



Observations for a better world

Annual Report 2022

VAISALA

Observations for a better world

Through measurements, we build a more sustainable future and help to fight climate change. Our technology works on two planets.





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Product and technology leadership, from our own sensor technology to digital solutions, is a key success driver in Vaisala's strategy. **p. 7**



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About this report:

In its Annual Report, Vaisala applies the Integrated Reporting Framework, as defined by the International Integrated Reporting Council (IIRC). The primary purpose of an Integrated Report is to describe how a company creates value over time. We started our work towards this goal in 2016: this Vaisala Annual Report is the seventh one to apply the International Integrated Reporting <IR> Framework. Our aim is to develop our operations by exploring the

different types of value Vaisala creates for its stakeholders. Thus, this comprehensive report includes information about Vaisala's value creation, sustainability, governance, and financials. Vaisala has published standalone sustainability reports since 2008.

This report caters also to those who gather data from GRI (Global Reporting Initiative) reports. You can find the GRI content index at

the end of the Sustainable business practices section together with an Independent limited assurance report. Disclosure of non-financial information in accordance with Finnish Accounting Act chapter 3 a is presented in the Sustainable business practices section as well as in the chapters Business model in Our business section, Dashboard in the Creating value section, and Risk management in the Governance section.

How to navigate this report:

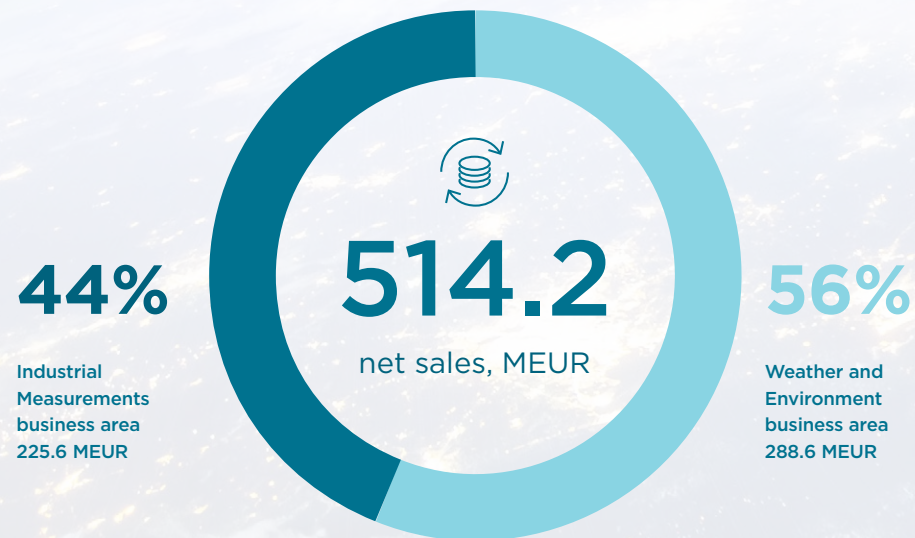
Read more about this topic



Vaisala in 2022: cutting-edge technology and sustainable growth

In 2022, we helped our customers to solve global challenges, such as climate change mitigation and adaptation. During the year, we also received recognition for our sustainability actions.

Despite the challenging global market situation, we excelled. Our investments into product development and scalable business support sustainable growth.



Key figures for 2022



62.5

operating result, MEUR

R&D **12%**
of net sales



100%
renewable electricity



2,200+
employees



4.2/5
employee engagement rate



Operating all over the world




25+
 offices


17
 countries

AMERICAS

 **37%**
 of net sales

 **350**
 employees

APAC

 **31%**
 of net sales

 **173**
 employees

EMEA

 **32%**
 of net sales

 **1,712**
 employees



Committed to sustainable development and technology leadership

The year 2022 has been marked by turbulence and uncertainty. The COVID-19 pandemic continued, energy and component shortage caused challenges globally, inflation increased, and above all, Russia's military attack against Ukraine shocked us all. As the war is against everything we stand for, Vaisala ceased all its business in Russia and Belarus as of early March.

2022 was a year of record growth for Vaisala. We succeeded well in meeting our customers' needs in all markets despite a challenging market environment and a shortage of components.

Sustainability and climate commitment at the core of Vaisala

In addition to facing a tough business environment, the global climate situation continued to be ever more alarming. The impacts of climate change are being felt across the globe. We continued working towards our purpose *Observations for a better world*, enabling our customers' business-critical operations and decisions that help solve the great sustainability challenges of our time.

In March 2022, Vaisala committed to setting science-based targets to reduce greenhouse gas emissions, aligned with the requirements of the Science-Based Targets initiative (SBTi). The aim is to set targets to decrease Vaisala's direct Scope 1 and especially indirect Scope 3



Chair of the Board Ville Voipio and
President and CEO Kai Öistämö



emissions by 2030. During the year, we calculated the full greenhouse gas inventory of our emissions and built a better understanding of the emissions in the entire value chain. In 2023, we will formulate the emissions reduction targets and roadmap, focusing especially on our products' energy consumption and the supply chain emissions. Our aim is to get SBTi validation for the targets by 2024.

Vaisala's business is at the intersection of multiple global megatrends that are tightly intertwined with the United Nation's Sustainable Development Goals (SDGs). In 2022, we continued integrating the Sustainable Development Goals to our strategic planning and product development. We continue our commitment to the UN Global Compact initiative and its 10 principles regarding human rights, labor standards, environment, and anti-corruption.

Once again, our sustainability work gained outstanding recognition. Vaisala was ranked fifth in the Financial Times list of *European Climate Leaders 2022*. We also received the *Carnegie Sustainability Award* acknowledging both our sustainable business practices and the positive handprint of the business, generated by our products. Moreover, *Sustainalytics* assessed our ESG Risk Rating to be 9.7 (negligible risk), placing Vaisala in the 2nd percentile in the electronics equipment industry.

Building success upon technology leadership and innovation

Product and technology leadership, from our own sensor technology to digital solutions, is a key success driver in Vaisala's strategy. To further improve our market leader position and meet the needs of a sustainable future, our high investments into research and development continued. In 2022, these investments made up 12% of our net sales.

During the year, we launched several new products both in Weather and Environment as well as Industrial Measurements business areas. We also took action to accelerate the growth of Vaisala's weather and environmental data business. In January, we closed the acquisition of US-based software company AeriWeather providing comprehensive weather data for a wide range of industries. In September, we launched Vaisala Xweather, a suite of Solution as a Service and Data

as a Service services providing real-time and hyperlocal weather and environmental data.

Engaged and diverse talent makes our future

Talented and engaged employees are vital to drive growth and innovation. In 2022, we also grew in terms of our number of people, welcoming a total of 357 permanent colleagues. Navigating in the new hybrid work environment, we have focused on finding the best working conditions for our employees to innovate and collaborate, while managing a healthy work-life balance.

As we are dedicated to being a great place to grow for brilliant minds, it is important that we keep fostering an inclusive community where everyone feels that they belong. For this, diversity, equity, and inclusion (DEI) are an integral part. During 2022, we finalized our diversity, equity, and inclusion strategy and set ambitious targets for increasing diversity. The strategy is realized on four levels, ranging from a compelling vision and building awareness to practical processes and quantitative key performance indicators.

Solving challenges together

The year 2023 will see a continued need for accelerated climate action, and the uncertainty in the business environment remains. In this context, it is more important than ever to work together to solve the great challenges of both today and tomorrow.

Successfully closing this year and entering a new one, we want to thank our employees, customers, partners, and other stakeholders for the invaluable contribution and collaboration in 2022.

Together with all of you, we look forward to continuing our journey towards a more sustainable future.

Ville Voipio
Chair of the Board

Kai Öistämö
President and CEO



In Vaisala, advancing diversity, equity, and inclusion (DEI) is important from the points of view of employee well-being, attracting new talent, and creating new innovations, for example. In 2022, we launched our DEI strategy, which creates the foundation for systematic development work and multi-level activities to ensure an inclusive work community.



Highlights 2022

Q1

We accelerated our recurring revenue business by acquiring the US-based software company AerisWeather. By combining Vaisala's weather measurement and forecasting technologies with AerisWeather's data services and developer tools, we offer our customers comprehensive subscription-based weather and environmental data.

 [Read more vaisala.com/annualreport](https://vaisala.com/annualreport)



We launched the new Vaisala TMI110 Temperature Transmitter for cooling systems in data centers. It helps our customers to optimize temperatures in energy-hungry data centers. There even the smallest fluctuation in cooling temperature can have a significant impact on the overall running costs and the environment.

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We provide Volkswagen Group with their global infotainment weather service to enhance driver safety and experience. This service is fully integrated into the in-vehicle digital experience allowing drivers to easily discover precise weather data and plan their routes, for example.

 [Read more vaisala.com/annualreport](https://vaisala.com/annualreport)

Vaisala's Board of Directors changed the name of its Remuneration and HR Committee to People and Sustainability Committee. The Committee focuses on long-term development regarding employees and sustainability, adding sustainability to the top management's targets.

 [Read more vaisala.com/annualreport](https://vaisala.com/annualreport)

As part of our climate action, we committed to setting science-based targets aligned with the requirements of the Science-Based Targets initiative (SBTi). The commitment includes decreasing our direct Scope 1 and especially indirect Scope 3 emissions by 2030.

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Q2

We were recognized for our industrial design. Our Indigo handheld instrument received an honorary award in one of the most prominent design competitions in Finland, the Fennia Prize 2022.

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We ranked in the top five of Financial Times' Climate Leaders 2022 list. The list includes 300 European companies that achieved the greatest reduction in their greenhouse gas (GHG) emissions between 2015 and 2020, and Vaisala achieved fifth place.

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We launched our cutting-edge C-band Weather Radar WRS300

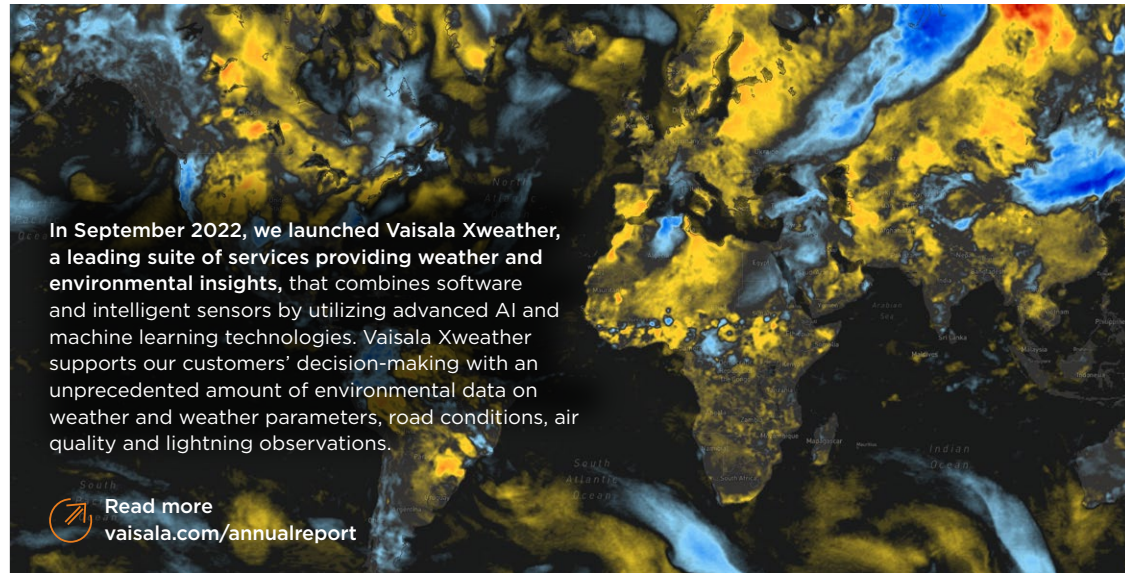
for high-performance weather surveillance and smart early-warning decisions. As the most efficient radar of its kind, it enables weather detection across large areas with unprecedented longevity.

 [Read more vaisala.com/annualreport](https://vaisala.com/annualreport)





Q3



In September 2022, we launched Vaisala Xweather, a leading suite of services providing weather and environmental insights, that combines software and intelligent sensors by utilizing advanced AI and machine learning technologies. Vaisala Xweather supports our customers' decision-making with an unprecedented amount of environmental data on weather and weather parameters, road conditions, air quality and lightning observations.

 [Read more
vaisala.com/annualreport](https://vaisala.com/annualreport)

We launched a hyperlocalized Air Quality Forecast that delivers high-quality data for air quality management in cities. The solution provides unmatched hyperlocal insights that empower city authorities to protect communities to make them more resilient to environmental challenges.

 [Read more
vaisala.com/annualreport](https://vaisala.com/annualreport)



We celebrated 10 years of Martian measurements. NASA's Curiosity rover landed on the planet Mars in August 2012 with Vaisala's humidity and pressure sensors onboard. Since then, it has provided unique measurement data to researchers around the globe.

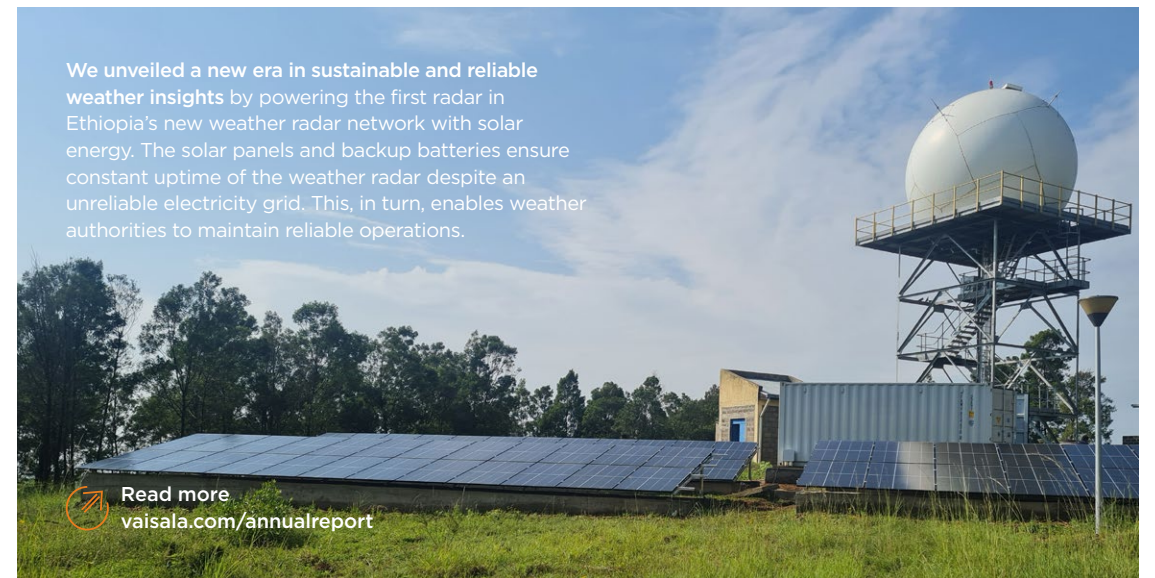
 [Read more
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Q4



Vaisala's innovative MGP261 biogas measurement instrument won Instrumentation Excellence Awards competition in the UK. The groundbreaking instrument is used to optimize biogas production. With this instrument, biogas plants are able to enhance the production and improve the quality of biogas.

 [Read more
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We unveiled a new era in sustainable and reliable weather insights by powering the first radar in Ethiopia's new weather radar network with solar energy. The solar panels and backup batteries ensure constant uptime of the weather radar despite an unreliable electricity grid. This, in turn, enables weather authorities to maintain reliable operations.

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Our business

- 11** Megatrends
- 13** Strategy
- 15** Business model
- 16** Industrial Measurements business area
- 18** Weather and Environment business area
- 20** Operations





Our innovations have an impact at the intersection of megatrends

Various global megatrends are transformational shifts that provide both a source of innovation and opportunities for growth for Vaisala. Of the many megatrends where Vaisala plays a key role, the most strategic ones for Vaisala are climate change, renewable energy, resource efficiency, as well as well-being and health. Together with our customers, we create solutions to the pressing societal, environmental, and industrial needs and challenges posed by these megatrends.

Vaisala's solutions help the world to adapt to the urgent climate change challenge and to mitigate the impacts through resource efficiency and our focus on renewable energy. The energy shortage due to the world situation in 2022 also created an increased need for renewable energy and efficient use of the available energy.

Reliable measurements and observations play a key role in understanding and mitigating climate change as well as adapting to its impacts.



CLIMATE CHANGE

Climate change is one of the most significant challenges humankind has faced. It increases the frequency and magnitude of extreme weather events, driving chains of societal, environmental, and economic effects. By optimizing the processes with the data provided by our measurement instruments, our industrial customers can reduce their energy consumption and emissions. We help customers to build capabilities to understand, mitigate, and adapt to changing conditions, as well as improve their understanding of their environmental footprint. With first-rate environmental observations, forecasting, and early warning systems, societies and institutions can become more resilient. In addition, we actively collaborate with the scientific community to increase understanding of climate change.

Reliable measurements and observations are critical in fighting climate change. For example, Vaisala will deliver to Ethiopia an observation and forecasting system that enables reliable warnings and weather forecasting services. This will help Ethiopia to become more resilient to climate change and minimize the impacts of extreme weather.

CASE



Vaisala's continuous monitoring system monitors critical environments of top US hospital

A prestigious hospital in the United States has been using the Vaisala viewLinc Continuous Monitoring System for several years to monitor environments that contain temperature-sensitive materials. These include applications such as processing labs, pharmacies, procedure rooms, operating rooms, as well as blood and tissue banks.

[Read more
vaisala.com/annualreport](https://vaisala.com/annualreport)



Megatrends

Strategy

Business model

Industrial Measurements business area

Weather and Environment business area

Operations



RENEWABLE ENERGY

Increasing the production of renewable energy is a pivotal way to mitigate climate change. The need for various forms of renewable energy is becoming ever more important in the face of the energy crisis. Our measurement technologies help to build and utilize wind and solar power plants even more efficiently. Accurate measurements enable our customers to select the optimal site for their wind parks, for example, and also monitor, predict, and plan operations. Weather observations and modeling can also be used to optimize the operations of hydroelectric power plants.

Biogas provides significant opportunities for industries and transportation. Our measurement instruments for biogas quality optimization and biomethane production help to generate more value from waste by enhancing the production process as well as decreasing costs and emissions. Our products enable also the optimal production conditions for fuel cells in the hydrogen economy.



RESOURCE EFFICIENCY

Resource efficiency – the efficient use of energy, water, and materials – advances the sufficient and sustainable use of natural resources globally. Our measurement instruments make production processes more efficient, improve productivity, as well as help to decrease the usage and loss of materials. Our instruments and hyperlocal weather forecasts enable energy companies to predict energy needs and thus to optimize energy production and distribution.

With our road weather solutions, transportation customers plan and allocate maintenance resources, such as fleet management, maintenance activities, and treatments during winter months, as well as assess the need for repairs in infrastructure across the network in real time. Also players in the field of aviation can operate more efficiently and decrease their unnecessary use of fuel.



WELL-BEING AND HEALTH

COVID-19 pandemic made it evident humankind must be able to develop medicines quickly and safely even in challenging conditions. The pandemic has also highlighted the importance of well-being and health in society overall. Our solutions are used to monitor the development, manufacturing, and supply chains of pharmaceutical drugs and vaccines, as well as the bio-decontamination process of spaces and equipment. Accurate and reliable condition monitoring is particularly important in laboratories and hospitals as well as in their cold storages and incubators.

Indoor and outdoor condition monitoring supports people's well-being and health. Our solutions monitor indoor air quality, for instance in public buildings and offices. Outdoors, our ambient air quality systems monitor urban environments and provide data for better decision-making, aiming at improving health and increasing the quality of life of citizens.

CASE



Vaisala supports climate research of Antarctica

Australia's icebreaker RSV Nuyina has been equipped with several solutions from Vaisala that help to advance marine and climate research in the Antarctic waters. One of the missions of RSV Nuyina is studying climate change in Antarctica so scientists can more accurately predict future impacts and provide information to policy makers and other stakeholders. Italian Antarctic Meteo-Climatological Observatory, in its turn, **uses Vaisala's ceilometer** to study the climate variability in the polar environment.

 [Read more about RSV Nuyina
vaisala.com/annualreport](https://vaisala.com/annualreport)



Strategy: measurements help to build a better world

The foundation for our strategy is our purpose-driven business, with technology leadership and sustainability at its core. Through these, we have a positive impact on our world's challenges. Vaisala is at the intersection of various global megatrends, which gives us an excellent position in the market, drives our strategy work, as well as offers opportunities for sustainable growth and innovation.

Our measurement technologies provide our customers with relevant data and better visibility into their processes helping them to make business-critical decisions.

The pillars of our strategy are science-based technology leadership, deep customer understanding and application knowhow, scalable business, as well as purpose-driven culture and talent. Sustainability is at the center of our strategy, and it is reflected in everything we do.

Customer understanding and application expertise

Our measurement solutions are based on a thorough understanding of our customers' needs in versatile applications from meteorology and renewable energy to industrial processes and life science. We continuously collaborate with our customers and partners to serve their measurement requirements better. The foundation of our business is our flagship businesses where we have a strong foothold. To keep our technology leadership position, we invest strongly in our growth markets that include both digital services and new technologies. In 2022, Vaisala's R&D investments were 12% of net sales.

Read more about our customer understanding in chapters Value for customers on page 27 and Value for society and the environment on page 31.

Product and technology leadership

Product and technology leadership is at the core of our success. We make significant investments into R&D that provides opportunities for innovation throughout our business. Our high-quality and reliable technologies range from sensors to digital solutions, which allows us to serve our customers comprehensively.

Read more about our products and technologies in chapters Industrial Measurements business area and Weather and Environment business area on pages 16 and 18.

Scalable business model

Our offering includes hundreds of product families and thousands of products, and we serve customers through our various sales channels in over 150 countries. Different applications require different products and solutions, which is why our products are almost always made to order. All this requires operational excellence, supported by our ways of working that have been developed accordingly, and our scalable product platforms. By streamlining, we can make our operations more agile and flexible as well as achieve sustainable and profitable growth.

Read more about how we manage our high mix and low volumes in the chapter Operations on page 20.

Purpose-driven culture and talent

Our motivated and talented employees are one of the key factors behind our success. Our values, purpose, and sustainability motivate our employees. In 2022, we kicked off an internal culture development program to ensure that the well-being of our people, meaningful growth opportunities, as well as a diverse and inclusive community will support our business and our positive impact on the planet also in the future.

Read more about our people and employee matters in chapters Value for employees on page 29 and Employees on page 54.



Megatrends

Strategy

Business model

Industrial Measurements business area

Weather and Environment business area

Operations

MEGATRENDS

Climate change

Renewable energy

Resource efficiency

Well-being and health

Observations for a better world

SUCCESS DRIVERS



Product and technology leadership from sensors to digital solutions



Scalability in high-mix, low-volume businesses



Deep customer understanding and application knowhow



Purpose-driven culture and talent

VAISALA

We provide the world's most reliable measurements where it truly matters.

We actively seek sustainable growth by solving business-critical challenges, aiming to be #1 in selected markets.

VALUES

Customer focus | Innovation & renewal | Strong together | Integrity



Megatrends

Strategy

Business model

Industrial Measurements business area

Weather and Environment business area

Operations

Business model at the core of leading technologies

Partners

- Key customers
- Meteorological institutes
- Distributors
- R&D partners
- Universities and research organizations
- Manufacturing partners
- Suppliers and subcontractors

Functions

- Research and development
- Sales and marketing
- Sensor production
- Manufacturing

Delivery models

- Product shipments
- Projects, including installations, testing, and training
- Digital solutions (Daas/Saas)
- Services, i.a. calibration, maintenance

Products and technologies

- Wide and leading product portfolio based on proprietary technologies and application expertise
- Measurement sensors and instruments, systems, software, digital solutions, and services for measuring weather, environmental, and industrial conditions and processes
- Thin-film sensors, optical weather and process sensors, and radio frequency technologies
- 300 product families include approximately 9,000 products.

Cost structure

- R&D investment 12% of net sales
- Personnel costs MEUR 190.4
- Material costs MEUR 143.6
- Asset-light business model
- Capital expenditure MEUR 13.7

VAISALA

Value propositions

Reliable, high-quality measurements and observations for decision-making, safety, and efficiency

Global technology and market leader in weather, environmental, and high-end industrial measurements

Excellence in high-mix, low-volume businesses

Solid dividend payer

Resources

- Product and technology leadership
- Application knowhow
- Engaged and talented employees
- Vaisala Production System
- In-house cleanroom
- Strong financial position

Sales channels

Direct global sales

- Sales employees in **approx. 20** countries
- E-commerce

Distribution network

- Distributors and agents in over **100** countries
- Retailers

Customers in over **150** countries

Revenue streams



Customer segments

Wide customer base covering public and private sector customers



INDUSTRIAL MEASUREMENTS BUSINESS AREA

High-end humidity
High-end carbon dioxide
Life science
Liquid measurements
Power and energy



WEATHER AND ENVIRONMENT BUSINESS AREA

Meteorology
Aviation
Roads
Renewable energy





We help to curb energy consumption, advance resource efficiency, and reduce emissions

Industrial Measurements business area serves customers in selected industrial applications. The business area's measurement instruments and solutions provide customers with reliable and accurate data that helps them to optimize their processes profitably while decreasing their environmental footprint.

The business area has a strong position in high-end humidity and carbon dioxide measurement markets. Additionally, its key growth markets are life science, liquid measurements, as well as power and energy.

Industrial Measurements' business is growing strongly. The growth is based on continuous investments into research and development, such as expanding the product portfolio to cloud-based measurement solutions. In addition, we put focus on strengthening customer experience and service business.

Product categories

- **Industrial instruments:** The product area serves numerous applications in various industries, for example in the pharmaceutical, food, as well as electronics and semiconductor industries. Key products include instruments optimized for high-end humidity, dew point and carbon dioxide measurements, and hydrogen peroxide vapor measurements.
- **Continuous monitoring systems:** The key applications are strictly regulated manufacturing and production environments, such as laboratories, cleanrooms, and warehouses, as well as other industrial applications where cloud-based remote monitoring provides added value. The product area includes measurement instruments for temperature, humidity, carbon dioxide, differential pressure, and other critical parameters, as well as monitoring software for local and remote use.
- **Liquid measurements:** The key industries are, for example, the semiconductor, chemical, food, as well as pulp and paper industries. The process refractometers developed for industrial applications measure dissolved solids in liquids.
- **Power and energy:** The product area serves the development of the energy sector by offering measurement solutions for power and biogas industries. The key products are the DGA monitors developed for continuous monitoring of power transformers and instruments for biogas and biomethane production optimization.

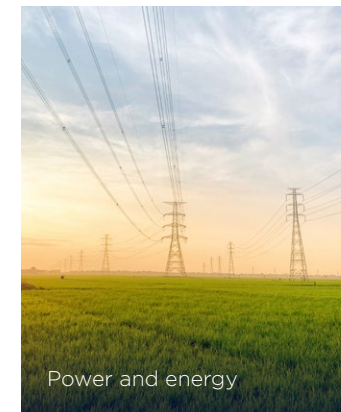
Main markets



High-end humidity



High-end carbon dioxide



Power and energy



Liquid measurements



Life science



Megatrends

Strategy

Business model

Industrial Measurements business area

Weather and Environment business area

Operations

We help customers to improve

- product quality
- productivity
- energy efficiency
- maintenance activities
- regulatory compliance

We partner with

- end-users
- original equipment manufacturers
- integrators
- distribution network
- research and development partners
- manufacturing partners and suppliers

Our competitive advantages are

- science- and research-based technology leadership combined with strong application expertise
- best customer experience
- fast delivery times
- global sales and services network

Global market sizes and growth

Flagship markets

900-1,100 MEUR, CAGR 6% p.a.

High-end humidity

High-end carbon dioxide

Growth markets

600-700 MEUR, CAGR 5-10% p.a.

Life science

Power and energy

Liquid measurements



Our mission is to support our industrial customers in developing and maintaining sustainable and profitable business. Thanks to the data insights provided by our measurement solutions, our customers can improve their process efficiency, product quality, productivity, and yield, while reducing energy consumption and emissions at the same time. This mission has worked successfully during the past year, as we saw excellent growth in every product area within the Industrial Measurements business area.

Sampsa Lahtinen

EVP, Industrial Measurements business area



We grow strongly in renewable energy and help to combat climate change with new weather data services

The customers of Weather and Environment business area focus on people’s safety, protection of property, sustainability, and efficient processes, utilizing reliable measurements and decision support systems in all weather conditions. The customers include, among others, meteorological institutes, airports, road operators, and energy companies.

Weather and Environment business area strives for profitable growth by expanding its product and decision support systems portfolio. The main markets are meteorology, aviation, roads, and renewable energy. The business area seeks growth in large meteorological infrastructure projects, new customer segments, environmental measurements, and especially software and data services, such as the launch of Vaisala Xweather, a suite of services providing weather and environmental insights in 2022.

Product categories

- Radiosondes and sounding systems
- Pressure, temperature, and humidity sensors as well as wind sensors
- Visibility and present weather sensors
- Ceilometers
- Remote wind sensing instruments
- Lightning sensors
- Weather stations
- Weather radars
- Air quality sensors
- Road state sensors

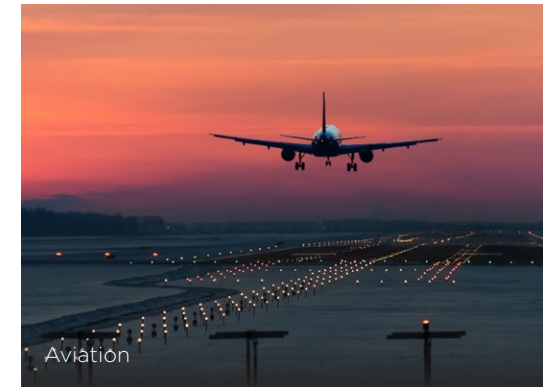
Decision support systems and data for

- Transportation
- Lightning observations
- Renewable energy
- B2B weather services
- Air quality
- Automotive

Growth through expansion

- Large meteorological infrastructure development projects
- Solutions for organizations in renewable energy
- Decision support systems, IoT measurement instruments, as well as weather and environmental data

Main markets





Megatrends

Strategy

Business model

Industrial Measurements business area

Weather and Environment business area

Operations

We help our customers to

- prepare for increasing extreme weather events
- ensure the functionality of critical transportation infrastructure
- enhance the production of growing renewable energy
- optimize weather-dependent commercial operations
- make well-informed decisions

We partner with

- customers
- meteorological institutes
- governmental organizations
- universities
- research organizations

Our competitive advantages are

- technology leadership based on science and application knowhow
- integrated solutions from sensors to analytics
- based on being a reliable partner throughout the entire life cycle of products

Global market sizes and growth

Flagship markets

MEUR 750–850, CAGR 0–5% p.a.

