycling found that textile recycling offers enormous business potential throughout Europe. Around 100 million kilograms of textile waste are discarded annually in Finland and up to 10 billion kilograms in Europe. Only around one percent of the world's textiles are recycled back into textiles.

The recycling challenges are primarily due to the complexity of textile raw materials and the lack of regulation. The EU is a global leader in demanding textile recycling regulation. An increase in recycling could bring parts of the textile production chain back to Europe.

The Telaketju network has researched textile recycling in Finland for years. The Telavalue project has focused on solving sustainability challenges by favouring the principle of minimal processing. This means that if a textile can no longer be repaired or reused, the preferred option is mechanical fibre recycling to produce fibres that can be reused in production.



Port of Oulu pilots resilience technologies

VTT and the Port of Oulu and its partners have launched a three-year, EUR 12.8 million [project](#) aimed at enhancing security and situational awareness in critical cyber-physical systems. Ports are critical nodes and complex ecosystems in transportation networks, which makes security a particular concern.

VTT and the Port of Oulu are cooperating with 20 other Finnish and international actors, such as Polar, F-Secure and Enerim, in this project with important implications for security of supply.

A new pilot line for health technologies in Oulu

In order to facilitate faster product development for medical devices, VTT has launched a unique [pilot line](#) at its Oulu location, where VTT has invested EUR 3.4 million in cleanroom and manufacturing equipment. The test facility accelerates the product development of patient-friendly inventions by up to one-third. With the pilot line environment, devices for early cancer detection and heart disease monitoring can advance to patient use more rapidly. International companies are already making moves to utilise this new opportunity.



Key achievements 2025

VTT helped Neste accelerate the shift from fossils to renewables

Neste wanted to increase its R&D efforts in catalytic processes to replace fossil-based raw materials with renewable alternatives.

Neste and VTT agreed on strategic [cooperation](#) involving the installation of test equipment for hydrotreating renewable raw materials, consisting of several parallel reactors, and the development of related expertise.

VTT's hydrotreatment equipment helped to significantly speed up the R&D process and catalyst testing. Considering the economic benefits, selecting a more efficient catalyst makes it possible to save up to tens of millions of euros annually.

Customers,
total

1,085

of which 335 are foreign private sector companies and 600 domestic private sector companies

Ease of work with VTT, rate seen by customers (CES)*

4.6

(on a scale of 1–5)

*CES is based on a customer feedback survey.

Customers' overall assessment of VTT's project execution**

4.4

(on a scale of 1–5)

**The score is based on the customer impact survey.

VTT was the most active Nordic organisation in terms of patent applications

VTT's strong investment in innovations was reflected in a European Patent Office study that examined the patenting activity of public research organisations in Europe. VTT was the most active Nordic player and ranks 14th in Europe.

VTT uses IPR licence revenue and in-kind investments in startup companies to create added value for its customers, who then commercialise VTT's technology. In 2026, VTT's licensing revenue was EUR 4.4 million, and first round investments totalled EUR 2.6 million. The most productive technology fields were biotechnology, health and food technology, quantum and microelectronics, and process simulation software.

The year 2025 also laid the foundation for future innovations, as a record 276 invention disclosures were received. VTT's strong IPR assets are an attractive factor in terms of obtaining larger customer assignments and co-financed projects.

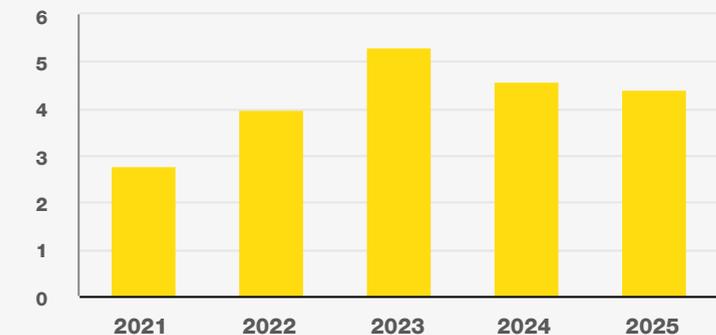
International talents in the Postdoc programme

A total of 26 Postdoctoral Researchers worked in VTT's Postdoc programme, nearly all of whom are international talents. Half of the Postdocs worked with the REPowerEU* thematic areas to create new knowledge for green and digital solutions in energy efficiency, material efficiency and deployment of renewable energy solutions to accelerate the clean energy transition.

VTT is investing in doctoral level expertise as part of developing its scientific excellence. A total of 42% of the research staff are doctors, and our PhD and Postdoc programmes contribute to increasing the number of doctors and international experts specialising in industrial cooperation in Finland.

*funded by the European Union NextGenerationEU

VTT's IPR revenue, MEUR



Key achievements 2025

VTT attracted many international talents

VTT recruited 194 new experts last year, almost 31% of whom came from outside Finland. The share of international talent has already increased by 68.2% over the past five years.

Our [recruiting](#) has targeted quantum and hydrogen experts in particular, who increase expertise not only in our organisation but also in Finnish society. We also received excellent feedback on our recruitment processes, which emphasises the human perspective and the overall situation of employees arriving in Finland. We actively cooperate with cities and authorities when recruiting international talents.

Research Council of Finland Award to Emilia Nordlund

VTT Research Manager Emilia Nordlund was one of the recipients of the Research Council of Finland [Award](#) 2024.

Nordlund's work at VTT focuses on developing new processes and innovations that contribute to building a sustainable food system. New alternative protein sources, produced from plant-based raw materials or industrial by-products, or with the help of biotechnology, are an important area of research.



Two AI professors at VTT

Two new [AI research professors](#) were appointed at VTT in 2025. Both of them previously worked at VTT as research team leaders.

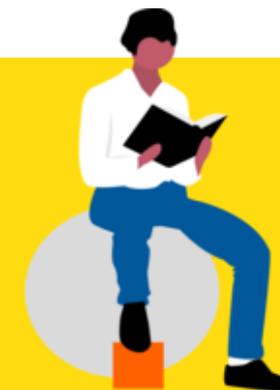
Arash Hajikhani was appointed to the position of research professor in artificial intelligence and large language models at VTT on 1 September 2025. He has a background in natural language processing, text analysis and machine learning. He holds a PhD from the Software Engineering Department at LUT University.

Samuel Marchal took up the position of research professor of AI-focused cyber security on 1 November 2025. He holds a PhD in network and system security, and is a pioneer in the use of machine learning to detect phishing attacks, mitigate online deception and improve network security.

We focused on the employee experience

The results of the Navigator personnel survey show that VTTers continue to be very satisfied with their work. VTT's organisational culture index this year was 78 (scale 0–100), which is an excellent result. The index consists of five elements: job satisfaction and loyalty, excellence, performance, wellbeing and people leadership.

In 2025, we focused on the employee experience by renewing the career landscape for research, which resulted in more detailed job descriptions and the creation of three completely new researcher positions. We strengthened feedback culture by adding a component on feedback requested from colleagues to the goal and development discussions. In addition, we launched the Project Excellence Program (PEP) to develop VTT's overall project management and processes.



VTT published a record number of scientific articles

VTT's publishing activity continued to develop in line with the global growth trend in scientific publishing. It was a busy year: 646 scientific articles were published, of which 87% were made openly accessible. Despite the record-high volume of scientific publications, VTT maintained a high level of quality, with 38% of all scientific articles published in top-tier journals. International collaboration was strong, as 68% of scientific articles were co-authored with international partners.

194

new VTTers, of which 124 were trainees

57

different nationalities

VTT published

646

scientific articles

Our sustainability

We promote sustainable renewal and growth in business and society. In 2025, we worked hard to achieve our sustainability targets and develop our operations in a more sustainable direction.

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| Key achievements in sustainability 2025 | 22 |



VTT's sustainability priorities

The priorities of VTT's sustainability work reflect our role in solving major global challenges and our commitment to uncompromising ethics and sustainability.

Research impact

We solve some of the greatest challenges of our time with the help of science and research. We help our customers develop sustainable business and we make society more sustainable through technological innovations.



Environmental responsibility

We implement climate actions in pursuit of carbon neutrality, prevent negative impacts on biodiversity, and use natural resources in a sustainable manner.



Social responsibility

We foster the safety, well-being, development, and diversity of our professionals within our fair working community and the realisation of labour and human rights in our value chain.



Good governance

Our uncompromising ethical principles, careful data management and good data security provide a solid foundation for our research and business.



Key achievements in sustainability 2025



We analysed our ability to adapt to climate change

During 2025, VTT performed its first analysis to evaluate the climate risks facing its operations and value chain. The analysis examined the increasing physical climate risks, such as floods and heat waves, and the business risks associated with transitioning to a low-carbon economy, such as the increasing price of carbon emissions.

VTT's ability to adapt to climate risks in different future scenarios was considered to be at a good level in the analysis. In order to mitigate the identified risks, VTT will continue to monitor them, plan continuity and cooperate with its stakeholders. You can read more about the analysis [here](#).



Our emphasis in occupational safety produced results

VTT advanced its occupational safety culture in many ways during the year. Among other initiatives, we provided a diverse range of training and introduced a new mobile tool for making safety observations. Participation was encouraged by selecting a Safety Observation of the Month.

VTT's long-term work to develop occupational safety has produced results, as the number of accidents and first aid cases dropped by an impressive -29% in 2025.

Safety observations

7,149

Severe accidents

0

We set an ambitious recycling target

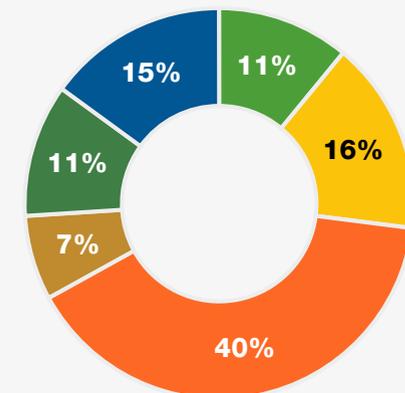
VTT mapped and calculated its recycling rate for the first time, which was our circular economy target for 2025. Based on data from 2024, our recycling rate was 40%.

This provided the foundation for setting the ambitious target of achieving a 70% recycling rate by 2030.

We assessed human rights risks and impacts in our value chain

VTT completed its first systematic human rights risk assessment, which was implemented in accordance with the UN Guiding Principles on Business and Human Rights. Management of identified risks has been integrated into VTT's risk management process. In addition, the UN Global Compact Business & Human Rights online course was made available to all employees in order to raise awareness.

Primary positive impacts on the Sustainable Development Goals identified by our projects



- SDG 3 Good Health and Well-being
- SDG 7 Affordable and Clean Energy
- SDG 9 Industry, Innovation, and Infrastructure
- SDG 12 Responsible Consumption and Production
- SDG 13 Climate Action
- Other SDGs

Sustainability report

Sustainability is a cornerstone of VTT's operations. This report outlines the key priorities and progress of our sustainability efforts. This sustainability report is aligned with the European Sustainability Reporting Standards (ESRS) but is not externally audited.

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General disclosures

VTT's sustainability report is published annually as part of our annual report. The reporting period is the same as in financial reporting, the financial year 1.1.2025–31.12.2025. In this report, we describe how sustainability is an integral part of our operations and decision-making. We describe our key goals, actions and results related to the environment, people and good governance as well as how we develop our operations in a long-term and transparent manner.

Basis for preparation

The sustainability report has mainly been prepared in accordance with the sustainability standards referred to in Chapter 7 of the Accounting Act on European Sustainability Reporting Standards (ESRS). To a certain extent, the report also follows the European Financial Reporting Advisory Group's (EFRAG) updated sustainability reporting standards (ESRS, 3 December 2025). Under the EU's Omnibus Directive, VTT will not be within the scope of the Corporate Sustainable Reporting Directive (CSRD) in the future but will continue reporting in line with ESRS standards.

The reported sustainability topics and sustainability indicators are based on VTT's double materiality assessment, which was updated in 2025. The double materiality assessment provided the basis for identifying the reporting requirements of the European sustainability reporting standards that are relevant to the company's operations and stakeholders. More information about the double materiality assessment and its results is available on page [31](#).

The data for the reported European sustainability standards, VTT's own indicators and their location in the sustainability report are presented in the content index on page [29](#).



Sustainability governance at VTT

VTT is a state-owned company whose purpose is specified in law. VTT's purpose is to promote the utilisation and commercialisation of research and technology in business and society. VTT turns major global challenges into sustainable growth for companies and society through science and technology. Responsibility and sustainability are thus at the core of VTT's operations.

Sustainability management at VTT

Sustainability management and the responsibilities of management bodies in sustainability topics are described in VTT's sustainability governance structure. The President & CEO, the Executive Leadership Team (ELT), VTT's Board of Directors and the Audit Committee are responsible for monitoring sustainability-related impacts, risks and opportunities. The sustainability governance structure complements VTT Ltd's governance structure by specifying the management of sustainability and responsibility issues and is thus an integral part of VTT's internal processes.

The sustainability governance model specifies that the ELT is responsible for managing impacts, risks and opportunities, especially regarding the sustainability targets related to them. The ELT reviews the setting of sustainability targets and progress towards them at least twice a year. In addition, a representative of the ELT belongs to the Governance and Sustainability

Steering Group, in which the impacts, risks and opportunities are discussed as necessary or at least three times a year.

| Board of Director's gender split (%) | 2025 |
|--------------------------------------|------|
| Female | 43 |
| Male | 57 |

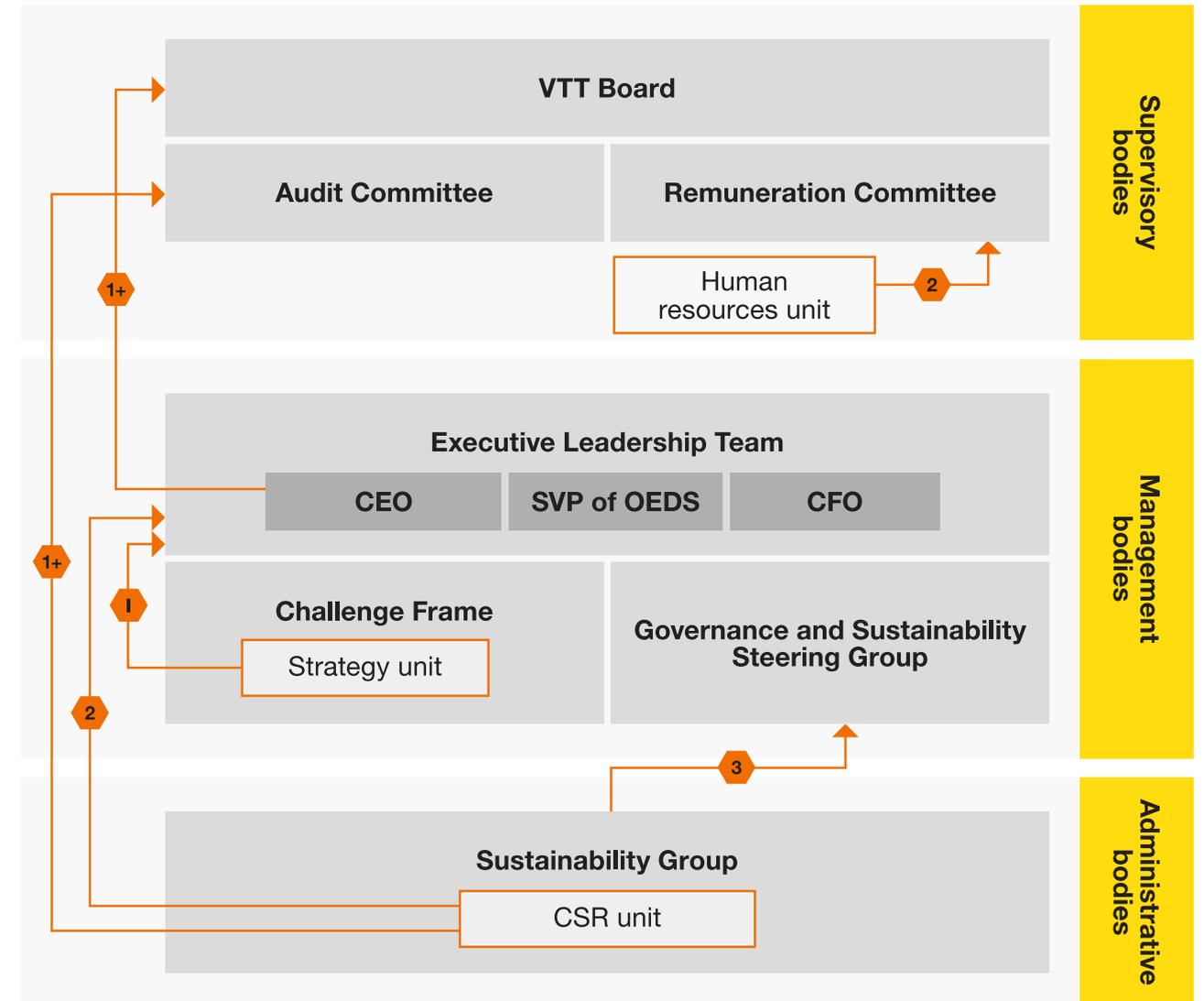
| Executive Leadership Team's gender split (%) | 2025 |
|--|------|
| Female | 50 |
| Male | 50 |

| The number of executive and non-executive members in the Board | 2025 |
|--|------|
| Number of executive members | 0 |
| Number of non-executive members | 7 |

100% of the Board members were independent in 2025 (2024: 100%).