Meteorology

Aviation

Road winter maintenance

Growth and emerging markets

600–700 MEUR, CAGR 5–10% p.a.

Renewable energy

Weather & air quality in cities and industries

Road asset management & Automotive



Vaisala Xweather, launched in September 2022, is a leading weather forecast and observation suite of services, combining intelligent sensors and software as well as utilizing the latest artificial intelligence and machine learning technologies. Vaisala Xweather services provide an unprecedented amount of environmental information on, for example, road conditions, air quality, weather, and lightning to support our customers’ decision-making.

Jarkko Sairanen

EVP, Weather and Environment business area



Operations: delivery capability at high level

Operations organization manufactures Vaisala’s products in high-mix, low-volume business. The management of a large product portfolio without compromising quality or efficiency has always been Vaisala’s core strength. The basis lies in Vaisala Production System.

The threefold Vaisala Production System incorporates a Lean management system, systematic improvement, as well as standardized processes and production technologies. In addition, Operations is guided by strategic choices: in-house manufacturing of key technologies and partnership-based sourcing.

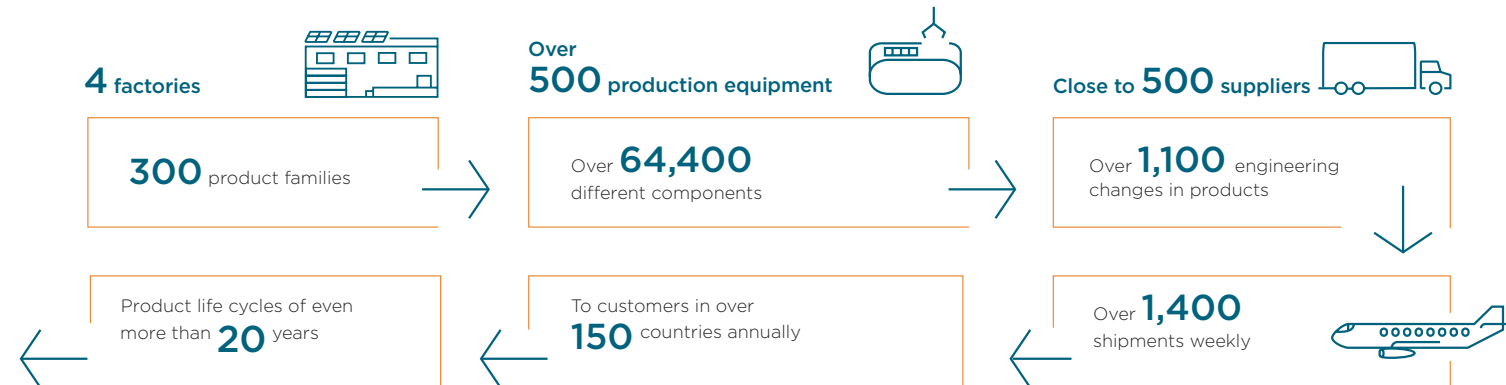
Operations focus areas in 2022

In 2022, Operations focused specifically on ensuring component availability in the global component shortage. We also invested in the renewal of our Enterprise Resource Planning system. We also successfully continued to improve the quality of the supply chain and added manufacturing capacity focusing on the highest growing products.

The strategic development areas in 2022 were

- supply chain quality improvement
- improving the product development process together with research and development
- Smart Factory project for identifying and adopting new technologies

Operations in numbers 2022



In 2022, we achieved great success despite facing delivery challenges. We met our customers’ delivery schedule requirements while maintaining a high level of delivery capability. Additionally, we were able to reduce quality errors in manufacturing, in line with our strategy.

Throughout the year, we refined our Operations strategy, identifying key areas for strategic development. Our priorities include enhancing supply chain quality, enabling faster growth for Vaisala, increasing the capacity and manufacturability of our sensor factory, standardizing manufacturing technologies, improving and optimizing manufacturing methods and manufacturability design capabilities, as well as establishing a smart factory that leverages automation and data.

Vesa Pylvänäinen
EVP, Operations

Creating value

- 22** UN Sustainable Development Goals
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UN Sustainable Development Goals accelerate business

In 2022, we continued developing our business and practices in line with the UN Sustainable Development Goals that are the most relevant for Vaisala. Solutions that benefit society and the environment have always been at the core of our business. Integrating the goals to our strategy work helps us to better assess our impacts on sustainable development and get inspiration for developing new business and sustainable practices.

Sustainable solutions

Industrial Measurements business area

UN sustainable development goal (SDG)	The most relevant UN SDG targets for Vaisala	Vaisala's solutions	Read more
	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes.	Improving resource efficiency with industrial measurement solutions Fact: By using inline Vaisala refractometer, a dairy customer reduced waste by two thirds.	Megatrends: Climate change, Resource efficiency Value for customers: Reliable decisions Value for society and the environment: Resource efficiency
	7.2 By 2030, increase the share of renewable energy in the global energy mix substantially. 7.3 By 2030, double the global rate of improvement in energy efficiency.	Improving energy efficiency in buildings and industrial processes Optimizing biogas production and upgrading process Fact A customer decreased its natural gas consumption by 20% by using Vaisala's probes in its drying process of gypsum plaster blocks.	Megatrends: Renewable energy Value for customers: Productivity Value for society and the environment: Resource efficiency
	3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all.	Monitoring development and manufacturing in regulated industries like life science Fact All of the 50 largest pharmaceutical companies globally use Vaisala's measurement technology.	Megatrends: Well-being and health Value for customers: Quality Value for society and the environment: Better-informed societies

Weather and Environment business area

UN sustainable development goal (SDG)	The most relevant UN SDG targets for Vaisala	Vaisala's solutions	Read more
	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries. 13.3 Improve education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning.	Increasing understanding of and adopting to extreme weather Fact Vaisala's radiosondes cover over 70% of the radiosondes used in the Global Climate Observing System (GCOS) Reference Upper-Air Network (GRUAN). GRUAN is an international network of research sites that aims to improve understanding of climate change.	Megatrends: Climate change Value for customers: Productivity, Quality Value for society and the environment: Better-informed societies; Safety
	7.2 By 2030, increase the share of renewable energy in the global energy mix substantially. 7.3 By 2030, double the global rate of improvement in energy efficiency.	Optimizing wind and solar power production Fact ENGIE Green has increased the Annual Energy Production (AEP) by 3% on average in wind turbines using Vaisala's WindCube Nacelle.	Megatrends: Renewable energy Value for customers: Reliable decisions
	11.2 By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all. 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality.	Improving the safety and sustainability of transport systems Monitoring ambient air quality Fact Vaisala's air quality sensors have been delivered to 60 countries.	Megatrends: Resource efficiency, Well-being and health Value for society and the environment: Resource efficiency



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Sustainable business practices

UN sustainable development goal (SDG)	The most relevant UN SDG targets for Vaisala	Vaisala's business practices	Indicators	Read more	UN sustainable development goal (SDG)	The most relevant UN SDG targets for Vaisala	Vaisala's business practices	Indicators	Read more
<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>12.2 By 2030, achieve the sustainable management and efficient use of natural resources.</p> <p>12.4 Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water, and soil in order to minimize their adverse impacts on human health and the environment.</p> <p>12.5 By 2030, reduce waste generation substantially through prevention, reduction, recycling, and reuse.</p>	<p>Design for environment and long product life cycles</p> <p>Enabling the safe use and end-of-life processing of products</p> <p>Increasing the recycling rate</p>	<p>% of employees working on ISO 14001 certified sites</p> <p>Recycling rate</p>	<p>Environment: Environmental management, Waste, Sustainable product design and management</p>	<p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<p>8.1 Sustain per capita economic growth in accordance with national circumstances.</p> <p>8.7 Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking, and by 2025 end child labor in all its forms.</p> <p>8.8 Protect labor rights and promote safe and secure working environments for all workers.</p>	<p>Positive economic impact on communities through direct employment and taxes, as well as through the supply chain</p> <p>Upholding labor standards and occupational health and safety as well as managing human rights risks in our own operations and partner network</p>	<p>Economic value generated and distributed</p> <p>% of suppliers rated with ESG metrics and suppliers that have signed the Supplier Code of Conduct</p> <p>Total Recordable Injuries rate (TRI), Proactive reports</p>	<p>Value for society and the environment: Economic value</p> <p>Ethics and compliance: Respect for human rights, Conflict minerals</p> <p>Responsible supply chains</p> <p>Occupational health and safety</p>
<p>7 AFFORDABLE AND CLEAN ENERGY</p>	<p>7.2 By 2030, increase the share of renewable energy in the global energy mix substantially.</p> <p>7.3 By 2030, double the global rate of improvement in energy efficiency.</p>	<p>Using renewable electricity</p> <p>Improving energy efficiency in our facilities</p>	<p>% of renewable electricity</p> <p>Energy use and energy intensity</p> <p>Scope 2 emissions</p>	<p>Environment: Energy, Emissions</p>	<p>10 REDUCED INEQUALITIES</p>	<p>10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies, and practices and promoting appropriate legislation, policies, and action in this regard.</p>	<p>Promoting diversity and providing equal opportunities, for example, in recruitment and development</p>	<p>Diversity indicators, such as gender distribution</p> <p>Equality in remuneration</p> <p>Diversity, equity, and inclusion index</p>	<p>Value for employees: Well-being</p> <p>Employees: Diversity, equity, and inclusion</p>
<p>13 CLIMATE ACTION</p>	<p>13.3 Improve education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning.</p>	<p>Decreasing indirect emissions</p> <p>Raising awareness of climate change and encouraging employees' climate-friendly choices</p>	<p>Scope 3 emissions</p>	<p>Environment: Environmental management, Energy, Emissions</p>	<p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p>16.5 Reduce corruption and bribery in all their forms substantially.</p>	<p>Ensuring compliance with our International Anti-Corruption Policy</p>	<p>% of employees completed the Code of Conduct training</p>	<p>Ethics and compliance: Prevention of corruption and bribery</p>



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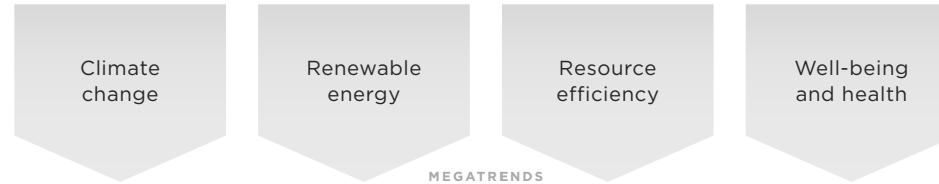
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Value creation model: we create value for various stakeholders

We create value in continuous interaction with our stakeholders. Our business leaves a positive handprint on society especially through our customers.

Our measurement solutions empower our customers to make informed decisions and optimize their productivity and processes in the areas of weather and environment as well as industrial measurements. By doing so, we can have a positive impact at the intersection of multiple megatrends and contribute to the UN Sustainable Development Goals by increasing awareness, resource efficiency, and safety in societies.





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Dashboard: key figures of our value creation

Our fundamentals	Topic	Performance 2022	Target
Product and technology leadership Application knowhow	R&D investments, % of net sales	12% (13%)	Over 10% of net sales
	Employee engagement index	4.2/5 (4.1/5)	> 4.0/5
Engaged and talented people	Learning index	3.9/5 (3.8/5)	> 4.0/5
	DEI index	4.2/5 (4.1/5)	4.3/5
Vaisala Production System Partnerships	On-time delivery accuracy (OTD)	91.5% (91.9%)	95%
	Net sales growth year-on-year	17% (15%)	7% growth year-on-year
Strong financial position	EBIT % of net sales	12.2% (11.5%)	15%
	Return on equity (ROE)	18.7% (18.1%)	
	Earnings per share (EPS), euros	1.24 (1.08)	
Sustainability	Greenhouse gas emissions (Scope 1-3) in relation to net sales	148 tonnes CO ₂ e/ MEUR (165 tonnes CO ₂ e/ MEUR)	Continuous reduction
	Waste recycling rate	66% (55%)	60% by 2022
	Total recordable injuries rate (TRI)	4.7 injuries per million working hours (2.2)	Continuous reduction
	Suppliers scored for ESG metrics, % of spend	83% (90%)	> 85%



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Towards the future together with stakeholders





Our stakeholders influence the future of our business, and we work in an open and continuous interaction with them.

In 2022, meetings and communication with employees and other stakeholder groups were organized in a hybrid model: some were organized face-to-face and some in digital communication, sales, and marketing channels due to the COVID-19 pandemic. For instance, the Annual General Meeting was organized virtually, but some of the other investor and analyst meetings were organized face-to-face.

Customer focus is one of our core values, and during 2022, we took further actions to ensure superior customer experience. This development project, started in 2020, continued with active programs and engaging even more of our employees in the work.

We identify and evaluate our stakeholders by defining how they impact our company and by analyzing how our own operations impact them. We maintain continuous dialogue with our key stakeholders and actively look for partnerships and collaboration potential with customers, suppliers, academia, research companies, organizations, and other parties.

As part of our sustainability management, stakeholder engagement helps us identify and assess actual and potential impacts as well as develop our actions to manage these impacts. We interview our most important external stakeholders related to sustainability development at regular intervals. The previous stakeholder interviews were conducted in 2021. Stakeholders' feedback on Vaisala's sustainability work has been largely positive, confirming that Vaisala's sustainability actions are seen as effective. However, stakeholders' development suggestions are carefully assessed, and they have influenced Vaisala's decision to commit to setting science-based targets for climate emissions, for example.

	Description	Main activities
 <p>Customers</p>	<p>Thousands of private and public sector customers in more than 150 countries</p> <p>Distributors in more than 100 countries</p>	<ul style="list-style-type: none"> • Continuous development and management of customer relationships, e.g. in online channels, meetings, events, and exhibitions • Ongoing online surveys on customer trainings and field services operations as well as on technical support and services • Developing and enhancing customer experience further
 <p>Employees</p>	<p>Over 2,200 professionals globally</p>	<ul style="list-style-type: none"> • Learning and career development opportunities • Developing employee satisfaction and well-being • Active internal communication • Diverse remuneration models
 <p>Society and the environment</p>	<p>Universities and research collaborators, meteorological institutes, manufacturing partners and suppliers, supply chain workers, governments and regulators, local communities, non-governmental organizations, the media, and the public</p>	<ul style="list-style-type: none"> • Partnerships and collaboration with academic and scientific institutions • Scholarships and donations • Close cooperation with our global supply chain • Sharing expertise with external organizations and decision-makers • Raising awareness of environmental issues among experts and the public • Continuous improvement of media relations, press releases, and activity in social media
 <p>Owners and investors</p>	<p>Major shareholders include descendants of the founder Professor Vilho Väisälä, Novameter Oy, Finnish pension funds and other financial institutions, the Finnish Academy of Science and Letters, and private households. Ownership outside Finland and nominee registrations amounted to 21.3% of shares on December 31, 2022.</p>	<ul style="list-style-type: none"> • Quarterly result presentations and Q&A for investors, analysts, and the media • Annual General Meeting • Stock exchange releases • Roadshows, investor and analyst meetings and conference calls

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Creating value for customers

Vaisala's technologies and solutions help to safeguard life and property, while enabling decision-making that facilitates productive, efficient, and high-quality operations. By measuring the environment accurately, our customers can make more reliable decisions and ensure safer and more sustainable operations in any application area.

Reliable decisions

We enable our customers to make fact-based decisions with accurate measurements. For example, investments in wind energy are based on reliable data on wind conditions and wind farm performance. Our remote wind sensing solutions help customers to make profitable investments and decisions. In 2022, **Japanese Green Power Investment (GPI) installed** Vaisala's WindCube Scan Dual Lidar that provides accurate wind observations, helping to select the most productive sites for wind farms. **Vaisala's Environmental Monitoring System (EMS) in France** produces comprehensive weather data, helping to predict wind conditions and production.

With data provided by Vaisala's measurement instruments and solutions, industrial customers can optimize their processes. Humidity and carbon dioxide data help to adjust ideal growth conditions, for example, in primary food production, such as greenhouses. This way, end-product quality and optimal use of energy are ensured. In 2022, we wrote about the **significance of measurements in food production**, where **carbon dioxide measurements**, for instance, play an important role.





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Productivity


Vaisala’s solutions improve the cost efficiency of our customers’ operations, thus increasing productivity. Vaisala’s innovative and award-winning **MGP261 multigas instrument** for the optimization of biogas quality enables biogas plants to generate more value from waste by providing humidity, methane, and carbon dioxide data directly from the production process. The MGP262 instrument, in the same series, monitors the off-gas in the biogas upgrading process.

Vaisala’s automatic sounding systems enable flexible remote soundings, reducing costs. The systems make it possible to carry out automatic soundings for one month at a time, relieving resources for critical weather forecasts. Thanks to these sounding systems, national weather services can extend the coverage of their upper-air networks to geographically hard-to-reach locations.

Quality

High-quality products and services have always been at the core of Vaisala, but it is equally important to us that our customers can ensure the quality of their own end-products and operations with the help of our technologies and expertise. For example, Vaisala’s weather observing systems provide reliable and comparable observations that support precise weather forecasts and climate projects.

Accurate monitoring of industrial processes helps to guarantee high-quality products. For instance, in food, pulp, and pharmaceutical industries, liquid concentrations need to be measured in every batch to ensure consistent quality and compliance. The process refractometers, developed for industrial liquid measurements, provide our customers with continuous and accurate digital data on the liquid concentration and thus indicate end-product quality.

 Read more examples of how Vaisala creates value for customers at vaisala.com

CASE



Remote wind measurements in complex terrain in Croatia

Vaisala’s WindCube is helping Green Trust, a consultancy in all parts of the wind farm development chain, to get reliable wind measurements in Croatia. Green Trust is taking advantage of the WindCube’s flexibility to take measurements in more than one location and on higher levels than before. The data is accurate even in an area that is hilly, forested, and subject to powerful Bora winds.

 [Read more vaisala.com/annualreport](https://vaisala.com/annualreport)

CASE



Vaisala helps TKSAGE to monitor the bio-decontamination process

TKSAGE Technology Group offers its customers operating in the life science sector advanced bio-decontamination equipment. TKSAGE chose Vaisala’s durable and accurate HPP270 series probes as part of its bio-decontamination system, which is based on vaporized hydrogen peroxide. With the help of Vaisala’s instruments, TKSAGE has been able to improve the adaptability and stability of its bio-decontamination solutions.

 [Read more vaisala.com/annualreport](https://vaisala.com/annualreport)

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Creating value for employees

Vaisala offers versatile opportunities for talented and motivated professionals who value work with a purpose and continuous learning. We support the well-being of our people and want to make sure they have the chance to develop at work.

Purposeful work

Vaisala's products and solutions have a true positive influence on the environment, societies, businesses, and individuals, and our people are motivated by the opportunity to solve some of the challenges of our time. Sustainable and ethical behavior is an integral part of the values of both Vaisala and our employees. We invest in research and development, which guarantees that we can continue to respond to global issues also in the future as well as grow our business sustainably. This increases the meaningfulness of working at Vaisala.

Our annual employee survey was conducted in November 2022. The survey shows that Vaisala's people were engaged and proud of their work even during changes and remote work. The Engagement Index in the survey remained on a good level and was 4.2 on a scale of 1-5. The survey had a response rate of 80%, with answers from 1,746 employees.

In 2022, we kicked off an internal culture development program to ensure a purpose-driven and future-proof culture, based on meaningful work and supporting Vaisala's strategy and growth. The program started with employee interviews, which revealed our cultural strengths to be helpful colleagues, a supportive community, and world-class experts focused on quality. Some of the development areas identified were empowering employees in decision-making, learning and growth opportunities, as well as diversity and inclusion.





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Based on these findings, we implement actions to evolve our culture. For instance, we have made the decision-making structures less hierarchical and re-evaluated our people strategy. In addition, we have started to share more information with our employees about the Vaisala Leadership Team meetings and organized employee workshops to develop our ways of working. The culture work continues with workshops within teams and functions.

We focus on strong and inspirational leadership, and we support managers and experts systematically in developing their leadership skills by organizing training programs and courses. Based on the culture findings, we have also added new topics to our leadership trainings. In 2022, we continued training managers on change management and coaching skills. Also the Leadership Index remained on a good level and was 4.2 on a scale of 1-5. The key strengths of Vaisala managers are fairness and objectivity, ability to listen, as well as positive attitude towards initiatives.

Well-being

At Vaisala, well-being at work is regarded as a whole, including the work community, leadership, the company, and the individuals themselves. Thus, well-being consists of strong leadership, motivating and inclusive work community, balanced workload, meaningful work, as well as a safe working environment. As preventive measures, Vaisala promotes well-being and energy at work by supporting sports and recovery, providing occupational healthcare, and preventing problems early on.

With these preventive measures, we aim to support our people in managing their work, ensuring recovery, and maintaining a healthy lifestyle. In Finland, we provide our employees with sports and recreational clubs, sports and cultural benefit, company bike benefit, trainings on time management and recovery, as well as the opportunity to participate in a well-being analysis on stress and quality of sleep. In 2022, we also piloted the Auntie service that offers easily accessible discussion support in different life situations. In the United States, Vaisala FIT program supports the well-being of employees.

Employee well-being is measured regularly in Vaisala's employee surveys. The results show that Vaisala employees find their work meaningful and are proud to work for Vaisala. There is some room for development in ensuring that workloads are manageable. In November 2022, Vaisala Well-Being Index score was 4.0 on a scale of 1-5.

We continued our work to advance diversity, equity, and inclusion (DEI) as part of our culture work. DEI topics are essential for our business – not only for the benefits they bring for innovation but also for sustainability. As a sustainability leader, we see it as our responsibility to promote sustainable and fair work life, and we want to make sure that all Vaisala people feel well in their community. At the end of the year, we launched our new DEI strategy that forms the foundation for systematic development, versatile actions, and KPIs to ensure an inclusive community.

During the year, we organized various panel discussions and talks regarding DEI topics. DEI topics are also included in our employee survey, and the Diversity and Equity Index was 4.2 on a scale of 1-5. You can read more about the topic in the Sustainable business practices section, under the chapter Employees.

Learning and development

In addition to cutting-edge technologies, Vaisala's competitive strength stems from our talented, engaged, and purpose-driven people. Changes in the business environment, technologies, ways of working, and tools require our employees to learn and take in new things continuously.

Future of Work program, which was established in 2021, is a part of the culture work. It develops hybrid work models supporting work and learning. Within this program, we offered engaging and motivating events to inspire growth and development during the year, such as global stream of Nordic Business Forum.

We support our employees in actively developing and maintaining their expertise and knowledge. Managers play a key role in enabling and supporting learning, and it is the responsibility of all managers to plan development and learning activities together with their

CASE

Vaisala celebrated EU's Diversity Month in May

May 2022 marked the European Diversity Month. Vaisala participated in the celebration with a few internal activities. These included a coffee chat with President and CEO Kai Öistämö as well as a panel discussion moderated by an external speaker and organized with Vaisala people, to reflect on multicultural backgrounds in technology. In June, we also organized a keynote presentation regarding sexual and gender minorities at work.

 [Read more
vaisala.com/annualreport](https://vaisala.com/annualreport)

teams. Developing expertise and knowledge is always in line with Vaisala's values as well as our business needs and objectives. Defining competence development needs is part of the annual People Forum process.

Vaisala Learning Index, derived from the employee survey, was 3.9 on a scale of 1-5. Employee training costs amounted to 1.65 MEUR and averaged 739 EUR per employee in 2022.



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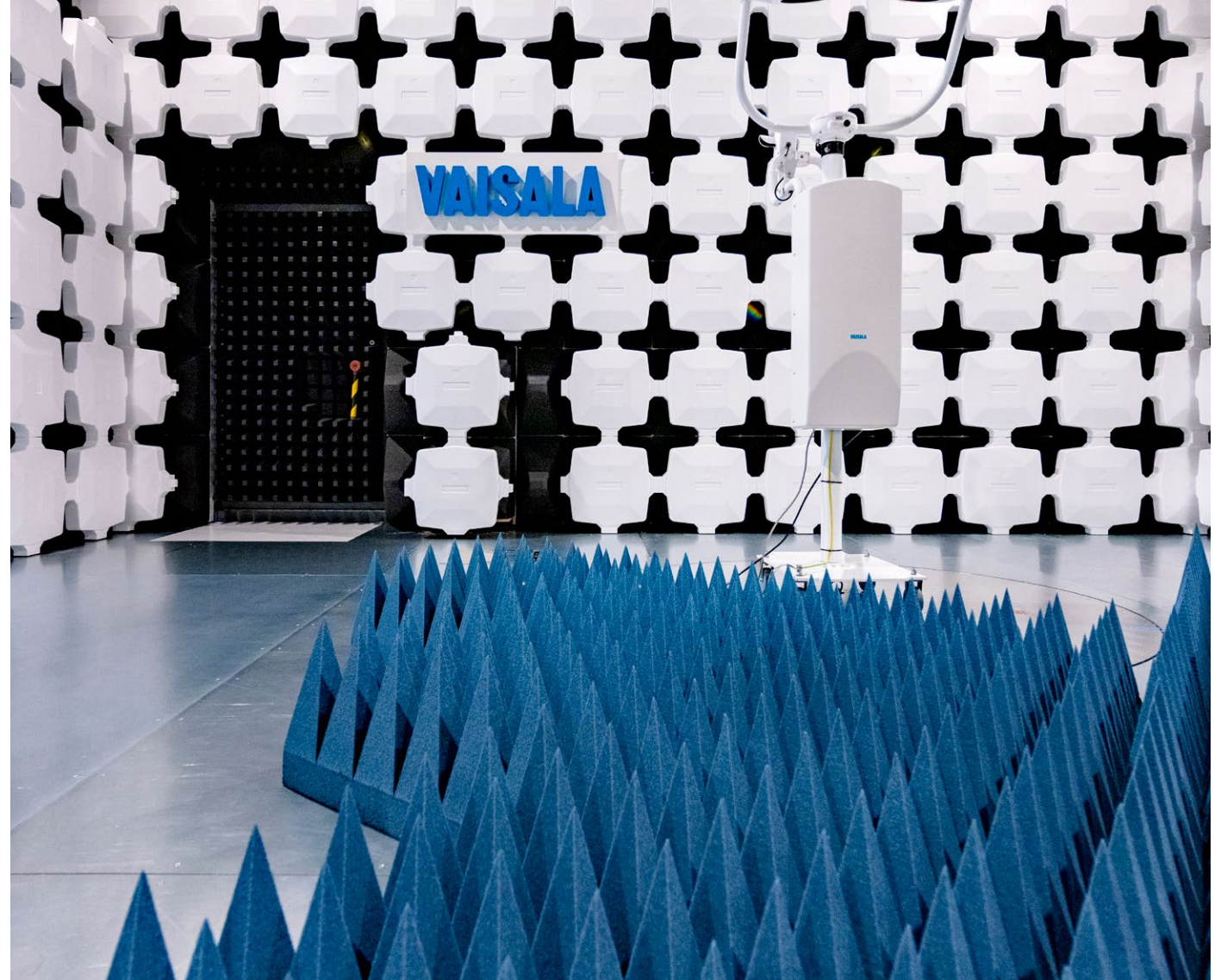
Creating value for society and the environment

We bring value to society through accurate and reliable environmental measurements as well as decision-making support for authorities and businesses. This way we help societies become better-informed, more resource efficient, and safer. In addition, we create value through significant investments in R&D and collaboration with the scientific community.

Better-informed societies

Vaisala works together with nearly all meteorological institutes in the world, supporting them in gathering accurate weather observations for weather forecasts that are critical for societies. We also collaborate with international funding agencies and weather experts to build capacity for weather observing networks and competence in developing economies. This way we help these societies to be better prepared for extreme weather and its impacts.

Health services are also one of the foundation pillars of an informed society. For example, hospitals require accurate and reliable monitoring of their various activities. Vaisala's viewLinc Continuous Monitoring System safeguards the critical parameters in blood and tissue banks, among others, where continuous monitoring ensures that the materials are preserved and remain viable. Our solutions are also widely used to monitor the development, manufacture, and storage of different pharmaceuticals and medicines.





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Resource efficiency

Vaisala’s measurement solutions improve resource efficiency in various industrial production processes. Accurate measurements enable our customers to optimize their production as well as reduce their energy consumption and material loss. With the accurate data from Vaisala’s measurement instruments, data centers’ conditions can be optimized energy efficiently, for example.

Vaisala’s road weather stations and MD30 mobile detectors provide real-time data that, combined with road weather model, road heat maps, and information systems, helps to optimize road winter maintenance. Timely decisions on anti-icing, treatments, and snow ploughing increase safety and resource efficiency as well as reduce the environmental effects of chemicals used in road maintenance. In 2022, MD30 helped the road authorities in Iowa to reduce road treatments without compromising road safety. Vaisala also expanded its IoT offering with **GroundCast and TempCast sensors as part of the Wx Horizon solution** that provides data for road winter maintenance. With the solution, local environment can be measured and modeled easily and cost-efficiently to identify ice and frost on road surface. Wx Horizon automizes the usage of different observation and data sources to improve road weather forecasts.

Safety

Our technologies help our customers maintain safe operating environments in many parts of society. Extreme weather, such as hurricanes, can have devastating consequences for local economies and livelihoods. Vaisala’s hurricane-tracking dropsondes can make in-situ measurements inside a hurricane, providing essential information for forecasting its path and intensity. This advance information helps to safeguard both lives and infrastructure.

The data from our measurement instruments makes it easy to maintain and monitor the high voltage transformers that are critical for power production and distribution. Continuous transformer condition monitoring also supports smart power grids, where electricity consumption is controlled and adjusted as needed. Reliable and continuous online monitoring enables preventive maintenance. This,

CASE



Vaisala helps to safeguard a power station’s key transformer at Eneco

To protect reliable power output and reduce risk for power outages, Bio Golden Raand power plant, owned by the energy company Eneco in the Netherlands, equipped its power transformer with Vaisala MHT410 that measures three key parameters in transformer oil – moisture, hydrogen, and temperature. The transformer is one of the most valuable assets in the plant, which makes it important for Eneco to monitor its condition and performance in real time.

[Read more vaisala.com/annualreport](https://vaisala.com/annualreport)

in turn, enables operators to detect faults in time and prevent power outages that would risk the safety and operation of society.

[Read more examples of how Vaisala creates value for society and the environment at vaisala.com.](https://vaisala.com)

CASE

Vaisala and Abertis join forces to improve road safety through innovation

Vaisala and Abertis, a global leader in toll road management, are conducting a pilot study on how preventive road winter maintenance can reduce ice formation on highways and increase driver safety. In addition, through the data technology provided by Vaisala, the meteorological factors that affect driving are analyzed for road maintenance decisions.

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Economic value

Vaisala has a positive impact on local communities through employment and taxes, both directly and through its supply chain. Responsible business practices and use of local suppliers create indirect benefits to local communities.

Vaisala as taxpayer

Vaisala’s head office is located in Vantaa, Finland. Vaisala has established subsidiaries and branches in 17 countries. Our group structure is simple, and we have companies only in countries where we do business.

In addition to the tax data published in the financial statement, Vaisala provides here more information on its approach to tax, tax management, and global tax footprint.

Approach to tax

Vaisala’s values are the basis of all our activities, both within Vaisala and with our partners and customers. We value integrity: we are honest, respectful, and reliable. We promote sustainable and ethical behavior. We recognize that Vaisala has a liability to pay taxes that are legally due in any country in accordance with the rules set by the relevant authorities. Vaisala also has a responsibility to its shareholders to structure its business in an efficient manner to ensure that strategic business objectives are met without incurring unnecessary tax costs.

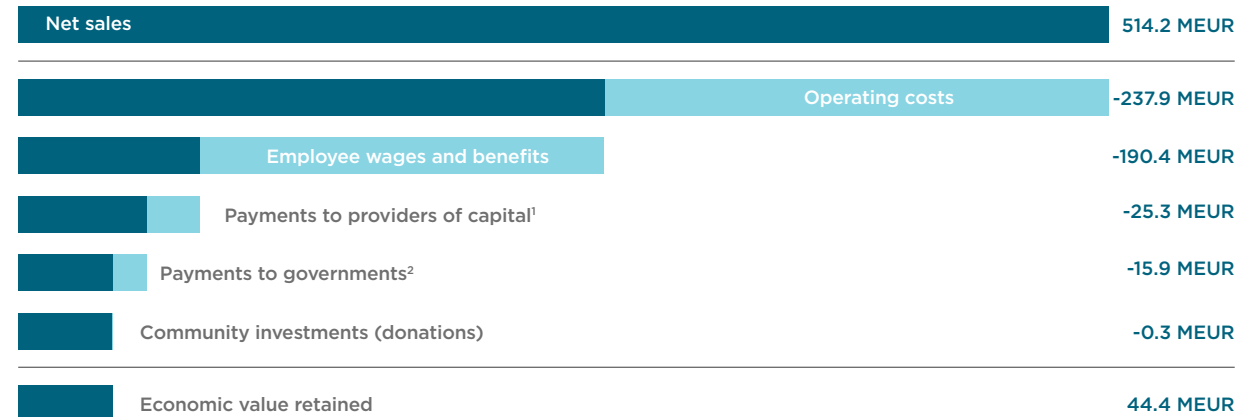
Vaisala is committed to ensuring that it follows local and international tax rules and regulations in all jurisdictions where it conducts its business. We do not operate in tax haven countries for tax reasons. Vaisala does not practice tax planning that would aim at artificially decreasing the Group’s taxable income. We pay and report taxes in countries where the reporting obligations are applicable as a result of our activities.

Vaisala’s transfer pricing is aligned with the arm’s length principle in accordance with OECD Transfer Pricing Guidelines. The rationale of the chosen transfer pricing methods is properly documented. We comply with the arm’s length principle in relation to all intercompany transactions.

Direct economic value generated and distributed in 2018–2022

MEUR	2022	2021	2020	2019	2018
Net sales	514.2	437.9	379.5	403.6	348.8
Operating costs	-237.9	-192.1	-162.2	-181.9	-166.2
Employee wages and benefits	-190.4	-174.3	-154.1	-157.7	-133.6
Payments to providers of capital ¹	-25.3	-22.5	-22.4	-21.1	-40.2
Payments to governments ²	-15.9	-10.5	-6.6	-8.4	-8.4
Community investments (donations)	-0.3	-	-0.1	-0.2	-0.1
Economic value retained	44.4	38.5	34.1	35.2	0.3

Direct economic value generated and distributed in 2022



¹ Includes dividends and interest of borrowings

² Includes income taxes



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Tax management

In Vaisala's centralized Finance & Control function, Chief Financial Officer (CFO) is responsible for the management and strategy of tax matters. A centralized tax team supports the CFO in implementation: the tax team is responsible for implementing and monitoring the tax policies to ensure that all Vaisala's subsidiaries comply with them in a consistent way. Important matters of principle are presented and approved by the Audit Committee in Vaisala's Board of Directors.

Vaisala Group has outsourced a large part of its foreign recurring tax compliance work to a few professional service providers to ensure competences and resources in complying with the local rules and regulations. Vaisala's Finance & Control regularly monitors the transparency, quality, and outputs of these outsourcing engagements.

Global tax footprint

To ensure focus on process implementation and comparable data collection, Vaisala decided to start its tax footprint initiative in 2019. Vaisala reports corporate income taxes, value added taxes, payroll taxes, excise taxes, and property taxes paid in 2022 and comparable figures for 2021. The principle of materiality has been observed in the collection and presentation of figures.

Vaisala benefits from R&D tax credits in the United States and France. In addition, Vaisala has prior year tax losses in its subsidiaries located in the United States and France, which reduced their corporate income tax payments in 2022. The tax contribution of the parent company in Finland totaled 41.7 (30.0) MEUR in 2022.

Total taxes paid 2022 - Vaisala Group



- 19%** Corporate Income Tax (CIT) (21%)
- 21%** Value Added Tax (VAT) (20%)
- 59%** Payroll Tax (59%)
- 0%** Property Tax (1%)



- 11%** APAC 7.9 MEUR (4.1)
- 70%** EMEA 52.2 MEUR (38.7)
- 19%** Americas 14.2 MEUR (13.1)

Tax	Paid in 2022 (MEUR)	Paid in 2021 (MEUR)
Corporate Income Tax (CIT)	14.2	11.5
Value Added Tax (VAT)	15.9	11.3
Payroll Tax	43.8	32.7
Property Tax	0.3	0.3
Total	74.3	55.9

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Active community outreach and scientific collaboration

In addition to Vaisala's own research and development work, scientific collaboration strengthens our position as an industry pioneer and an innovative technology leader. Vaisala continues to be a contributor to many organizations, advancing technological development in several fields of study as well as supporting higher education, research, and science education.

Vaisala is a wide-ranging, research and innovation-focused technology company, and our collaboration partners include several different organizations, research institutions, corporations, meteorological institutes, and universities from around the world and from different fields of technology.

Participating in the most significant scientific commissions and organizations in our field

Vaisala's solutions are used to observe and measure aviation weather, and thus Vaisala is active in the International Civil Aviation Organization (ICAO), a specialized agency of the United Nations (UN). The World Meteorological Organization (WMO), likewise an agency of the UN, coordinates the study of the state and behavior of the Earth's atmosphere, including weather and climate. Vaisala participates in various expert teams and commissions working under WMO.

These groups focus on developing weather observations and forecasts globally. Such expert teams include Infrastructure Commission and its Standing Committee on Measurements, Instrumentation and Traceability (SC-MINT) as well as Standing Committee on Earth Observing Systems and Monitoring Networks (SC-ON). Vaisala is an active member of the Association of Hydro-Meteorological Equipment Industry (HMEI).

We also participate in various industry standards development work in fields that are important to us, for example as a member of the European Telecommunications Standards Institute (ETSI) as well as in different national committees and groups of the International Electrotechnical Commission (IEC). Vaisala also participates in the working groups of CIGRE (Conseil International des Grands Réseaux Électriques): the documentation created in these groups forms, for the most part, the basis for IEC's standards.

In Finland, Vaisala operates in close cooperation with various scientific stakeholders, including the Finnish Meteorological Institute (FMI), VTT Technical Research Centre of Finland Ltd., the Helsinki Region Environmental Services Authority HSY, and different universities.

Vaisala has representation in the Technology Industries of Finland and its branch groups, such as in the new semiconductor group, established in 2022. We also cooperate with Technology Academy Finland (TAF) as a Millennium Technology Prize partner.

In the United States, our collaboration partners comprise, for example, the National Oceanic and Atmospheric Administration (NOAA) and the National Centre for Atmospheric Research (NCAR). Vaisala is also a strong contributor and corporate sponsor to the American Meteorological Society (AMS) that is a leading scientific organization dedicated to atmospheric, oceanic, and hydrologic sciences. In addition to sponsorships, Vaisala representatives contribute to the AMS through several activities, such as scientific committees, journals, and articles.

In France, Vaisala has strong partnerships with local research centers located on the Saclay campus. One of the collaboration partners is the French Aerospace Lab ONERA in the field of lasers, lidar research and advanced signal and data processing. Other partners include Thales and the III-V Lab also on integrated optical technologies, and SIRT Atmospheric Research Observatory.

Regarding software development, Vaisala is a long-term member in the Open Geospatial Consortium (OGC), developing global, open geospatial standards and APIs (Application Program Interface). In the Open Mobile Alliance, we participate in developing open and modern solutions for software device management. We also contribute to the CAR 2 CAR consortium that advances the digital interfaces in vehicles.

Seats in different sustainability and commerce organizations

We are active in the International Chamber of Commerce (ICC) Finland, which promotes international trade and investment worldwide. Vaisala is also a member of FIBS, Finland's leading corporate responsibility network, and the Climate Leadership Coalition (CLC). The purpose of the CLC is to improve the competitiveness of Finnish businesses and research organizations as well as their ability to respond to the threats posed by climate change.



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Vaisala is a shareholder and research partner of CLIC Innovation Oy. CLIC is an open innovation cluster with the mission to create breakthrough solutions in bioeconomy, energy, and cleantech by facilitating joint research between industry and academia in Finland.

Enhancing academic research and science education

Academic research around the world has always been an integral part of the development of Vaisala’s science-based innovations. For instance, two of WMO’s awards carry the name of Vaisala’s founder Professor Vilho Väisälä. They are granted every other year to distinguished research in the field of environmental measurement instruments and observation methods as well as meteorological instrument work in developing countries and countries with economies in transition.

Our experts collaborate with universities, and our employees include Masters’ students and doctoral candidates. In 2022, we announced **our collaboration with Sorbonne University** that uses Vaisala’s condition monitoring system in environmental research on pesticides.

Another example of university collaboration is the Nanjing Air Quality Testbed project, realized together with the University of Nanjing in China. A similar air quality project has been implemented in Helsinki with the University of Helsinki. We also piloted a project in Helsinki with JCDecaux Finland in 2022, aiming to share air quality information efficiently with public transportation users. In the projects, dense air quality observation networks and predictive models have been built in the cities, providing data for decision-making.

In the United States, we collaborate with the Colorado State University (CSU) in the field of weather radars, among others. In 2020, Vaisala’s Board of Directors renewed the annual donation of USD 25,000 to the university for three years.

Vaisala inspires children and youngsters to discover the field of science also as a long-term partner in Finnish Science Centre Heureka’s exhibition Science on a Sphere. Overall, we support natural sciences and science education in different projects annually.

CASE



Vaisala helps the Technical University of Denmark to research carbon capture

Carbon capture, utilization, and storage are integral for achieving carbon neutrality. For this, the Technical University of Denmark (DTU) is working with a waste incineration plant to develop a process to capture carbon dioxide from the plant’s emissions. The project is utilizing advanced gas analyzers from Vaisala to measure carbon capture efficiency and therefore the viability of the method.

 [Read more
vaisala.com/annualreport](https://vaisala.com/annualreport)

Support for important climate and environmental projects

Vaisala provides charitable donations with products, funding, or services to non-profit organizations as part of its community outreach activities. Our overall objective is to support organizations and projects that advance environmental awareness and science education. All our outreach activities are in line with our values and resonate well with topical issues close to our business, such as climate, weather, environmental and industrial measurements, and environmental sciences. Vaisala does not donate funds to political parties, causes, or campaigns.

Another focus is non-profit organizations working for environmental disaster prevention and recovery. Furthermore, impartial humanitarian organizations that provide protection and assistance to people affected by disasters are within the scope of possible donations. In 2022, Vaisala **donated 100,000 euros to the Finnish Red Cross** for humanitarian aid in Ukraine.

Vaisala’s employees in Finland participated in the Kilometer Competition by the Chain Reaction Campaign. In the competition, Vaisala employees kept track of all the kilometers they cycled during the summer. Based on the over 50,000 kilometers in total, Vaisala made a donation to the Finnish Red Cross to help with climate change adaptation in Eastern Africa which is plagued with harsh drought.

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Creating value for investors

Vaisala is a stable, sustainable, and globally operating company headquartered in Finland. As a technological leader in its field, Vaisala aims for long-term growth as well as globally leading position in weather, environmental, and industrial measurements by responding to different megatrends and investing in research and development.

The company's series A shares have been quoted on Nasdaq Helsinki stock exchange since 1994. Vaisala's target is to maintain high solvency and to pay a stable dividend which will increase in line with net profit development.

In May 2022, Vaisala received an **ESG Risk Rating of 9.7 in an assessment by Sustainalytics**, a company focused on sustainability analytics of listed companies. This means that Vaisala was evaluated to be at negligible risk of experiencing material financial impacts from environmental, social, and governance factors.

Vaisala's sustainable business received Carnegie Sustainability Award

The investment bank Carnegie granted Vaisala the Carnegie Sustainability Award 2022 in the category for Small Cap companies. The award acknowledges both Vaisala's sustainable business practices and the positive handprint of the business, generated by Vaisala's products.





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1

Technology leader and strong market position

- Leading technologies in weather, environmental, and industrial measurements with the most reliable instruments, algorithms, and software
- Clear market leadership position in key products, high customer satisfaction, estimated total market size of EUR 3 billion
- High continuous investments in R&D (2022: 62.4 MEUR or 12% of net sales)

2

Growth potential in multiple dimensions

- New technologies
- New products, applications, and digital solutions that leverage the latest technologies, platforms, as well as business models based on recurring revenue
- Expansion into new customer segments and geographical regions

3

Well diversified sales mix

- Vaisala is a global player in its relevant markets with representatives in more than 100 countries
- 2022 geographical net sales split: 37% Americas | 31% APAC | 32% EMEA
- Several customer segments in governmental and private sectors

4

Asset-light business model

- High-mix, low-volume business model
- Sales growth does not require CAPEX: related annual CAPEX around 10 MEUR
- Potential for productivity improvement with volume growth

5

Strong cash generation and financial position

- Enable investing in growth and long-term business development
- Strong cash conversion rate (2022: 0.5)
- Solvency ratio 58.2% (2022)
- Gearing 3.2% (2022)

6

Solid dividend payer

- Aim to distribute a stable dividend which will increase in line with net profit development
- Dividend per share for the last five years paid at the average rate of 81% on earnings and the average effective dividend yield of share 2.6%

7

Technology with an impact in a responsible way

- Technologies, products, and digital solutions that enhance customers' decision-making and development of operations and that contribute significantly to solving global challenges related to climate change, resource efficiency, and well-being and health, for example
- Very low ESG risk: in the evaluation by Sustainalytics, Vaisala's ESG risk score is 9.7 which is defined as negligible
- Vaisala is a member of the RE100 initiative and uses 100% renewable electricity. Furthermore, Vaisala is committed to set Science Based Targets for emissions reduction



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EU Taxonomy on Sustainable Finance

The EU Taxonomy Regulation requires all companies falling within the scope of the Non-Financial Reporting Directive to report certain indicators detailing the extent to which their activities are sustainable. There are six key objectives set out within the regulation. Climate change mitigation and climate change adaptation have been the first two to come into effect.

During 2021, Vaisala evaluated its EU Taxonomy eligibility according to the descriptions of economic activities listed in Annexes 1 and 2 of the Climate Delegated Act. The majority of Vaisala's activities fall under NACE code C26.51 (Manufacture of instruments and appliances for measuring, testing and navigation), which is not yet covered by the taxonomy. Vaisala views, however, that products and services within Weather and Environment business area contribute significantly to climate change adaptation and therefore, a significant share of Vaisala's net sales should be included within the next version of the technical screening criteria.

Vaisala has identified taxonomy-eligible net sales under activities 3.1 *Manufacture of renewable energy technologies* and 3.5 *Manufacture of energy efficiency equipment for buildings*. We have determined that manufacture of remote wind sensing solutions for the wind energy sector and manufacture of measurement instruments for the biogas processes are both taxonomy eligible activities based on the description of economic activity 3.1 within Annexes 1 and 2 of the Climate Delegated Act. Vaisala's remote wind sensing solutions enable wind power operators to select the optimal site for their wind parks, as well as monitor, predict, and plan operations, and thereby increase the performance of their wind parks. Vaisala's multi-gas measurement instruments, on the other hand, help biogas and biomethane producers minimize methane slip and gives them the ability to control the process and increase their biogas yield and quality. In addition, we have

determined that the HVAC instruments manufactured for humidity, CO₂, and temperature measurements are taxonomy eligible, based on the description of economic activity 3.5 within Annexes 1 and 2 of the Climate Delegated Act. These instruments are integrated into building automation and control systems, which help to improve energy efficiency. All Vaisala's taxonomy eligible activities are eligible to be enabling activities for climate change mitigation.

During 2022, Vaisala has continued its EU Taxonomy work by evaluating the extent to which taxonomy-eligible activities meet the technical screening criteria for climate change mitigation (Annex 1) and climate change adaptation (Annex 2). We assessed that Vaisala's taxonomy eligible activities meet the technical screening criteria for substantial contribution to climate change mitigation, but do not meet them for substantial contribution to climate change adaptation.

We also assessed the do no significant harm (DNSH) criteria related to other environmental objectives and concluded that Vaisala's taxonomy eligible activities fulfill the DNSH criteria to a large extent. However, we were not able to comprehensively assess the fulfillment of the generic criteria for DNSH set out in Annex 1, Appendix C* due to the unclarity of points (f) and (g). In accordance with the EU REACH legislation, Vaisala has collected information about those substances in its products that have been identified as substances of very high concern (SVHC) under the EU REACH legislation. The DNSH criteria for pollution prevention and control in the EU Taxonomy seem to go beyond the current legislation and require that in order to fulfill the criteria, the taxonomy eligible activities should not involve SVHCs or substances that meet the criteria for SVHCs unless their use has been proven to be essential for society. However, according to the Commission Draft Notice**, published on December 19, the Commission is currently preparing a horizontal document explaining how to assess

whether use of chemicals is essential for society which is to be used coherently across the EU legislation. The Draft Notice mentions that the Commission aims to finalize the work of defining the criteria for essential use in early 2023. Since the criteria for essential use of chemicals had not been formally adopted for the reporting year 2022, we were not able to comprehensively and reliably assess whether our taxonomy eligible activities fulfill the DNSH criteria for pollution prevention and control.

In addition, Vaisala has assessed that it has good readiness to comply with the Minimum Safeguards defined in the EU Taxonomy Regulation.

Taxonomy Key Performance Indicators and accounting principles

12.7% of Vaisala's net sales derived from taxonomy eligible activities, while 87.3% of net sales derived from activities that are not yet covered by the EU Taxonomy. Our taxonomy eligible operating expenditure (OpEx) was 7.1% of total OpEx. Vaisala's total OpEx, as defined in the EU Taxonomy Disclosure Delegated Act, comprises of research and development expenses. The taxonomy eligible OpEx represents the proportion of the total OpEx that is associated with our taxonomy eligible activities.

Our taxonomy eligible capital expenditure (CapEx) was 9.9% of total CapEx. Vaisala's total CapEx, as defined in the EU Taxonomy Regulation, includes additions to the right-of-use assets, in addition to the tangible and intangible assets detailed in our financial reporting. The taxonomy eligible proportion of CapEx includes additions related to leased buildings (taxonomy activity 7.7) and additions related to leased cars (taxonomy activity 6.5).

Due to the unclarity of the DNSH criteria for pollution prevention and control, Vaisala does not report its Taxonomy aligned net sales nor taxonomy aligned OpEx. Vaisala reports 0% taxonomy aligned CapEx, as we are not yet able to assess the taxonomy alignment of these activities that are unrelated to our own taxonomy eligible activities.

* Generic criteria for DNSH to pollution prevention and control regarding use and presence of chemicals

** Draft Commission Notice on the interpretation and implementation of certain legal provisions of the EU Taxonomy Climate Delegated Act establishing technical screening criteria for economic activities that contribute substantially to climate change mitigation or climate change adaptation and do no significant harm to other environmental objective



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Proportion of net sales from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2022	Code(s) (2)	Absolute net sales (3)	Proportion of net sales (4) %	Substantial contribution criteria						DNSH criteria ('Does Not Significantly Harm')						Minimum safeguards (17)	Taxonomy-aligned proportion of net sales, year N (18)	Taxonomy-aligned proportion of net sales, year N-1 (19)	Category (enabling activity or) (20)	Category ('transitional activity') (21)
				Climate change mitigation (5)	Climate change adaptation (6)	Water and marine resources (7)	Circular economy (8)	Pollution (9)	Biodiversity and ecosystems (10)	Climate change mitigation (11)	Climate change adaptation (12)	Water and marine resources (13)	Circular economy (14)	Pollution (15)	Biodiversity and ecosystems (16)					
Economic activities (1)		tEUR	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																				
A.1 Environmentally sustainable activities (Taxonomy aligned)																				
Manufacture of renewable energy technologies	3.1	N/A*	N/A*																	
Manufacture of energy efficiency equipment for buildings	3.5	N/A*	N/A*																	
Net sales of environmentally sustainable activities (Taxonomy-aligned) (A.1)		N/A*	N/A*																	
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																				
Manufacture of renewable energy technologies	3.1	N/A*	N/A*																	
Manufacture of energy efficiency equipment for buildings	3.5	N/A*	N/A*																	
Net sales of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		N/A*	N/A*																	
Total (A.1 + A.2)		65,196	12.7%																	
B. TAXONOMY-NON-ELIGIBLE																				
Net sales of Taxonomy-non-eligible		449,003	87.3%																	
Total (A + B)		514,199	100%																	

* Vaisala is not able to define whether its Taxonomy-eligible activities are Taxonomy aligned, since the assessment of the DNSH criteria for pollution prevention and control would require the criteria for essential use of chemicals, which have not been published yet by the European Commission.



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Proportion of CapEx from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2022	Substantial contribution criteria									DNSH criteria ('Does Not Significantly Harm')										
	Code(s) (2)	Absolute turnover (3) Currency	Proportion of turnover (4) %	Climate change mitigation (5)	Climate change adaptation (6)	Water and marine resources (7)	Circular economy (8)	Pollution (9)	Biodiversity and ecosystems (10)	Climate change mitigation (11)	Climate change adaptation (12)	Water and marine resources (13)	Circular economy (14)	Pollution (15)	Biodiversity and ecosystems (16)	Minimum safeguards (17)	Taxonomy-aligned proportion of CapEx, year N (2021) (18)	Taxonomy-aligned proportion of CapEx, year N-1 (19)	Category (enabling activity or) (20)	Category ('transitional activity') (21)
Economic activities (1)		tEUR	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																				
A.1 Environmentally sustainable activities (Taxonomy aligned)																				
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	0%																	
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																				
Acquisition and ownership of buildings	7.7	3,583	9.1%																	
Transport by motorbikes, passenger cars, and light commercial vehicles	6.5	294	0.7%																	
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		3,877	9.9%																	
Total (A.1 + A.2)		3,877	9.9%																	
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																				
Capex of Taxonomy-non-eligible activities (B)		35,354	90.1%																	
Total (A + B)		39,231	100%																	



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Economic activities (1)	Code(s) (2)	Absolute turnover (3) Currency	Proportion of turnover (4) %	Substantial contribution criteria						DNSH criteria ('Does Not Significantly Harm')						Minimum safeguards (17)	Taxonomy-aligned proportion of OpEx, year N (2021) (18)	Taxonomy-aligned proportion of OpEx, year N-1 (19)	Category (enabling activity or) (20)	Category ('transitional activity') (21)
				Climate change mitigation (5)	Climate change adaptation (6)	Water and marine resources (7)	Circular economy (8)	Pollution (9)	Biodiversity and ecosystems (10)	Climate change mitigation (11)	Climate change adaptation (12)	Water and marine resources (13)	Circular economy (14)	Pollution (15)	Biodiversity and ecosystems (16)					
		tEUR	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																				
A.1 Environmentally sustainable activities (Taxonomy aligned)																				
Manufacture of renewable energy technologies	3.1	N/A*	N/A*																	
Manufacture of energy efficiency equipment for buildings	3.5	N/A*	N/A*																	
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		N/A*	N/A*																	
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																				
Manufacture of renewable energy technologies	3.1	N/A*	N/A*																	
Manufacture of energy efficiency equipment for buildings	3.5	N/A*	N/A*																	
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		N/A*	N/A*																	
Total (A.1 + A.2)		4,449	7.1%																	
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																				
Opex of Taxonomy-non-eligible activities (B)		57,985	92.9%																	
Total (A + B)		62,434	100%																	

* Vaisala is not able to define whether its Taxonomy-eligible activities are Taxonomy aligned, since the assessment of the DNSH criteria for pollution prevention and control would require the criteria for essential use of chemicals, which have not been published yet by the European Commission.

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Reporting principles

Non-financial information

Disclosure of non-financial information in accordance with the Finnish Accounting Act chapter 3 is presented in the Sustainable business practices section as well as the chapters Business model in Our business section, Dashboard in the Creating value section, and Risk management in the Governance section. The Sustainable business practices section includes information on environmental matters, social and employee matters, respecting human rights, as well as anti-corruption and anti-bribery compliance.

Implementing the GRI guidelines

To maintain transparency and consistency in our sustainability reporting, we apply the Global Reporting Initiative’s (GRI) reporting guidelines. This report has been prepared in accordance with the GRI Standards. The GRI reference index can be found on pages 67–74 of this report.

Boundaries

Most of our sustainability data is reported for the entire Group and for all locations. The waste reporting covers the most significant manufacturing sites, located in Finland, the United States, and France.

Independent assurance

According to our reporting process, we seek assurance for the report from a third-party assurance provider. An independent third party, Deloitte Oy, has at Vaisala management’s request externally assured the disclosures marked in the GRI reference index. An Independent limited assurance report can be found on page 66.

Materiality

Identification of actual and potential positive and negative impacts is a part of the continuous sustainability management process. In this process, engagement with different functions and external stakeholders plays an important role. We gain knowledge of actual and potential negative impacts also from internal and external audits as well as from our partners’ audits. In addition, we utilize different public information sources, such as studies on the social and environmental impacts of the

industry. The material topics are prioritized for reporting based on the significance of the impact, and they are reviewed annually as part of the reporting process.

The material issues are included in the Creating value and Sustainable business practices sections of the Annual Report. The Creating value section focuses on the positive impacts of the business while the Sustainable business practices section focuses mainly on our efforts to manage the actual and potential negative impacts.

RELEVANT TOPICS

OUR VALUE CREATION:

Value for employees

- Purposeful work
- Well-being
- Learning and development

Value for society and the environment

- Economic value
- Active community outreach and scientific collaboration
- Better-informed societies
- Resource efficiency
- Safety

SUSTAINABLE BUSINESS PRACTICES

Environment

- Energy
- Emissions
- Waste

Employees

- Employee turnover
- Collective agreements
- Diversity, equity, and inclusion

Occupational health and safety

- Impacts of COVID-19 pandemic
- Collaboration
- Proactive reporting and investigation
- Injuries
- Occupational health services

Ethics and compliance

- Prevention of corruption and bribery
- Respect for human rights and human rights due diligence
- Conflict minerals
- Fair competition
- Product safety

Responsible supply chains

- Supplier management



Governance, policies, and due diligence

Governance

Vaisala’s leadership team led by the President and CEO is responsible for developing and updating the organization’s values and mission statement, strategies, policies, and goals related to sustainable development. These are reviewed by the People and sustainability committee and approved by the Board of Directors.

Vaisala’s leadership team is responsible for the management of Vaisala’s impacts on the economy, environment, and people. The leadership team reports to the Board of Directors on the management of the organization’s impacts at least quarterly.

The Board of Directors oversees the processes to identify and manage the organization’s impacts on the economy, environment, and people. It reviews the effectiveness of these processes at least annually, for example, by assessing external and internal audit findings and reviewing the annual sustainability report.

Code of Conduct and policies

The Code of Conduct reflects Vaisala’s values: integrity, innovation and renewal, strong together, and customer focus. We endorse the United Nations Global Compact strategic initiative for sustainable business practices and follow the Global Compact’s Ten Principles, which cover the areas of human rights, labor, environment, and anti-corruption. These ten principles are reflected in Vaisala’s Code of Conduct, and we report on the implementation of the principles on an annual basis as part of our sustainability reporting. Our Code of Conduct also refers to international conventions, such as the United Nations’ Universal Declaration of Human Rights and the International Labour Organization’s (ILO) Declaration on Fundamental Principles and Rights at Work. The Code of Conduct is approved by the Board of Directors.





Reporting principles	Governance, policies, and due diligence	Environment	Employees	Occupational health and safety	Ethics and compliance	Responsible supply chains	UN Global Compact	Signatures	Independent limited assurance report	GRI content index
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All our employees and partners, such as distributors and agents, must comply with the Code of Conduct under all circumstances. We comply with all applicable laws and regulations in the countries in which we operate. Where differences exist between regulatory requirements and Vaisala’s Code of Conduct, we strive to apply whichever sets the highest standard.

Our Code of Conduct includes guidance on environmental matters, social aspects and employment matters, human rights, anti-corruption and anti-bribery as well as fair competition. Moreover, Vaisala’s Board of Directors has approved more detailed policies, such as the International Anti-Corruption Policy and the Quality, Environment, and Health and Safety (QEHS) Policy.

Vaisala’s Leadership Team is responsible for integrating the policy commitments into organizational strategies, operational policies, and operational procedures. It delegates responsibility for the implementation of the policy commitments to different functions such as the sustainability manager, QEHS team, Human Resources, Sourcing, and Legal and Compliance.