Regarding environmental impacts, the Senior Vice President, Operational Excellence, Digitalisation and Sustainability (OEDS), has operational responsibility. The opportunities identified on environmental topics are mainly based on VTT's strategy and research priorities, so the responsibility for them lies with the heads of research areas and the Senior Vice President, Strategy and Business Intelligence. The Senior Vice President, OEDS, is responsible for managing social impacts in relation to the safety of VTT's own personnel and employees in the value chain. Senior Vice President, Human Resources is responsible for managing the impacts and opportunities affecting VTT's own workforce. The SVP of OEDS matters is responsible for managing governance-related impacts. In risk management, responsibilities are determined in accordance with VTT's risk management principles.

VTT's sustainability governance structure



Informing 1+ Informs min. 1x/year 2 Informs 2x/year 3 Informs 3x/year 1 Informs

The role of management in sustainability governance

VTT's President & CEO is responsible for the sustainability of VTT's operations, sustainability management and sustainability reporting together with the Board of Directors, as well as for informing the Board of Directors. The President & CEO approves the sustainability goals and metrics of the material topics.

The ELT approves principles related to sustainability and responsibility, ensures sufficient resources, reviews sustainability roadmaps, goals of material topics and KPIs, and monitors progress towards them.

Sustainability reporting is the responsibility of the Chief Financial Officer (CFO) and the SVP of OEDS. The SVP of OEDS oversees the setting of sustainability targets and is in charge of operational activities and development related to impacts, opportunities and risks.

In its research agenda, VTT has identified the global sustainability challenges to which it can offer solutions and make a significant impact. VTT's research and customer work agenda is called the Challenge Frame, and it guides sustainability management in research. VTT's ELT decides on the contents of the Challenge Frame and the Challenge Focuses.

The Governance and Sustainability Steering Group is responsible for steering the vision of long-term sustainability and responsibility in research, supervising sustainability reporting processes, monitoring the performance related to responsibility and sustainability, and enabling change management if necessary.

VTT's Board of Directors approves the sustainability governance structure, policies and goals related to responsibility and sustainability in incentive schemes, the KPIs, the double materiality assessment (DMA), and

the sustainability report. The Board monitors and assesses the effectiveness of internal supervision and audits and risk management.

The Audit Committee's tasks include reviewing the responsibility and sustainability policies, material topics, and the sustainability report, and recommending them for adoption. The Remuneration Committee audits the incentive scheme for sustainability and responsibility performance and handles sustainability issues concerning VTT's own workforce.

The expertise of VTT's Executive Leadership Team to supervise sustainability issues stems directly from its members' education and professional experience. The members have experience in, for example, HR management, carbon-neutral solutions and other environmental themes through research. The expertise in different environmental themes is linked to the material impacts identified by VTT, especially the impacts and opportunities generated through research. On the other hand, the expertise of VTT's SVP of Human Resources and the personnel representative in the ELT is linked to the impacts, risks and opportunities related to VTT's own personnel. In addition, VTT established a cross-organisational sustainability group in 2023 to ensure the necessary expertise related to sustainability.



Responsibilities

| | | | | |
|---|--|--|---|------------------------------|
| VTT Board | | | | Supervisory bodies |
| <ul style="list-style-type: none"> 1. Approves sustainability policies and material topics 2. Approves sustainability KPIs and sustainability related performance in incentive schemes | <ul style="list-style-type: none"> 3. Approves sustainability reporting and is responsible for it together with the CEO 4. Monitors and evaluates reporting system | <ul style="list-style-type: none"> 5. Monitors and evaluates effectiveness of internal control and audit and risk management | | |
| Audit Committee | | Remuneration Committee | | Supervisory bodies |
| <ul style="list-style-type: none"> 1. Reviews sustainability policies, priorities, goals and program 2. Monitors and evaluates effectiveness of internal control, audit and risk management, including sustainability reporting 3. Monitors sustainability reporting processes and reviews the report 4. Has responsibility for the selection of the statutory sustainability reporting auditor, and on monitoring its independence 5. Monitors implementation of sustainability reporting audit and assurance 6. Informs the management or supervisory bodies of the results of the sustainability reporting audit | | <ul style="list-style-type: none"> 1. Reviews incentive scheme about sustainability topics 2. Reviews sustainability-related performance in incentive schemes 3. Reviews own workforce related sustainability matters | | |
| Executive Leadership Team | CEO | CFO | SVP of OEDS | Management bodies |
| <ul style="list-style-type: none"> 1. Approves sustainability related principles 2. Ensures sufficient resources 3. Reviews sustainability roadmaps, targets for material topics, KPIs, and monitors progress towards them 4. Reviews sustainability development and implementation in relation to impacts, risks and opportunities | <ul style="list-style-type: none"> 1. Responsible for the sustainability of VTT's operations, governance of sustainability matters and informing the board 2. Responsible for sustainability reporting together with the board 3. Approves sustainability targets and metrics for material topics | <ul style="list-style-type: none"> 1. Oversees sustainability reporting 2. Approves information to be reported and its identification process | <ul style="list-style-type: none"> 1. Oversees the sustainability target-setting 2. Oversees the operative actions on positive and negative sustainability impacts, risks and opportunities | |
| Governance and Sustainability Steering Group | | Challenge Frame | | |
| <ul style="list-style-type: none"> 1. Steering of long-term sustainability vision and prioritisation of sustainability-related development initiatives 2. Following up on sustainability performance 3. Enables change management when necessary | | <ul style="list-style-type: none"> 1. Steering of the sustainability impact of research is executed via challenge focus processes, for which the strategy unit is responsible | | |
| Sustainability Group | | | | Administrative bodies |
| <ul style="list-style-type: none"> 1. Drafts sustainability policies and principles, metrics and targets in relation to the material topics | <ul style="list-style-type: none"> 2. Prepares sustainability programme and development roadmaps 3. Manages sustainability reporting operatively 4. Implements sustainability matters into processes | <ul style="list-style-type: none"> 5. Provides input to strategic planning 6. Manages stakeholder engagement 7. Communicates about sustainability matters | | |

Sustainability group at VTT

VTT's sustainability group prepares the targets related to material impacts, risks and opportunities and their indicators as well as VTT's sustainability programme. The sustainability group is cross-administrative and consists of experts and researchers from different fields. The group includes experts and researchers in environmental, economic and social sciences and technology. Each member brings with them special expertise and experience from different parts of the organisation. This enables establishing a comprehensive understanding of VTT's sustainability challenges as well as the development of innovative solutions. The group's expertise is available to VTT's management, administrative and supervisory bodies.

The sustainability group and sustainability work as a whole are coordinated by the corporate sustainability and responsibility (CSR) team, which consists of experts in corporate social responsibility and research ethics. The team regularly advises and informs VTT's management on responsibility and sustainability issues.

The sustainability group is divided into environmental, corporate social responsibility and governance (ESG) working groups, which address the impacts, risks and opportunities related to each topic. The VTT Strategy Unit also steers the impact of research activities from the perspective of sustainability. The participation of the strategy representative in all the working groups ensures a dialogue between the strategy and sustainability work.

Incorporating sustainability-related performance into incentive schemes

In addition to the total remuneration, the CEO & President and ELT members have the opportunity to

receive a Leadership Excellence Reward. Its objectives consist of the company's strategic, financial, business area-specific and ESG goals. The goal of the Leadership Excellence Reward is to make VTT's performance targets an integral part of rewarding the management and to increase the transparency of remunerations to the management. The objective of the remuneration is to be fair and competitive and high enough to attract and retain managers with the necessary skills and experience to achieve VTT's strategic objectives.

The VTT Board decides on the President & CEO's remuneration model, objectives and realisation annually. The remuneration model, objectives and realisation for the ELT and the business area leadership team members are decided on a proposal from the President & CEO and approved by the Board on an annual basis.

Sustainability performance metrics are included in the management remuneration system. In 2025, performance was assessed in the remuneration of management in relation to selected sustainability-related objectives. They included objectives related to occupational safety, wellbeing at work, organisational culture and the promotion of the sustainability and responsibility targets of VTT's customers.

Based on the achievement of sustainability-related objectives, the target level of the remunerations paid is 10–15% of the annual salary and the maximum level is 20–30% of the annual salary.

The Human Resources and Remuneration Committee proposes the terms and conditions of the management incentive scheme to the Board of Directors, which then approves them. Following the Board's approval, the VTT remuneration team updates the terms and conditions accordingly.

Risk management and internal control in sustainability reporting

The internal supervision of sustainability reporting is the responsibility of the VTT Audit Committee. It monitors and assesses the risk management of sustainability reporting and the sustainability reporting process. If necessary, the Audit Committee will issue recommendations for improving the reporting process or ensuring the reliability of the reported information to those responsible for reporting.

The results of sustainability reporting are reviewed at all levels of the sustainability governance structure. The project manager responsible for sustainability reporting identifies the risks associated with reporting, and the ELT and the steering group for reporting assess their significance. The most pressing risks identified are taken into VTT's risk management tool and processed in the same way as any other risks in accordance with VTT's risk management process. VTT has performed a partial test audit of its sustainability report in cooperation with the auditor.

Due diligence

| Key factors in the due diligence process | Sections in the sustainability report |
|--|---------------------------------------|
| a) Integration of due diligence into governance, strategy and the business model | GOV-1, SBM-3 |
| b) Interaction with affected stakeholders at all key stages of the due diligence process | IRO-1, SBM-2, S1-2, S2-2, G1-2 |
| c) Identification and assessment of negative impacts | IRO-1, SBM-3, S1-3, S2-3, G1-2 |
| d) Implementation of actions to prevent negative impacts | E1-3, E4-3, E5-2, S1-4, S2-4, G1-3 |
| e) Monitoring and communication regarding the effectiveness of those actions | E1-4, E4-4, E5-3, S1-5, S2-5, G1-3 |

ESRS-content index

The index shows which ESRS disclosure requirements VTT has followed in its reporting and their location in the report.

| ESRS indicator | Location & comment |
|--|---|
| ESRS 2 General disclosures | |
| BP-1 – General basis for preparation of sustainability | 24 |
| GOV-1 – The role of the administrative, management and supervisory bodies | 25 |
| GOV-3 – Integration of sustainability-related performance in incentive schemes | 28 |
| GOV-4 – Statement on due diligence | 28 |
| GOV-5 – Risk management and internal controls over sustainability reporting | 28 |
| SBM-1 – Strategy, business model and value chain | 34 |
| SBM-2 – Interests and views of stakeholders | 36 |
| SBM-3 – Material impacts, risks and opportunities and their interaction with strategy and business model | 39 , 44 , 46 , 49 , 55 , 58 , 60 |
| IRO-1 – Description of the processes to identify and assess material impacts, risks and opportunities | 31 |
| IRO-2 – Disclosure requirements in ESRS covered by the undertaking's sustainability statement | 29 |
| MDR-P – Policies adopted to manage material sustainability matters | 37 , 40 , 44 , 46 , 49 , 55 , 58 , 60 |
| MDR-A – Actions and resources related to material sustainability matters | 41 , 45 , 46 , 51 , 56 , 60 |
| MDR-M – Metrics related to material sustainability matters | 41 , 45 , 47 , 51 , 56 , 61 |
| MDR-T – Tracking effectiveness of policies and actions through targets | 41 , 45 , 47 , 51 , 56 , 61 |
| ESRS E1 – Climate change | |
| E1-2 – Policies related to climate change mitigation and adaptation | 40 |
| E1-3 – Actions and resources related to climate change policy | 41 |
| E1-4 – Targets related to climate change mitigation and adaptation | 41 |
| E1-5 – Energy consumption and mix | 42 |
| E1-6 – Gross Scopes 1, 2, 3 and Total GHG emissions | 42 |
| E1-7 – GHG removals and GHG mitigation projects financed through carbon credits | Not material |
| E1-8 – Internal carbon pricing | Not material |
| E1-9 – Potential financial effects from material physical and transition risks and potential climate-related opportunities | Transition period utilised |

| ESRS indicator | Location & comment |
|---|----------------------------|
| ESRS E4 – Biodiversity and ecosystems | |
| E4-1 – Transition plan on biodiversity and ecosystems and interaction with strategy and business model | Not material |
| E4-2 – Policies related to biodiversity and ecosystems | 44 |
| E4-3 – Actions and resources related to biodiversity and ecosystems | 45 |
| E4-4 – Targets related to biodiversity and ecosystems | 45 |
| E4-5 – Impact metrics related to biodiversity and ecosystems change | Not material |
| E4-6 – Potential financial effects from biodiversity and ecosystem-related risks and opportunities | Transition period utilised |
| ESRS E5 – Resource use and circular economy | |
| E5-1 – Policies related to resource use and circular economy | 46 |
| E5-2 – Actions and resources related to resource use and circular economy | 46 |
| E5-3 – Targets related to resource use and circular economy | 47 |
| E5-4 – Resource inflows | Not material |
| E5-5 – Resource outflows | 47 |
| E5-6 – Potential financial effects from material resource use and circular economy-related impacts, risks and opportunities | Transition period utilised |
| ESRS S1 – Own Workforce | |
| S1-1 – Policies related to own workforce | 49 |
| S1-2 – Processes | 50 |
| S1-3 – Processes to remediate negative impacts and channels for own workers to raise concerns | 51 |
| S1-4 – Taking action on material impacts on own workforce, and approaches to mitigating material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions | 51 |
| S1-5 – Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities | 51 |
| S1-6 – Characteristics of the undertaking's employees | 52 |
| S1-7 – Characteristics of non-employee workers in the undertaking's own workforce | 52 |

| ESRS indicator | Location & comment |
|---|--------------------|
| S1-8 – Collective bargaining coverage and social dialogue | 53 |
| S1-9 – Diversity metrics | 53 |
| S1-10 – Adequate wages | Not material |
| S1-11 – Social protection | 53 |
| S1-12 – Persons with disabilities | Not material |
| S1-13 – Training and skills development metrics | 53 |
| S1-14 – Health and safety metrics | 53 |
| S1-15 – Work-life balance metrics | 53 |
| S1-16 – Remuneration metrics (pay gap and total remuneration) | 53 |
| S1-17 – Incidents, complaints and severe human rights impacts | 54 |
| ESRS S2 – Workers in the value chain | |
| S2-1 – Policies related to value chain workers | 55 |
| S2-2 – Processes for engaging with value chain workers about impacts | 55 |
| S2-3 – Processes to remediate negative impacts and channels for value chain workers to raise concerns | 55 |
| S2-4 – Taking action on material impacts on value chain workers, and approaches to managing material risks and pursuing material opportunities related to value chain workers, and effectiveness of those actions | 56 |
| S2-5 – Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities | 56 |
| ESRS G1 – Business conduct | |
| G1-1 – Business conduct policies and corporate culture | 58 |
| G1-2 – Management of relationships with suppliers | 59 |
| G1-3 – Prevention and detection of corruption and bribery | 59 |
| G1-4 – Confirmed incidents of corruption or bribery | 59 |
| G1-5 – Political influence and lobbying activities | 59 |
| Research ethics (company-specific topic) | |
| Policies related to research ethics | 60 |
| Actions and resources related to research ethics | 60 |
| Targets related to research ethics | 61 |



Material sustainability topics

VTT has carried out a double materiality assessment to clarify our key sustainability topics and related impacts, risks and opportunities. VTT's most significant impacts arise from our research, as reflected by the results of the assessment.