All new employees commit to complying with the Code of Conduct and the International Anti-Corruption Policy as part of their employment contracts as well as participate in an induction training on the operating principles and procedures of the company. All Vaisala employees must complete the Code of Conduct training at regular intervals and confirm their commitment to the Code of Conduct and the International Anti-Corruption Policy. The mandatory Code of Conduct training was organized for all employees in late 2022. Of them, 96.2% had completed the training by January 27, 2023.

In addition, separate trainings are organized on various topics, such as environment, health and safety, anti-corruption and anti-bribery, and human rights risk management, some of which are mandatory for all employees and others tailored to specific employee groups based on need.

Supplier Code of Conduct

Vaisala has a separate Supplier Code of Conduct that sets standards for our suppliers and subcontractors. The Supplier Code of Conduct reflects Vaisala’s values and Code of Conduct and is based on the principles created by the International Labour Organization (ILO), the United Nations Global Compact initiative, and the Responsible Business Alliance (formerly EICC). In addition, the Supplier Code of Conduct includes requirements concerning standards and procedures in line with the Business Social Compliance Initiative (BSCI) and Social Accountability International (SAI).

Compliance monitoring and violations

Compliance with the Code of Conduct and other guidelines is continuously monitored by regional and business area managers and immediate supervisors as well as by means of internal audits. We also monitor that our suppliers and other business partners comply with our Code of Conduct, for example through self-assessments and audits. In case an employee or partner violates the Code of Conduct or the International Anti-Corruption Policy, it leads to disciplinary action and may even lead to termination of the contract or employment.

If any Vaisala employee knows or suspects that the Code of Conduct or the International Anti-Corruption Policy is being violated, they must report the concern. Vaisala provides a whistleblowing channel for reporting concerns anonymously or with name. During 2022, we have prepared a new whistleblowing channel that uses an external secure portal. Through this channel, employees and external stakeholders can report suspected violations of the Code of Conduct or other concerns either anonymously or with name. The channel can also be used by employees or external stakeholders for reporting any negative impacts that the organization has caused them and for seeking remedy.

The new channel will be introduced in 2023 and its effectiveness will be tracked, for example, by monitoring the number of reported incidents as well as assessing stakeholder feedback.

Vaisala ensures that the reporting of concerns does not cause any kind of harm to the complainant. The reported concerns are addressed immediately, and the complainants are informed about the progress of the handling process. Vaisala has a Compliance Committee, which processes reports of suspected non-compliance. The Committee consists of members from the Legal department, Finance & Control, Human Resources, and business areas as needed. Critical concerns raised through the whistleblowing channel are reported to the Board of Directors by the Compliance Officer. Vaisala is committed to providing for or cooperating in the remediation of negative impacts that the organization identifies it has caused or contributed to.

In 2022, the Committee became aware of two suspected violations of the Code of Conduct. These were related to the distribution chain and to treatment of an employee, respectively. All the suspected violations have been investigated, processed, and resolved.



Read more

Read about Vaisala’s policies: vaisala.com/standards-and-policies
Vaisala whistleblowing channel can be reached at wbc@vaisala.com



Environment

Environmental management

Our environmental responsibility work is guided by our Global Quality, Environment, and Health and Safety (QEHS) Policy and our ISO 14001 certified environmental management system, which covers our largest manufacturing sites and offices. Presently, 91% of our employees work in ISO 14001 certified locations.

All our certified locations are audited by an independent third party as part of our audit program. Our environmental management system helps us to identify the most significant environmental impacts and risks at each location and set environmental targets both for the entire company and locally.

Our head office in Finland has been committed to the WWF Green Office environmental program for more than 10 years. During 2022, we continued to promote commuting by bicycle at our Finnish sites by acquiring a city bike station at our headquarters and participating in the national Kilometrikisa (Kilometer Competition) biking contest with our own Vaisala team. We also organized waste awareness events for our employees and participated in Earth Hour by collecting climate commitments from our employees.

Environmental impacts

We regularly assess our environmental impacts as part of our environmental management system and aim to continuously reduce the negative environmental impacts of our product portfolio, business operations, and supply chain.

The most significant environmental impacts of our business operations are related to energy consumption, waste, and indirect emissions. Such emissions arise mainly from the energy consumption of sold products, purchased goods and services, logistics, business travel, and capital goods.

Before 2020, we were also reporting the water consumption of our manufacturing sites, but we have recognized that its share of our environmental impact is minor. Therefore, we are no longer reporting it. However, we will continue to monitor our water consumption and will re-examine the situation should changes occur in the consumption or availability of water at our sites.

The most significant environmental risks of our operations are related to potential emergency situations that can lead to local contamination. These risks are controlled, for example, as part of our emergency preparedness and management processes for hazardous substances.

Environmental indicators 2022



Renewable electricity

100%
(2021: 100%)



Employees working on ISO 14001 certified sites

91%
(2021: 94%)



Waste recycling rate*

66%
(2021: 55%)



Emission intensity (Scope 1-3)

148
tCO₂e/MEUR
(2021: 165 tCO₂e/MEUR)

* Recycling rate includes reuse, material recycling, and composting.



Reporting principles

Governance, policies, and due diligence

Environment

Employees

Occupational health and safety

Ethics and compliance

Responsible supply chains

UN Global Compact

Signatures

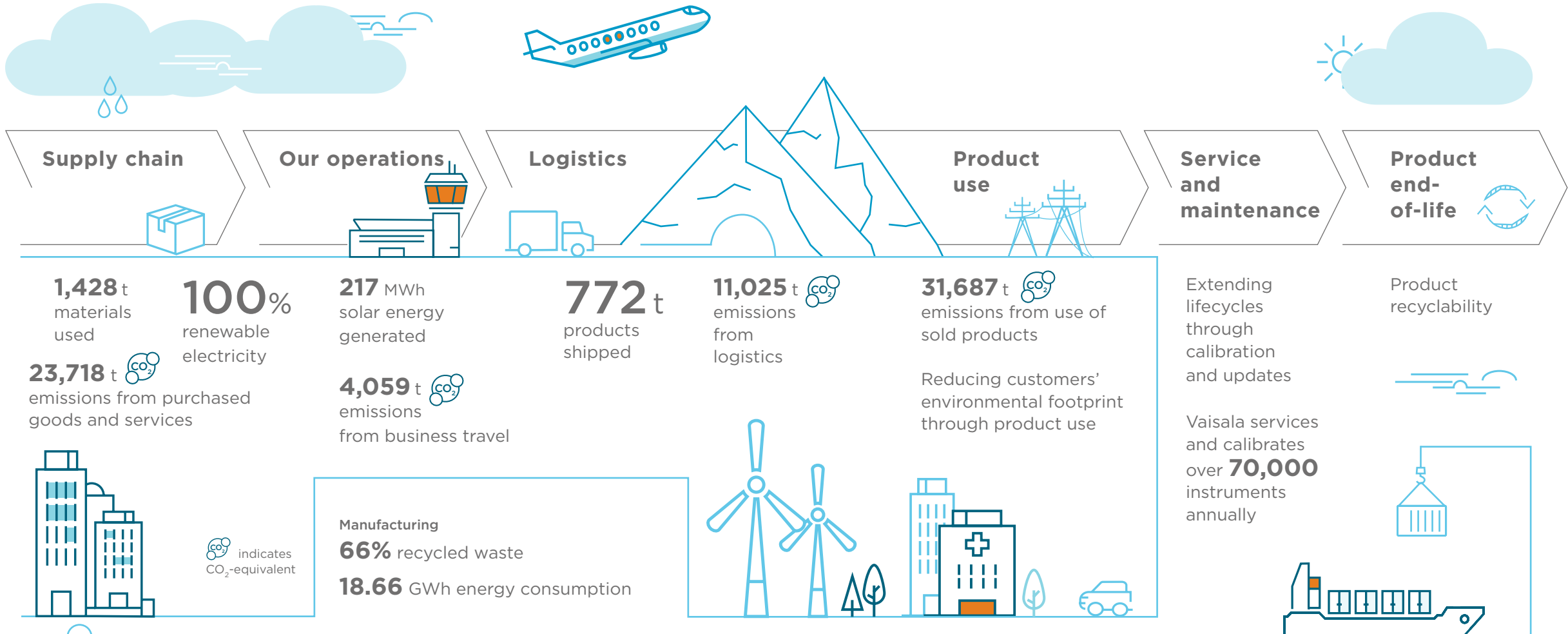
Independent limited assurance report

GRI content index

Environmental impacts

MINIMIZING OUR ENVIRONMENTAL FOOTPRINT

MAXIMIZING OUR ENVIRONMENTAL HANDPRINT





Reporting principles

Governance, policies, and due diligence

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Energy

In 2020, Vaisala reached the target of covering 100% of our electricity consumption with renewable sources, and we maintained this level in 2022 as well. Even though our manufacturing sites in Finland and the United States are already using solar panels to produce clean energy, we still need to purchase most of our electricity from local energy companies. Those of our sites with the most significant energy consumption purchase green electricity products directly from their electricity providers. The origin of renewable energy for these green electricity products has been certified. For those sites where Vaisala cannot negotiate the electricity agreement directly, we purchase unbundled energy attribute certificates from the regional markets to match our consumption.

The energy efficiency of our facilities is important to us. Our most energy-intensive site, the production site in Finland, has been part of the Finnish energy efficiency agreement for industries since 2006. We have set ourselves energy efficiency targets according to this agreement. At the end of 2022, we also participated in the Finnish nationwide Down a Degree campaign. To help ensure sufficient energy in our society, we decreased room temperature in the office spaces of our headquarters. In addition, we continued changing our Vantaa site's lighting to energy efficient LED lights. Our energy intensity, i.e. our energy consumption in relation to net sales, was 39.9 megawatt hours per million euros (2021: 48.3 MWh/MEUR). The share of non-renewable energy was 2.9% of our total energy consumption in 2022.

Emissions

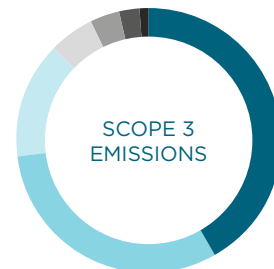
In 2022, we committed to setting near-term science-based targets aligned with the requirements of the Science-Based Targets initiative (SBTi). In 2023, we will formulate the emissions reduction targets and roadmap to implement them. Our aim is to get SBTi validation for the targets by 2024. To support the setting of the emissions reduction targets, we started an extensive cross-organizational project in 2022. In the project, we calculated the full greenhouse gas (GHG) inventory of our company for the years 2021 and 2022 according to the GHG

Protocol (Greenhouse Gas Protocol). This changed the scope of our GHG emissions reporting significantly in comparison to previous years.

In 2022, our Scope 1 emissions were 481 metric tons of CO₂e. Our market-based Scope 2 emissions (calculated with supplier-specific emission factors) were 34 metric tons of CO₂e. Our location-based Scope 2 emissions (calculated with country-specific average emission factors) were 2,442 metric tons of CO₂e. However, the majority (99%) of our emissions are other indirect emissions (Scope 3), mostly from the use of sold products, purchased goods and services, and logistics.

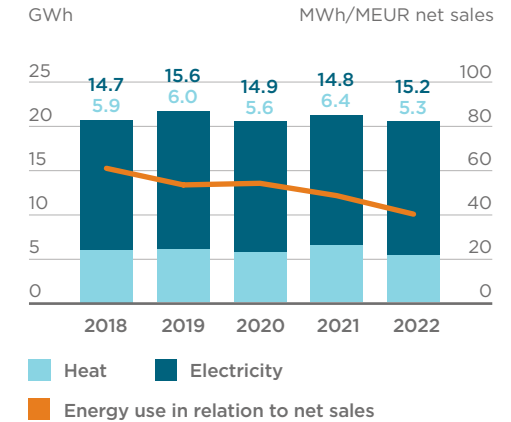
Our target for 2022 was to reduce the Scope 3 emissions in relation to net sales by 15 percent compared to 2019, covering the emissions that were within the scope of our emissions calculation until 2021. The year 2019 was chosen as the comparison period as the years 2020–2021 were exceptional due to the global COVID-19 pandemic, especially reflected in reduced business travel. To support the target, we revised our travel policy in 2022 to emphasize environmental aspects in travel related decision-making more than before. The Scope 3 emissions within the scope of the target decreased by 30% in relation to net sales compared to 2019. This was due to reduced business travel and increased remote working.

Our emissions intensity, i.e. carbon dioxide emissions in relation to net sales, was 148 metric tons CO₂e per million euros in 2022 (2021: 165 tCO₂e/MEUR).

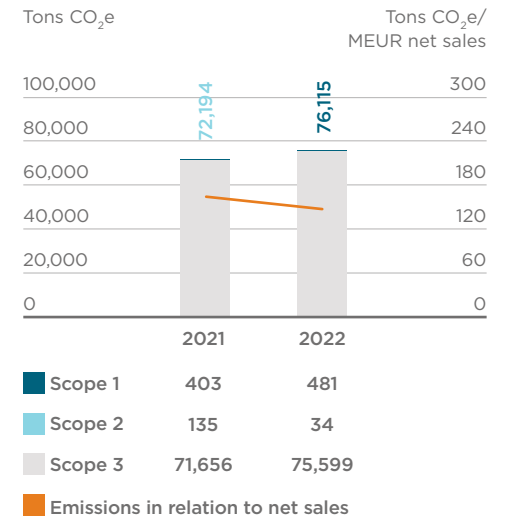


- 41.9%** Use of sold products
- 31.4%** Purchased goods and services
- 14.3%** Upstream transportation and distribution
- 5.4%** Business travel
- 3.7%** Capital goods
- 2.4%** Commuting
- 1.0%** Other

ENERGY USE



CARBON FOOTPRINT





Waste

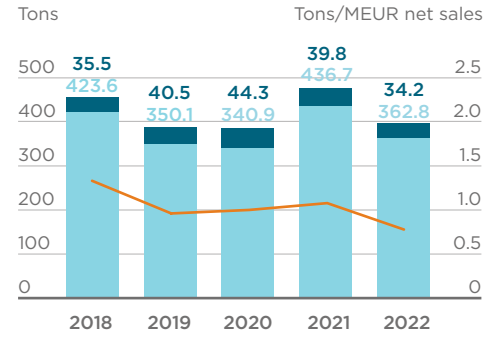
Waste associated with Vaisala’s business operations is produced at the beginning of the supply chain in the manufacture of materials and components, in Vaisala’s own operations related to manufacturing, repairing, and servicing of products and the work of our employees, as well as at the end of the value chain when a customer removes a Vaisala product from service. These impacts are depicted in the waste process flow chart.

Our main manufacturing site in Finland generates most of the waste in our own operations. There waste is sorted into 14 categories to enable its efficient processing and further use. We actively try to find ways to direct an even bigger proportion of waste to recovery in cooperation with our waste management service providers. We make sure that our waste operators have the appropriate licenses for waste treatment.

Our recycling rate was 66% in 2022 (2021: 55%). We exceeded our goal to increase the recycling rate to 60 percent. We achieved this, among other things, by improving the reuse and recycling of wooden pallets together with a new supplier. Furthermore, our major waste service provider developed their waste treatment technologies so that an even larger share of the waste we generate can be recycled as material. Our goal for 2023 is to maintain the 66% recycling rate and continue improving our waste sorting.

We also aim to reduce the amount of waste generated in the first place, for example by utilizing reusable trays for packaging with some of our suppliers and reducing scrap material produced in our manufacturing processes. We reduce the amount of waste at the end of the value chain by designing our products to last as long as possible and offering diverse maintenance and repair services for our products. In addition, we advise our customers on how to recycle our products at the end of their life cycles.

WASTE*



■ Non-hazardous ■ Hazardous

■ Amount of waste in relation to net sales

* Waste management takes place offsite in our service provider’s premises.



51.5% Recycling
29.4% Energy recovery
16.7% Composting
1.8% Landfill
0.6% Reuse



33.6% Recycling
32.6% Incineration
32.0% Physico-chemical treatment
1.0% Landfill
0.8% Recovery

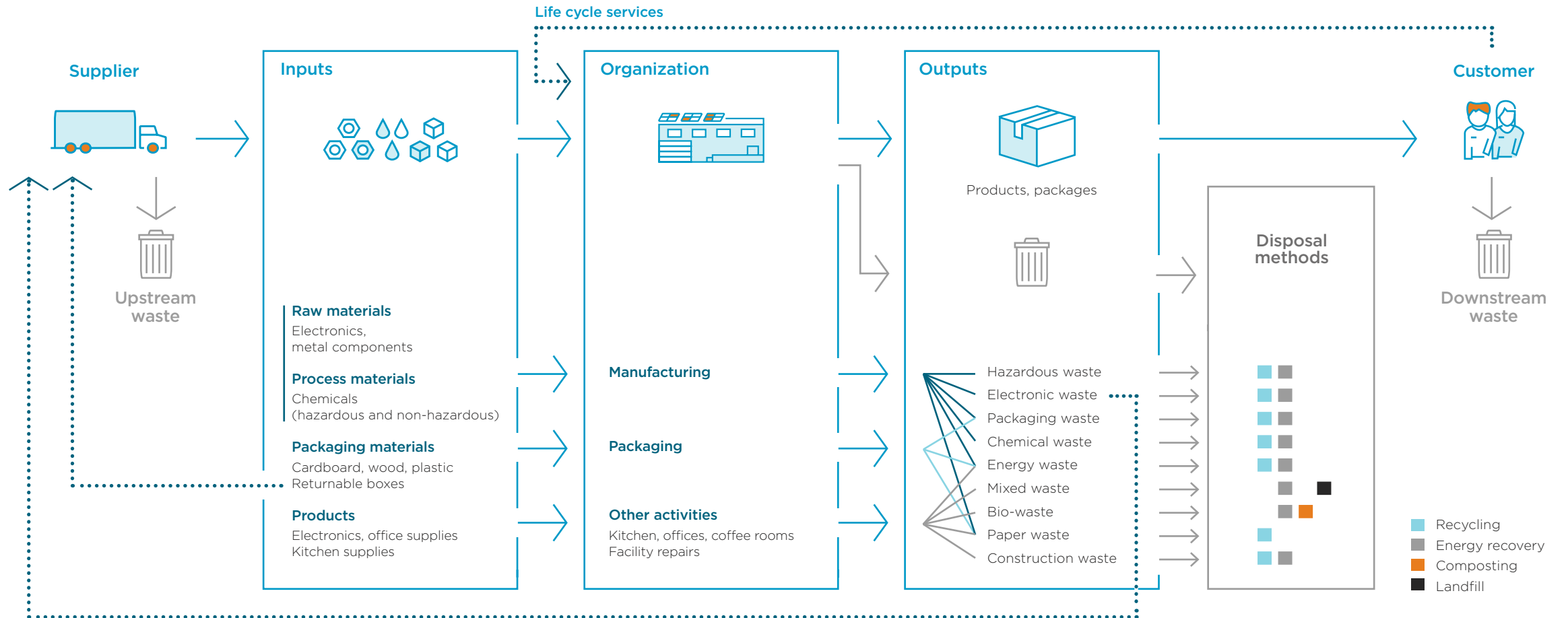


Waste process flow

Upstream in value chain

Own activities

Downstream in value chain





Reporting principles	Governance, policies, and due diligence	Environment	Employees	Occupational health and safety	Ethics and compliance	Responsible supply chains	UN Global Compact	Signatures	Independent limited assurance report	GRI content index
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Sustainable product design and management

The environmental footprint generated by products over their life cycle can be influenced during the product design phase. Our product development process includes environmental requirements, and many of the required product qualities, such as energy efficiency, maintainability, and recyclability, are beneficial for the environment. The updateability and modular design of many of our products, combined with our field services, extend the product life cycles, which typically range from a year to over 20 years. However, we are aware that the global scarcity of resources and rapidly developing environmental requirements call for us to improve our product design process continuously. Following our commitment to the Science-Based Targets initiative, we will also take actions to reduce the carbon footprint of our products.

To ensure that our products are safe for people and the environment, we set strict requirements on the materials used in our products during the product design process. Components are analyzed early in the new product development process to ensure compliance. We systematically collect information about substances that the European Union's REACH* legislation has defined to be of very high concern, as well as about compliance with the EU RoHS** Directive and the United States TSCA*** regulation, to enable the safe use and end-of-life treatment of products. Furthermore, we report the required information in the SCIP database**** of the European Chemicals Agency. In 2022, we started a project to reduce the substances of very high concern in our products. We select new suppliers carefully and ensure that they meet our strict requirements. At the end of a product's life cycle, we advise customers to recycle the products in accordance with local best practices for electronics recycling or to return them to Vaisala for recycling.

* REACH = Registration, Evaluation, Authorisation, and Restriction of Chemicals
 ** RoHS = Restriction of Hazardous Substances in electrical and electronic equipment
 *** TSCA = Toxic Substances Control Act
 **** SCIP = Substances of Concern In articles as such or in complex objects (Products)

Scope of environmental reporting

Most of our Group's energy consumption and waste generation can be attributed to our manufacturing locations in Finland, the United States, and France. Hence, the waste indicators are reported only for these three largest manufacturing sites. The indicators related to energy consumption are reported for all Vaisala locations. The energy consumption does not include the fuel consumption of field-service vehicles due to their low share of the total energy consumption. However, fuel consumption is considered as part of our Scope 1 emissions.

Our GHG inventory covers all Vaisala global activities and all applicable emission categories as defined in the GHG Protocol Corporate Accounting and Reporting Standard.

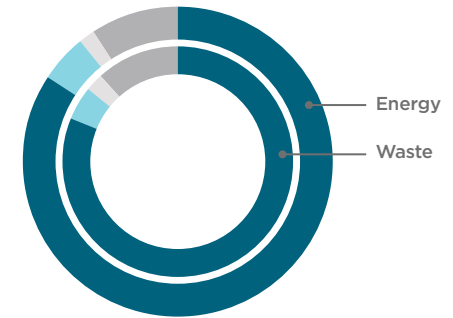
Data sources and assumptions

Energy and waste data are collected from various sources. In addition to having our own monitoring systems at our sites, we collect data from the reporting systems and invoices of our service providers. All our sites in the reporting scope submit their environmental indicators in a centralized reporting system.

For Scope 1 emissions calculation, we collect data from Vaisala owned and leased cars, and from the consumption of heating fuels and refrigerants. For Scope 2 emissions, we collect data from the energy consumption of our sites. For indirect (Scope 3) emissions calculation, we collect data from various sources. For use of sold products, purchased goods and services, capital goods, and inbound logistics, we use data from our internal systems. For outgoing logistics, we get data from our logistics partners and for business travel from our travel agency. For commuting, we utilize data from our commuting survey renewed in 2022 to estimate the proportions of different modes of transport and share of remote work.

The environmental figures for 2022 are based, for the relevant part, on data that was available at the time of the publication of the report including the first 10-12 months of the year. For the missing

DIVISION OF ENVIRONMENTAL IMPACTS BY LOCATION



- Vantaa, manufacturing location
- Boulder (Louisville, CO), manufacturing location
- Paris (Saclay), manufacturing location
- Other locations



Reporting principles	Governance, policies, and due diligence	Environment	Employees	Occupational health and safety	Ethics and compliance	Responsible supply chains	UN Global Compact	Signatures	Independent limited assurance report	GRI content index
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part, the figures are estimates based on actual data for the previous months. There is no reason to assume that there should be significant differences between the estimates and the actual figures for 2022.

Emission factors

Greenhouse gas emissions are calculated using the best available emission factors. These emission factors mainly come from BEIS 2022 (UK Department for Business, Energy & Industrial Strategy), Ecoinvent 3.9.1, CEDA 5.05, IEA Emissions Factors 2022, and eGRID2020 databases.

Certain emission factors come from other sources, such as our logistics partners, local energy companies, and vehicle manufacturers. For flights, we use BEIS emission factor with radiative forcing, which also acknowledges those climate change effects of aviation not attributable to CO₂.

To determine our Scope 2 carbon footprint, we primarily use the market-based calculation method, which takes our purchased energy specific emissions into account. In 2022, our purchased electricity was entirely renewable, which means that we use 0.0 g CO₂e/kWh as the emission factor for electricity in the market-based calculation. In addition, we report our location-based Scope 2 emissions, which are based on average country-specific emissions from energy production.

Our carbon footprint includes all greenhouse gases converted into carbon dioxide using global warming potential (GWP-100).

Calculation methodology for Scope 3 emissions

We have described here our calculation methodology for each of the Scope 3 emission categories as defined in the GHG Protocol.

- 1. Purchased goods and services:** For direct purchases, we have chosen the top 10 vendor subtypes that contribute most to spend and calculated the emissions of purchased items in these vendor subtypes based on their weights, material approximations, and matching emission factors. For other vendor subtypes under direct purchasing, we have used spend-based calculation. For indirect purchasing, we have used spend-based calculation covering those vendor subtypes that were assessed relevant considering emissions and are not included in other emission categories.
- 2. Capital goods:** The calculation is based on financial data for fixed assets for the year 2022 using a spend-based approach. Emissions in this category vary significantly from year to year based on purchase needs.
- 3. Fuel and energy related activities:** For this category, we have considered the heating and vehicle fuels reported under Scope 1 and the total energy consumption reported under Scope 2. We have used the emission factors available to us for calculating the upstream emissions as well as transmission and distribution losses for our fuel and energy use.
- 4. Upstream transportation and distribution (paid by Vaisala):** For inbound logistics, we have used data from our internal systems concerning the geographical locations of our suppliers and approximations of the weight of incoming goods. The distance traveled has been estimated based on the country of origin and target country. For outbound logistics, we have used emissions data received from our logistics service providers. We have used transportation method specific WtW (Well-to-Wheel) emission factors.
- 5. Waste generated in operations:** We have calculated the emissions from each waste stream generated on our major production site in Vantaa, Finland. According to our estimates, this covers more than 81% of the total waste generated in Vaisala. We have extrapolated these emissions to cover our total waste generation globally.

- 6. Business travel:** We have included air and rail travel, rental car kilometers, kilometer reimbursements for business trips travelled by employees' own cars, and hotel nights. For air and rail travel, hotel nights, and rental cars we have received data from our service providers. For hotel nights, we have extrapolated the data based on information regarding overnight travel bookings without hotel.
- 7. Employee commuting:** We conducted a commuting survey among all our global employees in 2022. We got 955 responses with a good representation of our different locations. We extrapolated the results to cover all our employees. We have not included the emissions from remote work.
- 8. Upstream leased assets:** This category is not applicable to Vaisala. We have covered the emissions of our leased vehicles and facilities in our Scope 1 and 2 emissions.
- 9. Downstream transportation and distribution (paid by customer):** We have used data from our internal system on the transportation methods and weight of the customer paid shipments. The distance traveled has been estimated based on the country of origin and target country. We have used transportation method specific WtW emission factors.
- 10. Processing of sold products:** This category is not applicable to Vaisala, because we manufacture end products.
- 11. Use of sold products:** We have considered here our products that are powered or charged with grid power. The calculation formula is $\sum(\text{number of products sold in reporting period} \times \text{total lifetime expected use hours of product} \times \text{average power consumption} \times \text{regional emission factor for electricity})$. Due to the long life cycles of our products (even 20 years), this category is our largest emission category.
- 12. End-of-life treatment of sold products:** We have used data from our internal systems on the total amount of products put onto markets in different regions, and research data on the regional waste treatment methods for waste from electrical and electronic equipment, and packaging.
- 13. Downstream leased assets:** This category is not applicable to Vaisala.
- 14. Franchises:** This category is not applicable to Vaisala.
- 15. Investments:** This category is not applicable to Vaisala.



Employees

The total number of employees at the end of 2022 was 2,235. The average number of people employed during the year was 2,139. The average age of employees was 44 years. At the end of the year, 93% of employees were permanent and 7% temporary. In addition, there were approximately 200 workers who were not employees working at Vaisala. Most of these were consultants working in R&D.

Employees by contract and gender

	Female	Male	Unknown	Total
Total	674	1,560	1	2,235
Permanent	616	1,459	1	2,076
Temporary	58	101	0	159
Full-time	631	1,481	1	2,113
Part-time (guaranteed hours)	23	41	0	64
Part-time (non-guaranteed hours)	20	38	0	58

Employees by contract and area

	Finland	Americas	EMEA	APAC
Total	1,475	350	240	170
Permanent	1,380	350	230	116
Temporary	95	0	7	57
Full-time	1,376	348	224	165
Part-time (guaranteed hours)	41	2	16	5
Part-time (non-guaranteed hours)	58	0	0	0

Americas: North and South America; EMEA: Europe, Middle East, and Africa; APAC: Asia-Pacific





Employee turnover

During 2022, 357 permanent employees were recruited, and 143 permanent employees left the company, out of whom 19 retired. The turnover rate for permanent employees was 6.9%, and the recruitment rate was 17.2%.

Collective agreements and compensation

Vaisala is a member of Technology Industry Employers of Finland. Vaisala's employees in Finland are covered by three collective agreements: the collective agreement for employees in technology industries, the collective agreement for salaried employees in technology industries, and the collective agreement for senior salaried employees in technology industries. Globally, 70% of Vaisala's employees are covered by collective bargaining agreements.

Salaries and wages paid by the company are based on local collective and individual agreements, individual performance, and the requirements of each position. The base salaries are supplemented by a performance-based bonus system, which covers all Vaisala employees.