Assessment of sustainability impacts, risks and opportunities

VTT's most recent double materiality assessment was approved in 2025. It examined the materiality of sustainability topics for VTT both through impacts and in terms of the related risks and opportunities. The results of the double materiality assessment guide our sustainability work and strategic choices and lay the foundation for our sustainability reporting.

The double materiality assessment identified and assessed potential and actual impacts on people and the environment through our due diligence process. The assessment also examined the impacts of VTT on its own operations and business relationships in different functions and value chains. In addition, the analysis specified the impacts that VTT can influence through its own actions and decisions, as well as the impacts that can be linked to VTT based on its business relationships and reputation. Financial materiality was examined through risks and opportunities stemming from sustainability themes.



Process description and methods used

VTT's double materiality assessment was carried out qualitatively by using a questionnaire to collect information from internal and external stakeholders and by interviewing VTT's management and owners. VTT's sustainability team analysed the results by assigning a score to the identified impacts, risks and opportunities based on the collected data, and finally by specifying threshold values for materiality.

Prior to their approval, the results were validated through interviewing internal experts. The double materiality assessment was carried out in accordance with the framework of the European Sustainability Reporting Standards (ESRS 2023). The topics examined in the assessment were based on standard sub-topics and the results of VTT's first double materiality assessment.

Overview of the process:

1. Stakeholder interaction and data collection
2. Definition of impacts, risks and opportunities
3. Scoring of impacts, risks and opportunities based on stakeholder assessments
4. Validation rounds with experts
5. Validation round with the management team
6. Board approval for the results

Stakeholder engagement and analysis data sources

A double materiality assessment has to survey the views of different stakeholders in order to achieve a balanced assessment. VTT's double materiality

assessment involved interviewing the management team and board members and collecting information from personnel using questionnaires.

The process regarding external stakeholders included interviewing representatives of the parties responsible for ownership steering and a survey sent to selected customers, suppliers, members of the scientific community and funders.

In addition, interview data from VTT's previous double materiality assessment round was utilised to expand on the views obtained from external stakeholders. External experts were not used in VTT's double materiality assessment, as VTT's role as a research centre ensures that it has wide-ranging and diverse expertise in different sustainability topics inside the company.

As a result, VTT's own experts and management as well as external and internal stakeholders were used as data sources for the double materiality assessment. Other material used to support the assessment included VTT's annual personnel survey, carbon footprint calculation, the results of the trust and reputation survey and biodiversity footprint analysis.

The analysis of impacts in the value chain, especially in supply chains, was largely based on estimates because a sufficient amount of accurate data is not available yet. Further information on the double materiality assessment is available [here](#).

Assessment of VTT's impacts

For each topic, the interviews and questionnaires evaluated how VTT's functions or its value chain could produce negative sustainability impacts. Another focus of the analysis was to find out what type of positive impacts VTT has or could have on sustainability. For example, in VTT's everyday activities, the need to

continuously develop occupational safety practices and support people's mental wellbeing was noted. In potential adverse effects on human rights, on the other hand, the emphasis was on VTT's global subcontracting chains.

There are no major environmental risks associated with office work and research, but VTT's operations cause greenhouse gas emissions, which have an impact on climate change mitigation and biodiversity. However, VTT's emissions have been estimated to be relatively low, and the most significant contributor to mitigating climate change is the impact of our research. Positive impacts were identified particularly through the impact of research and customer work, but also in relation to VTT's own personnel.

Both negative and positive impacts were prioritised by assessing their scale, extent, probability and the irreparable nature of the negative impacts. When identifying impacts, it was determined at the same time whether they were actual or potential, and they were assessed over different time spans. Numeric scales were drawn up for these attributes, and the interviewees asked to use these in their evaluation.

Finally, numeric materiality thresholds were specified, and used as the basis for prioritising both negative and positive impacts. After the analysis, the scoring and materiality of the impacts were also evaluated with internal experts to ensure a balanced end result.

Further information about the material impacts identified in the assessment on pages [39](#), [44](#), [46](#), [49](#), [55](#), [58](#) and [60](#) of the report.

Assessment of risks and opportunities

Financial materiality, or risks and opportunities stemming from sustainability themes, was assessed

qualitatively through significance and probability. The significance of the risks and opportunities was determined on a scale according to the size of the anticipated impact on VTT's cash flow.

Probability was assessed in the same way as impacts, and was based on VTT's general risk assessment process. The risks related to sustainability are assessed and prioritised using the risk matrix, in the same way as all other risks at VTT. In particular, risks were identified involving occupational safety and cybersecurity, the availability of workforce, research ethics and the due diligence process.

Opportunities were identified in relation to environmental topics from the perspective of the impact of our research and in relation to VTT's own personnel, for example, in terms of competence development. The relationships between impacts, risks and opportunities were also assessed during the process – for example, our positive environmental impacts are directly linked to the financial opportunities stemming from them.

Further information about the material impacts and opportunities identified in the assessment on pages [39](#), [44](#), [46](#), [49](#), [55](#), [58](#) and [60](#) of the report.

Decision-making in determining materiality

VTT's Internal Auditor and the Audit Committee supervise the processes related to the double materiality assessment in accordance with the sustainability management structure. The decision-making process in the double materiality analysis progressed as follows:

1. VTT's sustainability experts prepared a plan for implementing the double materiality analysis (incl. topic selection)
2. The SVP of OEDS approved the plan and proposed some changes

3. The sustainability experts collected the data according to the plan
4. The sustainability experts analysed the results
5. Internal experts evaluated the results of the analysis for each theme
6. The CFO and SVP of OEDS validated the results with minor changes
7. VTT's Executive Leadership Team validated the results
8. VTT's Board approved the results

Development of the double materiality assessment process

VTT carried out its first materiality analysis as part of determining sustainability priorities in 2020. The results of the first double materiality assessment were approved in 2023. At that time, the assessment focused on identifying the big picture in terms of sustainability priorities and involving stakeholders in a broad manner.

The update performed in 2024–2025 utilised the results of the previous double materiality assessment and some parts of the data collected in it. The update focused on specifying the definitions of impacts, risks and opportunities and the scoring, and the update was carried out using EFRAG guidelines.

In the future, the results of the assessment will be evaluated annually by examining the need to make changes in the definitions or scoring of impacts, risks and opportunities.



Sustainability and strategy

VTT's strategy guides our efforts to find solutions to global challenges through science and technology. At the same time, we create value for our stakeholders by generating growth, wellbeing and jobs.

Strategy, business model and value chain

The purpose of VTT's strategy is to bring together people, business, science and technologies to solve the world's biggest challenges and thereby promote growth, wellbeing and jobs. We solve global challenges through science and technology and we aim for impact through our work. This requires deep expertise in all our activities.

VTT operates in three business areas: carbon-neutral solutions, sustainable products and materials, and digital technologies. We engage in innovative strategic research with public funding; we work in jointly funded consortium projects with companies, other research institutes and other stakeholders (cities, the third sector); we carry out commercial R&D and expert assignments for companies; and we commercialise our technologies through startup companies. VTT's outputs and services include scientific knowledge and publications; technological innovations; business incubator, piloting and testing services as well as studies and reports. Our services also include proof-of-concept projects and practical tools for utilising technology in companies and society.

VTT's [Challenge Frame](#) defines the research and customer priorities, and it specifies the social and technological challenges on which VTT focuses. The

challenge focus areas defined in the Challenge Frame provide more detailed descriptions of the themes to which VTT directs its expertise and allocates research resources. Solving these challenges requires extensive cooperation between research institutes, companies and public actors. The aim is to turn solutions developed through applied science into innovations that help address solving global sustainability challenges. VTT approaches these challenges at two complementary levels: systemic change and technological breakthroughs. In addition, we promote sustainability goals related to our own actions in operational activities in accordance with our sustainability programme.

VTT tracks how its own and jointly funded projects contribute to promoting the UN Sustainable Development Goals (SDGs). The priorities set out in VTT's research agenda guide how our projects are targeted towards the SDGs. More information about the targeting of our projects towards the SDGs is available [here](#).

VTT carried out a strategic review in 2025 and will renew its strategy in 2026. During the 2021–2025 strategy period, VTT identified challenges that are also closely linked to sustainability – and where VTT can have the greatest impact. Read more in our [annual report](#).

The quality of VTT's research and innovation activities is built on intellectual capital, namely the expertise, capabilities and wellbeing of its personnel. VTT has 2,349 employees and supports the professional development of its personnel in many ways. Creating the world's most meaningful place to

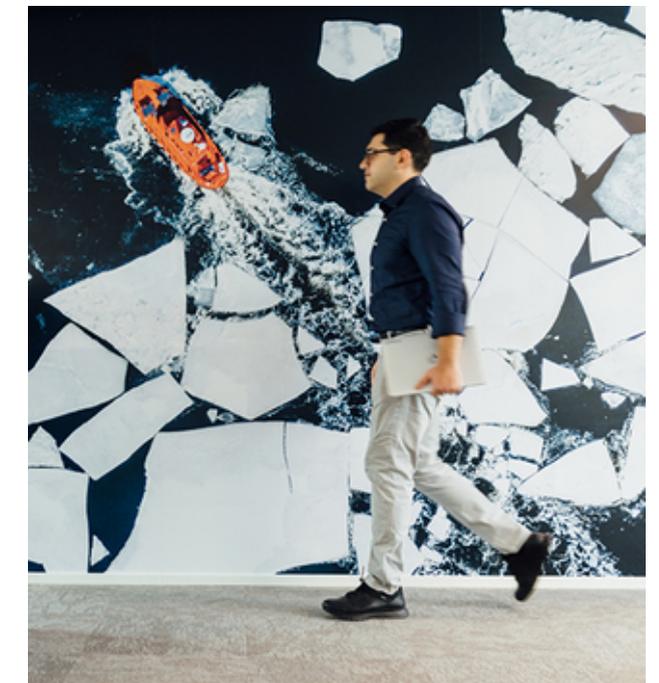
work was one of VTT's strategic choices for 2021–2025. In its annual Objectives and Key Results (OKR), VTT has identified several development priorities related to personnel and safeguarding intellectual capital.

VTT continuously monitors the research funding landscape, engages in active dialogue and influences providers of research funding. Some key development targets related to the research funding environment have been included in our annual OKRs. VTT has also defined a KPI for the sustainability impact of its research.

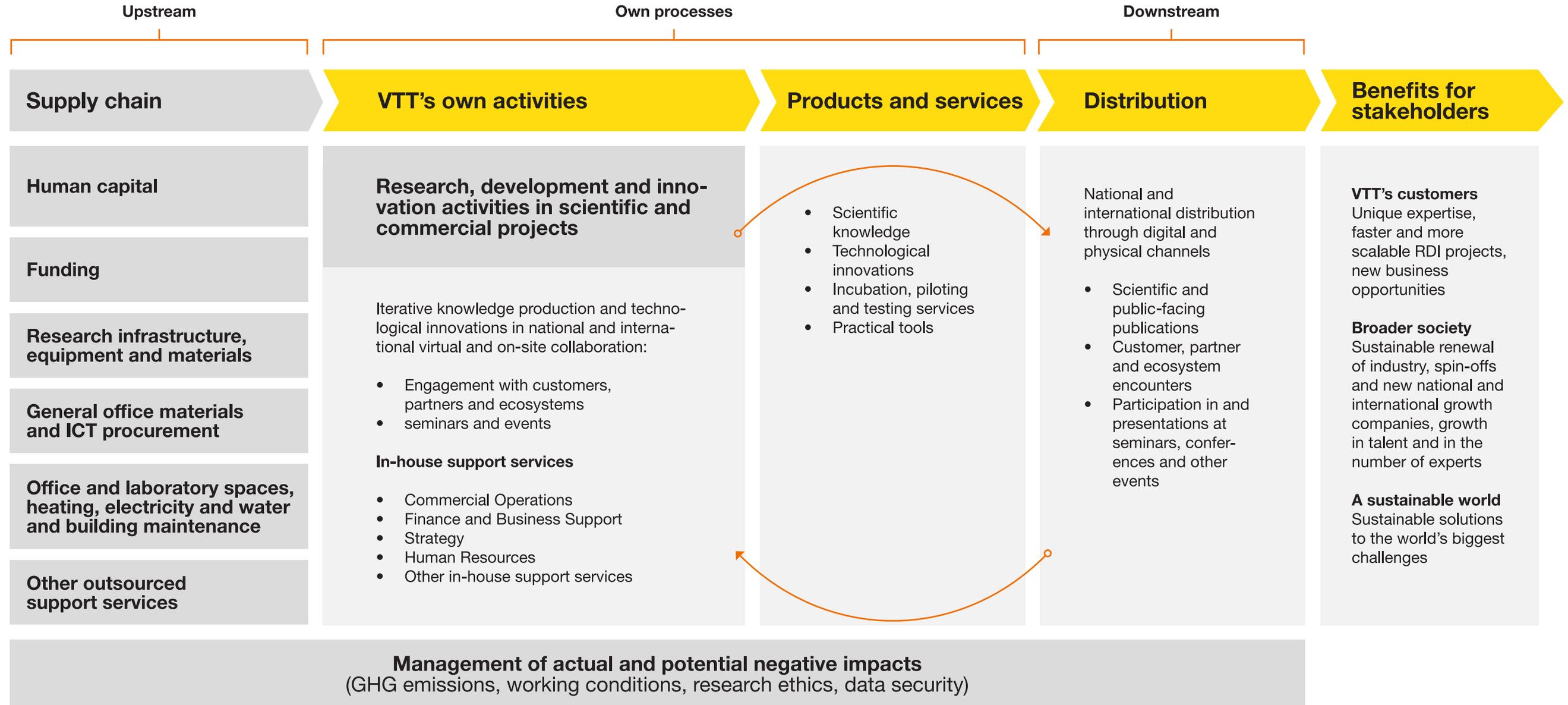
VTT provides its customers with unique expertise and access to the latest technologies to support their innovative activities. High-quality expertise and piloting and testing platforms help to ensure that working with VTT accelerates customer RDI projects and makes their results easier to scale up. Collaboration with VTT and access to its networks also create new international business opportunities for customers. At a societal level, VTT contributes to sustainable business growth, the creation of new growth companies and increasing competence and the number of experts in Finland.

The key enablers at the front end of VTT's value chain are research funding agencies. These include the European Commission, Business Finland and the Research Council of Finland, and the core funding provided by the Ministry of Economic Affairs and Employment. VTT creates value for its customers in the form of knowledge and technological innovations through national and international cooperation, collaboration with customers, partners and ecosystems, commercial projects, seminars and events, and internal support services.

Our distribution channels include scientific and open-access publications in academic and professional journals and in public media, customer engagement and collaboration, and participation and presentations at seminars, conferences and other events. The end users of the information and solutions produced by VTT are customer companies, research organisations and the wider scientific community, VTT's own startup companies and, in a broader sense, society as a whole.



VTT's value chain



Interests and views of stakeholders

Stakeholders are the cornerstone of VTT's operations and a key enabler. Stakeholder cooperation supports value creation and impact both in the short term and in the long term, steering VTT's applied research activities to societal, industrial and commercial needs.

Stakeholder expectations and views are communicated to VTT management through several channels, such as the double materiality assessment and personnel satisfaction and customer impact surveys.

Stakeholder cooperation is continuously developed to respond to the challenges and opportunities in a changing operating environment. VTT's experts and management representatives actively participate in stakeholder cooperation in national and international forums, thus promoting shared impact and the exchange of information. Stakeholder expectations, methods of engagement and links to VTT's business are reported in the table below.

| Stakeholder | Customers | Owner | Financiers | Personnel | Research community | Suppliers |
|---|---|--|--|--|--|---|
| Expectations | <ul style="list-style-type: none"> VTT helps its customers strengthen their expertise and capabilities Technologies and innovations help customers develop their business sustainably Working with VTT helps customers to establish networks in research and innovation ecosystems. | <ul style="list-style-type: none"> The ownership strategy set for VTT by the Ministry of Economic Affairs and Employment describes the owner's expectations for VTT's operations and its societal impact in accordance with the policies of the government programme. | <ul style="list-style-type: none"> Identifying opportunities arising from the global challenges identified by financiers A mission-driven and sustainability-oriented approach EU regulation-based, measurable, and comparable sustainability reporting Impeccable research ethics | <ul style="list-style-type: none"> Meaningful and interesting work Professional development and opportunities for career advancement Competitive pay and other benefits Good working conditions, good management, and good work-life balance Fair and just treatment | <ul style="list-style-type: none"> Research cooperation in which the expertise and capabilities of the parties involved complement each other in innovation ecosystems and research projects Ethical research activities and a focus on projects that promote sustainability and responsibility Promotion of open science | <ul style="list-style-type: none"> Compliance with the principles of public procurement Clear and fair agreements and treatment Responsible conduct and compliance with ethical practices Smooth cooperation and development of the procurement process Promoting competition by maintaining a level playing field |
| VTT's response in 2025 | <ul style="list-style-type: none"> Customer satisfaction with our projects remained high (NPS 81). According to our customer impact survey, 37% of the projects carried out in cooperation with VTT helped domestic customers to integrate into international networks. VTT supported customers' sustainability and corporate responsibility efforts (in 64% of the projects where responsibility is relevant) | <ul style="list-style-type: none"> In 2025, VTT promoted the impact goals set for it in many ways (read more here). VTT's finances are on a sustainable footing | <ul style="list-style-type: none"> Providing solutions to systemic challenges, developing technology breakthroughs, and supporting society in addressing the challenges it faces VTT's research agenda is aligned with the UN Sustainable Development Goals | <ul style="list-style-type: none"> The results of the Navigator personnel survey were excellent Investing in comprehensive physical and mental wellbeing and creating an extensive wellbeing programme A fair and transparent reward policy Continuous opportunities for personnel to develop their skills and competencies | <ul style="list-style-type: none"> Joint research projects and diverse research collaboration Joint scientific publications Visiting researchers and professors Participation in international research seminars | <ul style="list-style-type: none"> Compliance with the Act on Public Procurement and Concession Contracts and equal treatment of suppliers Active dialogue with suppliers and providing feedback on cooperation Use of a responsibility assessment tool in competitive tendering |
| Channels and frequency | <ul style="list-style-type: none"> Customer survey for every project Annual customer impact survey Direct discussion with the customer in daily project work Dedicated customer team for key accounts | <ul style="list-style-type: none"> Regular meetings with the ministry responsible for ownership steering Reporting on the use of state funding and the progress of impact goals twice a year | <ul style="list-style-type: none"> Cooperative meetings with financiers Stakeholder networks and influencing within them, such as EARTO, Finn-ARMA and Tulanet Evaluations of funding decisions | <ul style="list-style-type: none"> Regular day-to-day meetings, such as project and team meetings and discussions with line managers Annual personnel survey Goal and development discussions three times a year Several channels for feedback and ideas (read more here) | <ul style="list-style-type: none"> Continuous participation in joint projects, forums, and associations with other RTOs and members of the wider research community Communication about research in VTT's different channels | <ul style="list-style-type: none"> Supplier meetings Continuous dialogue between responsible persons and strategic suppliers Market dialogue before competitive tendering Continuous access to the whistleblowing channel |
| Impact on VTT's business model and planned actions | <ul style="list-style-type: none"> Understanding of market and industry sectors obtained from customers makes it possible to refine VTT's research agenda to meet customer needs in the future and provides a background for strategic choices. | <ul style="list-style-type: none"> The impact goals set by the owner are important factors in VTT's business activities and strategy. | <ul style="list-style-type: none"> VTT's strategic research choices steer funding applications Active and multi-level dialogue with financiers is a prerequisite for ensuring VTT's strategic funding. | <ul style="list-style-type: none"> The results of the personnel survey and feedback received through other channels are used to plan operations, support development measures and develop the strategy. | <ul style="list-style-type: none"> Dialogue through research activities and other forms of cooperation informs VTT's research content, priorities and development of research activities. | <ul style="list-style-type: none"> Smooth cooperation with suppliers ensures the continuity and development of VTT's business operations. |

Policies applied to managing sustainability topics

VTT has renewed its guiding policies and principles to comprehensively cover all material aspects of sustainability and responsibility. Through them, VTT aims to promote sustainable, ethical and responsible practices in all its activities.

Hierarchy of operating policies at VTT

VTT has several operating policies that promote sustainable practices. There are three levels of policy:

- policies
- principles
- guidelines.

Policies are approved by the VTT Board, whereas the principles are approved by VTT's Executive Leadership Team. The table presents the operating principles and guidelines that VTT has put in place concerning the sustainability topics considered material to the company.

| Sustainability topic | Operating policy |
|---|--|
| Climate change (Read more) | <ul style="list-style-type: none"> • Environmental policy • Environmental protection principles |
| Biodiversity and ecosystems (Read more) | <ul style="list-style-type: none"> • Environmental policy • Environmental protection principles |
| Circular economy and resource use (Read more) | <ul style="list-style-type: none"> • Environmental policy • Environmental protection principles |
| Own workforce (Read more) | <ul style="list-style-type: none"> • Personnel policy • Rewarding policy • Principles on diversity, inclusion and equal treatment • Strategic resourcing principles • Excellence and competence development principles • Performance management principles |
| Occupational safety (Read more) | <ul style="list-style-type: none"> • Safety policy • Occupational safety principles |
| Workers in the value chain (Read more) | <ul style="list-style-type: none"> • VTT's Code of Conduct • Supplier Code of Conduct |
| Business conduct (Read more) | <ul style="list-style-type: none"> • VTT's Code of Conduct • Guidelines for anti-corruption activities and reporting • Reporting of suspected misconduct and the protection of whistleblowers (Whistleblower guidelines) |
| Research ethics (Read more) | <ul style="list-style-type: none"> • VTT's Code of Conduct • VTT Open science principles • (We comply with RI guidelines) |
| Regarding to all topics | <ul style="list-style-type: none"> • VTT's Code of Conduct • Risk management policy • Risk management principles |

Environmental information (E)

VTT's most significant environmental contribution stems from the positive impacts of our research, which supports solutions to major sustainability challenges. At the same time, we are committed to minimising the environmental footprint of our own operations. This section outlines the actions we take to reduce our impacts on nature and climate.

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| Circular economy and resource use | 46 |



Climate change

In 2025, we advanced greenhouse gas emission reduction targets in line with the 1.5 degree target, conducted a climate resilience analysis, and improved input data collection for climate accounting and the scope of our calculations.

Material impacts, risks and opportunities

As part of its double materiality assessment, VTT has identified actual and potential climate-related impacts in the context of its strategy and business model. Demand for climate solutions continued to grow in 2025, which has reinforced the strategic focus of VTT's research activities, particularly in the development of energy systems and the hydrogen economy, carbon capture, and the reduction of industrial emissions.

VTT creates impact over the long term. The goal of our operations is to increase societal resilience, accelerate the transition towards carbon neutrality and support companies in responding to climate policy requirements. In 2025, VTT continued its work to achieve these goals in close cooperation with public and private partners. VTT's systemic breakthroughs focus on high-impact areas, such as sustainable and regenerative food system and transport innovations. Our Carbon Neutral Solutions business area, at the same time, is directly developing systemic and technological solutions to promote carbon neutrality.

The strategic importance of climate solutions has increased at VTT. The transition to a low-carbon economy will affect VTT's operations, especially through increasing demand for climate solutions and changes in the regulatory and funding environment. As part of the review of its current strategy, carried out in 2025, VTT analysed changes in the operating environment and

their impacts on research priorities and the development of customer offering. Climate solutions will continue to be a key part of VTT's research work and core business.

VTT's operations and value chain generate greenhouse gas (GHG) emissions, and reducing and managing these emissions is a key priority for VTT. Emissions are generated especially through the business travel required for international research collaboration. VTT takes travel-related emissions into account as part of the organisation's carbon footprint calculations and travel practices. Read more about VTT's emission reduction actions [here](#).

VTT's climate risk analysis

In 2025, VTT carried out a climate resilience analysis to assess its material climate risks. The analysis identified some material risks:

Physical risks:

- Flooding
- Increasing precipitation and moisture burden
- Heat stress and heat waves
- Storms and extreme weather

Transition events and risks:

- Higher prices and reduced availability of raw materials
- Technology and research tracks
- Increase in the price of GHG emissions

Material impacts, risks and opportunities

| Description | Impact, risk or opportunity | Time horizon | Target in the value chain |
|---|---------------------------------------|---|---|
| VTT's research and innovation activities promote climate change mitigation and adaptation. (Among other things, VTT focuses its research on clean energy transition, nuclear safety and carbon sequestration.) | Actual positive impact, very material | Long term (+5 years) and medium term (3–5 years) | Own operations |
| Climate change mitigation and adaptation provide financial opportunities for VTT (VTT has a lot of business related to the transition to fossil-free energy, carbon removal and other carbon-neutral technologies, and further growth is expected in the sector.) | Actual opportunity, very material | Short term (1 year), medium term (3–5 years) and long term (+5 years) | Own operations |
| VTT's own operations and its value chain cause greenhouse gas emissions. (In particular, air travel causes emissions at VTT. However, VTT's emissions are relatively low.) | Actual negative impact, material | Short term (1 year), medium term (3–5 years) and long term (+5 years) | Own operations and value chain, especially upstream |
| Accelerating climate change may create physical risks and operational disruption for VTT. (Power outages, floods and other physical risks caused by climate change may disrupt operations. However, VTT's business is not particularly sensitive to such physical risks.) | Potential risk (physical), material | Long term (+5 years) | Own operations |
| Acceleration of climate change may cause additional costs for VTT. (For example, the costs of energy and fuels may increase, and the mitigation of VTT's own emissions will increase costs.) | Actual risk (transition), material | Long term (+5 years) and medium term (3–5 years) | Own operations |
| There is a risk that funding for climate change-related research will decrease. (In a geopolitically unstable situation, funding for climate change mitigation may decrease as defence spending increases. The political climate and a downturn in the global economy may also affect this.) | Potential risk (transition), material | Short term (1 year) and medium term (3–5 years) | Financiers |

- Reputational risks.

The analysis was carried out qualitatively by assessing physical and transitional climate risks and VTT's resilience in workshops held for internal experts.

In the analysis, VTT used two of the IPCC's Shared Socioeconomic Pathways (SSP) scenarios in combination with greenhouse gas concentration scenarios, known as Representative Concentration Pathways (RCP). The combination covers physical climate forecasts and political, social and economic scenarios. This makes the scenarios suitable for

assessing both physical and transitional risks. All risks were assessed in the sustainable development scenario (SSP1-1.9) and the high emissions scenario (SSP3-7.0).

The risks were assessed in the short, medium and long term. In addition to VTT's own operations and assets, the analysis covered its value chain, including customers, supply chains and other scientific collaboration. Local data was only used for VTT's own facilities. As VTT only has offices and operations in Finland, national and local data and climate reports were used to supplement the IPCC scenarios for mapping risks.

Analysis results and VTT's resilience

VTT's overall ability to respond to the physical risks caused by climate change and adapt to the transition to a low-carbon society were assessed as good. VTT is developing solutions to promote the clean transition and climate change adaptation. For this reason, the analysis considered the high emission scenario, which involves a slower transition to a low-carbon society, to be less favourable for the company.

The impact of physical climate risks on VTT's own operations was assessed as moderate, because VTT only operates in Finland and most of the work takes place indoors. However, heat waves and heat stress were identified as a growing risk, and there is a need to better prepare for floods and other natural phenomena that will become increasingly severe as climate change progresses. Extreme weather phenomena can have a global impact in VTT's value chain, for example by causing disruptions in supply chains or the activities of partners.

In order to manage the risks, VTT will continue assessing and monitoring risks, planning for the continuity of the business, and cooperating with key stakeholders. Particular attention must be paid to the safety of business travel, identifying risks in supply chains and the continuous maintenance of VTT's facilities.

Policies related to climate change mitigation and adaptation

VTT aims to promote sustainable development through its research activities, for example by developing low-carbon solutions and technologies suitable for climate change mitigation. However, we recognise the need to minimise our own environmental footprint. Therefore,

VTT has adopted an environmental policy as well as environmental protection principles to complement it.

In our environmental policy, we commit ourselves to continuous improvement of environmental protection and our goal to create solutions that improve the state of the environment while minimising the harm. The policy presents VTT's key environmental objectives, which are:

- to continuously improve the level of environmental protection
- a positive handprint by developing solutions and technologies that promote sustainable development and improve the state of the environment for the use of customers and society
- carbon neutrality
- to continuously improve the energy efficiency of our operations
- to promote material and resource efficiency by reducing waste
- to keep our negative impacts on nature low, continuously collecting more information on the impacts of our activities.

The environmental protection principles specify our approach to these goals and to managing the material impacts and opportunities related to climate change. Our most material positive impact on climate change is our research aimed at reducing GHG emissions, which is also linked with significant business opportunities. Our environmental protection principles emphasise our aim to promote positive impacts and opportunities by, for example, promoting the clean transition through our research projects.

As a negative impact, we have identified our GHG emissions. Our measures and commitments to reducing them are specified in our operating principles, including

our commitment to improving energy efficiency and transition to 100% carbon-neutral energy. Risks related to climate change, including potential risks related to climate change adaptation, are discussed as part of the general risk management process, if necessary, in accordance with VTT's risk management principles.

Environmental policy and environmental protection principles apply to the entire VTT Group and cover the environmental impacts of our research. At VTT, the

Board of Directors approves the policies, and the Executive Leadership Team (ELT) approves the operating principles. An assigned Executive Vice President, who is also a member of the VTT ELT, is responsible for the overall development of environmental management at VTT. VTT has certified its operating system in environmental management in accordance with ISO 14001, which specifies the

21.2%

emission reductions from travel over the course of the year

99.87%

percentage of fossil free electricity

VTT's emissions in total

4644

tonnes (CO₂)



requirements for our environmental management system.

Actions and resources related to the operating policies concerning climate change

In 2025, we continued the work to prepare a climate transition plan. The plan will be finalised during 2026. During 2025, we prepared alternative emission reduction estimates and scenarios and modelled the potential impacts of the most effective emission reduction actions in terms of achieving the short-term greenhouse gas (GHG) emission reduction targets. The biggest challenges are associated with achieving the necessary reductions in Scope 3 emissions, which are currently dominated by emissions related to international flights.

The emission reduction scenarios that were prepared will be used as the starting point for setting a long-term climate neutrality (or net-zero) target in accordance with the principles of the Science Based Targets Initiative (SBTi) and the Paris Agreement on Climate Change.

The annual GHG emission calculations and possible emission reduction scenarios were prepared by life cycle assessment (LCA) researchers from VTT's sustainable business research team. The collection of input data and assessment of the required financial resources needed to prepare the plan were carried out in cooperation with VTT's LCA researchers, VTT's sustainability team experts and the facilities team. According to the current plan, VTT's climate transition plan will be discussed and approved in VTT's Executive Leadership Team during 2026.

Targets related to climate change mitigation

To reduce its greenhouse gas emissions, VTT set a medium-term emission reduction target in 2024 in accordance with the Science Based Targets framework. The target involves achieving a 42% reduction in GHG emissions by 2030 in comparison to the emissions in 2023. The target is linked to the goal of carbon neutrality defined in our environmental policy.