- 3% Doctoral degree
- 69% University degree
- 10% College/vocational school
- 15% High school/vocational institute
- 3% Comprehensive school

* Covers 86% of permanent employees

Recruitments by age group

	-19	20-29	30-39	40-49	50-59	60-	Total
Male	8	115	105	71	27	8	334
Female	3	61	49	42	16	3	174
Unknown			1				1
Total	11	176	155	113	43	11	509

Turnover by age group

	-19	20-29	30-39	40-49	50-59	60-	Total
Male	7	52	45	24	16	16	160
Female	2	25	23	15	5	10	80
Total	9	77	68	39	21	26	240

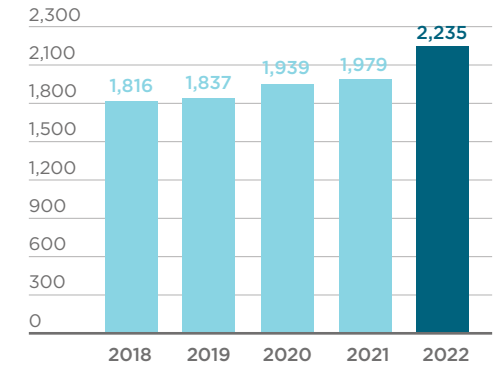
Recruitments by region

	Finland	Americas	EMEA	APAC	Total
Permanent	218	96	34	9	357
Temporary	113	5	13	21	152
Total	331	101	47	30	509

Turnover by region

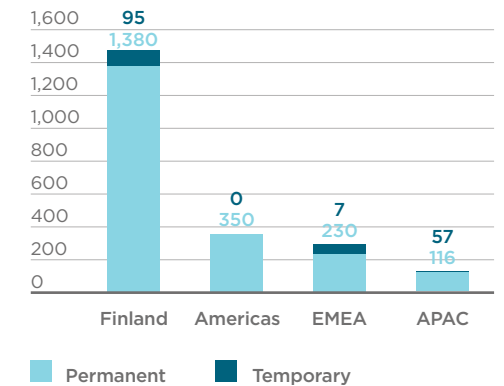
	Finland	Americas	EMEA	APAC	Total
Permanent	84	36	21	2	143
Temporary	69	5	15	8	97
Total	153	41	36	10	240

EMPLOYEES AT THE END OF THE YEAR*



* Number of employees includes also persons in long-time absence as of 2020.

EMPLOYEES BY REGION AND CONTRACT



Americas: North and South America
EMEA: Europe, Middle-East, and Africa
APAC: Asia-Pacific



Diversity, equity, and inclusion

In Vaisala, advancing diversity, equity, and inclusion (DEI) is important from the points of view of employee well-being, attracting new talent, and creating new innovations, for example. By enhancing and fostering diversity and equity in our work community, we can also do our part to promote these topics in society at large and enhance sustainable work life.

As laid out in Vaisala’s Code of Conduct, we recognize the value of diversity and do not accept any form of discrimination. We aim to treat all our employees and applicants equally in all recruitment, hiring, training, development, as well as compensation or benefits plans regardless of their gender or gender identity, age, ethnic or national background, citizenship, language, religion and belief, physical or mental disability, health, sexual orientation, or any other reason pertaining to their person.

Our aim is that Vaisala’s employees, jobseekers, and the subcontractors operating within Vaisala’s guidance and offices as well as leased employees will be treated equally and that our employees work within a safe, caring, communal, and accessible operating environment. Equity is advanced by developing good practices as well as identifying problems and presenting solutions to them. If discrimination occurs, it will be reacted to immediately and systematically. Local operating environments and their legislation are acknowledged when enhancing equality and equity in our offices around the world.

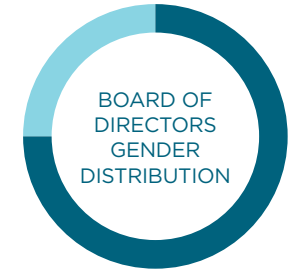
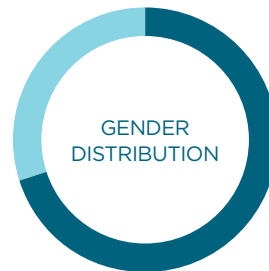
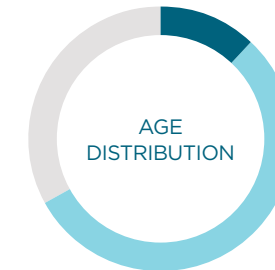
We want to support our employees in different stages of life and circumstances. We take a positive view on family leaves, irrespective of gender. The professional capacity and skills of more senior employees are enhanced, among others, with an annual discussion where the employer and an employee of over 58 years of age discuss the actions that support the said employee in continuing their work.

Wage equality between genders is on a good level in Vaisala. In 2022, we conducted a wage survey covering all locations. The survey showed that women’s wages were, on average, 94% of men’s wages

Gender pay gap: women’s average wage/men’s average wage*

	All employee groups	Production employees	Managers and professionals
All countries	94%	104%	94%
Finland	97%	100%	97%
United States	90%	102%	90%
France	95%	106%	94%

* Position levels where the equivalent position for a minimum of two genders was not found were excluded from the analysis.



* Gender unknown, undeclared, or other



Reporting principles	Governance, policies, and due diligence	Environment	Employees	Occupational health and safety	Ethics and compliance	Responsible supply chains	UN Global Compact	Signatures	Independent limited assurance report	GRI content index
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on the same job requirement level for managers and professionals and 104% of men’s wages for production employees. We did not find any systematic, unexplainable differences in the wages between genders. However, we will investigate the causes of the observed differences further during 2023.

We continued our work to actively enhance DEI through the program group that was set up in 2021. This work is part of our culture development program. The program group will be expanded as the work progresses.

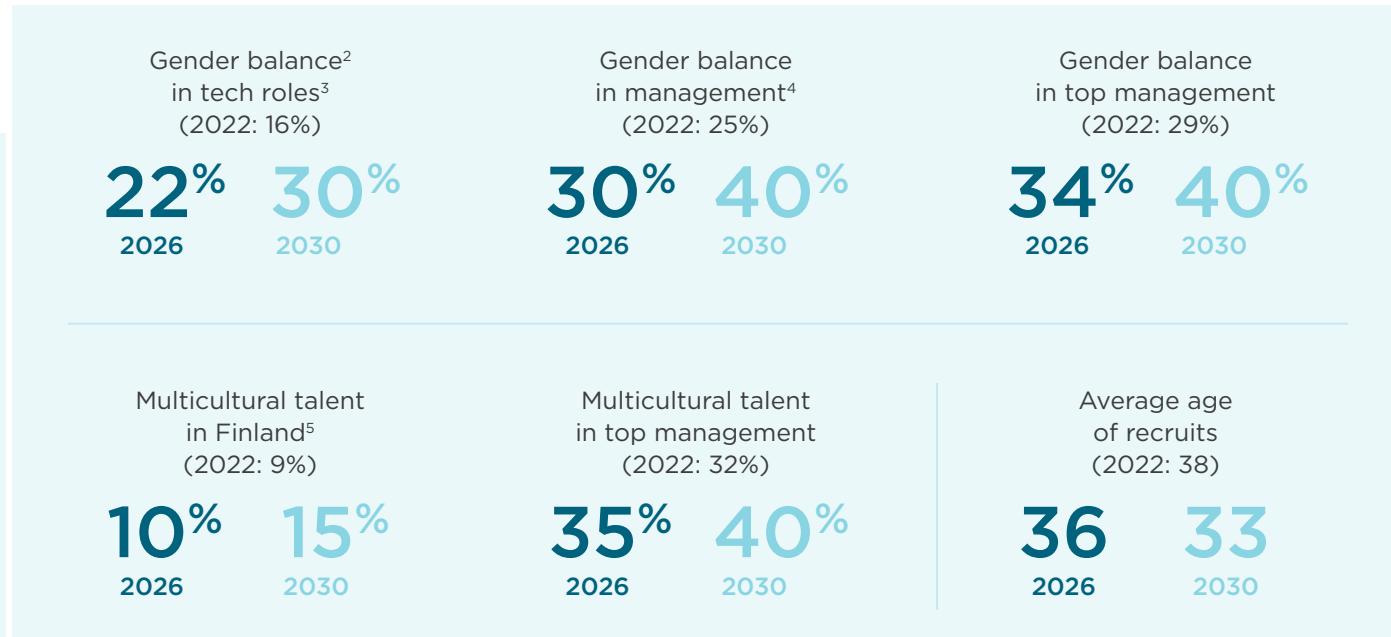
One of the most significant achievements in 2022 was the internal launch of our DEI strategy. The strategy defines our DEI vision as well as high-level means to achieve it. We move towards the vision by 1) building awareness, 2) establishing consistent, inclusive ways of working, 3) and monitoring measurable KPIs.

According to the vision, we strive to become a DEI leader in the technology field by aiming to have our people reflect our customer base and the societies we work in as well as have our managers reflect our people. In Vaisala, everyone is welcome as they are: our values, innovation, and curiosity are the most important elements uniting us.

As part of our DEI strategy and culture work, we continued to build DEI awareness among our employees by organizing different campaigns, internal events, and panel discussions in 2022. We also started planning a new DEI e-learning, which will be launched in 2023.

The DEI index in our employee survey was 4.2, while in the previous year, it was 4.1. This indicates that our employees’ experience of equity and inclusion has improved. The improvement was, however, less significant among employees identifying themselves as minorities. Therefore, we aim to pay more attention to improving the experience of inclusion within the different minorities.

Vaisala’s DEI targets



¹ The minority/majority gap in the DEI Index
² The share of employees with non-dominant gender identities
³ Tech roles = expert or manager positions in IT, product management, and R&D
⁴ Management = managers in team lead positions
⁵ In this context, multi-cultural = other than Finnish citizen



Occupational health and safety

Occupational health and safety management

Occupational health and safety is an important part of all our activities. Our occupational health and safety management and development is guided by our Global Quality, Environment, and Health and Safety (QEHS) Policy as well as our ISO 45001 certified occupational health and safety management system, which sets the background for continuous improvement. 91% of our employees work on certified sites, but the system covers all our activities and employees.

The identification and assessment of occupational health and safety related risks is systematic work, and it is done in cooperation with our employees and other stakeholders. We apply the hierarchy of controls to minimize risks. We aim to eliminate the most significant hazards or substitute them with less dangerous alternatives if removing them is not possible. We aim to further reduce the residual risk by controlling the risk at the source through engineering controls. If personal protective equipment is needed, it is given to employees for free.

We invest in health and safety training for employees and ensure that all employees have the necessary qualifications to perform their work. All our employees have the right to refuse work that they believe could endanger their own or their colleagues' safety or health. This and other occupational health and safety practices are covered in a mandatory e-learning course. Occupational safety training is free for our employees, and the training can be conducted during working hours.

Impacts of COVID-19 pandemic

The COVID-19 pandemic continued to influence our health and safety work especially in the beginning of the year 2022. We managed to prevent the spread of the epidemics at our workplaces by increasing remote work and staggering of shifts and breaks, improving hygiene instructions and cleaning, requiring face masks, as well as tightening travel and visitor restrictions according to the changing epidemiological situation.

Collaboration

We have increased collaboration between employees and the employer by establishing Health and Safety Committees in several locations. The committees have an important role in monitoring and developing occupational health and safety. Currently, active Health and Safety Committees are operating in Finland, Canada, Germany, the United States, the United Kingdom, Japan, France, and China. These local committees cover all employee groups and convene at least twice but usually four times a year, some of the committees even monthly.

The committees handle occupational health and safety collaboration topics that concern the workplace and workers in general. Some of the key tasks of Health and Safety Committees are making development suggestions about occupational health and safety to the employer and monitoring the implementation of health and safety action plans. The committees' tasks also include making proposals for arranging occupational health and safety training, on-the-job training and orientation, as well as participating in actions supporting employees' working capacity.

The Health and Safety Committees monitor occupational safety issue reports and take part in accident investigations. Meeting minutes and other materials produced by the committees are available for employees to read on our intranet. In addition, the committees can promote the health and safety culture with various actions, such as organizing events, which the employer aims to support with suitable measures.

In addition to the committees, our employees can take part in maintaining and developing the health and safety system through, for instance, occupational safety issue reports. We communicate about health and safety regularly, every month as a minimum, and the texts published on our intranet are open to comments. Whenever occupational health and safety risks of a job, area, or organization are assessed, employee representatives are included, either from the local Health and Safety Committee or from the area in question.





Proactive reporting and investigation

We encourage our employees and contractors to proactively report any health and safety risks in the workplace and make improvement suggestions concerning the safety of working conditions and methods. To prevent injuries, harmful exposure, and the recurrence of incidents, line management is responsible for making sure that the reported deviations and their causes are investigated. After the investigation, corrective measures are implemented without delay. A globally consistent reporting procedure and database improve the efficiency and transparency of health and safety performance monitoring.

In 2022, the proactive reporting index (reported risks, near misses, and improvement suggestions per 100 employees) was 15.88. We strive to increase the reporting frequency even more by continuing to focus on education and increasing our employees’ understanding of the importance of proactive reporting. In addition, we aim to shorten the processing time of issue reports. Our business units’ leadership teams receive regular reports of proactive reporting figures for their areas as well as the average processing time of the reports so that prolonged processing times can be dealt with early on.

Injuries

The number of injuries increased in 2022 compared to the previous year. A total of 21 injuries occurred, of which 15 led to sick leave. The Total Recordable Injury Frequency (TRIF) was 4.69 injuries per million hours worked, with the total number of hours worked being 4.47 million. The Lost Time Injury Frequency (LTIF) was 3.35 per million hours worked. The injuries have been investigated and corrective actions have been defined. Some of the corrective actions will continue to be executed during 2023.

Most of the injuries were caused by slipping in the winter. Following the investigation of these injuries, we started a comprehensive

assessment of the safety risks related to the traffic on our headquarter area. The aim of this assessment is to define actions whereby the safe movement of pedestrians, cyclists, and vehicles can be ensured in the area.

In addition, we started actions to develop our safety culture, such as safety trainings for managers and leadership team’s safety walks. We continue to work towards our long-term goal of zero injuries and occupational diseases, and we believe we can achieve this goal through continuous improvement.

Occupational health services

In Vaisala, occupational healthcare is managed by following local legislative requirements, and thus the practices vary in different countries. Employees are informed about the services through our intranet, for example.

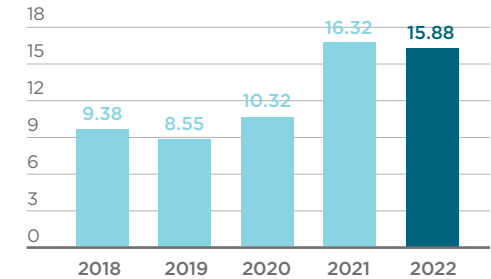
In Finland, Vaisala offers all employees general practitioner level medical care. Our work capacity insurance covers specialist level medical services for all but hourly-based employees. Our healthcare contract covers treatment expenses caused by accidents that occur during working hours and free time.

In the United States, Vaisala provides a complete package of health-care benefits including but not limited to medical, dental, and vision coverage. In France, Vaisala pays 50% of employees’ mandatory private health insurance that covers a variety of medical specialist treatments. In China, Vaisala provides annual medical check-ups to all employees, and an exclusive commercial medical insurance has been purchased for employees and their dependents.

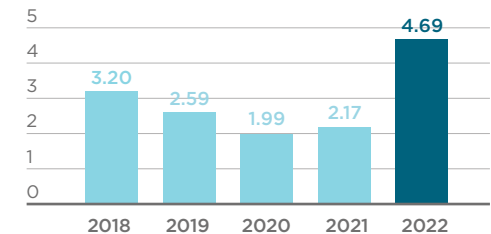
In countries other than the ones mentioned above (the countries mentioned cover approximately 90% of Vaisala’s employees), the occupational healthcare is managed in accordance with local legislation and practices.

PROACTIVE REPORTING

Reports/100 employees



INJURIES PER MILLION WORKING HOURS (TRI)





Ethics and compliance

Prevention of corruption and bribery

Vaisala has a zero-tolerance policy towards all forms of corruption. Our International Anti-Corruption Policy strictly forbids offering, giving, soliciting, arranging, demanding, or accepting bribes, whether directly or through third parties. The Policy includes detailed guidelines on acceptable hospitality and entertainment. Periodical training for employees on the Code of Conduct also covers aspects related to the International Anti-Corruption Policy. In addition, a more specific Anti-Corruption Policy training has been tailored to employees who, according to risk analysis, might face challenging situations in their work.

To serve its customers as efficiently as possible, Vaisala conducts business through a network of partners – with distributors, agents, and resellers in more than 100 countries. Our business operations cover a large geographical area, meaning that we also operate in countries with a demanding business environment. For this reason, we pay special attention to selecting our business partners.

Our agreements with our partners typically include strict clauses concerning immediate termination if a partner violates any aspects of our Code of Conduct or International Anti-Corruption Policy, both of which are attached to the agreements we sign with partners. We also have an e-training on Vaisala’s Code of Conduct targeted at our distribution partners. The completion of the training is monitored via the training system. The training emphasizes anti-corruption and bribery, and it aims to ensure that partners understand Vaisala’s principles and can act according to them in all situations.

Respect for human rights and human rights due diligence

Vaisala is committed to respecting human rights as defined in the United Nations’ Universal Declaration of Human Rights and endorses ILO’s Declaration of Fundamental Principles and Rights at Work. Vaisala

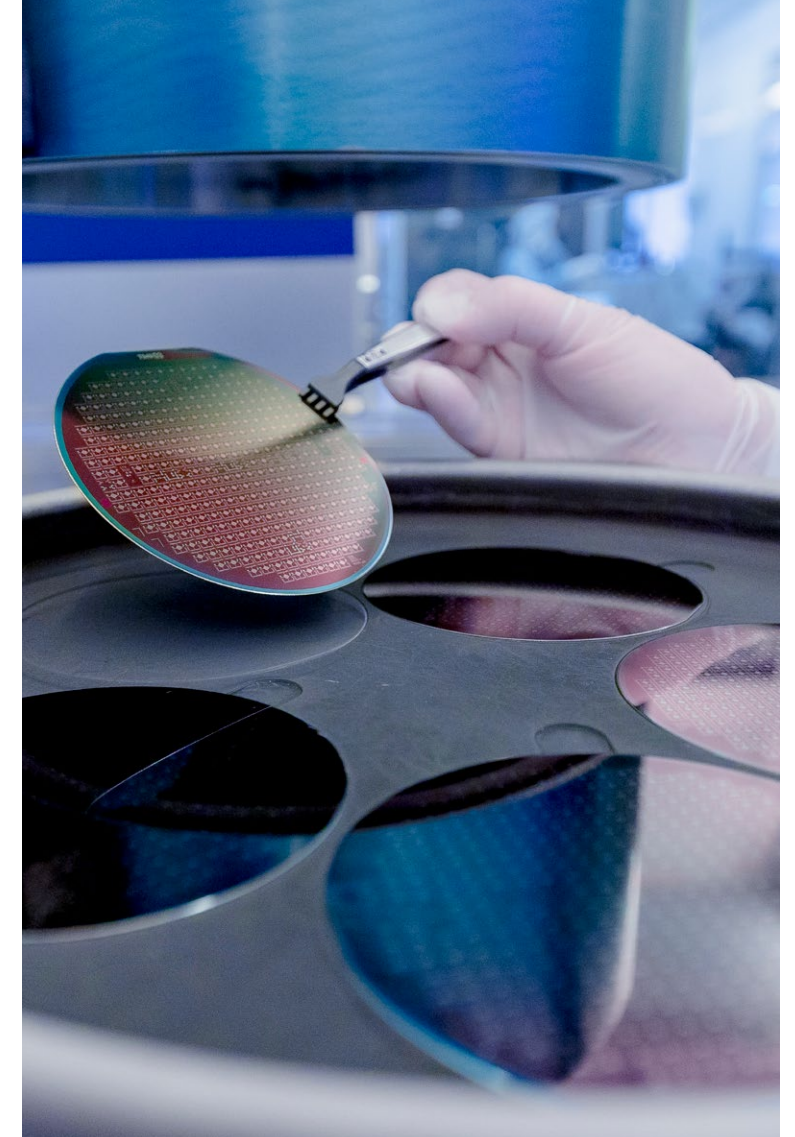
does not condone violations of human rights or labor laws in any part of its supply chain. The company takes appropriate measures to ensure that the risk of violations of its Code of Conduct or Supplier Code of Conduct is minimized in its immediate supply chain.

Vaisala’s internally conducted human rights risk assessment suggests that the risk of most salient human rights violations is the highest beyond the third tier of suppliers. These risks are the same as in other electronics manufacturing supply chains, including unpaid or excessive overtime, dangerous working conditions, bonded labor, and low wages. The human rights risks in Vaisala’s supply chain are mitigated by carefully choosing preferred suppliers and working closely with first-tier suppliers, insisting on policies that go beyond the requirements of local laws and obliging them to ensure that human rights are respected also in their supply chains. The suppliers’ human rights risk management processes are assessed and monitored as a part of the suppliers’ self-assessment questionnaires and supplier audits.

Another area where we have identified a high need to understand and manage human rights risks is our global project subcontractor network, where we need to ensure, for example, that our partners follow adequate health and safety standards. Therefore, we give concrete safety instructions and trainings to our subcontractors, for example, in addition to ensuring their commitment to Vaisala’s Supplier Code of Conduct.

We also train our sourcing employees and project managers operating in high-risk areas to identify and manage human rights risks while operating with potential or selected suppliers or subcontractors.

We evaluate the adequacy of our human rights due diligence processes annually as a part of the sustainability reporting, for example, by monitoring the share of suppliers who have signed the Supplier Code of Conduct and suppliers assessed by ESG criteria.





Reporting principles	Governance, policies, and due diligence	Environment	Employees	Occupational health and safety	Ethics and compliance	Responsible supply chains	UN Global Compact	Signatures	Independent limited assurance report	GRI content index
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Any violations or suspected violations of human rights can be reported in Vaisala’s whistleblowing channel, through which stakeholders can also seek remedy for them.

Conflict minerals

Vaisala is committed to responsible sourcing of minerals. Our operating model for ensuring the responsibility of the minerals supply chain follows the Organisation for Economic Co-operation and Development (OECD) Guidance, and we use the Responsible Minerals Initiative’s (RMI) reporting template to find out and document the origin of the minerals.

Vaisala’s suppliers must aim to ensure that the parts delivered to Vaisala do not contain any minerals that have their origin in conflict areas, currently including but not limited to the tin, tungsten, tantalum, and gold mined in the Democratic Republic of Congo (DRC) or in adjoining countries. If parts or products supplied to Vaisala contain tin, tantalum, tungsten, or gold, the supplier must ensure responsible sourcing of these minerals and report to Vaisala using RMI’s Conflict Minerals Reporting Template (CMRT).

Fair competition

As laid out in our Code of Conduct, we comply with all laws and regulations concerning competition and expect the same from our business partners. Business practices we renounce include participating in cartels, abusing one’s dominant position in the marketplace, and fixing prices with competitors. Competition aspects are carefully considered in all our business. Fair competition is included as a topic in Vaisala’s mandatory Code of Conduct training.

Product safety

Vaisala is known for its reliable products, and customer health and safety are key considerations at all stages of our product development.

We follow all safety standards applicable to each product in our product design. Our products are carefully designed and type tested, keeping in mind their safe and environmentally friendly delivery, use, maintenance, and decommissioning. User documentation is built to support these goals. Accredited laboratories are widely used to ensure the safe design of our products. Vaisala performs an electrical safety inspection of all applicable products.



Responsible supply chains

In its supply chain, Vaisala seeks to promote competitive advantage and innovations responsibly through cooperation. Our business operations are based on high mix and low volumes. Managing this complexity requires effective coordination of hundreds of suppliers and selected strategic partners. To deliver on our customer promise and meet stakeholder expectations, we must have a reliable and responsible supply chain. We set strict requirements for our suppliers, and we cooperate with them closely over the long term, which enables both parties to further develop their operations.

Typical product supply chain

Our direct suppliers are generally located close to our product development operations and manufacturing sites. We purchase subassemblies, components, and mechanical parts mainly from Finland and other European countries as well as the United States. Our upstream supply chains resemble other typical supply chains in the global electronics manufacturing industry.

Supplier management

Vaisala's supplier management model has five categories: temporary, potential, approved, preferred, and strategic suppliers. In addition to these categories, suppliers may be, for example, in phase-out when their contracts are being discontinued gradually or on a watch list when they are monitored closely due to serious issues experienced over the long term. The classification defines the relationship between Vaisala and the supplier and outlines the management model for each category. All suppliers are expected to meet certain requirements before they can be approved and categorized. The requirements for





suppliers are based on the classification, risk assessment, and spend. Suppliers must also commit to the Supplier Code of Conduct.

We use a Supplier Sustainability Self-Assessment Questionnaire (SAQ) as part of supplier development and in all categories to assess environmental, social, and governance (ESG) risks. The questionnaire is a part of the supplier's assessment and exposes risks related to environmental management, occupational safety, social responsibility, governance, and supply chain management.

If a supplier's assessment does not meet Vaisala's requirements, the supplier is expected to implement corrective measures to improve their sustainability as part of their comprehensive development plan, and any weaknesses are addressed in cooperation with the supplier. The SAQ is used also for assessing new suppliers' ESG risks. In 2022, we approved two new suppliers. One of the suppliers was assessed using ESG criteria, while the other one was still in the assessment process at the end of the year.

As part of supplier management, we conduct quality, supply chain, and process audits. In these audits, we also check aspects related to sustainability, such as suppliers' knowledge and application of Vaisala's Supplier Code of Conduct, labor and human rights, occupational safety, environmental management, product safety (RoHS and REACH), and conflict mineral management. In 2022, we audited 32 suppliers.

Due to the recent challenges in global component supply, we added several new temporary suppliers during 2022. These temporary suppliers are mainly brokers selling components, not new manufacturers. The temporary suppliers do not go through Vaisala's regular supplier approval processes, and only necessary contracts are made with them. For this reason, the share of suppliers who have signed Vaisala's Supplier Code of Conduct and the share of suppliers assessed using ESG criteria went down from the previous year. The number of temporary suppliers will decrease as the market situation normalizes.



47% Strategic suppliers (12 suppliers)
17% Preferred suppliers (41 suppliers)
25% Approved suppliers (352 suppliers)
11% Other (92 suppliers)



53% Finland (171 suppliers)
25% Other EU (142 suppliers)
12% North America (115 suppliers)
9% China (61 suppliers)
1% Japan, Singapore, South Korea, and Malaysia (8 suppliers)

Key figures of Vaisala's direct supply chain*



497
(2021: 457)
suppliers

32
(2021: 34)
suppliers audited during the year

87%
(2021: 92%)
of purchases (based on spend) were made from suppliers who had signed the Supplier Code of Conduct

83%
(2021: 90%)
of purchases (based on spend) were made from suppliers rated on ESG metrics

* By direct suppliers, we mean suppliers related to our products, which includes manufacturing partners as well as mechanics and other component suppliers.

Read more about supplier management at Vaisala: vaisala.com/suppliers



UN Global Compact

Vaisala joined the UN Global Compact in 2008 and has committed to following the 10 guiding principles of the initiative. These 10 principles are reflected in Vaisala’s Code of Conduct, and we report on the implementation of the principles on an annual basis as part of our sustainability reporting. Our sustainability reports have qualified for the Global Compact Advanced differentiation level since its introduction in 2010.

Human rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.	p. 60–61 Ethics and compliance
Principle 2: Make sure that they are not complicit in human rights abuses.	p. 60–61 Ethics and compliance

Labor standards

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	p. 55 Collective agreements and compensation
Principle 4: The elimination of all forms of forced and compulsory labor.	p. 60–61 Ethics and compliance
Principle 5: The effective abolition of child labor.	p. 60–61 Ethics and compliance
Principle 6: The elimination of discrimination in respect of employment and occupation.	p. 56–57 Diversity, equity, and inclusion, p. 60–61 Ethics and compliance

Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges.	p. 52 Sustainable product design and management
Principle 8: Undertake initiatives to promote greater environmental responsibility.	p. 47 Environmental management, p. 49 Energy, p. 49 Emissions, p. 50 Waste
Principle 9: Encourage the development and diffusion of environmentally friendly technologies.	p. 52 Sustainable product design and management

Anti-corruption

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	p. 60–61 Ethics and compliance
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Signing of non-financial information

Disclosure of non-financial information in accordance with Finnish Accounting Act is presented in the annual report's Sustainable business practices section as well as the chapters Business model in Our business section, Dashboard in the Creating value section, and Risk management in the Governance section.

Vantaa February 15, 2023

Petri Castrén

Antti Jääskeläinen

Petra Lundström

Jukka Rinnevaara

Kaarina Ståhlberg

Tuomas Syrjänen

Ville Voipio
Chair
of the Board of Directors

Raimo Voipio
Vice Chair
of the Board of Directors

Kai Öistämö
President and CEO



Independent limited assurance report

To the Board of Directors of Vaisala Oyj

Scope

We have been engaged to provide a limited assurance on the selected GRI disclosures presented on pages 33 and 44–64 of Vaisala Oyj’s (business identity code 0124416-2) annual report for the reporting period of January 1, 2022 to December 31, 2022. The assured information is presented on the Vaisala’s GRI Content Index pages 67–74. (Hereafter Sustainability Reporting).

Responsibilities of the Board of Directors

The Board of Directors of Vaisala Oyj is responsible for the preparation of the Sustainability Reporting in accordance with the Reporting criteria as set out in the Vaisala Oyj’s reporting instructions and the GRI Sustainability Reporting Standards of the Global Reporting Initiative (hereinafter also the Reporting criteria). This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of the Sustainability Reporting that are free from material misstatement, whether due to fraud or error, selecting and applying appropriate criteria and making estimates that are reasonable in the circumstances.

Assurance provider’s responsibilities

Our responsibility is to perform a limited assurance engagement and to provide an independent conclusion on the Sustainability Reporting based on our engagement. We conducted our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised) and its terms have been agreed with Vaisala Oyj. ISAE 3000 standard requires that we plan and perform the assurance engagement to obtain limited assurance whether any matters come to our attention that cause us to believe that the Sustainability Reporting has not been prepared, in all material respects, in accordance with the Reporting criteria. The nature, timing and scope of the limited assurance procedures are based on professional judgement, including

an assessment of material misstatement due to fraud or error. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

We have maintained our independence and confirm that we have complied with the ethical requirements set by the International Ethics Standards Board for Accountants, IESBA. We have applied International Standard on Quality Management, ISQM 1.

Description of the measures taken

As the methods of obtaining evidence are more limited in a limited assurance than in a reasonable assurance, an assurance obtained is more limited than in a reasonable assurance. We have designed and performed procedures to obtain sufficient and appropriate evidence for limited assurance and to provide a basis for our conclusion, therefore we do not obtain all the evidence, which is required in reasonable assurance. While we consider the design of internal controls when determining the nature and scope of our assurance procedures, our limited assurance engagement is not included the testing of the operating effectiveness of internal controls. Our procedures did not include control testing or performing procedures related to combining and calculating data within IT systems.

The limited assurance engagement consists of inquiries of individuals who are responsible for preparing Sustainability Reporting and related information, as well as for carrying out analytical and other procedures.

The procedures included:

Among other things, we have carried out the following procedures in the assignment:

- Interviewing senior management of the Vaisala Oyj;
- Conducting interviews with employees responsible for the collection and reporting of the sustainability information and reviewing of the processes and systems for data gathering, including the aggregation of the data for the Sustainability Reporting;

- Reviewing internal and external documentation to verify to what extent these documents and data support the information included in the Sustainability Reporting and evaluating whether the information presented in the Sustainability Reporting is in line with our overall knowledge of the objectives and management of corporate responsibility at Vaisala Oyj;
- Performing analytical review procedures and testing data and its compilation on a sample basis to assess the reasonability of the presented Sustainability Reporting;
- Conducting limited assurance procedures at Vaisala’s Saclay and Boulder sites;
- Assessing the consistency of the Sustainability Reporting with GRI Reporting criteria, reporting contents as well as the qualitative principles of reporting.

Conclusion

Based on procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Vaisala Oyj’s Sustainability Reporting for the reporting period ended 31 December 2022 is not properly prepared, in all material respects, in accordance with the Reporting criteria.

Vantaa, February 15, 2023

Deloitte Oy
Audit firm

Reeta Virolainen
Authorized Public Accountant

Teemu Jaatinen
Authorized Public Accountant



GRI content index

STATEMENT OF USE: Vaisala has reported in accordance with the GRI Standards for the period January 1–December 31, 2022.

GRI 1 USED: GRI 1: Foundation 2021

GRI standard	Disclosure	Location and additional information	Omission			Assurance
			Requirement(s) omitted	Reason	Explanation	
General disclosures						
GRI 2: General Disclosures 2021	2-1 Organizational details	Name: Vaisala Corporation, head office: Vantaa, Finland. Operating countries: 15. p. 148 Consolidated financial statements: Note 26. Subsidiaries				
	2-2 Entities included in the organization's sustainability reporting	p. 44 Boundaries				
	2-3 Reporting period, frequency and contact point	Reporting period: January 1–December 31, 2022, reporting frequency: annual, publication date: March 1, 2023. Contact information: p. 179 Contact information				
	2-4 Restatements of information	We have restated the 2021 emissions figures 1 due to the increased accuracy of our emissions calculation methodology.				
	2-5 External assurance	p. 44 Independent assurance, p. 66 Independent limited assurance report				
	2-6 Activities, value chain and other business relationships	p. 15 Business model, p. 16–17 Industrial Measurements business area, p. 18–19 Weather and Environment business area, p. 20 Operations, p. 62 Responsible supply chains				
	2-7 Employees	p. 54 Employees				
	2-8 Workers who are not employees	p. 54 Employees				
	2-9 Governance structure and composition	p. 45 Governance, p. 76–82 Corporate Governance Statement. Board of Directors (BoD) comprises competences relevant to the impacts of the organization, for example related to management of supply chains, human resources management as well as sustainable manufacturing. www.vaisala.com/en/investors/corporate-governance/board-directors				
	2-10 Nomination and selection of the highest governance body	p. 90 Board of Directors				



GRI standard	Disclosure	Location and additional information	Omission			Assurance
			Requirement(s) omitted	Reason	Explanation	
GRI 2: General Disclosures 2021	2-11 Chair of the highest governance body	The Chair of the Board of Directors is not a senior executive in the organization.				
	2-12 Role of the highest governance body in overseeing the management of impacts	p. 45 Governance				X
	2-13 Delegation of responsibility for managing impacts	p. 45 Governance				X
	2-14 Role of the highest governance body in sustainability reporting	Board of Directors reviews the sustainability report annually. The report is approved and signed in a Board of Directors meeting before publishing.				
	2-15 Conflicts of interest	p. 77 Selection criteria, diversity, and the independence of the members. There are no conflicts of interest. If there were any conflicts of interest, they would be announced publicly.				
	2-16 Communication of critical concerns	p. 46 Compliance monitoring and violations				X
	2-17 Collective knowledge of the highest governance body	Sustainability knowledge was added to the Board of Directors' nomination criteria. In addition, the Board of Directors' agenda includes activities to increase the Board's awareness on sustainability related matters.				
	2-18 Evaluation of the performance of the highest governance body	p. 76-82 Corporate Governance Statement. In response to the evaluation, the Remuneration and HR Committee was changed as the People and Sustainability committee in 2022.				
	2-19 Remuneration policies	p. 83-85 Remuneration Report				
	2-20 Process to determine remuneration	p. 83-85 Remuneration Report 2022. Remuneration consultants were not involved in determining remuneration.				
	2-21 Annual total compensation ratio	p. 83-85 Remuneration report 2022				
	2-22 Statement on sustainable development strategy	p. 6-7 Chair and CEO's message				
	2-23 Policy commitments	p. 45-46 Governance, policies, and due diligence, p. 46 Supplier Code of Conduct				X
	2-24 Embedding policy commitments	p. 45-46 Governance, policies, and due diligence				X
2-25 Processes to remediate negative impacts	p. 46 Compliance monitoring and violations				X	



GRI standard	Disclosure	Location and additional information	Omission			Assurance
			Requirement(s) omitted	Reason	Explanation	
GRI 2: General Disclosures 2021	2-26 Mechanisms for seeking advice and raising concerns	p. 46 Compliance monitoring and violations				X
	2-27 Compliance with laws and regulations	No incidents				X
	2-28 Membership associations	p. 35-36 Active community outreach and scientific collaboration				
	2-29 Approach to stakeholder engagement	p. 26 Stakeholder engagement				
	2-30 Collective bargaining agreements	p. 55 Collective agreements and compensation				X
Material topics						
GRI 3: Material Topics 2021	3-1 Process to determine material topics	p. 44 Materiality				X
	3-2 List of material topics	p. 44 Materiality				X
Value for society and the environment						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 31-36 Value for society and the environment				X
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	p. 33 Economic value				X
	201-2 Financial implications and other risks and opportunities due to climate change	p. 6-7 Chair and CEO's message, p. 11 Megatrends: Climate change, p. 16-17 Industrial Measurements business area, p. 18-19 Weather and Environment business area, p. 31-32 Value for society and the environment, p. 86-89 Risk management, p. 108 Financial statements				
GRI 203: Indirect Economic Impacts	203-2 Significant indirect economic impacts	p. 16-17 Industrial Measurements business area, p. 18-19 Weather and Environment business area, p. 31-32 Value for society and the environment				
Prevention of corruption and bribery						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 45-46 Governance, policies, and due diligence, p. 60 Prevention of corruption and bribery				X
GRI 205: Anti-Corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	p. 60 Prevention of corruption and bribery				X
	205-3 Confirmed incidents of corruption and actions taken	No incidents				X



Reporting principles	Governance, policies, and due diligence	Environment	Employees	Occupational health and safety	Ethics and compliance	Responsible supply chains	UN Global Compact	Signatures	Independent limited assurance report	GRI content index
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GRI standard	Disclosure	Location and additional information	Omission			Assurance
			Requirement(s) omitted	Reason	Explanation	
Fair competition						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 45-46 Governance, policies, and due diligence, p. 61 Fair competition				X
GRI 206: Anti-Competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	No incidents				X
Energy						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 47 Environmental management, p. 47 Environmental impacts, p. 49 Energy				X
GRI 302: Energy 2016	302-1 Energy consumption within the organization	p. 49 Energy, p. 52 Data sources and assumptions	Consumption by fuel, sold energy	Not applicable	Vaisala does not consume process fuels or sell electricity in any significant quantities.	X
	302-3 Energy intensity	p. 49 Energy				X
Emissions						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 26 Stakeholder engagement, p. 47 Environmental management, p. 47 Environmental impacts, p. 49 Emissions				X
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	p. 49 Emissions, p. 52 Data sources and assumptions, p. 53 Emission factors				X
	305-2 Energy indirect (Scope 2) GHG emissions	p. 49 Emissions, p. 52 Data sources and assumptions, p. 53 Emission factors				X
	305-3 Other indirect (Scope 3) GHG emissions	p. 49 Emissions, p. 52 Data sources and assumptions, p. 53 Emission factors, p. 53 Calculation methodology for Scope 3 emissions				X
	305-4 GHG emissions intensity	p. 49 Emissions				X
	305-5 Reduction of GHG emissions	p. 49 Emissions				X



GRI standard	Disclosure	Location and additional information	Omission			Assurance
			Requirement(s) omitted	Reason	Explanation	
Waste						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 47 Environmental management, p. 47 Environmental impacts, p. 50-51 Waste				X
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	p. 50-51 Waste				X
	306-2 Management of significant waste-related impacts	p. 50-51 Waste, p. 52 Data sources and assumptions				X
	306-3 Waste generated	p. 50-51 Waste, p. 52 Data sources and assumptions				X
	306-4 Waste diverted from disposal	p. 50-51 Waste, p. 52 Data sources and assumptions				X
	306-5 Waste directed to disposal	p. 50-51 Waste, p. 52 Data sources and assumptions				X
Employee turnover						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 55 Employee turnover				X
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	p. 55 Employee turnover				X
Collective agreements						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 55 Collective agreements and compensation				X
GRI 402: Labor/ Management Relations 2016	402-1 Minimum notice periods regarding operational changes	Minimum notice periods are defined in collective agreements. In those countries, where employees are not covered by collective agreements, the minimum notice periods vary depending on legislation.				X



GRI standard	Disclosure	Location and additional information	Omission			Assurance
			Requirement(s) omitted	Reason	Explanation	
Occupational health and safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 58-59 Occupational health and safety				X
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	p. 58 Occupational health and safety management				X
	403-2 Hazard identification, risk assessment, and incident investigation	p. 58 Occupational health and safety management, p. 59 Proactive reporting and investigation				X
	403-3 Occupational health services	p. 59 Occupational health services				X
	403-4 Worker participation, consultation, and communication on occupational health and safety	p. 58-59 Collaboration				X
	403-5 Worker training on occupational health and safety	p. 58 Occupational health and safety management				X
	403-6 Promotion of worker health	p. 30 Well-being, p. 59 Occupational health services				X
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	p. 60-61 Respect for human rights and human rights due diligence				X
	403-8 Workers covered by an occupational health and safety management system	p. 58 Occupational health and safety management				X
	403-9 Work-related injuries	p. 58 Occupational health and safety management, p. 59 Injuries				X
Value to employees						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 29-30 Value to employees				
GRI 404: Training and Education 2016	404-3 Percentage of employees receiving regular performance and career development reviews	All of our employees are within the scope of performance and career development review discussions.	Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period	Not applicable	All of our employees are offered regular performance and career development reviews.	X



Reporting principles Governance, policies, and due diligence Environment Employees Occupational health and safety Ethics and compliance Responsible supply chains UN Global Compact Signatures Independent limited assurance report GRI content index

GRI standard	Disclosure	Location and additional information	Omission			Assurance
			Requirement(s) omitted	Reason	Explanation	
Diversity, equity, and inclusion						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 45–46 Governance, policies, and due diligence, p. 56–57 Diversity, equity, and inclusion				X
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	p. 56–57 Diversity, equity, and inclusion				X
	405-2 Ratio of basic salary and remuneration of women to men	p. 56–57 Diversity, equity, and inclusion (a separate wage survey is conducted in countries, where Vaisala has more than 100 employees)				X
GRI 406: Non-Discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	No incidents				X
Human rights						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 45–46 Governance, policies, and due diligence, p. 60–61 Respect for human rights and human rights due diligence, p. 61 Conflict minerals				X
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	p. 60–61 Respect for human rights and human rights due diligence, p. 61 Conflict minerals, p. 62–63 Responsible supply chains	Listing of operations and suppliers in risk	Not applicable	The topic is material only in some parts of the supply chain, not in Vaisala's own operations.	X
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	p. 60–61 Respect for human rights and human rights due diligence, p. 61 Conflict minerals, p. 62–63 Responsible supply chains	Listing of operations and suppliers in risk	Not applicable	The topic is material only in some parts of the supply chain, not in Vaisala's own operations.	X
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	p. 60–61 Respect for human rights and human rights due diligence, p. 61 Conflict minerals, p. 62–63 Responsible supply chains	Listing of operations and suppliers in risk	Not applicable	The topic is material only in some parts of the supply chain, not in Vaisala's own operations.	X



GRI standard	Disclosure	Location and additional information	Omission			Assurance
			Requirement(s) omitted	Reason	Explanation	
Responsible supply chains						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 45-46 Governance, policies, and due diligence, p. 62-63 Responsible supply chains				X
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	p. 62-63 Responsible supply chains				X
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	p. 62-63 Responsible supply chains				X
Product safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 61 Product safety, p. 52 Sustainable product design and management				X
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Assessment covers all significant product categories.				X
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	No incidents				X
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	p. 61 Product safety				X
	417-2 Incidents of non-compliance concerning product and service information and labeling	No incidents				X
	417-3 Incidents of non-compliance concerning marketing communications	No incidents				X

Governance

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Corporate Governance Statement 2022

Vaisala's general governance principles

Vaisala's corporate governance is based on and complies with the laws of Finland and Vaisala's Articles of Association. Consolidated financial statements and other financial reports are prepared according to the International Financial Reporting Standards (IFRS), approved by the EU. The company complies with the rules, regulations, and guidelines for listed companies issued by Nasdaq Helsinki Ltd and Finnish Supervisory Authority as well as Finnish Corporate Governance Code 2020 published by the Securities Market Association.

Vaisala Board of Directors has approved this Corporate Governance Statement in its meeting on February 15, 2023. Deloitte Oy, audit firm, the company's auditor, has verified that the statement has been issued and that the general description of internal audit and risk management systems associated with the financial reporting process conforms to the same in financial statements.

Deviation from the recommendations of the Corporate Governance Code and explanation for the deviation

The term of the members of Vaisala's Board of Directors deviates from the Recommendation 6 of Corporate Governance Code, which recommends a term of one year. The term of Vaisala's member of the Board of Directors is determined in accordance with its Articles of Association. Under the Articles of Association, a member's term is three years, beginning at the close of the General Meeting in which the member is elected and ending at the close of the third subsequent Annual General Meeting.

A longer term of office of the Board members has been justified until now by the long-term development of Vaisala's business as well as by the nature of the business. The Board proposes that a term of Board members will be one year as of the 2023 Annual General Meeting.

Governing bodies

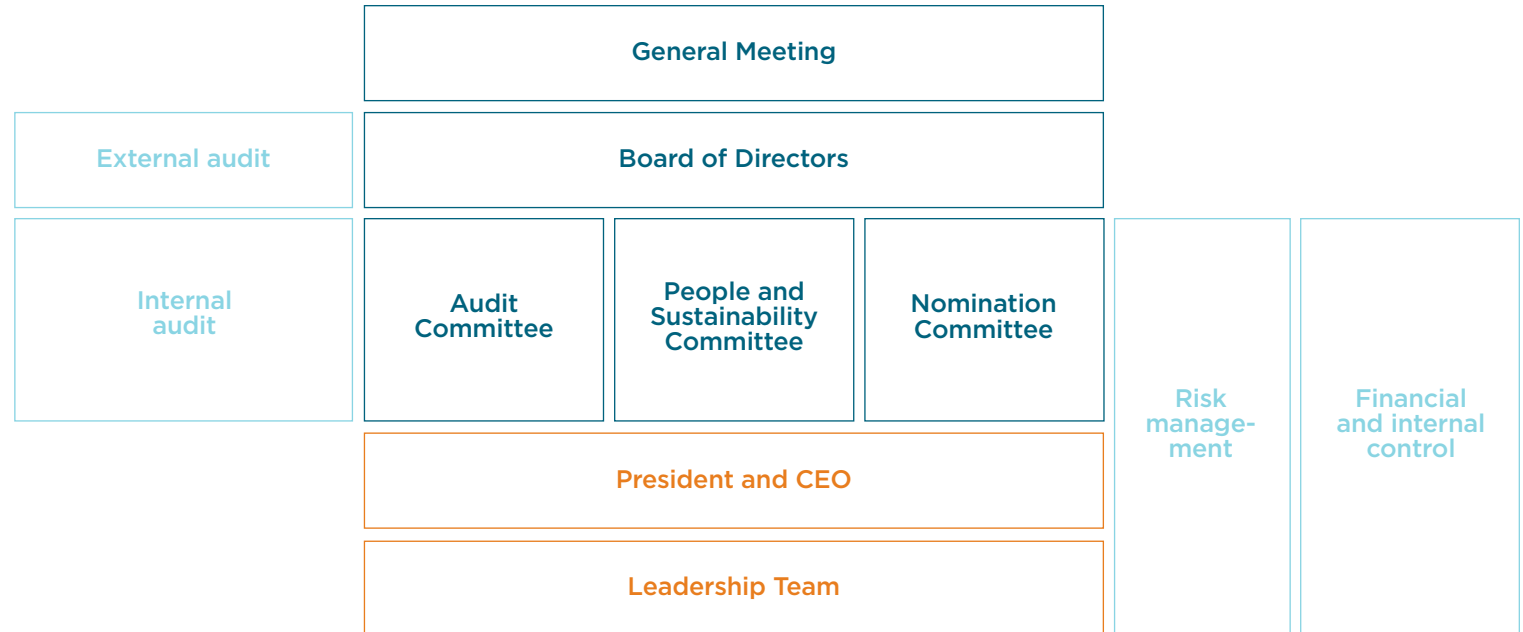
The General Meeting, the Board of Directors, and the President and CEO, assisted by the Leadership Team, are responsible for the governance of the Vaisala Corporation.

General meeting

The General Meeting is the supreme decision-making body of Vaisala, in which all the shareholders of the company can participate in the

supervision and control of the company and exercise their right to vote, speak, and ask questions. The Annual General Meeting is held once a year before the end of June on a date determined by the Board of Directors. It decides on the matters stipulated in the Finnish Limited Liability Companies Act and the Articles of Association. The decisions are mainly made with simple majority of votes.

The Chair of the Board of Directors, members of the Board of Directors, and the President and CEO are present at the Annual General Meeting. The auditor is present at the Annual General Meeting.





Board member candidates are present at the Annual General Meeting where they are elected. If the above-mentioned person or persons fail to attend the Annual General Meeting, Vaisala notifies the General Meeting of such non-attendance. The members of the Leadership Team participate in the Annual General Meeting, if possible.

Participation in the General Meeting requires that the shareholder is registered in Vaisala's shareholder register, maintained by Euroclear Finland Ltd, on the record date of the meeting and that they register for the meeting by the date mentioned in the meeting notice.

Shareholders are entitled to have an issue placed on the agenda of the Annual General Meeting, provided that the issue can be decided upon by the Annual General Meeting according to the Limited Liability Companies Act. The request must be submitted in writing to the Board of Directors early enough that the issue can be included in the meeting notice. On its website, the company announces the date by which the shareholder must notify the Board of Directors of an issue to be added to the agenda of the Annual General Meeting. The date is available by the end of the previous financial year.

Vaisala publishes a notice of the Annual General Meeting no more than two months before the record date and no less than three weeks before the meeting on the company's website or in any other way that may be decided by the Board of Directors, or Vaisala may deliver it directly to shareholders when required by law. In addition, Vaisala publishes a meeting notice as a stock exchange release after the Board of Directors has decided on the convening of the Annual General Meeting. Agenda of the Annual General Meeting, proposals on decisions, and meeting documents are available on the company's website at least three weeks prior to the meeting. Documents of the Annual General Meeting will be held on the company's website for at least five years from the time of the meeting. Minutes of the meeting will be published on the company's website within two weeks of the meeting.

Due to the COVID-19 pandemic, the Annual General Meeting 2022 was held on March 29, 2022, in accordance with the temporary legislative act approved by the Finnish Parliament on May 7, 2021, and in a manner that the shareholders, auditor, and members of Board of Directors were not present. Shareholders both voted and were allowed to ask questions in advance.

Board of Directors

Competence, composition, and election

The Board of Directors is responsible for the administration and the proper organization of the operations of the company. The Board acts in accordance with the Articles of Association and the applicable legislation as well as the instructions and recommendations of the Financial Supervisory Authority and Nasdaq Helsinki Ltd. In accordance with the Articles of Association, Vaisala Corporation's Board of Directors comprises at least four and maximum eight members. The Annual General Meeting elects all Board members.

The Board of Directors elects a Chair and a Vice Chair from among its members. Under the Articles of Association, the term of the Board members is three years. The term begins at the close of the General Meeting in which the member is elected and ends at the close of the third subsequent Annual General Meeting following the member's election.

Selection criteria, diversity, and the independence of the members

The primary goal in Board member election is to gather capability, expertise, and experience from various technologies, international relations, global business, and strategically significant domains to the Board of Directors. The Board should be considered as a whole that is capable of managing its tasks and duties in the best possible way.

The goal of the election of the members of the Board of Directors is to ensure that the Board supports the development of the company's current and future business. In addition, the Board should consist of members of both men and women, and the members should have the chance to allocate a sufficient amount of time to managing their tasks. The goal is that there is at least 25% representation of both men and women in the Board of Directors.

Vaisala complies with the Finnish Corporate Governance Code 2020 in evaluation of the independence of the members of the Board. The majority of the members of the Board must be independent of the company, and at least two members in this majority must be independent of the company's major shareholders. The Board evaluates the independence of the members annually based on an overall evaluation. This evaluation of a member takes into account information and analysis provided by the member themselves.

Vaisala's Board of Directors in 2022 represents adequate expertise and experience as well as diversity on the established goals. All members of the Board in 2022 were independent of the company and of the company's major shareholders.

Meetings, duties, and decision-making

The Board of Directors convenes at least eight times a year and if otherwise needed. The President and CEO and the Chief Financial Officer also attend Board meetings. The other members of the Leadership Team attend Board meetings as required on the invitation of the Board of Directors. The Board of Directors may, on the basis of the Chair's decision, establish working groups from among its members in individual cases to prepare the matters allocated for it in order to ensure the effective organization of the Board of Directors' work.

The Board of Directors operates in accordance with an approved written charter, published on the company's website. Meetings may, if necessary, be held as conference calls, video meetings, or e-mail meetings. Minutes of the meetings are compiled in English, with annually running numbering. The General Counsel acts as the Secretary of the Board of Directors.

A member of the Board of Directors is not allowed to participate if they are biased in that issue between themselves and the company or between the company and a third party when there is a possibility to achieve essential advantage to themselves, which may conflict with the company's interest.

The members of the Board of Directors are bound by obligations related to commercial and trade secrets as well as by the restrictions and requirements of the Market Abuse Regulation (EU) N:o 596/2014 (MAR) and the restrictions and obligations of Vaisala's Insider Policy. In their decision-making and other activities, the Board and its members must act in accordance with the interest of the company and all its shareholders as well as in accordance with the principles of due care and data protection.

The Board will have a quorum when more than half of the members are present. Decisions are made on a simple majority basis, and when the votes are even, the Chair has the casting vote. When the votes for the election of the Chair are even, the Chair is elected by drawing lots.



The President and CEO is responsible for the execution of the Board of Directors' decisions, oversees their implementation, and reports to the Board on deficiencies or problems observed during the execution.

Main responsibilities of the Board of Directors are

- to decide on the election and dismissal of the President and CEO
- to decide on the employment terms of the President and CEO
- to decide on the election and dismissal of the members of the Leadership Team and their job descriptions based on the President and CEO's proposition
- to ensure that the company has organized internal control of accounting and financial management as well as to monitor the effective-ness of supervision
- to determine the company's strategy and oversee its implementation and to approve the strategic plans of the business areas
- to determine the company's long-term targets and to monitor their implementation and to accept business areas' long-term targets
- to assess the company's and its business areas' annual action plans
- to approve the company and its business areas' financial targets
- to make the business decisions, the value of which exceeds the approval limit of the President and CEO according to the Approval Policy, such as business reorganizations, acquisitions and divestitures, major contracts and liabilities, investments, and financing arrangements
- to review and approve the company's most important policies and instructions, such as Approval Policy, Treasury Policy, Disclosure Policy, Dividend Policy, Risk Management Policy, Insider Policy, Code of Conduct, and Anti-Corruption Policy
- to decide on management remuneration and incentive systems

Members of the Board of Directors in 2022

During January 1–March 29, 2022, the Board of Directors comprised eight members. The Chair of the Board of Directors was Ville Voipio, the Vice Chair was Raimo Voipio, and the members were Petri Castrén, Antti Jääskeläinen, Petra Lundström, Jukka Rinnevaara, Kaarina

Composition of the Board of Directors Dec. 31, 2022

Member	Member since	End of term	Born	Education	Nationality	Main occupation	Shareholding Dec. 31, 2022
Ville Voipio, Chair	2015 Chair since 2021	2024	1974	D.Sc. (Tech.)	Finnish	CSO, Simap Oy	397,642 (A share) 119,712 (K share)
Raimo Voipio Vice Chair	1989 Chair in 1994–2021	2023	1955	M.Sc. (Eng.)	Finnish	Board professional	571,360 (A share) 404,296 (K share)
Petri Castrén	2017	2025	1962	LL.M., MBA	Finnish	CFO, Kemira Oyj	3,643 (A share)
Antti Jääskeläinen	2020	2023	1972	M.Sc. (Eng.), M.Sc. (Econ.), MBA	Finnish	Executive Vice President, UPM Raflatac	1,242 (A share)
Petra Lundström	2014	2024	1966	M.Sc. (Tech. Physics)	Finnish	Vice President, Nuclear Engineering Services and Co-owned Assets, Fortum Power and Heat Oy	7,043 (A share)
Jukka Rinnevaara	2019	2023	1961	M.Sc. (Econ.)	Finnish	Board professional	1,962 (A share)
Kaarina Ståhlberg	2016	2025	1966	LL.M	Finnish	General Counsel and M&A, Posti Group Oyj	6,443 (A share)
Tuomas Syrjänen	2019	2025	1976	M.Sc. (El. Eng.)	Finnish	Program Director – AI Renewal, Futurice Oyj	3,312 (A share)
Total							992,647 (A share) 524,008 (K share) 1,516,655 (total)

Shareholdings include also shares held by the Board of Directors' controlled organizations.

In accordance with the recommendation 10, all Board members are independent of the company and of significant shareholders of the company.

Ståhlberg, and Tuomas Syrjänen. The Board of Directors' secretary was General Counsel Katriina Vainio.

The Annual General Meeting held on March 29, 2022, confirmed that the number of Board members is eight. All members of the Board were

re-elected. Ville Voipio was elected as Chair of the Board and Raimo Voipio as Vice Chair of the Board. The Board of Directors' secretary is General Counsel Katriina Vainio.



Attendance in Board meetings 2022

Member	Attendance/ Number of meetings	Attendance %
Ville Voipio	14/14	100
Raimo Voipio	14/14	100
Petri Castrén	14/14	100
Antti Jääskeläinen	14/14	100
Petra Lundström	14/14	100
Jukka Rinnevaara	14/14	100
Kaarina Ståhlberg	14/14	100
Tuomas Syrjänen	14/14	100

Board committees

The Board of Directors has three permanent committees: Audit Committee, People and Sustainability Committee as well as Nomination Committee. The members and Chairs of the committees are appointed annually from among the members of the Board of Directors in accordance with the charter of the respective committee. Board established Nomination Committee at the end of the year 2022 and the committee will commence its work in the beginning of 2023. Ville Voipio is the Chair of the Nomination Committee, and the members are Petra Lundström, Kaarina Ståhlberg and Raimo Voipio.

Audit Committee

The Audit Committee assists the Board of Directors in supervising the company's accounting and asset management, risk management, as well as in organizing internal controls and external and internal audits. The Audit Committee manages its tasks in accordance with the charter approved by the Board of Directors, the Securities Market Association's Finnish Corporate Governance Code, as well as the applicable laws and regulations. The Audit Committee's charter is published as part of the charter of the Board of Directors on the company's website. The Audit Committee reports regularly about its meetings to the Board of Directors.

The Audit Committee comprises at least three members, appointed annually by the Board of Directors from among its members. The members of the committee must be independent of the company, and at least one member must also be independent of significant shareholders of the company. A member of the Audit Committee may not participate in the company's or its group company's daily management. Members of the Audit Committee have sufficient expertise and experience in matters forming part of the Audit Committee's duties and of the mandatory tasks related to audit.

People and Sustainability Committee

The People and Sustainability Committee is responsible for preparing people, sustainability and ESG topics for the Board of Directors. The committee reviews Vaisala plans for employee development, talent attraction and management, succession planning and their progress. People and Sustainability Committee proposes the compensation of the President and CEO as well as top management, evaluation of the performance of the President and CEO and the Leadership Team, and the company remuneration and incentive plans to the Board of Directors. The People and Sustainability Committee's charter is available as part of the charter of the Board of Directors on the company's website. The People and Sustainability Committee reports regularly about its meetings to the Board of Directors.

The People and Sustainability Committee comprises at least three members, appointed annually by the Board of Directors from among its members. The majority of the members of the committee must be independent of the company.

Nomination Committee

Nomination Committee is responsible for preparing proposals to the Annual General Meeting, and, if necessary, to an Extraordinary General Meeting, for the election and remuneration of the members of the Board of Directors and for identifying potential Board member candidates. The committee's charter is published as part of the charter of the Board of Directors on the company's website. The committee reports regularly about its meetings to the Board of Directors.

The Nomination Committee comprises at least three members, appointed annually by the Board of Directors among its members.

The members of the committee must be independent of the company. The President and CEO or a member of the Leadership Team cannot be appointed to the Nomination Committee.

Committee members and their attendance in committee meetings in 2022

Committee	Member	Attendance/ Number of meetings	Attendance
Audit Committee	Kaarina Ståhlberg (Chair)	8/8	100
	Petri Castrén	8/8	100
	Antti Jääskeläinen	8/8	100
	Raimo Voipio	8/8	100
People and Sustainability Committee	Ville Voipio (Chair)	7/7	100
	Petra Lundström	7/7	100
	Jukka Rinnevaara	7/7	100
	Tuomas Syrjänen	7/7	100

All members of the Audit Committee, the People and Sustainability Committee, as well as the Nomination Committee are independent of both the company and its significant shareholders.



President and CEO

The Board of Directors appoints the President and CEO. The President and CEO is responsible for the day-to-day management of the company in accordance with the guidelines and instructions given by the Board of Directors and informs the Board of Directors of the development of the company's business and financial situation. The President and CEO is responsible for ensuring that the company's accounting is legally compliant and that its financial affairs have been arranged in a reliable manner.

Kai Öistämö has been the President and CEO of Vaisala as well as the Chair of Vaisala Leadership Team since October 1, 2020. He was born in 1964 and holds a Ph.D. degree in computer science.