Our goal is:

- Carbon neutrality

The reduction target was calculated in accordance with the SBTi's cross-sectoral reduction pathway, with the aim of limiting emissions in a manner consistent with the Paris Agreement objective of keeping global warming to 1.5°C. The set reduction target has not yet been validated by external actors. Read more about the process of how sustainability targets are set at VTT [here](#).

| Climate targets | 2030 | 2025 |
|--|-------------|-------------|
| Absolute value of total Greenhouse gas emission reductions | 2878 | 2,208 |
| Percentage of total Greenhouse gas emission reductions (as of emissions of base year) | 42 % | 32% |
| Absolute value of Scope 1 Greenhouse gas emission reductions | 186 | 245 |
| Percentage of Scope 1 Greenhouse gas emission reductions (as of emissions of base year) | 42 % | 55% |
| Absolute value of market-based Scope 2 Greenhouse gas emission reductions | 602 | 1,334 |
| Percentage of market-based Scope 2 Greenhouse gas emission reductions (as of emissions of base year) | 42 % | 93% |
| Absolute value of Scope 3 Greenhouse gas emission reductions | 2090 | 628 |
| Percentage of Scope 3 Greenhouse gas emission reductions (as of emissions of base year) | 42 % | 13% |

| GHG emission reductions | 2025 |
|----------------------------------|-------------|
| Achieved GHG emission reductions | 2,207 |

Energy consumption

Energy consumption and combination of energy sources

| Energy consumption from non-renewable sources | 2025 |
|---|---------------|
| Total fossil energy consumption (MWh) | 1,062 |
| Share of fossil sources in total energy consumption (%) | 2% |
| Consumption from nuclear sources (MWh) | 32,720 |
| Share of consumption from nuclear sources in total energy consumption (%) | 56% |
| Energy consumption from renewable sources | |
| Total renewable energy consumption (MWh) (calculated as the sum of lines 8 to 10) | 24,296 |
| Share of renewable sources in total energy consumption (%) | 42% |
| Total energy consumption (MWh) | 58,077 |

Greenhouse gas emissions

In 2025, VTT's total greenhouse gas emissions decreased by 32% compared to 2023. VTT's direct (Scope 1) emissions decreased by 55% and indirect energy-related (Scope 2) emissions by 93%. Other indirect (Scope 3) emissions decreased by 13%.

In terms of direct (Scope 1) and indirect purchased energy (Scope 2) emissions, we exceeded our medium-term reduction target set for 2030 (-42% of 2023 emissions). For other indirect emissions (Scope 3), the future reduction need is approximately 1400 t CO₂e by 2030 (-34% of the actual emissions in 2025).

The most significant emission reduction was caused by changes in the origin of purchased electricity and district heating (market-based emissions). In 2025, the share of certified fossil-free electricity of all purchased electricity was more than 99%. The purchased electricity mainly included nuclear power and

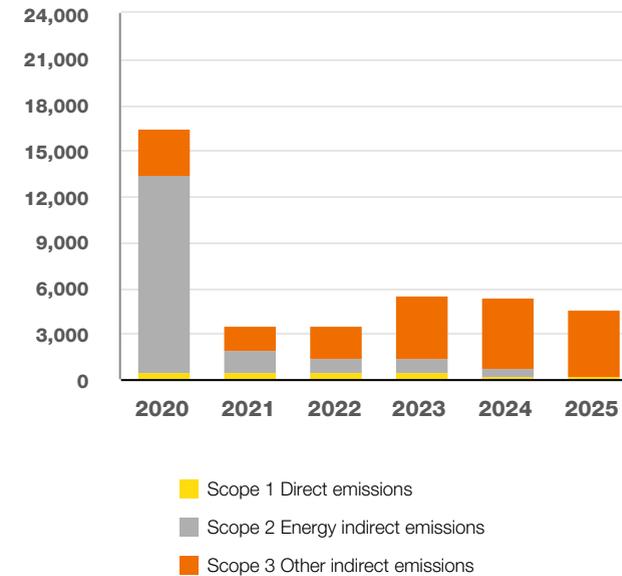
a small part of renewable energy. Renewable district heat accounted for 96% of all purchased heat.

In the category of other indirect emissions (Scope 3), there were several changes in both consumption data and the categories included in the calculation, which were again increased from the previous year. The most significant indirect emissions were related to purchased goods and services and commuting.

The increase in emissions from purchased services and goods was caused by more comprehensive reporting. Despite this, total indirect (Scope 3) emissions decreased compared to the base year, due to a decrease in the total number of flights and upstream emissions from purchased energy (transition to lower-emission electricity and heat). The most significant reductions in indirect emissions occurred in flight emissions and the amount of waste. In addition, the amount of recyclable waste has increased, which has reduced emissions related to waste treatment.

Total GHG emissions in 2025: 4644 tonnes (CO₂)

Scope 1, 2 and 3 gross and total GHG emissions



*VTT's GHG emissions (as tonnes of CO₂ eq) from years 2020–2025. Assessment was conducted according to the main principles of ISO14641-1 and the GHG Protocol.

| GHG emissions | Base year | Retrospective | | Change (%) |
|--|-----------|---------------|-------|------------|
| | 2023 | 2024 | 2025 | |
| Scope 1 GHG emissions | | | | |
| Gross Scope 1 GHG emissions (tCO ₂ eq) | 444 | 241 | 198 | -17.8 |
| Scope 2 GHG emissions | | | | |
| Gross market-based Scope 2 GHG emissions (tCO ₂ eq) | 1,432 | 541 | 98 | -81.9 |
| Significant scope 3 GHG emissions | | | | |
| Total Gross indirect (Scope 3) GHG emissions (tCO ₂ eq) | 4,976 | 4,650 | 4,348 | -6.5 |
| 1 Purchased goods and services | 219 | 194 | 825 | 325.4 |
| 2 Capital goods | 446 | 304 | 159 | -47.6 |
| 3 Fuel and energy-related Activities (not included in Scope 1 or Scope 2) | 566 | 344 | 283 | -17.7 |
| 4 Upstream transportation and distribution | 0 | 37 | 29 | -22.8 |
| 5 Waste generated in operations | 614 | 479 | 457 | -4.5 |
| 6 Business travelling | 3,131 | 3,292 | 2,594 | -21.2 |
| GHG intensity per net revenue | | | | |
| Total GHG emissions (market-based) per net revenue (tCO ₂ eq/Monetary unit) | 37 | 29 | 24 | -19.0 |

Calculation principles

VTT calculates and reports its annual GHG emissions in line with the core principles of ISO14064-1 and the GHG Protocol Corporate Value Chain Accounting and Reporting Standard, encompassing direct emissions (Scope 1), indirect emissions related to purchased energy (Scope 2), and additional indirect emissions (Scope 3). Our emissions are reported in tonnes of fossil CO₂ equivalents. Biogenic CO₂ emissions are currently not included in our reporting. Scope 2 related emissions from purchased energy are calculated and reported based on both market and location-based emissions. Characterization factors for calculating the global warming potential (GWP) were derived from the Environmental Footprint (EF 3.1, GWP 100).

Scope 3 related emissions are based on a combination of primary data collected from our suppliers and service providers. Data fromecoinvent database has been used as a proxy for the generated upstream emissions, if no primary data has been available. All the calculations and data sources are reviewed and updated on an annual basis, using latest available data. All consumption related data is from year 2025.

In compliance with the European Sustainability Reporting Standards, the year 2023 is used as the baseline. Compared to GHG emissions reported in 2023, some changes to system boundaries and GHG emission categories reported under Scope 3 were made. For 2025, reported GHG emission categories are expressed according to the categories of the GHG protocol (instead of ISO14064-1). Additions include several purchased goods and services (such as

cleaning, security, transports, laundry & delivery services). Additionally, the number of included chemicals and related upstream emissions has increased.

Similarly to previous years, GHG emissions related to employee commuting between home and workplace are excluded from Scope 3 emissions, together with emissions related to capital expenses and building of research equipment. Emissions reported under capital goods are related to leased IT-equipment and purchased furniture.

| Quantitative Reconciliation | 2025 | 2024 |
|---|-------|-------|
| Total GHG emissions market based (tCO ₂ eq) | 4,644 | 5,423 |
| Percentage of contractual instruments, Scope 2 GHG emissions | 98 | 95 |
| Percentage of market-based Scope 2 GHG emissions linked to purchased electricity bundled with instruments | 99 | 97 |

| Indirect Emission Categories | 2025 | 2024 |
|--|-------|-------|
| Indirect GHG Emissions from imported energy | 283 | 344 |
| Indirect GHG Emissions from other sources | 843 | 559 |
| Indirect GHG Emissions from products used by an organisation | 628 | 455 |
| Indirect GHG Emissions from transportation | 2,594 | 3,292 |

Biodiversity and ecosystems

Through its research, VTT aims to address major drivers of biodiversity loss. As part of assessing our biodiversity footprint in 2025, we focused on determining the impacts that chemicals in our supply chain have on nature.

Material impacts, risks and opportunities

VTT has identified biodiversity and ecosystems as a key element in its sustainability work. These themes were defined as material topics in the double materiality assessment carried out in 2025. Addressing biodiversity loss and safeguarding ecosystem functionality are cross-cutting priorities – especially in our applied research activities related to climate change mitigation and the circular economy.

In its strategic research priorities, VTT emphasises the opportunities presented by synthetic biology. VTT’s synthetic biology research aims to develop nature-based solutions that strengthen ecosystem resilience and offer new models for sustainable growth. Our sustainable food system research area develops solutions that reduce the impact of traditional production methods on nature and support biodiversity. These strategic research areas are expected to have a positive impact on people and the environment in the short and long term.

VTT has promoted the application of synthetic biology in food, materials and energy production, for example, through the SynbioMAP framework, which supports the clean transition and the sustainable use of natural resources. VTT-originating food technology startups, such as Solar Foods and Onego Bio, demonstrate how deep technology can renew food

production and significantly reduce environmental impacts.

Our research activities may have potentially adverse impacts on biodiversity and ecosystems. Our work is based on experimental research, which includes the procurement of materials and the piloting of new technologies and solutions in real-world environments. Potential negative impacts may arise, for example, from choices related to research materials or in trade-off situations, which may occur when balancing resource efficiency, technological progress and environmental protection. VTT anticipates, assesses and minimises these impacts as part of its [sustainability programme](#).

VTT recognises that research and development activities aimed at addressing biodiversity loss offer significant opportunities for growth and renewal. In particular, circular economy solutions and the increasing demand for technologies that support ecosystem services may create new business opportunities and innovations with significant economic and societal impact. VTT aims to capture these opportunities and realise their business potential as part of its continuous strategic renewal. VTT has not conducted a resilience analysis for biodiversity and ecosystems.

Material impacts, risks and opportunities

| Description | Impact, risk or opportunity | Time horizon | Target in the value chain |
|--|--|---|--|
| VTT aims to prevent biodiversity loss through its research. (We influence large drivers of biodiversity loss, such as climate change and overconsumption of natural resources, by developing resource efficiency, sustainable materials and carbon-neutral solutions. We also promote sustainable urban planning through nature-based solutions and the development of a more sustainable food system.) | Actual positive impact, material | Short term (1 year), medium term (3–5 years) and long term (+5 years) | Own operations and customers |
| Solutions that have a direct or indirect impact on halting biodiversity loss create business opportunities for VTT. (VTT has a wide range of activities that help tackle the drivers of biodiversity loss. However, the activities that specifically address biodiversity loss are not yet extensive. This area is considered to have growth potential.) | Actual opportunity, material | Short term (1 year), medium term (3–5 years) and long term (+5 years) | Own operations and customers |
| VTT's resource use and research work can also have negative impacts on biodiversity and ecosystems. (VTT's own operations have been estimated to have very minor negative impacts, but these may occur especially in the global value chains of VTT's procurements. The solutions we develop may also cause negative impacts on nature.) | Actual and potential negative impact, material | Short term (1 year), medium term (3–5 years) and long term (+5 years) | Own operations and value chain, especially upstream, also customers and other end users of solutions |

Policies related to biodiversity and ecosystems

Through its research activities, VTT promotes sustainable development by, for example, producing novel sustainable materials and developing resource efficiency and environmentally friendly business practices. However, we recognise the need to minimise our own environmental footprint. Therefore, VTT has adopted an environmental policy and environmental protection principles that complement it. You can read more about them in the [climate change section](#).

Our environmental protection principles specify our approach to managing the material impacts and opportunities related to biodiversity. Through research, we strive to positively impact the mitigation of biodiversity loss and climate change, with a particular focus on land use optimisation, climate action and avoiding pollution. These areas of research also provide significant business opportunities. Our environmental

protection principles emphasise our aim to promote positive impacts and opportunities related to them.

VTT’s negative impacts on biodiversity are currently assessed to be very limited. In our environmental protection principles, VTT commits both to maintaining these impacts at a minimal level and to strengthening the knowledge base by systematically gathering additional information on how our operations affect biodiversity. In the double materiality analysis carried out in 2022, we identified potential negative impacts on biodiversity in terms of our GHG emissions and construction of facilities. However, our biodiversity footprint assessment, commissioned in 2024, found that our most significant footprint impacts arise in procurement production chains.

Our environmental protection principles do not cover detailed indicators or goals related to biodiversity and the state of ecosystems, as they are not material to our business. Furthermore, our main line of business is

not to produce physical end products for our customers, which would have real or potential material impacts on biodiversity and ecosystems in the value chain and whose traceability should be monitored in our operating principles. Our facilities in Otaniemi, Jyväskylä, Kuopio, Tampere, and Oulu are located in the vicinity of Natura 2000 sites included in the European Union's network of protected areas. No negative impacts on these areas have been observed in our operations.

Actions and resources related to biodiversity and ecosystems

VTT's most significant contribution to nature is developing solutions addressing the causes of biodiversity loss in our research and innovation activities. Solutions aimed at mitigating climate change, promoting fossil-free alternatives and resource-efficient production also have an indirect impact on the state of nature.

To minimise our own footprint impacts, we assessed our biodiversity footprint in cooperation with the University of Jyväskylä in 2024. The research method used was a novel biodiversity footprint calculation model developed by the University of Jyväskylä. It combines information from an organisation's financial accounting, Finland's international trade, and data banks that classify global drivers of biodiversity loss.

Based on the results of the calculation, we have identified chemicals as the most harmful procurement category. During the past year, we conducted a study on the five most procured chemicals. In the study, we assessed both their impacts on biodiversity and impacts on human and labour rights. During the process, we held discussions with suppliers.

Next year, we plan to promote the environmental sustainability of our processes by preparing for the EU Regulation on Deforestation free Products (EUDR) and strengthening the responsibility criteria in the procurement process.

Targets related to biodiversity and ecosystems

To minimise its potential ecological impacts, VTT has set as its target to examine in more detail impacts on biodiversity materialising in its value chain. Read more about the process of setting sustainability targets at VTT [here](#).

Our goal is:

- To keep VTT's negative impacts on biodiversity low and collect more information on the impacts of our operations.

For the time being, VTT lacks any direct result-oriented targets for managing ecological impacts that could be measured numerically, as we need more information on the potential impacts generated in our value chain. Our short-term (2025) goal was to determine the origins of the chemicals we are using as accurately as possible. As the quality of the data we collected did not fully meet our expectations, we did not obtain the information we wanted concerning the origin of the chemicals at a sufficiently accurate level. As a result, we also examined possibilities to obtain better information on the origins of chemicals in connection with future competitive tendering for chemicals. In the medium term (2030), our goal is to use and procure chemicals only from suppliers that do not operate in sensitive areas in terms of biodiversity. Progress is measured by the number of suppliers inspected for origin.



Circular economy and resource use

In 2025, VTT reviewed its recycling rate and used the findings to set a new target, marking the start of measures to improve recycling practices. At the same time, our circular economy research promotes the wider adoption of resource-efficient solutions and supports sustainable business development.

Material impacts, risks and opportunities

The circular economy and more efficient use of resources are part of VTT's core business, and our positive impacts in these areas are directly linked to the company's strategic priorities. For example, our Sustainable Products and Services business area focuses on developing sustainable processes, technologies, materials and products. Across our research areas, industrial biotechnology and chemistry, food production solutions, and bio-based materials support more efficient use of resources in the future.

In 2023–2025, VTT invested in the clean transition, resource efficiency and security of supply and in strengthening the sustainable growth and competitiveness of companies. VTT also develops new recyclable materials, products, and processes that support planning and business models aligned with the circular economy.