Leadership Team

The President and CEO is the Chair of the Leadership Team. The Leadership Team comprises eight members. The Leadership Team meets at least once a month to assist the President and CEO in developing and implementing the strategy, managing operational business, as well as preparing matters handled by the Board. The Leadership Team draws up annual operational and financial plans as well as targets related to these plans, monitors the implementation of the plans, and prepares major investments and acquisitions. The President and CEO is responsible for the decisions made by the Leadership Team.

Members of the Leadership Team are responsible for implementing the decisions in their own areas of responsibility. Members of the Leadership Team are the President and CEO, the Executive Vice Presidents of both business areas, the Chief Financial Officer, the Executive Vice President of Operations, the Executive Vice President of Operational Excellence, the Executive Vice President of Human Resources, as well as the Group General Counsel. The General Counsel acts as secretary to the Leadership Team.

On November 3, 2022, Vaisala appointed Heli Lindfors as Chief Financial Officer as Kaarina Muurinen will be retiring. Heli Lindfors, M.Sc. (Econ.), will start in her position latest on May 1, 2023.

Members of the Leadership Team Dec. 31, 2022

Director	Member since	Born	Education	Nationality	Position at Vaisala	Shareholding Dec. 31, 2022
Kai Öistämö	2020	1964	D.Sc. (Tech.)	Finnish	President and CEO	6,000 (A share)
Sampsa Lahtinen	2013	1963	M.Sc. (El. Eng.)	Finnish	EVP, Industrial Measurements business area	39,970 (A share)
Timo Leskinen	2021	1970	M.Sc. (Psy.)	Finnish	EVP, Human Resources	2,250 (A share)
Kaarina Muurinen	2011	1958	M.Sc. (Econ.)	Finnish	CFO	50,860 (A share)
Olli Nastamo	2021	1956	M.Sc. (Eng.)	Finnish	EVP, Operational Excellence	- (A share)
Vesa Pylvänäinen	2011	1970	M.Sc. (Econ.)	Finnish	EVP, Operations	26,236 (A share)
Jarkko Sairanen	2016	1963	M.Sc. (Ind. Eng.), MBA	Finnish	EVP, Weather and Environment business area	37,040 (A share)
Katriina Vainio	2017	1967	LL.M.	Finnish	EVP, Group General Counsel	10,412 (A share)
Total						172,768 (A share)

Shareholdings include also shares held by the Leadership Team's controlled organizations.



Controls

Main features of the internal control and risk management systems pertaining to the financial reporting process

Internal control seeks to ensure the company's compliance with applicable laws, regulations, Code of Conduct, and with other recommendations as well as the reliability of financial and operational reporting. Furthermore, internal control seeks to safeguard the assets of the company and to ensure overall effectiveness and efficiency of operations to meet strategic, operational, and financial targets. Internal control practices are aligned with the risk management process. The goal of risk management is to support strategy and achievement of targets by anticipating and reacting to potential business threats and opportunities.

Vaisala's operating model of internal control and risk management related to financial reporting aims to provide sufficient assurance regarding the reliability of financial reporting and that the financial statements have been prepared in accordance with the applicable laws and regulations, accepted accounting principles (IFRS), and other requirements for listed companies. The principal components of internal control are control environment, risk assessment, control activities, communications, and monitoring.

Control environment

The Board of Directors has the overall responsibility for the internal control of financial reporting. The Board of Directors has established a written charter that clarifies its responsibilities and regulates the internal distribution of work of the Board of Directors and its committees. The Board of Directors has appointed the Audit Committee whose task is to ensure that established principles for financial reporting, risk management, and internal control are followed by and to enable appropriate external audit. The President and CEO is responsible for organizing an effective control environment and ongoing work on internal control as regards financial reporting. The internal audit reports all relevant issues to the Audit Committee and the President and CEO.

Internal audit focuses on developing and enhancing controls related to financial reporting by proactively and consistently assessing internal control environment and by monitoring the effectiveness of the control

design. Most important internal steering instruments for financial reporting comprise the Code of Conduct, Approval Policy, Treasury Policy, Credit Policy, Disclosure Policy, accounting policies, and other reporting instructions.

Risk assessment

Risk assessment as regards financial reporting aims to identify and systematically evaluate most significant threats at the levels of Vaisala, reporting segments, functions, and processes. As a result of risk assessment, the company defines control targets through which it seeks to ensure that the fundamental requirements placed on financial reporting are fulfilled. Information on the development of essential risk areas as well as reactions to the risks are communicated regularly to the Audit Committee.

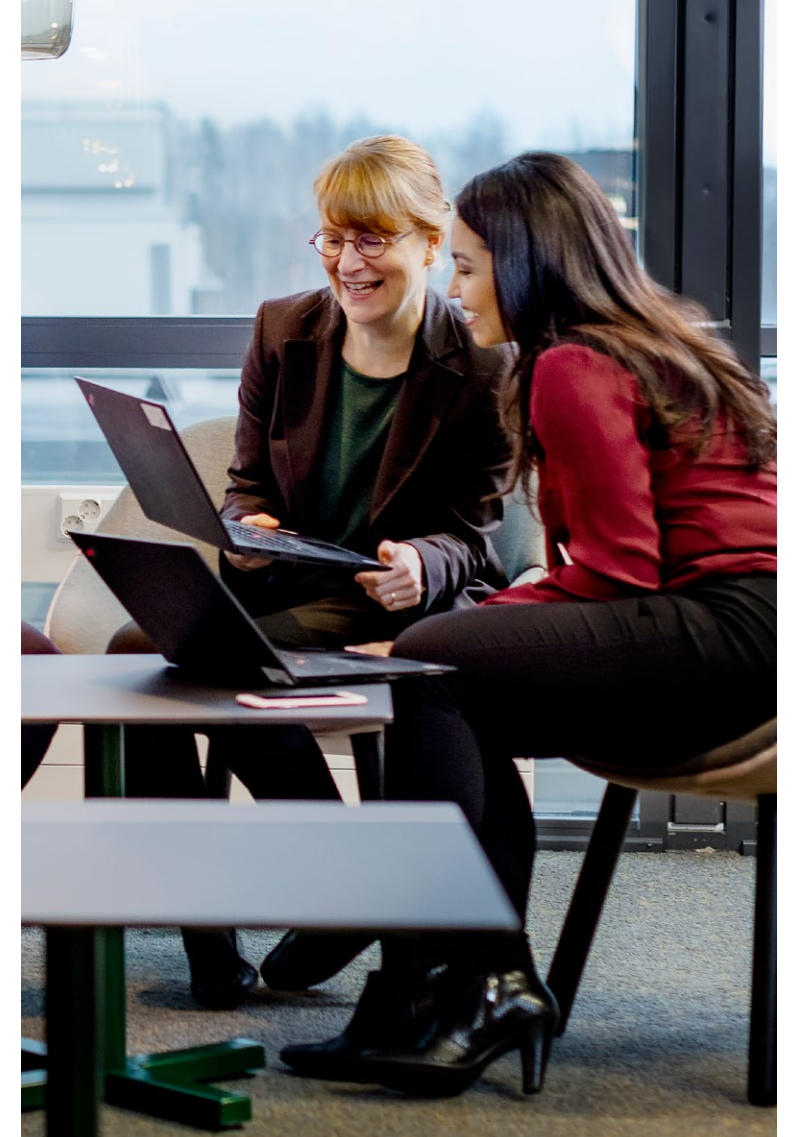
Control activities

The President and CEO is operationally responsible for internal controls. Internal control related to financial activities as well as to control of the business and the management has been integrated into Vaisala's business processes. The company has defined and documented significant internal control activities related to its financial statements reporting process as part of business processes. Approval mechanisms, access rights, segregation of duties, authorizations, verifications, reconciliations, and follow-up of financial reporting are essential internal activities.

All business units have their own defined controller function whose representatives participate in planning and evaluating the unit's performance. They ensure that monthly and quarterly financial reporting follows the company's policies and instructions and that all financial reporting is delivered on time. The management follows up the achievement of targets through monthly management reporting routines. The Chief Financial Officer regularly reports the results of the internal control work and the efficiency of the control activities to the Audit Committee.

Communications

Vaisala seeks to ensure that the internal and external communication of the company is open, transparent, accurate, and timely. The Disclosure





Policy defines how and when information should be given and by whom it is given. It also defines the accuracy and comprehensiveness of the information in order to fulfill the communication obligations. Code of Conduct, Approval Policy, Treasury Policy, Credit Policy, accounting policies, and reporting instructions as well as Disclosure Policy and Insider Policy are available on the company's intranet.

Monitoring

The Board of Directors, the Audit Committee, the President and CEO, and internal audit monitor the effectiveness of internal control related to financial reporting. The monitoring includes follow-up of monthly financial reports, review of the rolling forecasts and plans, as well as reports from internal audit and auditors. Internal audit assesses the effectiveness of operations and adequacy of risk management and reports the risks and development areas related to the internal control processes. Internal audit compiles an annual audit plan and reports the status of the plan and findings regularly to the Audit Committee and the Leadership Team. Furthermore, the Chief Financial Officer, the General Counsel, internal audit, and auditor coordinate audit planning and monitoring regularly.

General development measures in internal control and risk management in 2022

In 2022, internal audit focused among other topics on business continuity planning, crisis management and internal control framework, as well as product portfolio management. Audits provided input to continual improvement of processes and internal controls.

Related party transactions

Vaisala's Board of Directors has defined principles for monitoring and assessing related party transactions as well as keeps a record of related parties. The Board of Directors resolves on all related party transactions that are not made in the ordinary course of business or implemented under arms-length terms.

On top of its affiliates, related parties of Vaisala are members of Vaisala's Board of Directors and Leadership Team including President and CEO, as well as their spouses, partners, and children and legal entities where a member of the Board or a member of the Leadership Team has control. The Board of Directors has approved guidelines that stipulate approval process and reporting concerning related party transactions. In accordance with the guidelines, Finance and Control as well as Legal follow related party transactions as part of regular reporting and control procedures. Board of Directors will resolve on all related party transactions that are not made in the ordinary course of business or implemented under arms-length terms.

Vaisala reports related party transactions in a note to financial statements. Vaisala has currently no related party transactions which would be material and in conflict with the ordinary course of business or not implemented under arms-length terms.

Auditing and auditor's fees

According to the Articles of Association, the company has one auditor, who must be a public accountant or an audit firm, authorized by the Finland Chamber of Commerce. If an audit firm is not chosen to perform the auditing, a deputy auditor must be elected as well. Auditor's term of office covers the current fiscal year and expires at the close of the following Annual General Meeting. Annual General Meeting elects the auditor and decides on the compensation paid to them.

The Annual General Meeting held on March 29, 2022, re-elected Deloitte Oy, audit firm, as the Auditor for a term of one year. APA Reeta Virolainen acts as the auditor with the principal responsibility.

Auditor's fees

1,000 EUR	2022	2021
Audit	469	455
Tax advice	47	19
Statements	46	28
Other fees	113	48
Total	676	550

Insiders

Vaisala maintains project or event-specific insider lists when needed. 30-day closed window applies to the managers defined by the company before publishing Interim Reports, Half Year Financial Report, Financial Statement Release, and Financial Statements. Closed window ends on the day following the publication day. Closed window also applies to the persons engaged in preparation of those reports. The managers subject to transaction notification obligations comprise the Board of Directors, the President and CEO, as well as members of the Leadership Team. The company's legal department is responsible for insider management, training, as well as creation and maintenance of project and event-specific insider lists and monitoring of the same.

The President and CEO, Chief Financial Officer, and/or the General Counsel, two together, can decide, based on an evaluation of the conditions set out in the Market Abuse Regulation being met, to delay publication of insider information. When the company makes the decision on delay of disclosure, a project or event-based insider list regarding the inside information will be established. Persons, to whom project or event-specific inside information is disclosed, are entered into the project or event-specific insider list.



Remuneration Report 2022

Remuneration Report 2022 for Governing Bodies of Vaisala Corporation has been prepared pursuant to the Finnish Corporate Governance Code 2020. The remuneration of governing bodies in 2022 has been in alignment with the Remuneration Policy.

Vaisala's business performance in terms of net sales and profitability development has been steady during the past five years. Vaisala's net sales and operating result have developed according to Vaisala's long-term financial targets.

In 2021, the Annual General Meeting approved an increase for the Board remuneration. In addition, year-on-year variation of total remuneration is influenced by meeting fees. In 2022, the remuneration of the Board remained unchanged.

According to Vaisala's Remuneration Policy and principles, the President and CEO is paid for performance. A significant proportion of remuneration is derived from variable pay, i.e. short and long-term incentives, to ensure that there is strong alignment between performance and reward.

All rewards have been paid by Vaisala Corporation. During 2022, the company has not exercised any rights to modify, cancel, or reclaim any paid rewards.

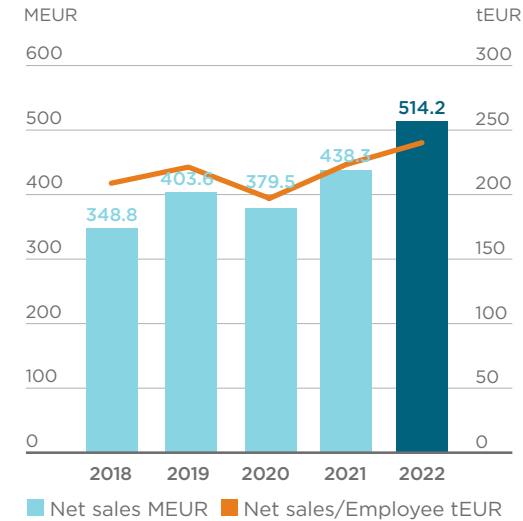
Development of remuneration during past years

EUR 1,000	2022	2021	2020	2019	2018
Chair of the Board	62	61	55	46	48
Vice Chair of the Board	48	45	46	39	38
President and CEO*	1,004	784	2,092	1,291	1,320
Vaisala's employee on average**	72	72	67	71	66

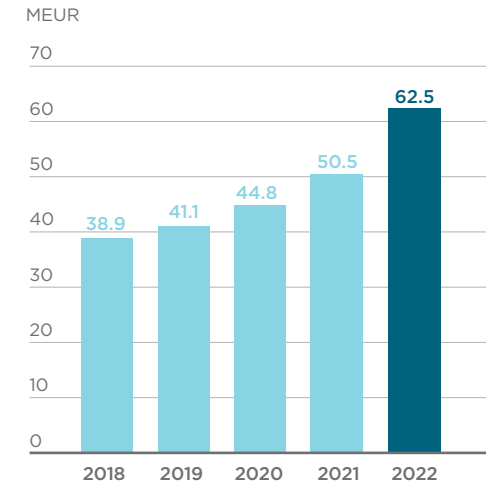
* Values are excluding pension fees. Year 2020 includes remuneration of two President and CEO's prorated to their time in service.

** Vaisala's employee on average: total employee expenses without social and pension costs divided by the average number of employees during the year.

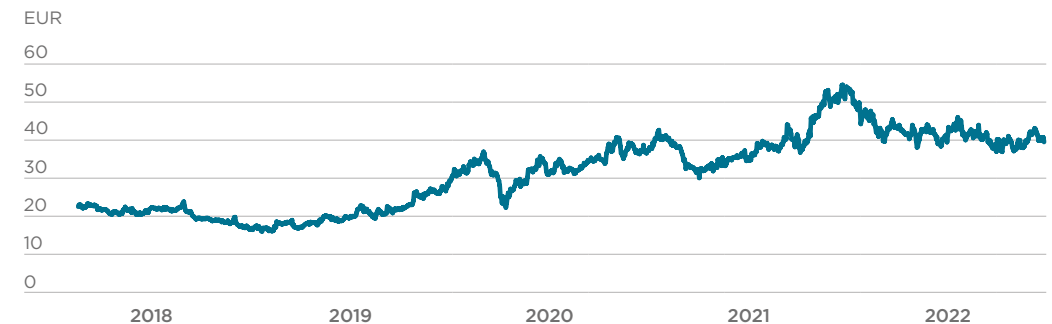
NET SALES



OPERATING RESULT (EBIT)



VAISALA SHARE PRICE 2018-2022





Remuneration of the Board of Directors for 2022

The Annual General Meeting held on March 29, 2022, resolved that the annual remuneration payable to the Chair of the Board of Directors is EUR 55,000 and each Board member EUR 40,000 per year.

At its organizing meeting held after the Annual General Meeting, the Board elected Ville Voipio as the Chair of the Board of Directors and Raimo Voipio as the Vice Chair.

In accordance with the Annual General Meeting's resolution, approximately 40% of the annual remuneration has been paid in Vaisala Corporation's series A shares acquired from the market and the rest in cash. No special terms or conditions are associated with the share ownership.

In addition, the Annual General Meeting resolved that the meeting fee for the Chair of the Audit Committee is EUR 1,500 per attended meeting and EUR 1,000 per attended meeting for each member of the Audit Committee and the Chair and each member of the People and Sustainability Committee and any other committee established by the Board of Directors. The meeting fees are paid in cash.

Remuneration of the Board of Directors 2022 (payment basis)

EUR 1,000		Annual remuneration	Compensation, Audit Committee	Compensation, People and Sustainability Committee	Total
Ville Voipio	Chair of the Board	55		7	62
Raimo Voipio	Vice Chair of the Board	40	8		48
Petri Castrén	Member of the Board	40	8		48
Antti Jääskeläinen	Member of the Board	40	8		48
Petra Lundström	Member of the Board	40		7	47
Jukka Rinnevaara	Member of the Board	40		7	47
Kaarina Ståhlberg	Member of the Board	40	12		52
Tuomas Syrjänen	Member of the Board	40		7	47
Total		335	36	28	399



Remuneration of the President and CEO for 2022

The remuneration of Vaisala's President and CEO Kai Öistämö includes a fixed base salary, fringe benefits, a defined contribution scheme in addition to the Finnish statutory pension, performance-related annual variable pay, and a long-term incentive (LTI); performance-related share plan.

In 2022, the maximum short-term incentive (STI) for the President and CEO was 72% of annual base salary. STI was based on predefined performance criteria, which were Vaisala's EBITA (50% weight), Vaisala's net sales development (45% weight) and ESG (in 2022 the criteria was diversity) (5% weight).

The President and CEO Kai Öistämö's STI 2021 payout was 72% of annual salary or EUR 344,736 which was paid in March 2022.

The STI 2022 payout was 58.5 % of the annual base salary. Payment of EUR 287,690 will be paid in March 2023.

Variable pay, meaning short and long-term incentives, forms a substantial part of the President and CEO's total remuneration. In 2022, the paid short-term and long-term incentives formed 51% of total compensation and the fixed annual salary 49% for Kai Öistämö.

The total target remuneration for the President and CEO for 2022 was 44% base salary, 20% short-term incentives (45% of the base salary), and 37% long-term incentives (at target 10,000 shares, share price EUR 41.45 at the time of the grant).

Long-term incentive reward of 4,000 shares for 2019-2021 for President and CEO Kai Öistämö was paid in 2022. 50% of the reward was paid in shares and 50% in cash to cover the income tax withholdings. The total value of the reward was EUR 168,732.

The reward shares are under holding restriction by which the President and CEO is required to build up and maintain his holding of the shares at least up to a level, where the value of the company's shares corresponds to his annual gross salary.

The president and CEO is a participant in three performance-based share incentive plans.

The grant at target performance for the 2020-2022 performance-based share incentive plan is 10,688 performance shares, for the 2021-2023 performance-based share incentive plan 11,550 performance shares, and for 2022-2024 performance-based share incentive plan 10,000 performance shares. The performance criteria for all active performance share plans are Vaisala's share Total Shareholder Return for the period (weight 30%) and average EBIT % for the period (weight 70%).

The President and CEO is entitled to participate in a supplementary defined contribution pension plan with an annual fee corresponding to three month's base salary. The President and CEO's retirement age is 62 years.

No other financial benefits were paid to the President and CEO in 2022.

Remuneration of the President and CEO in 2022

EUR 1,000	Kai Öistämö
Salary	491
Short-term incentives	345
Share-based payments	169
Supplementary pension	114
Total	1,118



Risk management

The objective of Vaisala's risk management is to identify and manage material risks related to strategy implementation and business operations. Vaisala's Risk Management Policy, approved by the Board of Directors, covers the company's strategic, operational, hazard, and financial risks. The policy aims to ensure the safety of the company's employees, operations, and products as well as the continuity and compliance of business operations.

The Board of Directors defines and approves risk management principles and assesses the effectiveness of risk management. The Audit Committee reviews compliance with Risk Management Policy and processes.

Risk management is integrated into key business processes and operations by incorporating risk identification, assessment, management, and risk reporting actions into the core processes. The most significant risks are reported to the Vaisala Leadership Team quarterly and to the Audit Committee annually.

Various risks may have an adverse effect on Vaisala's business operations. The list in this chapter explains some of the risks with their potential impacts and how Vaisala manages those risks. Risk likelihoods and impacts are estimates, provided by a small group of subject area experts. No quantitative methods have been applied to assess either likelihoods or impacts.

Risks related to sustainable practices

Environment

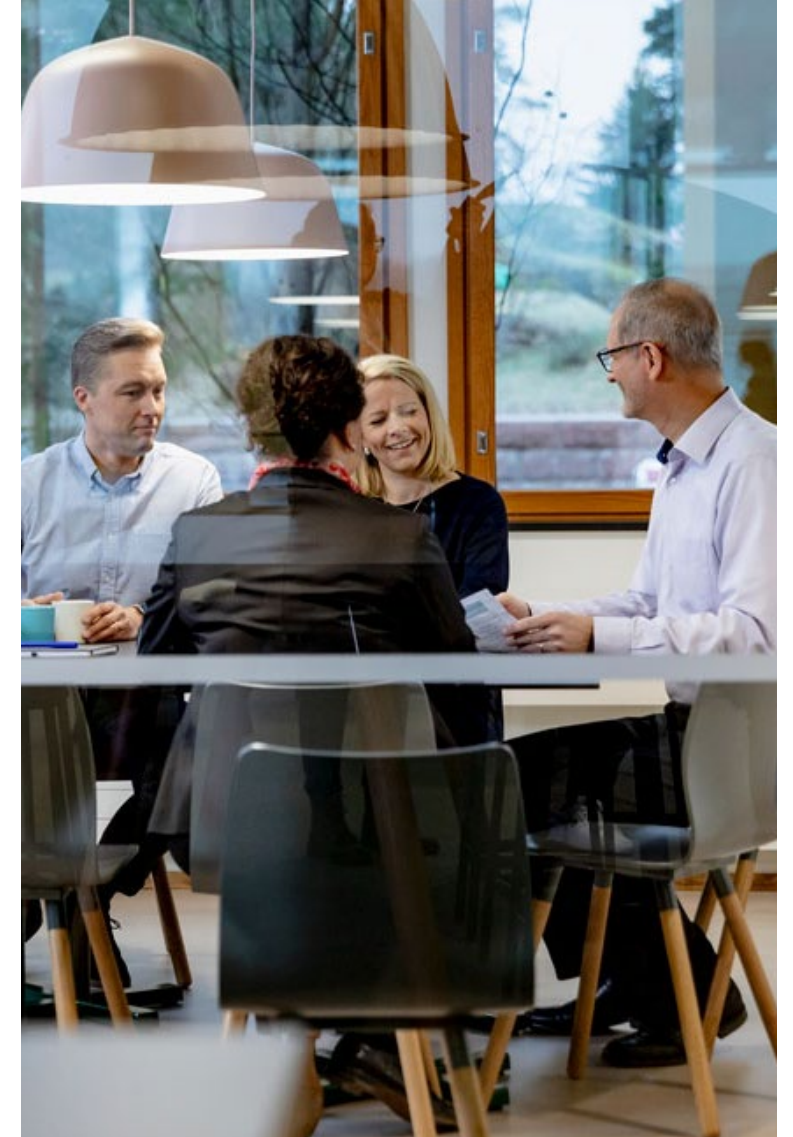
We assess environmental risks regularly as part of our environmental management system. The most significant environmental risks of our operations are related to potential emergency situations that can lead to local contamination. These risks are controlled as part of our emergency preparedness and our management process for hazardous substances. Climate change has been assessed to increase the likelihood of certain risks (H4 and O1 in the table introduced here). On the other hand, climate change may provide Vaisala also with business opportunities.

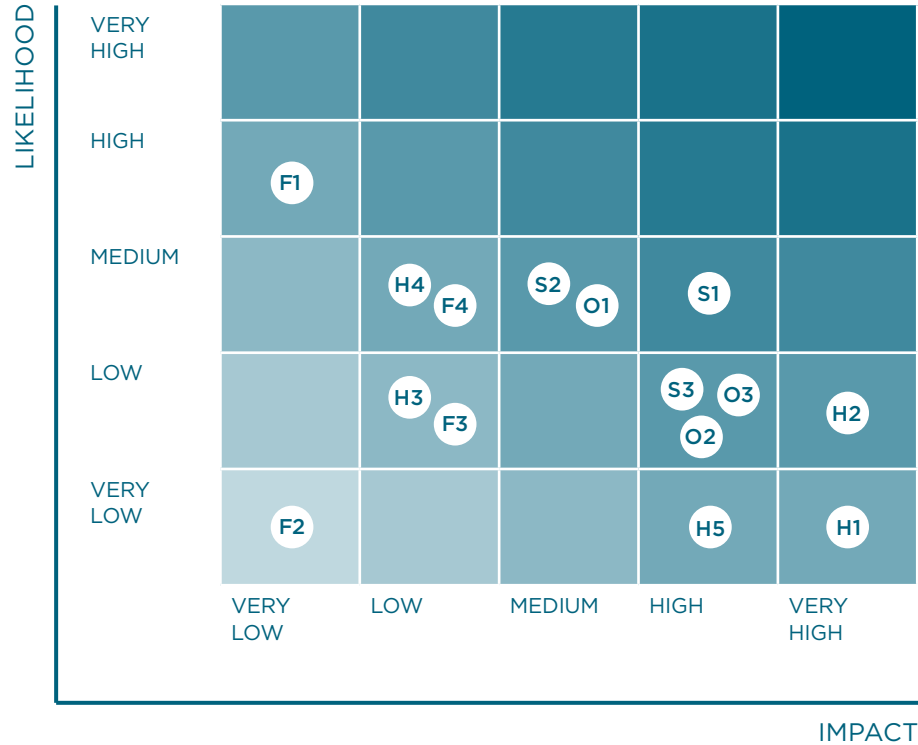
Social and employee matters

On an individual level, employee risks relate to occupational health and occupational accidents. On corporate level, the risks are related to the company's ability to retain and attract talent. These risks are controlled through continuous development of Vaisala's occupational health and safety system, support for the well-being of our employees, monitoring employee satisfaction, as well as providing purposeful work, learning opportunities, and an equal work environment.

Respecting human rights and preventing corruption and bribery

Risks related to human rights violations, corruption, and bribery impact corporate reputation, brand, and the company's ability to attract the best talent. Other potential consequences are judicial processes, penalties, contract cancellations, and exclusion from tenders. These risks are managed through recurring and compulsory Code of Conduct trainings as well as audits. We choose our suppliers carefully and verify the sustainability of their practices. Our Supplier Code of Conduct sets the requirement level for their operation. Our other partners, such as distributors and agents, are committed to complying with our Code of Conduct. The compliance of all our partners is assessed and monitored.





Key risks 2022

Impact/Likelihood

Strategic risks

S1	Long-term inflation and energy crisis particularly in Europe	high/medium
S2	Change in competitive situation	medium/medium
S3	Risks relating to China	high/low

Hazard risks

H1	Long disruption in the cleanroom operation	very high/very low
H2	Severe field service employee accident caused by working conditions	very high/low
H3	Critical failure of infrastructure supporting digital solutions	low/low
H4	Natural disaster, epidemic (other than COVID-19), civil unrest, terrorism	low/medium
H5	Long disruption in radiosonde production	high/very low

Operational risks

O1	Business continuity risks related to suppliers	medium/medium
O2	Cyber risk	high/low
O3	Long unavailability of IT systems	high/low

Financial risks

F1	Credit risk	very low/high
F2	Liquidity and refinancing risk	very low/very low
F3	Financial credit and interest rate risk	low/low
F4	Currency risk	low/medium



Strategic risks

S1 Long-term inflation and energy crisis particularly in Europe
 Prolonged period of inflation and energy crisis may lead to weak economic growth and decrease of public sector investments.

Managing risk

- Management of costs and pricing
- Marketing of easy-to-purchase digital services
- Choice of operational focus areas based on regional economic situation and demand

S2 Change in competitive situation

New growth companies may arrive in the market to compete with non-traditional technological solutions and business models. Some customers settle with lower performance of products than before.

Managing risk

- Differentiation from competitors with complete solutions covering everything from sensors to analytics
- Development of business models

S3 Risks relating to China

Requirements for increased utilization of Chinese technology in certain fields may decrease demand. The spreading of COVID-19 pandemic in China may slow down the economic growth of the entire country and decrease demand for Vaisala's products. Local type approvals are increasing, which declines the exports of products to the Chinese market. The trade war between China and the United States may pose restrictions to the exports of products to China or to the imports of components from China.

Managing risk

- Active monitoring of the situation in China
- Creating alternative scenarios and activity plans
- Focusing on fields with stronger demand

Hazard risks

H1 Long disruption in the cleanroom operation

Long disruption of cleanroom operation would have a major impact on the delivery capability of both business areas. Potential causes could include fire, contamination, or breakdown of key equipment.

Managing risk

- Emergency stock of sensor components, management of production equipment and spare parts, safety of facilities
- Business continuity planning
- Manufacturing partnerships
- Business Interruption Insurance

H2 Severe field service employee accident caused by working conditions

A serious accident caused by hazardous working conditions, for example at roadsides, in tall towers, or in extreme conditions.

Managing risk

- Continuous development of occupational safety, emergency procedures, job hazard analysis
- Tracking system for employees working in hazardous conditions

H3 Critical failure of infrastructure supporting digital solutions

Service unavailability due to, for example, a communications or software failure or power outage, causing significant harm to customers.

Managing risk

- Geographic system redundancy across multiple server sites
- Transition to cloud computing

H4 Natural disaster, epidemic (other than COVID-19), civil unrest, terrorism

Impaired business environment caused by external events.

Managing risk

- Geographic diversity of business
- Business Interruption Insurance
- Monitoring the business environment
- Risk assessment of business opportunities

H5 Long disruption in radiosonde production

A long disruption in production can result in the loss of long-term customers.