The rapidly growing demand for circular economy solutions and the steering role of EU regulation have increased demand for research and development. VTT has responded to this development by directing strategic investments through the Challenge Frame, particularly towards research on resource efficiency and systemic sustainability. Combining these research areas has strengthened impact in the short term through technology piloting and in the long term by supporting

the societal transition towards sustainable production and consumption models. Notably, VTT's Bioruukki Pilot Centre for bio-based products has strengthened its position as a strategically important innovation platform that supports the development of a sustainable and resource-efficient society. Bioruukki offers an internationally unique environment for developing and piloting bio-based circular economy solutions. Pilots implemented in cooperation with customer organisations promote the creation of new value chains and support business renewal.

The financial opportunities presented by the circular economy, material development and resource efficiency are a key element of VTT's long-term strategy. National and international strategies related to the clean transition and the circular economy are expected to create new opportunities in both the short and long term.

Policies related to the circular economy and resource use

Through our research activities, we aim to promote sustainable development by, for example, producing novel sustainable materials and developing resource efficiency and environmentally friendly business practices. We recognise the importance of minimising our environmental footprint, even though our impact is

Material impacts, risks and opportunities

| Description | Impact, risk or opportunity | Time horizon | Target in the value chain |
|---|---------------------------------------|---|------------------------------|
| VTT promotes more efficient resource use and the circular economy, both of which generate indirect positive impacts. (A particularly important focus of our research work is sustainable materials and resource efficiency. Positive impacts can extend to society as a whole through customers.) | Actual positive impact, very material | Long term (+5 years) | Own operations and customers |
| VTT has financial opportunities in the areas of developing materials and promoting the circular economy. (VTT receives significant financial returns from activities that focus on promoting the circular economy and on efficient resource use. Clean transition programmes and circular economy strategies offer growing funding opportunities.) | Actual opportunity, very material | Short term (1 year), medium term (3–5 years) and long term (+5 years) | Own operations |

slight in terms of resource use. VTT has adopted an environmental policy along with environmental protection principles to complement it. You can read a more detailed description of the policy and our environmental management system in the [Climate change section](#).

The environmental protection principles specify our approach to managing the material impacts and opportunities related to materials and resources. Through research and innovation, we aim to promote the circular economy and reduce the consumption of natural resources. Our key priorities are research projects that promote the use of renewable rather than non-renewable resources and those that increase the reuse of non-renewable materials. Our environmental protection principles emphasise our aim to strengthen positive impacts and utilise the business opportunities associated with them.

VTT's direct negative impacts on material consumption and waste flows are limited, but in our principles we commit to responsible procurement and improving our recycling rate. We monitor progress related to enhancing our recycling rate, for example, by

means of waste reporting at our facilities. With regard to procurement, we recognise that a significant part of the overall impact is generated in supply chains, which is why we steer procurement towards sustainable and circular solutions. In procurement, we use a responsibility tool that takes circular economy principles and the environmental impact of supply chains into account, and we communicate our environmental requirements to suppliers and subcontractors as part of tendering and contract processes. We also favour products made from renewable and recycled materials in procurement and encourage VTTers to make responsible supplier choices.

Our main line of business does not involve the production of physical end products. Consequently, our operations do not include lifecycle material flows requiring monitoring or manufacturing activities subject to circular economy or ecodesign requirements..

Actions and resources related to the circular economy and resource use

The most important internal development project in 2025 focused on determining VTT's recycling rate and

using it as the basis for setting a new target. The project provided an overall picture of the current state of the recycling system and provided the foundation for systematic development of recycling.

As a result, we initiated new actions to improve recycling practices. This work will continue in cooperation with waste companies in 2026, with a focus on updating sorting points and harmonising practices throughout the organisation. At the same time, we intend to strengthen personnel participation in promoting recycling by preparing clear recycling and sorting guidelines and by improving communications.

Waste and the basis for calculations

The reported waste data have been collected from the waste management companies serving all of VTT's sites. The figures include both municipal waste generated in VTT's facilities and waste arising from research activities, such as hazardous waste and industrial waste. At sites shared with other organisations, VTT's share has been estimated on the basis of the floor area it occupies. As for disposal and diverting from disposal, amounts have been estimated where exact data was not available. The indicators have not been validated by an external party.

Targets related to the circular economy and resource use

In order to promote efficient resource use and the circular economy, VTT's target for 2025 involved determining VTT's recycling rate and the state of existing recycling systems. The recycling rate in 2024 was assessed at 40.45%. During 2025, the Executive Leadership Team used this number as the basis for setting a medium-term target of 70% by 2030. Read more about the process of setting sustainability targets at VTT [here](#).

Our goal is:

- To improve the efficiency of material and resource use and to promote the minimisation of waste and maximisation of the circular economy in the long term.

This supports the above-mentioned goal set in VTT's environmental policy of promoting the circular economy while minimising the amount of waste and the desire to improve the level of recycling outlined in the environmental protection principles. The actions taken during the past year focused on laying the foundation for setting this target and raising the recycling rate in future years. The recycling rate target applies to the recycling of waste generated at VTT's facilities in VTT's own operations. The target is not required by law and it was not set on the basis of scientifically justified and convincing evidence.

| Particulars of waste generated | 2025 | 2024 |
|----------------------------------|---------|---------|
| Total amount of waste generated | 945,975 | 855,400 |
| Non-recycled waste | 490,843 | 521,580 |
| Percentage of non-recycled waste | 53.6 | 59.6 |

| Hazardous Waste diverted from Disposal | 2025 | 2024 |
|--|--------|--------|
| Recycling | 32,649 | 2,541 |
| Other recovery operations | 13,453 | 44,271 |

| Hazardous Waste directed to Disposal | 2025 | 2024 |
|--------------------------------------|--------|--------|
| Incineration | 0 | 425 |
| Other disposal operations | 27,398 | 62,642 |

| Hazardous and Radioactive waste | 2025 |
|---------------------------------|--------|
| Hazardous waste | 73,500 |
| Radioactive Waste | 982 |

| Target | 2025 | 2024 | Target (2030) |
|----------------------|--------|--------|---------------|
| VTT's recycling rate | 46.42% | 40.45% | 70 % |

Our recycling rate increased

5.97

percentage points during 2025

Social information (S)

VTT is an expert organisation, and one of our top priorities is our workforce, consisting of top experts. We aim to create the world's most meaningful place to work. It is built by investing in wellbeing, competence development and safety culture. We also aim to ensure sustainability in our value chain and to identify risks.

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Own workforce

As an expert organisation, competent and thriving employees are a key resource and asset for VTT. We continuously improve personnel wellbeing, community spirit and opportunities for continuous learning.

Policies related to own workforce

In its double materiality analysis, VTT has identified positive and negative impacts on its own workforce as well as risks and opportunities associated with them. VTT's personnel is its most important asset, and the wellbeing, safety and work satisfaction of our employees are our key priorities.

In addition to the applicable legislation, the management of impacts is guided by the operating principles approved by the company's Board of Directors, which consist of VTT's values, Code of Conduct, strategy and policies. Management is based on personnel, rewarding and safety policies as well as [the principles](#) approved by VTT's Executive Leadership Team.

The Senior Vice President, Human Resources and Senior Vice President, Operational Excellence, Digitalisation and Sustainability (OEDS) are responsible for implementing the personnel policies and principles at the highest level. These policies and principles apply to all VTT personnel. Our safety policy and principles also apply to everyone working in VTT's facilities.

Health, safety and wellbeing

VTT has identified both positive and potential negative impacts on the health, safety and wellbeing of its employees. Management of these impacts is guided by VTT's Code of Conduct and the safety policy and

principles. VTT has an ISO 45001 certificate for its occupational health and safety system.

Maintenance and promotion of wellbeing and work ability at VTT are guided by the personnel policy and wellbeing at work priorities: leadership, health and safety. Promoting wellbeing at work and work ability are proactive activities aimed at early identification of factors that threaten employees' work ability, initiating actions, and maintaining health throughout their careers.

All risks related to VTT's own workforce are handled as part of VTT's risk management process in accordance with the risk management principles.

Fair and inclusive organizational culture

VTT has identified the diversity of its personnel as a material opportunity. Our aim is to be a diverse and inclusive workplace that respects and values the unique contribution of everyone. Our work towards this goal is guided by VTT's Code of Conduct and personnel policy.

VTT's policies and principles prohibit discrimination based on age, gender, origin, sexual orientation, political activity or other personal characteristics. VTT has zero tolerance for discrimination, harassment or inappropriate treatment. Indirect discrimination is also prohibited. As part of zero tolerance, VTT monitors the number of cases of harassment. VTT also monitors that investigation of reported cases has begun within the deadline specified in the guidelines.

Material impacts, risks and opportunities

| Description | Impact, risk or opportunity | Time horizon | Target in the value chain |
|--|---------------------------------------|---|---------------------------|
| VTT's actions to promote wellbeing at work create positive impacts. (Among other things, VTT enables occupational health care that exceeds statutory requirements, supports balance between private and working life through longer holidays and flexible working practices, which have positive impacts on wellbeing. Meaningful work supports wellbeing.) | Actual positive impact, very material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |
| Development of VTT's safety culture improves occupational safety and increases the sense of safety at the workplace. (Continuous work to develop the safety culture includes team safety discussions, development of emergency preparedness and informing.) | Actual positive impact, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |
| VTT strongly supports the development of personnel competence and expertise, which has positive impacts for employees. (VTT supports education and other competence development in many ways, for example, through our PhD programme.) | Actual positive impact, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |
| VTT's personnel is diverse and multinational, which has a positive impact on both research and the personnel. (VTT invests in the diversity of its personnel in many ways. VTT has employees from 57 different countries.) | Actual positive impact, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |
| VTT's motivated and competent personnel are a financial opportunity for the company. (Highly qualified personnel ensure good results for VTT, maintain a good employer image and help attract experts. Competence development also produces positive impacts for the personnel.) | Actual opportunity, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |
| VTT's diverse workforce represents a financial resource and opportunity for the company. (Diversity is an attraction factor and a competitive advantage, as a more diverse group of experts enables better results and project quality.) | Actual opportunity, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |
| Project-type expert work can be burdensome and fragmented, which has negative impacts on coping. (This is common in expert work and especially in project work where the workload varies.) | Actual negative impact, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |
| Accidents or other damage can occur at work or during commuting or business travel, which would have a negative impact on the employee. (VTT conducts experimental research, which involves a greater risk in comparison to office work. The risk is particularly high in laboratory conditions.) | Actual negative impact, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |
| Employees may experience a feeling of exclusion or similar negative impacts related to equality and inclusion. (This risk is emphasised in the case of employees who do not speak Finnish, as VTT has a multilingual work community, and unintentional exclusion may occur in unofficial interaction.) | Potential negative impact, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |
| Failing to retain its employees and attract new experts represents financial risk for VTT. (The availability of experts may also be poor and the competition tough, especially in areas requiring special expertise.) | Potential risk, very material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |
| Health and safety risks can also pose a financial risk. (For example, fires or other damage to life and health can cause financial losses and disruptions in operations.) | Potential risk, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |

Based on personnel data, VTT has identified two employee groups who may be in a particularly vulnerable position: 1) employees with reduced work ability and 2) international employees. VTT has various support processes designed to take these groups into account and promote sense of inclusion. We support the integration of international employees with relocation services, language and cultural training, and networking opportunities among other efforts. Mandatory Code of

Conduct training and VTT's internal communication channels increase personnel awareness of diversity, inclusion and equal treatment. These themes are also part of VTT's supervisor and management training.

VTT's top experts

VTT's success is tied to our top experts and expertise. Without them our business would not be possible. Attracting and retaining experts at VTT involves both opportunities and risks, which VTT manages through its strategic resourcing principles. The strategic resourcing principles provide a common foundation for VTT's guidelines on recruitment, expert strategy and resourcing. The principles of competence development guide the continuous development of excellence and expertise.

VTT uses diverse methods to support joint and individual learning, such as development and training opportunities. For example, VTT's PhD programme supports goal-oriented doctoral thesis work in VTT's strategic research choices.

VTT's other commitments

VTT is committed to complying with the ILO Declaration on Fundamental Principles and Rights at Work and the UN Global Compact by implementing 10 fundamental principles related to human rights, labour rights, the environment and combating corruption. VTT is committed to correcting any negative human rights impacts in accordance with the UN Guiding Principles on Business and Human Rights and VTT's principles for reporting and investigating violations.

VTT is a research organisation that employs highly educated researchers and experts. Due to the nature of our operations, the risks related to child labour, forced labour and human trafficking are very small, which is why they have not been addressed in the policies related to our own workforce.

Processes for engaging with own workforce

VTT uses different processes for engaging with employees, such as personnel surveys, feedback

channels, development discussions, committees and consultations. VTT has invested in co-operation as part of developing its operations.

Co-operation and trustees

The purpose of co-operation is to engage in interaction, exchange information and negotiate between the employer and the personnel. The aim is to find a mutual understanding and develop the company's operations and employees' opportunities to influence the decisions made in the company concerning their work, working conditions and position in the company. The occupational health and safety manager is responsible for coordinating occupational health and safety activities.

VTT's Occupational Health and Safety Committee

VTT's Occupational Health and Safety Committee is elected for four years at a time. It meets at least once in a quarter. The meetings of the Committee are attended by the members of the personnel elected as occupational health and safety representatives or their deputy representatives and the designated occupational health and safety managers. The occupational health and safety managers represent the employer. The meetings are also attended by representatives of HR and occupational health care when matters related to occupational health care are discussed. The Committee deals with issues such as the occupational health care action plan and occupational safety.

Joint committee meetings

Joint committee meetings consist of the employer's representatives and chief shop stewards representing the personnel. The advisory boards meet regularly four times a year. In addition, personnel representatives take part in the leadership teams of business areas and in VTT's Executive Leadership Team. Joint committee

-29%

change in TRIF*
(*total recordable incident frequency)

78

VTT's organisational culture index
(on a scale of 0-100)

194

new VTTers

83

sense of inclusion
(on a scale of 0-100)

meetings involve dialogue concerning workplace rules, the personnel's competence needs and the company's development prospects.

Personnel surveys

The annual personnel survey provides information on the personnel's own work, their local work community, management and the operations of VTT as a whole, including workload and its impact on wellbeing at work. Personnel surveys also help us monitor the personnel's perceptions of learning and development, and their results are accounted for when planning development measures.

Processes to remediate negative impacts and channels to raise concerns

VTT has several reporting channels through which personnel can submit reports on different topics and raise concerns. The Whistleblower channel can be used to report suspected misconduct anonymously. Read more about the Whistleblower channel [here](#).

Occupational health and safety reports, such as suspected occupational health and safety incident or harassment, can be submitted through the Report inappropriate treatment -channel. The channel is available to all VTTers on the VTT intranet. Occupational health and safety reports can also be submitted in other ways, for example, by directly contacting the supervisor, HR or the occupational health and safety manager.

The Help service portal can be used to report accidents and incidents requiring first aid. The system sends information about the incident to the supervisor, occupational health and safety representative and occupational health and safety manager, after which the person's immediate supervisor initiates an investigation. All workplace and commuting accidents and first aid cases are investigated to prevent the recurrence of a

similar accident. Accidents and first aid cases are also reported to the management on a monthly basis.

The personnel can submit safety observations, development proposals and internal quality deviations or contact their supervisor directly about any problems. VTT has set a target for processing safety observations. There is also a process for handling development proposals.

In suspected cases of research misconduct, VTT follows the procedure in the Research Integrity (RI) guideline by the Finnish National Board on Research Integrity (TENK). In matters related to employment, employees should primarily contact their supervisor or the People Lead of their business area to report their concerns.

Actions related to own workforce

In 2025, VTT implemented numerous measures to promote competence development, wellbeing, equality, inclusion and occupational safety.

Competence development

The most important forums for competence development are the team excellence discussions and each employee's individual goal and development discussion. Competence development takes place through knowledge sharing and coaching.

Key priorities in developing competence in accordance with the VTT strategy include enhancing research, managerial, scientific and substance competence, and competence related to projects and customers.

In 2025, our management development focused on supporting supervisors' skills and providing orientation for new supervisors. We renewed the project management entity as part of the Project Excellence programme and created a model for the project

manager growth path at VTT. International employees were actively supported by providing teaching in the Finnish language. Development of feedback culture was supported by introducing a peer feedback practice as part of the goal and development discussions and team-specific feedback skills coaching.

We built a more versatile researcher career landscape model and introduced a more unified way of describing researcher tasks.

We continued to develop AI competence by coaching personnel in AI use and also introduced guidelines on the ethical and responsible use of AI at VTT.

Wellbeing and inclusion

We support the wellbeing of VTTers in many ways by offering them diverse wellbeing services to support both physical and mental wellbeing. These include sports services, company-sponsored employee clubs, mental wellbeing coaching services and high-quality occupational health care services. Continuous wellbeing is supported by the active caring model, based on early addressing and prevention of potential challenges.

During 2025 we focused on increasing physical activity and community spirit through instructed physical activity sessions. We invested in prevention by making work fitness testing part of health examinations in positions that involves physical strain.

We also launched a facility development project based on feedback from the personnel. The aim of the project is to develop our working environment so that it supports success at work, wellbeing and contributes to increasing the sense of an excellent employee experience.

VTT has identified the workload and fragmentation of project-type expert work as a negative impact on its own workforce. In 2025, we continued to invest in

solving the workload challenge: we focused on clarifying the role and responsibilities of a researcher, controlling the workload and providing space for concentration.

The Growth & Success -entity has improved the situation regarding fragmented work and unclear goals. We clarified the goal orientation of work for all VTTers and the feedback process by updating the goal and development discussion model. In Project Excellence -program, comprehensive project management, operating methods and better tools for project managers have been developed.

Occupational safety

In the field of safety, we began using a new tool to record safety observations, which makes it possible to also submit observation with mobile devices. This allowed us to respond to the employees' request for a mobile tool.

We implemented several actions to increase occupational safety awareness, one of which involved launching a chemical safety campaign.

We also arranged training courses related to occupational safety, including occupational safety card training with refresher sessions, first aid training, hot work safety card training, initial extinguishing training and electrical safety card training. Employees were also offered various QEHS systems-related user training courses and general orientations.

Targets related to own workforce

VTT has set results-oriented and time-bound targets to promote positive impacts for our own workforce and related opportunities, and to manage any risks and negative impacts. The targets set are in line with the objectives of our human resources policy and the principles complementing it. The targets were set in 2024 and the target levels at the beginning of 2025.

Read more about the process of setting sustainability targets at VTT [here](#).

Our targets related to our own workforce are:

• **VTT is the most world's most meaningful place to work.**

To monitor the achievement of the goal, we use the following KPI that is based on the Navigator Employee Survey:

| Target | 2025 | Target (2025) | Target (2030) |
|---|------|---------------|---------------|
| KPI 5 Organisational culture (Sub-indexes followed: Employee engagement, excellence, performance, wellbeing, people leadership) | 78 | 78 | tbc |

* The scale of the index is 0-100.

• **VTT is an inclusive and diverse workplace that is free of discrimination**

We use indexes based on the Navigator Employee Survey to monitor the achievement of the goal:

| Target | 2025 | Target (2025) | Target (2030) |
|-------------------------------|------|---------------|---------------|
| Navigator: sense of inclusion | 83 | 84 | 80 |

* The scale of the index is 0-100.

• **Everyone comes to work healthy and leaves work healthy. We aim at zero accidents.**

We monitor the achievement of this goal using the total recordable incident frequency (TRIF) as an indicator. It shows the number of incidents that have caused costs and/or absences at the workplace or at work per million hours worked. The TRIF level for 2025 is 5.98, demonstrating a 29% improvement compared to the previous period and exceeding the set reduction target of 25%. The long-term goal remains zero by 2030, meaning no recordable accidents.

| Target | 2025 | Target (2025) | Target (2030) |
|--|-------------|------------------|---------------|
| Total recordable incident frequency TRIF | 5,98 (-29%) | reduction of 25% | 0.00 |

Personnel metrics

Characteristics of VTT's employees and non-employees belonging to VTT's own workforce

| Number of employees by contract type and gender | 2025 |
|--|--------------|
| Total number of employees (head count) | |
| Male | 1,416 |
| Female | 933 |
| Other | 0 |
| Not Reported | 0 |
| Total | 2,349 |
| Number of permanent employees (head count) | |
| Male | 1,324 |
| Female | 876 |
| Other | 0 |
| Not Reported | 0 |
| Total | 2,200 |
| Number of temporary employees (head count) | |
| Male | 92 |
| Female | 57 |
| Other | 0 |
| Not Reported | 0 |
| Total | 149 |
| Number of non-guaranteed hours employees (head count) | |
| Male | 0 |
| Female | 0 |
| Other | 0 |
| Not Reported | 0 |
| Total | 0 |
| Number of full-time employees (head count) | |
| Male | 1,295 |
| Female | 829 |
| Other | 0 |
| Not Reported | 0 |
| Total | 2,124 |
| Number of non-guaranteed hours employees (head count) | |
| Male | 121 |
| Female | 104 |
| Other | 0 |
| Not Reported | 0 |
| Total | 225 |

| Employees by contract type and gender, average. | 2025 |
|--|--------------|
| Average number of permanent employees (head count) | |
| Male | 1,324 |
| Female | 876 |
| Other | 0 |
| Not Reported | 0 |
| Total | 2,200 |
| Average number of temporary employees (head count) | |
| Male | 92 |
| Female | 57 |
| Other | 0 |
| Not Reported | 0 |
| Total | 149 |
| Average number of non guaranteed hours employees (head count) | |
| Male | 0 |
| Female | 0 |
| Other | 0 |
| Not Reported | 0 |
| Total | 0 |
| Number of employees who have left undertaking and employee turnover | 2025 |
| Number of employee who have left undertaking | 240 |
| Turnover % | 3.6 |

Non-employees in VTT's own workforce

There were 290 non-employees in VTT's workforce. VTT's non-employees include, among others, those completing non-military service or unpaid traineeships, international visitors and providers of external expert services.

Coverage of collective bargaining, social dialogue and social protection

At VTT, 99% of employees are covered by collective agreements, only senior management is excluded. VTT applies:

- one sectoral collective agreement
- one company-specific collective agreement
- five local agreements based on collective agreements.

VTT has an elected an occupational health and safety representative at all its facilities. This means that all employees at the facility are covered by employee representation. All VTT employees are also covered by social security.

Diversity indicators

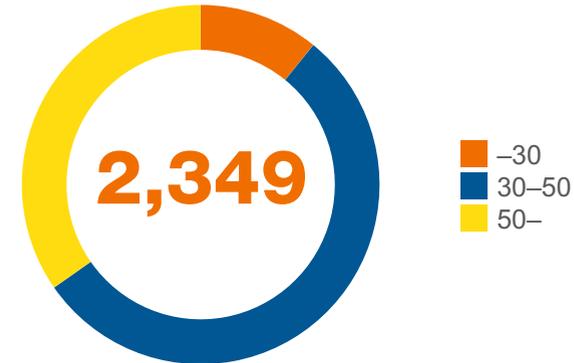
The table below shows the gender distribution of VTT's top management in numbers and percentages. VTT's Executive Leadership Team consists of business and service area leaders.

| Gender distribution in management | Number of employees (head count) | | Percentage of employees | |
|-----------------------------------|----------------------------------|------|-------------------------|------|
| | 2025 | 2024 | 2025 | 2024 |
| Female | 4 | 4 | 50 | 44 |
| Male | 4 | 5 | 50 | 56 |

The age distribution of VTT personnel is shown below:

| Age distribution in workforce | Number of employees (head count) | | Percentage of employee | |
|-------------------------------|----------------------------------|-------|------------------------|------|
| | 2025 | 2024 | 2025 | 2024 |
| Under 30 years | 255 | 283 | 11 | 10 |
| 30-50 years | 1,279 | 1,279 | 54 | 54 |
| Over 50 years | 815 | 824 | 35 | 36 |

Employees by age



Education and skills development indicators

All VTTers must participate in development discussions in accordance with VTT guidelines. The average number of training hours per employee in 2025 was 10.

Health and safety indicators

100% of VTT employees and people working in VTT facilities are covered by the occupational health and safety management system. VTT has an ISO 45001 certificate.

We are constantly developing our safety culture. A record number of safety observations were reported in 2025, a total of 7,149 observations, or 3.03 observations per employee.

The following table presents our health and safety indicators:

| Health and safety | 2025 | 2024 |
|---|------|------|
| The number of fatalities as a result of work-related injuries and work-related ill health | | |
| Employees | 0 | 0 |
| Non-employees | 0 | 0 |
| Number of recordable work-related accidents for own workforce | 4 | 6 |
| Rate of recordable work-related accidents for own workforce (LT13) | 0.97 | 1.42 |
| Number of cases of recordable work-related ill health of employees | 0 | 0 |
| Number of days lost to work-related injuries and fatalities from work-related accidents (minimum three day absences included) | 38 | 157 |

Work-life balance indicators

Under Finnish law, all employees are entitled to family leave. The table below shows the percentage of employees taking family leave by gender.

| % of entitled employees that took family-related leave | 2025 |
|--|------|
| Male | 14 |
| Female | 18 |
| Other | 0 |
| Not reported | 0 |

(The average period of absence was 64 days for men and 213 days for women.)

Metrics related to pay

The gender pay gap and the total remuneration indicator have been calculated based on data extracted from the HR system and supporting compensation materials. The data covers those who were employed at the end of the reporting year (12/2025). The calculation is based on the annual total salary as reported in the source systems, and the information has been compiled by gender.

Gender pay gap has been calculated as follows: (Male average pay – Female average pay) ÷ Male average pay × 100%.

The gender pay gap for 2025 was 6.8%. This level is typical for research-intensive and public-sector-adjacent organisations and mainly reflects differences in job roles and Internal Pay Equity (IPE) distribution rather than unequal pay for equal work.

| Pay gap | 2025 |
|----------------|------|
| Gender pay gap | 6.8% |

| Total remuneration | 2025 |
|--|------|
| Ratio of the highest paid individual to the median annual remuneration for all employees | 3.9 |

Incidents, complaints and severe human rights impacts

| Incidents, complaints and severe human rights impacts | 2025 |
|--|------|
| Number of reported incidents of discrimination | 0 |
| Number of complaints filed through channels for people in own workforce to raise concerns | 4 |
| Total amount of fines, penalties, and compensation paid for the reported cases of discrimination and harassment | 0 |
| Number of severe human rights issues and incidents connected to own workforce (forced labour, human trafficking, child labour) | 0 |
| Number of severe human rights issues and incidents connected to own workforce that are cases of non respect of UN Guiding Principles and OECD Guidelines for Multinational Enterprises | 0 |
| Amount of material fines, penalties, and compensation for severe human rights issues and incidents connected to own workforce | 0 |

Accounting principles

The figures for the metrics are based on VTT's own workforce, which includes both VTT's employees and non-employees belonging to VTT's own workforce. The information was compiled from VTT's HR data sources, and the reporting covers the material characteristics of the personnel, such as quantity and structure. The figures are based on centrally available personnel data, and the reporting follows VTT's internal data collection and reporting practices.



Workers in the value chain

The sustainability of VTT's value chain is steered by international human rights and labour rights agreements. We are committed to respecting internationally recognised human rights and ensuring fair working conditions, and we demand the same from our entire value chain.

Policies related to workers in the value chain

In all its activities, VTT complies with the Finnish legislation, which also takes account of the UN and ILO agreements. VTT requires its customer companies and supply chains to comply with national laws and to respect international labour and human rights conventions. However, VTT has recognised that in a global operating environment employees in the value chain may be exposed to negative impacts. To manage and minimise such impacts, VTT has policies in place that are in line with international human rights conventions.

Our commitment to the international agreements and declarations is outlined in the document "Overview of VTT's policies", compiling all VTT's policies.

VTT's commitment to respect human rights and the requirement for all partners to do the same is specified in VTT's Code of Conduct and VTT's Supplier Code of Conduct. If necessary, risks related to employees in the value chain are processed as part of VTT's risk management process and in accordance with its principles.

The Code of Conduct applies to all VTT personnel and partners. VTT's Supplier Code of Conduct applies to VTT's entire supply chain, including suppliers, service providers and business partners and is incorporated into all VTT procurement contracts.

According to the Supplier Code of Conduct, VTT requires suppliers to respect internationally recognised human rights and ensure fair working conditions. VTT requires the supplier to comply with local laws and regulations in force regarding maximum working hours, minimum wage and other mandatory benefits. The supplier must treat all its employees fairly and respectfully. Discrimination, intimidation, bullying or harassment are not permitted in any form. The supplier must also respect the freedom of association of employees. VTT requires that its supply chain and subcontractors prohibit child labour, forced servitude and forced labour.

VTT's suppliers must comply with VTT's Supplier Code of Conduct for the full duration of the contract period with VTT or VTT's business partner. The supplier must report any suspected or actual violations of the Code of Conduct. The Supplier is responsible for ensuring that its employees and subcontractors are familiar with VTT's Supplier Code of Conduct and comply with the requirements presented in it. If necessary, the Supplier shall make every effort to assist VTT in obtaining the necessary information to ensure conformity with the Supplier Code of Conduct.

VTT has not received any reports and it is not aware of any cases of non-compliance with the UN Guiding Principles on Business and Human Rights, the ILO Declaration on Fundamental Principles and Rights at

Material impacts, risks and opportunities

| Description | Impact, risk or opportunity | Time horizon | Target in the value chain |
|---|---|---|--|
| Our value chain may include actors whose operations have negative impacts on labour or human rights. (As an expert organisation, VTT's value chain risks are relatively small. However, VTT is a large company engaged in experimental research, which means that procurement of materials and supplies involves extensive and fragmented supply chains, which increases risks.) | Potential negative impact on human rights, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Value chain, especially supply chains |
| If VTT does not implement the due diligence obligation well enough, there will be a reputational risk and a risk of failing stakeholder expectations. | Potential risk, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Value chain, mitigating own operations |

Work and the OECD Guidelines for Multinational Enterprises upstream or downstream of its value chain.

Processes for engaging with workers in the value chain, channels for reporting concerns and processes for remediating negative impacts

Interaction between VTT and workers in its value chain has been enabled through the Whistleblower reporting channel. Whistleblower is available to all employees in the VTT value chain through VTT's website. The workers in the value chain can use the channel to anonymously report suspected misconduct by VTT and its subsidiaries, personnel or a VTT supplier and its subcontractor.

Notifications to VTT's Whistleblower channel may be submitted by VTT's customers, suppliers and their subcontractors, and the above-mentioned workers. Reports of suspected misconduct observed at VTT can be submitted by filling in an electronic form. The steps taken to process a report are documented in the system.

With regard to VTT's value chain, the reports are processed by the Compliance Committee, which consists of the following members:

- Sustainability expert
- Coordinator, Procurements and sustainability
- VP, Sales
- Internal auditor

If the investigation so requires, the case management tool can be used to contact the necessary persons. The independent and impartial processing of reports is ensured by excluding disqualified persons. VTT also has a "Report inappropriate treatment"-channel through which VTT employees can submit a notification on behalf of workers in the value chain, if necessary.

In supplier meetings with contract suppliers, VTT discusses issues related to sustainability, including how suppliers select their suppliers and subcontractors and monitor them during the contract period.

When a project is in progress, VTT communicates regularly with the customer. In addition, when a project has been completed, VTT collects feedback with a

survey in which people can freely express any concerns they may have or give other feedback. Communication with customers is the responsibility of the sales department and the representative of the research area involved in the project.

Actions and resources related to workers in the value chain

VTT is a contracting entity that must apply the Act on Public Procurement and Concession Contracts 1397/2016 (hereinafter the Public Procurement Act) in its procurements. Under the Public Procurement Act, a contracting entity must exclude a candidate, tenderer or subcontractor from the tendering process if this is subject to some mandatory exclusion criterion. A contracting entity must exclude a candidate or tenderer from the tendering process if it is aware of a final conviction for any of the following labour offences:

- a work safety offence
- a working hours offence
- work discrimination
- extortionate work discrimination
- violation of the right to organise
- unauthorised use of foreign labour

In 2025, VTT implemented several sustainability actions to prevent risks and to strengthen the transparency of the supply chain. VTT initiated a study on a responsibility assessment tool in the value chain, updated the Supplier's Code of Conduct and expanded the Whistleblower channel to cover the entire value chain. A requirement to comply with OECD or similar guidelines for preventing the harmful effects of minerals from conflict-affected areas was added for suppliers. Sanction checks were introduced in direct procurements, and a condition on performing a

responsibility audit was added to the contract templates.

VTT's country risk map tool guides customer work to take human rights and labour risks into account and prevents activities in extremely high-risk countries. In 2025, the tool was expanded to include suppliers. During the past year, the procurement organisation's ESG group also established its own responsibility forum. The Know Your Customer (KYC) process and regular Code of Conduct training for personnel also support mitigating risks.

Targets related to workers in the value chain

VTT has identified a potential negative impact that employees may be exposed to in its value chain, especially in supply chains. Our goal is to minimise risks related to human rights and labour rights in our value chain. The goal is linked to VTT's Code of Conduct and VTT's Supplier Code of Conduct. Read more about the process of setting sustainability targets at VTT [here](#).

Our goal is:

- We minimise human rights and labour rights risks to our value chain.

We promote this goal by including social responsibility criteria in competitive tendering and by collecting more information on the realisation of employees' rights in our value chain. The target levels are presented in the following table:

| Target | 2025 | Target (2025) | Target (2030) |
|--|------|---------------|---------------|
| Using social part of ESG tool in % of tenderings | 23% | 30% | 100% |

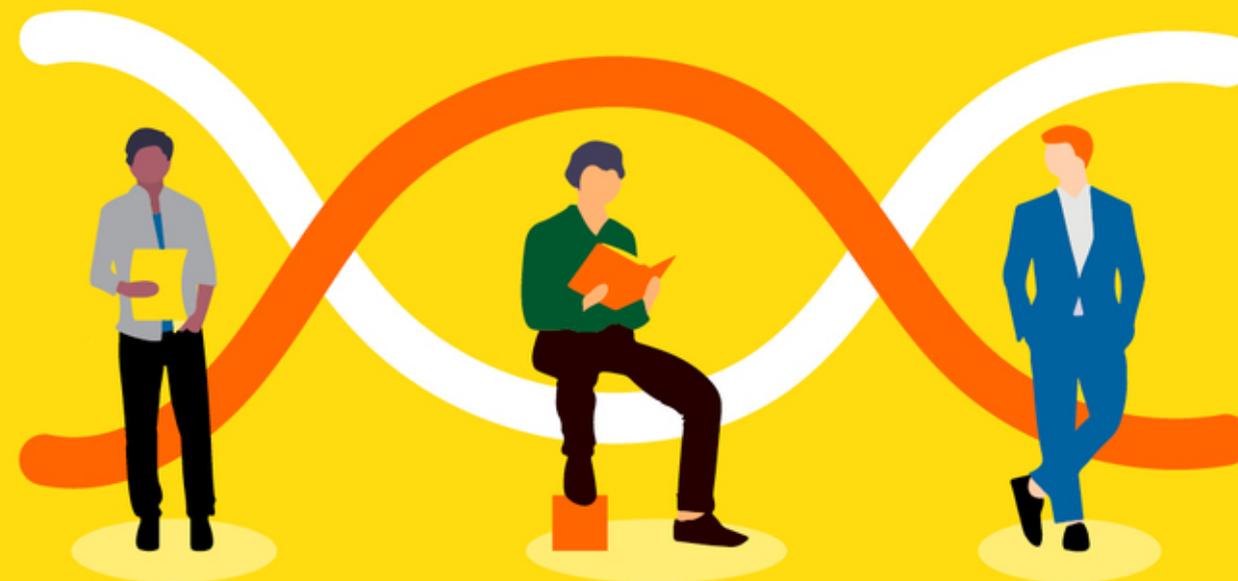


Governance information (G)

VTT is a reliable and responsible partner. Our research and business are guided by our uncompromising ethical principles: Impartiality, reliability, integrity and responsibility. In this section, we describe the principles of business conduct and research ethics at VTT.

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Business conduct

VTT's governance is based on compliance with laws and regulations, our own ethical principles and our voluntary commitments. We adhere to a high code of conduct in all our operations and require the same from our partners.

Our values are the cornerstones of VTT's culture



Material impacts, risks and opportunities

| Description | Impact, risk or opportunity | Time horizon | Target in the value chain |
|---|----------------------------------|---|---------------------------|
| VTT adheres to good governance in all areas, which has a positive impact on VTT's reliability. VTT also promotes good practices by means of its own example. (VTT has a strong emphasis in corporate culture and good governance due to the nature of its operations and funding.) | Actual positive impact, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |
| Providing research-based information to decision-makers and transparent political influence promote positive goals in society. | Actual positive impact, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |
| There is a risk of poor business contracts and failure in assessing project risk assessments or other business practices. | Potential risk, material | Short (1 year), medium (3–5 years) and long-term (+5 years) | Own operations |

Operating policies and corporate culture concerning business conduct

VTT is committed to a responsible and ethical conduct of business in all its activities. Its basic principles are described in the Code of Conduct document approved by VTT's top management. The Code of Conduct is a key part of VTT's compliance programme, to which all VTTers commit. Our corporate culture is influenced by VTT's values: respect, together, passion and forerunner and by VTT's ethical norms: impartiality, reliability, integrity and responsibility.

All VTT employers must complete the online Code of Conduct training course at least in every two years in accordance with the decision made by the Board of Directors. The course consists of a series of case exercises. The purpose of the training is to remind employees of the Code of Conduct so that they can identify potential hazards even in the middle of busy everyday work. In 2025, 100% of VTTers had completed the Code of Conduct training during the past two years.

The state of corporate culture is actively monitored at VTT. Risks related to operating principles and corporate culture are assessed as part of VTT's comprehensive risk management, and the necessary measures are decided in a risk-based manner annually.

VTT has a Whistleblower reporting channel for reporting suspected misconduct, and the procedure for processing reports submitted through the channel has been appropriately specified and described. VTT's Whistleblower channel and the processing of reports submitted through it comply with the provisions of the Directive of the European parliament and of the Council on the protection of persons who report breaches of Union law and the Act on the Protection of Persons Reporting Infringements of EU and National Law, which regulates the national implementation of the Directive.

The Whistleblower channel is available on VTT's website. Thus, persons outside VTT can also report suspected misconduct by VTT or a VTTer. Read more about the Whistleblower channel [here](#).

Relationships with suppliers

Taking care of supplier relations and managing supplier risks is something our stakeholders both assume and require from us. To manage risks, VTT uses the Know Your Supplier process, aiming to ensure that VTT's suppliers are reliable and comply with the laws and regulatory requirements.

All VTTs contract suppliers must accept VTT's Supplier Code of Conduct as part of the contract between VTT and the supplier.

VTT takes care of its relations with suppliers by meeting key contract suppliers annually or more frequently. With them, VTT goes through topical issues, feedback, purchasing volumes and issues related to developing cooperation and sustainability.

VTT is a contracting unit that must apply the Public Procurement Act. Under the Public Procurement Act, a contracting entity may decide to exclude a candidate, tenderer or subcontractor from the competitive tendering if they are subject to a mandatory or discretionary exclusion criterion, such as a final conviction for a violation of obligations under environmental law.

VTT's procurement organisation has at its disposal a responsibility tool (ESG tool) for procurements.

Prevention and detection of corruption and bribery

Combating corruption is part of VTT's Compliance Program and the related training. Code of Conduct training, which includes a section on corruption and bribery, is mandatory for the entire personnel at least every two years.

VTT's management is strongly committed to anti-corruption by ensuring sufficient resources for increasing corruption awareness, managing corruption

risks, investigating suspected corruption cases and holding perpetrators accountable for their actions. VTT combats corruption by ensuring adequate internal guidelines, organising training and monitoring compliance with the guidelines.

VTT has specified guidelines for anti-corruption activities and reporting that describe the practices for preventing and combating corruption. The guidelines highlight the key corruption risks for VTT's operations and define the responsibilities for preventing and combating corruption. The purpose of the guidelines is to engage the personnel in anti-corruption activities, promote the identification of corruption and transparency of decision-making, and improve VTT's possibilities of holding those involved in corrupt actions accountable.

VTT has a register of interests that is used in internal supervision, for example, to identify conflicts of interest. A report on material related-party transactions is submitted to the auditor annually.

Suspected cases of corruption are primarily reported through VTT's Whistleblower reporting channel, in which case the report is processed by an independent compliance committee. The personnel have been instructed to contact the line manager of the compliance function or internal auditor at a low threshold in case they suspect any kind of misconduct. VTT addresses suspected and detected corruption consistently, impartially and effectively.

Zero cases of corruption-related misconduct were detected in 2025.

Political influence and lobbying

As part of our expert role, we are active in setting direction for national and European RDI policy. Based

on our research and technology expertise, we provide knowledge to support decision-making.

VTT's political influence activities focus on RDI policy. Our key message for effective RDI policy in Finland is that Finland's economy will start growing through scientific breakthroughs and innovations based on them. The best value from increased R&D investment is achieved when we make strategic choices based on Finland's special expertise and competitive advantage, encourage the research sector and companies to increase their cooperation, and support research institutes in developing strategic competence and future capabilities.

Our message for a more competitive EU concerns the important role of RDI in delivering EU priorities. Our view is that the EU needs to substantially increase funding for the future Framework Programme for Research and Innovation. For the measures to be effective, particular attention should be paid to supporting the scaling up and commercialisation of research results and on how public funding can effectively encourage private R&D investments in Europe.

The message we are sending in our lobbying does not directly interact with the material impacts and risks we have identified in our double materiality analysis. However, we have identified several business opportunities related to RDI activities, such as growth opportunities in solutions aimed at mitigating and adapting to climate change.

VTT is registered in the Finnish Transparency Register (TEK-24-1081-R) and in the EU Transparency Register (registry number 549986317203-11).

Target set for business conduct:

| Target | 2025 | Target (2025) | Target (2030) |
|---|------|---------------|---------------|
| Reputation & Trust: "Open and transparent – fair in the way it operates" (three year rolling average) | 3.70 | 3.80 | 3.80 |

This indicator reflects VTT's reputation as a sustainable and responsible organization. The metric is the average score of the sustainability-related evaluations provided by our key stakeholders (scale: 1–5). Stakeholder trust in VTT has remained at the same level as in the previous year.

Research ethics

VTT is committed to upholding the highest standards of research ethics and research integrity across all its research activities. We continuously develop our practices to ensure that our operations meet ethical requirements and support a responsible research environment.

Material impacts, risks and opportunities

VTT's business model is based on high-quality applied research, in which ethical principles play a central role. As a research institute, our positive and potential negative impacts in relation to research ethics are derived directly from VTT's strategy and business model.

Our positive impact is based on trust and our commitment to upholding the highest standards of research ethics and national and international commitments. Research integrity (RI) and research ethics are at the core of our operations. We uphold these principles through our Code of Conduct and our strategic choice: "Always strive for sustainable business". We promote positive research ethics impacts in a goal-oriented manner in VTT's own operations as well as in networks, jointly funded projects and customer projects. The [prevention](#) of negative impacts associated with research ethics is also a key part of VTT's business.

VTT recognises that neglecting research ethics can have long-term and extensive impacts not only on our own business but also more broadly on society and on the environment.

Potential research ethics risks are taken into account as part of VTT's risk management, and actions to promote good research ethics play a key role in ensuring high-quality and reliable research. In a

changing operating environment, we actively monitor developments in ethical guidelines and standards, including research ethics questions related to the application of AI. Our goal is to respond to emerging risks in a proactive and agile manner in cooperation with expert communities and stakeholders.

Policies related to research ethics

In its double materiality analysis, VTT identified positive and negative impacts on research ethics as well as risks and opportunities associated with them. VTT's commitment to ethical and responsible research practices is described in our Code of Conduct. The Code of Conduct applies to all employees and has been approved by VTT's Board of Directors. In addition, VTT is committed to following the Research Integrity (RI) guidelines of the Finnish Advisory Board on Research Integrity (TENK):

"In Finland, for research to be ethically acceptable and reliable and for its results to be credible, the research must be conducted according to the Finnish Code of Conduct for Research Integrity (RI). In line with the European Code of Conduct for Research Integrity, the basic principles of research integrity in the Finnish Code of Conduct are reliability, honesty, respect and accountability.

Material impacts, risks and opportunities

| Description | Impact, risk or opportunity | Time horizon | Target in the value chain |
|---|----------------------------------|---|---------------------------|
| VTT is an ethical and trusted organisation in the research community, and we also disseminate good practices across the wider operating environment. | Actual positive impact, material | Short term (1 year), medium term (3–5 years) and long term (+5 years) | Own operations |
| Failure to comply with good research ethics will have negative impacts on the credibility of both VTT and its research. | Actual negative impact, material | Short term (1 year), medium term (3–5 years) and long term (+5 years) | Own operations |
| Failure to comply with good research ethics would have a negative impact on VTT's credibility, which also poses a financial risk. | Potential risk, material | Short term (1 year), medium term (3–5 years) and long term (+5 years) | Own operations |

Good research practices: Research integrity (RI) consists of good research practices that ensure that research integrity is maintained throughout the whole lifecycle of the research. Good research practices are therefore also part of the quality assurance of organisations belonging in the research community. Failure to comply with them can, at worst, lead to an alleged violation of research integrity and a possible RI process. In line with the European Code of Conduct for Research Integrity, good research practices can be linked to eight areas of research activity: 1) the research environment, 2) training, supervision and mentoring, 3) research procedures, 4) safeguards and agreements, 5) data practices and management, 6) collaborative working, 7) authorship, publishing and dissemination, and 8) reviewing and evaluating".

The European Code of Conduct for Research Integrity, or the so-called ALLEA code, binds research partners involved in European EU-funded cooperation projects.

In practice, the ALLEA code is consistent with the RI guidelines, but the RI guidelines also contain instructions for processing suspected RI violations.

Actions and resources to promote research integrity

VTT requires all research employees and research support personnel to complete a mandatory research ethics course, which is regularly updated and renewed. Employees are also offered training sessions, workshops, guidance, and instructions on research ethics and responsible practices. The integration of responsibility and ethical considerations is being developed further as part of VTT's processes and tools, including the design of the new project management system.

In 2025, researcher workshops, information sessions, and clinics were organised to support this work. In addition, a Sustainability & Ethics channel was launched in the Help service portal to make it easier for employees to seek advice.

Responsibility for research ethics lies with the Manager of Responsible Research and Innovation. VTT also has an Ethics Committee, which promotes compliance with good scientific practice and, when necessary, issues statements on non-medical research. Ethical pre-assessment is based on the principles set out in TENK's guidelines on good scientific practice.

Each business area has its own designated support person for good scientific practice, who provides confidential advice on related matters. The support network is coordinated by the Manager of Responsible Research and Innovation.

Targets related to research ethics

VTT has identified potential negative impacts, risks and opportunities in the field of research ethics. To maximise positive impacts and minimise negative impacts, we have set results-oriented goals for research ethics. The goals follow TENK's guidelines on research ethics and VTT's Code of Conduct.

Our goal is:

- All of VTT's research is always ethical and we promote responsible conduct with our work.

We strengthen responsible practices through our work. Achieving this goal is monitored by means of an indicator based on the customer survey, the completion rate of research ethics training courses, and the number of violations of established good research practices.

| Target | 2025 | Target (2025) | Target (2030) |
|--|------|---------------|---------------|
| ASVA survey: "Was a high level of research ethics implemented in the project?" (three years rolling average) | 4.57 | 4.5 | 4.5 |
| Valid completion of the e-learning course in research ethics % | 85% | 85% | 90% |
| Established RCR (Responsible Conduct of Research) violations | 0 | 0 | 0 |

4.57

High research ethics were realised in projects*

*Customer impact survey on the scale of 1–5

85%

Percentage of VTTers who have completed the research ethics course

0

RI violations detected



bey⁰nd

the obvious