Managing risk

- Identification of critical production factors and managing their risks
- Safety of facilities
- Reserve stocks
- Business Interruption Insurance



Operational risks

01 Business continuity risks related to suppliers

Long disruption in the operations of a key supplier, for example due to a natural disaster, equipment breakdown, an accident, or bankruptcy.

Managing risk

- Active supplier risk assessment
- Long-term supplier development plans
- Strategic supplier business continuity audits
- Parts stock at Vaisala

02 Cyber risk

Interruptions to operations or digital services, financial loss, loss of trade secrets or personal data.

Managing risk

- Maintaining ISO 27000 compliant Information Security Management System (ISMS)
- Cyber insurance
- GDPR controls

03 Long unavailability of IT systems

Unavailability of systems leads to interruptions in operations, especially in production.

Managing risk

- IT Disaster Recovery Plan as part of Information Security Management System
- Shortening the resolution time of critical incidents
- Change management process of systems, including impact assessments and formal approvals
- Cyber insurance

Financial risks

F1 Credit risk

Managing risk

- Secured terms of payment
- Business credit checks
- Diverse customer pool

F2 Liquidity and refinancing risk

Managing risk

- Sustainable capital structure

F3 Financial credit and interest rate risk

Managing risk

- High credit rating of financial counter parties
- Low risk cash investment

F4 Currency risk

Managing risk

- Currency hedging



Board of Directors



Ville Voipio

Chair of the Board of Directors, Chair of the People and Sustainability Committee, Chair of the Nomination Committee
b. 1974, Finnish citizen, D.Sc. (Measurement Technology)

Independent member of the Vaisala Board of Directors since 2015 and Chair since 2021. End of term 2024
Main occupation: Chief Strategy Officer, Simap Oy

Vaisala shares held
Dec 31, 2022: 397,642 A shares and 119,712 K shares
Dec 31, 2021: 397,136 A shares and 96,712 K shares



Raimo Voipio

Vice Chair of the Board of Directors, Member of the Audit Committee, Member of the Nomination Committee
b. 1955, Finnish citizen, M.Sc. (Engineering)

Independent member of the Vaisala Board of Directors since 1989 and Chair 1994–2021. End of term 2023.
Main occupation: Board professional

Vaisala shares held
Dec 31, 2022: 571,360 A shares and 404,296 K shares
Dec 31, 2021: 570,992 A shares and 454,296 K shares



Petri Castrén

Member of the Audit Committee
Born 1962, Finnish citizen, LL.M, MBA

Independent member of the Vaisala Board of Directors since 2017. End of term 2025.
Main occupation: Chief Financial Officer, Kemira Oyj

Vaisala shares held
Dec 31, 2022: 3,643 A shares
Dec 31, 2021: 3,275 A shares



Antti Jääskeläinen

Member of the Audit Committee
b. 1972, Finnish citizen, M.Sc. (Eng.), M.Sc. (Econ.), MBA

Independent member of the Vaisala Board of Directors since 2020. End of term 2023.
Main occupation: Executive Vice President, UPM Raflatac, Member of the UPM Group Executive Team

Vaisala shares held
Dec 31, 2022: 1,242 A shares
Dec 31, 2021: 874 A shares



Corporate Governance Statement

Remuneration report

Risk management

Board of Directors

Leadership Team

Information for shareholders

Shareholdings include direct holdings and shares held by interest parties and controlled organizations.
Read full CV information on the company's website at vaisala.com.



Petra Lundström

Member of the People and Sustainability Committee,
Member of the Nomination Committee
b. 1966, Finnish Citizen, M.Sc. (Technical Physics)

Independent member of the Vaisala Board of Directors since 2014.
End of term 2024.
Main occupation: Vice President, Nuclear Engineering Services and Co-owned Assets, Fortum Power and Heat Oy

Vaisala shares held
Dec 31, 2022: 7,043 A shares
Dec 31, 2021: 6,675 A shares



Jukka Rinnevaara

Member of the People and Sustainability Committee
b. 1961, Finnish citizen, M.Sc. (Econ.)

Independent member of the Vaisala Board of Directors since 2019.
End of term 2023.
Main occupation: Board professional

Vaisala shares held
Dec 31, 2022: 1,962 A shares
Dec 31, 2021: 1,594 A shares



Kaarina Ståhlberg

Chair of the Audit Committee,
Member of the Nomination Committee
b. 1966, Finnish citizen, LL.M.

Independent member of the Vaisala Board of Directors since 2016.
End of term 2025.
Main occupation: General Counsel and M&A, Member of the Executive Board, Posti Group Oyj

Vaisala shares held
Dec 31, 2022: 6,443 A shares
Dec 31, 2021: 6,075 A shares



Tuomas Syrjänen

Member of the People and Sustainability Committee
b. 1976, Finnish citizen, M.Sc. (El. Eng.)

Independent member of the Vaisala Board of Directors since 2019.
End of term 2025
Main occupation: Program Director - AI Renewal, Futurice Oy

Vaisala shares held
Dec 31, 2022: 3,312 A shares
Dec 31, 2021: 2,944 A shares



Leadership Team

Shareholdings include also shares held by the Leadership Team's controlled organizations.
Read full CV information on the company's website at vaisala.com.



Kai Öistämö

President and CEO,
Chair of the Leadership Team since 2020
b. 1964, Finnish citizen, D.Sc. (Tech.)

Vaisala shares held
Dec 31, 2022: 6,000 A shares
Dec 31, 2021: 4,000 A shares



Olli Nastamo

Executive Vice President,
Operational Excellence since 2021
b. 1956, Finnish Citizen, M.Sc. (Eng.)

Vaisala shares held
Dec 31, 2022: -
Dec 31, 2021: -



Sampsa Lahtinen

Executive Vice President,
Industrial Measurements since 2013
b. 1963, Finnish citizen, M.Sc. (El. Eng.)

Vaisala shares held
Dec 31, 2022: 39,970 A shares
Dec 31, 2021: 24,970 A shares



Vesa Pylvänäinen

Executive Vice President, Operations
since 2011
b. 1970, Finnish citizen, M.Sc. (Econ.)

Vaisala shares held
Dec 31, 2022: 26,236 A shares
Dec 31, 2021: 16,236 A shares



Timo Leskinen

Executive Vice President, Human Resources
since 2021
b. 1970, Finnish citizen, M.Sc. (Psy.)

Vaisala shares held
Dec 31, 2022: 2,250 A shares
Dec 31, 2021: -



Jarkko Sairanen

Executive Vice President, Weather and
Environment since 2016
b. 1963, Finnish citizen, M.Sc. (Ind. Eng.),
MBA

Vaisala shares held
Dec 31, 2022: 37,040 A shares
Dec 31, 2021: 22,040 A shares



Kaarina Muurinen

CFO since 2011
b. 1958, Finnish Citizen, M.Sc. (Econ.)

Vaisala shares held
Dec 31, 2022: 50,860 A shares
Dec 31, 2021: 38,360 A shares



Katriina Vainio

Executive Vice President,
Group General Counsel since 2017
b. 1967, Finnish citizen, LL.M.

Vaisala shares held
Dec 31, 2022: 10,412 A shares
Dec 31, 2021: 16,412 A shares



Information for shareholders

Vaisala Corporation's Annual General Meeting will be held on Tuesday March 28, 2023, at 2.00 p.m. Finnish time at Vaisala Corporation's head office, Vanha Nurmijärventie 21, 01670 Vantaa, Finland.

Payment of dividends

The Board of Directors proposes to the Annual General Meeting a dividend of EUR 0.72 per share for the fiscal year 2022 to be paid. The dividend would be paid to shareholders registered in the Register of Shareholders held by Euroclear Finland Ltd on the record date of the dividend distribution, March 30, 2023. The Board of Directors proposes that the dividend will be paid on April 12, 2023.

Change of address

Vaisala's shareholders are kindly requested to report written changes of address to the bank where they have their book entry account.

Listing of Vaisala shares

Vaisala Corporation has two classes of shares: the listed series A shares and the non-listed series K shares. The Vaisala series A shares are listed on the Nasdaq Helsinki and are registered at Euroclear Finland Ltd.

Publication of financial information

Vaisala Corporation publishes financial information in Finnish and English. All materials are available on Vaisala's website at vaisala.com.

The printed Finnish Annual Report will be mailed only upon request. The company's mailing list for financial reports can be joined on Vaisala's website at vaisala.com.

Interim Reports and Half Year Report

- May 5, 2023: Interim Report January–March 2023
- July 28, 2023: Half Year Financial Report 2023
- October 27, 2023: Interim Report January–September 2023

Silent period

Silent period begins 30 calendar days before the publishing of the Interim Reports, Half Year Financial Report, and Financial Statement Release and lasts until the publishing of the Interim Reports, Half Year Financial Report, and Financial Statement Release. Exceptions to this rule are the Annual General Meeting (if held during the silent period) and the publication of a stock exchange release regarding a significant business event and the related communication. During silent periods, Vaisala's spokespersons refrain from discussing and commenting on issues related to the company's financial performance or meeting with capital market representatives.

Comprehensive investor relations pages and investor relations contact information can be found at vaisala.com/investors.

Financial statements and Board of Directors' Report

- 95** Key figure graphs
- 96** Board of Directors' Report
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- 176** Key figures
- 178** Calculation of key figures

This Board of Directors' report and financial statements are not an xHTML document compliant with the European Single Electronic Format (ESEF) regulation. Board of Directors' report and financial statements 2022 in accordance with ESEF regulations are available at www.vaisala.com.





Key figure graphs



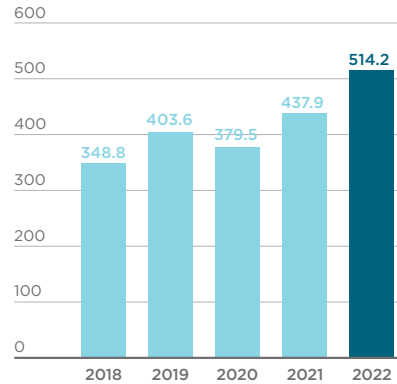
44% Industrial Measurements
225.6 MEUR
56% Weather and Environment
288.6 MEUR



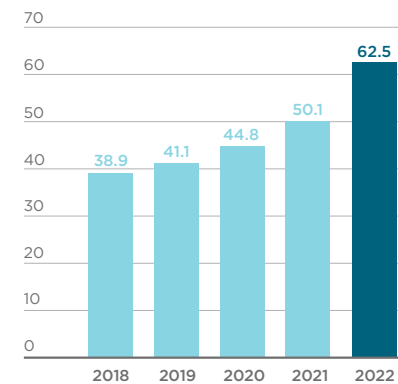
37% Americas
191 MEUR
31% APAC
160 MEUR
32% EMEA
163 MEUR

Americas: North and South America
APAC: Asia-Pacific
EMEA: Europe, Middle-East, and Africa

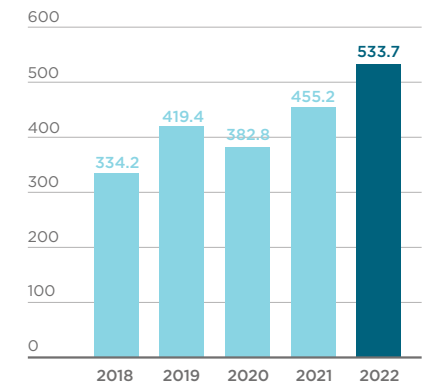
NET SALES, MEUR



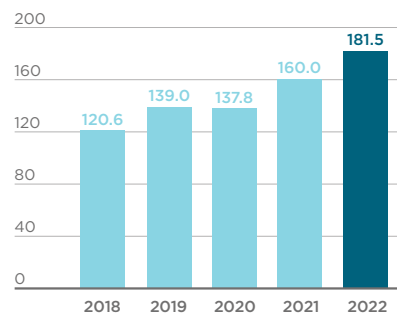
OPERATING RESULT (EBIT), MEUR



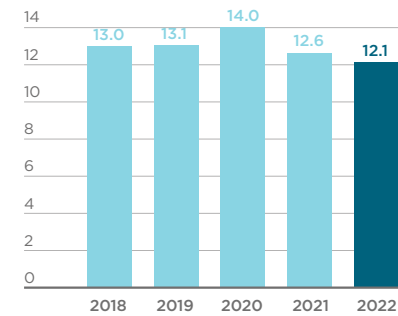
ORDERS RECEIVED, MEUR



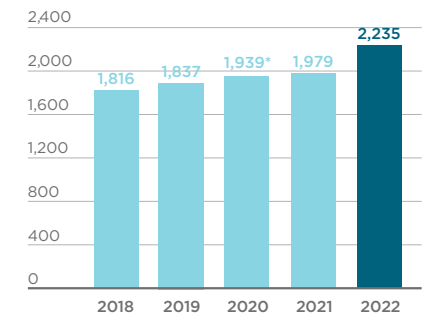
ORDER BOOK, MEUR



RESEARCH & DEVELOPMENT COSTS % OF NET SALES



EMPLOYEES AT YEAR-END



* Number of employees includes persons in long-time absence as of January 1, 2021. Comparison period 2020 has been adjusted accordingly.



Board of Directors' Report 2022

In 2022, Vaisala's net sales grew by 17% and were EUR 514.2 (437.9) million. In constant currencies, net sales increased by 12%. Gross margin remained close to previous year's level at 54.8 (55.2) % following pricing actions and economies of scale generated by volume growth, although component spot purchased caused significant additional costs. Operating result increased to EUR 62.5 (50.1) million and was 12.2 (11.5) % of net sales. The company continued IT system renewal and long-term investments in R&D as well as in sales and marketing. Earnings per share was EUR 1.24 (1.08). Financial position remained strong. The Board of Directors proposes to the Annual General Meeting that a dividend of EUR 0.72 (0.68) per share be paid out of distributable earnings totaling EUR 26.1 (24.6) million.

Main key figures

EUR million	2022	2021	2020
Net sales	514.2	437.9	379.5
Gross profit, %	54.8	55.2	56.1
Operating result	62.5	50.1	44.8
% of net sales	12.2	11.5	11.8
Result for the financial year	45.0	39.5	32.8
Earnings per share, EUR	1.24	1.08	0.91
Order book at the end of the financial year	181.5	160.0	137.8
Return on equity, %	18.7	18.1	16.3
Solvency ratio, %	58.2	57.2	59.0
Gearing, %	3.2	-12.0	5.7
Net working capital	82.4	44.5	61.5
Capital expenditure	13.7	19.2	31.0
Cash flow from operating activities	29.8	80.0	41.0
Average personnel	2,141	1,967	1,929

Calculation of key figures is presented at the end of the Financial statements and Board of Directors' Report section of the Annual Report.

Financial review 2022

Orders received and order book

EUR million	2022	2021	Change	FX*
Orders received	533.7	455.2	17%	12%
Order book, end of period	181.5	160.0	13%	

* Change with comparable exchange rates

In 2022, orders received increased by 17% compared to previous year and totaled EUR 533.7 (455.2) million. Growth of orders received was very strong in both business areas and orders received grew in all market segments. Growth was strongest in industrial instruments, life science, power industry, renewable energy, and aviation market segments.

At the end of 2022, order book amounted EUR 181.5 (160.0) million and increased by 13% compared to previous year. Order book increased in both business areas. EUR 142.9 (125.3) million of the order book is scheduled to be delivered in 2023.



Key figure graphs

Board of Directors' report

Financial statements 2022

Auditor's report

Key figures

Financial performance

EUR million	2022	2021	Change	FX*
Net sales	514.2	437.9	17%	12%
Products	375.5	320.3	17%	
Projects	73.5	63.6	16%	
Services	63.5	51.8	22%	
Lease income	1.7	2.1	-19%	
Gross margin, %	54.8	55.2		
Operating result	62.5	50.1		
% of net sales	12.2	11.5		
R&D costs	62.4	55.3	13%	
Amortization*	8.2	7.6		

* Amortization of intangible assets related to the acquired businesses

** Change with comparable exchange rates

In 2022, net sales increased by 17% compared to previous year and were EUR 514.2 (437.9) million. In constant currencies, net sales increased by 12%. Operations outside Finland accounted for 98 (98) % of net sales. Net sales grew in both business areas and in all market segments. Net sales increased strongly in industrial instruments, life science, aviation, renewable energy, and meteorology market segments.

Gross margin was close to previous year's level 54.8 (55.2) %. Additional costs related to component spot purchases had a 2.7 (1.1)

percentage point negative impact on gross margin. This was offset by pricing and economies of scale generated by volume increase.

In 2022, operating result increased compared to previous year following growth in net sales and was EUR 62.5 (50.1) million, 12.2 (11.5) % of net sales. Operating expenses increased due to IT system renewal and investments in sales and marketing as well as in R&D.

In 2022, financial income and expenses were EUR -3.1 (-2.1) million. This was mainly a result of valuation of USD denominated receivables, USD currency hedging and interest expenses. Income taxes increased to EUR 14.5 (8.9) million and effective tax rate was 24.4 (18.4) %. Due to high amount of expected utilization of tax losses carried forward, effective tax rate in comparison period was exceptionally low. Result before taxes was EUR 59.6 (48.3) million and result for the period EUR 45.0 (39.5) million. Earnings per share was EUR 1.24 (1.08).

Statement of financial position, cash flow and financing

Vaisala's financial position remained strong in 2022. At the end of December, statement of financial position totaled EUR 439.2 (408.0) million. Cash and cash equivalents totaled EUR 55.5 (77.9) million. In January 2022, Vaisala acquired Whether or Knot, LLC (dba AerisWeather), which increased net assets by EUR 23.1 million. Dividend payment, decided by the Annual General Meeting on March 29, 2022, totaled EUR 24.6 million.

In 2022, cash flow from operating activities decreased to EUR 29.8 (80.0) million. Net result increased cash flow, whereas increase in net working capital had a negative impact on cash flow.

On December 31, 2022, Vaisala had interest-bearing borrowings totaling EUR 52.5 (40.1) million. EUR 40.0 million of the interest-bearing borrowings related to a term loan, which has a financial

covenant (gearing) tested semi-annually. On December 31, 2022, Vaisala was in compliance with the covenant. For short term liquidity purposes, Vaisala had drawn financing from the domestic commercial paper markets totaling EUR 12.5 (0.0) million on December 31, 2022. Vaisala has also a EUR 50 million committed revolving credit facility, which was undrawn on December 31, 2022, as year before. In addition, interest-bearing lease liabilities totaled EUR 10.9 (10.1) million.

Capital expenditure and acquisitions

In 2022, capital expenditure in intangible assets and property, plant and equipment totaled EUR 13.7 (19.2) million. Capital expenditure was mainly related to investments in machinery and equipment to develop and maintain Vaisala's production, R&D, and service operations as well as facilities.

Depreciation, amortization, and impairment were EUR 23.6 (21.6) million. This included EUR 8.2 (7.6) million of amortization of identified intangible assets related to the acquired businesses.

In January 2022, Vaisala acquired US-based Whether or Knot, LLC (dba AerisWeather), a subscription-based software company providing weather and environmental information. The purchase price (cash and debt free) was USD 26 million (EUR 23 million), and it was paid with cash. This acquisition supports execution of Vaisala's Weather and Environment business area's strategy to drive growth in Data as a Service and Software as a Service recurring revenue businesses. The acquisition was closed during the first quarter and following this acquisition, 17 professionals, located in the US, transferred to Vaisala. Vaisala has reported AerisWeather's results as part of Weather and Environment business area's financial results as from February 2022.



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Personnel

The average number of personnel employed in 2022 was 2,141 (1,967). At the end of 2022, the number of employees was 2,235 (1,979). 77 (77) % of employees were located in EMEA, 16 (15) % in Americas and 8 (8) % in APAC. 66 (66) % of employees were based in Finland.

Number of employees by region

	Dec 31, 2022	Dec 31, 2021	Change
Americas	350	292	58
APAC	173	156	20
EMEA (excluding Finland)	237	228	9
Finland	1,475	1,303	172
Total	2,235	1,979	256

Number of employees by function

	Dec 31, 2022	Dec 31, 2021	Change
Sales and marketing	431	368	63
R&D	637	573	64
Operations	567	491	76
Services	350	331	19
Administration	250	216	34
Total	2,235	1,979	256

Increase in number of employees reflects business growth and investments in product and technology development. Acquisition of AerisWeather added 17 professionals in Americas organization.

In 2022, personnel expenses totaled EUR 190.4 (174.3) million.

Share-based incentive plans

The share issue without payment approved by Vaisala's Annual General Meeting on April 10, 2018, doubled the total number of series K and A shares. All share related figures have been adjusted to reflect the increased number of shares.

Share-based incentive plans are targeted to the Group key employees. The performance criterion for 2018 performance share plan was based on the group's profitability in respective calendar year. From 2019 onwards the performance criteria of the performance share plans are based on the development of the total shareholder return (TSR) and the group's profitability during the three-year plan period. Matching share plan consists of matching periods as decided by the Board of Directors and the participants are given an opportunity to receive matching shares for the predetermined personal investment in Vaisala's series A shares. Restricted share plan consists of vesting periods as decided by the Board of Directors and the participants are given an opportunity to receive a pre-determined number of restricted shares. The rewards are paid partly in Vaisala's series A shares and partly in cash. The cash portion covers taxes and tax-related costs arising from the reward to a key employee. No reward is paid if a key employee's employment or service ends before the reward payment date. From the plan 2019–2021 onwards, Vaisala's Board of Directors requires that the President and CEO and each member of the Leadership Team retains their ownership of shares received under this plan until the value of their ownership in Vaisala corresponds to at least their annual gross base salary.

On February 7, 2018, the Board of Directors resolved a performance share-based incentive plan 2018. On March 10, 2021, the reward corresponding to 166,200 series A shares, 55% of the maximum, was

paid to 27 key employees. On June 28, 2019, the reward corresponding to 923 series A shares was paid to a key employee. On March 10, 2021, the reward corresponding to 8,000 series A shares was paid to Kai Öistämö, President and CEO. Closing price of Vaisala's series A share was EUR 22.10 on the grant date of the incentive plan. A total expense of this plan of EUR 3.8 million was recorded for 2018–2021.

On February 12, 2019, the Board of Directors resolved a performance share-based incentive plan 2019–2021. On March 3, 2022, the reward corresponding to 251,900 series A shares, 100% of the maximum, was paid to 42 key employees. Of these shares, 2,000 were conveyed to the President and CEO Kai Öistämö. In addition, on March 3, 2022, a total of 1,218 series A shares were conveyed without consideration to an employee participating in the performance share-based incentive plans 2020–2022 and 2021–2023. Closing price of Vaisala's series A share was EUR 19.06 on the grant date of the incentive plan. On March 10, 2021, the reward corresponding to 23,040 series A shares was paid to former President and CEO, Kjell Forsén.

On February 12, 2020, the Board of Directors resolved for a performance share-based incentive plan 2020–2022 for approximately 45 key employees. The reward will be paid in spring 2023. The maximum amount of this plan originally corresponded to 240,000 series A shares. The expenses of this plan are accrued from May 2020 to March 2023. Closing price of Vaisala's series A share was EUR 28.65 on the grant date of the incentive plan. On March 10, 2021, the reward corresponding to 5,529 series A shares was paid to former President and CEO, Kjell Forsén.

On December 17, 2020, the Board of Directors resolved for a performance share-based incentive plan 2021–2023 for approximately 40 key employees. The reward will be paid in spring 2024. The maximum amount of this plan originally corresponded to 180,000 series A shares. The expenses of this plan are accrued from April 2021 to March 2024. Closing price of Vaisala's series A share was EUR 32.10 on the grant date of the incentive plan.



On February 17, 2022, the Board of Directors resolved for three share-based incentive plans.

Performance share-based incentive plan was resolved for the period 2022–2024 for approximately 40 key employees. The reward will be paid in spring 2025. The maximum amount of this plan originally corresponded to 161,000 series A shares. The expenses of this plan are accrued from May 2022 to March 2025. Closing price of Vaisala's series A share was EUR 41.45 on the grant date of the incentive plan.

Matching share-based incentive plan was resolved for the period 2022–2026 and shares are earned in matching periods lasting for 12 to 36 months. Restricted share-based incentive plan was resolved for the period 2022–2026 and shares are earned in vesting periods lasting for 12 to 36 months. The maximum amount of matching and restricted share-based incentive plans originally corresponded to 100,000 series A shares. The expenses of the matching share plan are accrued from May 2022 to March 2025. The expenses of the restricted share plan are accrued depending on the timing and length of the vesting period(s).

In 2022, expenses related to share-based incentive plans totaled EUR 4.0 (5.0) million.

2022 review by business area

Industrial Measurements business area

EUR million	2022	2021	Change	FX**
Orders received	234.2	194.4	20%	14%
Order book, end of period	41.8	32.9	27%	
Net sales	225.6	181.0	25%	17%
Products	208.1	165.9	25%	
Services	17.5	15.1	16%	
Gross margin, %	61.9	62.8		
Operating result	51.5	43.9		
% of net sales	22.8	24.3		
R&D costs	25.3	21.1	20%	
Amortization*	1.7	1.7		

* Amortization of intangible assets related to the acquired businesses

** Change with comparable exchange rates

Industrial Measurements business area's 2022 orders received increased by 20% compared to previous year totaling EUR 234.2 (194.4) million. Orders received increased in all market segments and growth was very strong in industrial instruments, life science, and power industry markets segments.

At the end of 2022, Industrial Measurements business area's order book amounted to EUR 41.8 (32.9) million and increased by 27% compared to previous year. EUR 39.0 (30.7) million of the order book is scheduled to be delivered in 2023. Order book increased in industrial instruments, life science, and power industry market segments and was at previous year's level in liquid measurements market segment.

In 2022, net sales were EUR 225.6 (181.0) million and increased by 25% compared to previous year. In constant currencies, net sales increased by 17%. Net sales growth was very strong in all market segments.

Gross margin decreased compared to previous year's level and was 61.9 (62.8) %. Additional costs related to component spot purchases had a 3.6 (1.8) percentage point negative impact on gross margin. This was offset by pricing, product mix, and economies of scale generated by volume increase.

Industrial Measurements business area's 2022 operating result increased compared to previous year following growth in net sales and totaled EUR 51.5 (43.9) million, 22.8 (24.3) % of net sales. Operating expenses increased due to IT system renewal and investments in sales and marketing as well as in R&D.



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Weather and Environment business area

EUR million	2022	2021	Change	FX**
Orders received	299.5	260.8	15%	11%
Order book, end of period	139.6	127.1	10%	
Net sales	288.6	256.9	12%	8%
Products	167.4	154.4	8%	
Projects	73.5	63.6	16%	
Services	46.0	36.7	25%	
Lease income	1.7	2.1	-19%	
Gross margin, %	49.3	49.9		
Operating result	11.1	7.6		
of net sales, %	3.8	3.0		
R&D costs	37.2	34.2	9%	
Amortization*	6.6	5.9		

* Amortization of intangible assets related to the acquired businesses
 ** Change with comparable exchange rates

Weather and Environment business area's 2022 orders received increased by 15% compared to previous year and totaled EUR 299.5 (260.8) million. Orders received increased in all market segments, and growth was very strong in renewable energy and aviation.

At the end of 2022, Weather and Environment business area's order book amounted to EUR 139.6 (127.1) million and increased by 10% compared to previous year. EUR 103.9 (94.6) million of the order book is scheduled to be delivered in 2023. Order book increased in renewable energy and ground transportation market segments, and was at previous year's level in aviation and meteorology.

In 2022, net sales were EUR 288.6 (256.9) million and increased by 12% compared to previous year. In constant currencies, net sales increased by 8%. Net sales grew in all market segments, and growth was strong in aviation and renewable energy.

Gross margin was at previous year's level 49.3 (49.9) %. Additional costs related to component spot purchases had a 1.9 (0.7) percentage point negative impact on gross margin. This was offset by improved gross margin of product business, higher share of more profitable digital services, and economies of scale generated by volume increase.

Weather and Environment business area's 2022 operating result increased compared to previous year and totaled EUR 11.1 (7.6) million, 3.8 (3.0) % of net sales. Operating expenses increased due to IT system renewal and investments in sales and marketing as well as in R&D.

Strategy and its implementation in 2022

Vaisala's strategy for 2022–2024 focuses on driving sustainable growth and global leadership in weather, environmental, and industrial measurements by managing three types of businesses: flagship, growth, and emerging businesses. Through its products and technologies, Vaisala enables business-critical decisions and operations for its customers. Thereby, the company strongly contributes to solving global challenges related to climate change, resource efficiency, and well-being and health.

Industrial Measurements business area drives profitable growth through product leadership strategy. Goal is to exceed Vaisala's average growth target. In 2022, Industrial Measurements business area exceeded expectations both in flagship and growth businesses. Growth of net sales in industrial instruments was excellent through-out the year. Industrial instruments contributed significantly to business area's operating result even after additional costs related to component spot purchases. Net sales in life science, power industry, and liquid

measurements market segments grew very strongly compared to previous year. Regional expansion continued in APAC with establishment of Korean subsidiary.

At the beginning of 2022, Industrial Measurements business area launched TM1100 immersion temperature transmitter on the market, which is designed for measuring the temperature of cooling/heating water in HVAC automation systems, especially in data centers. Accurate and stable measuring devices enable efficient control of the data center's cooling system, while keeping the temperature and relative humidity at the right levels in an energy-efficient manner.

Industrial Measurements business area continued development of Indigo500 software by announcing new features, e.g. analog input, which enables third-party sensors to be connected as part of the measurement solution, as well as more comprehensive and clearer data logging. Indigo500 brings unprecedented possibilities to traditional industrial measurement, enabling the utilization of several simultaneously monitored variables in an easy way.

Industrial Measurements business area completed the certification work for the HMT370EX humidity and temperature transmitter intended for hazardous areas up to zone 0 and 20 by adding national approvals to Canada (CSA) and Great Britain (UKEX). In addition, the business area launched the T-only version for customers who only need temperature measurement.

Moreover, Industrial Measurements business area further developed the user experience of the OPT100 multi-gas analyzer by introducing new features for data transmission of measurements, as well as by adding an alternative power supply to the device.

Weather and Environment business area's strategy is to secure leadership in flagship markets, to expand in growth and emerging markets to become market leader in selected markets, and to grow recurring revenue. In 2022, Weather and Environment business area's flagship business' net sales grew in line with expectations, although



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it was lacking orders for new large weather infrastructure projects. In addition, profitability improvement was delayed due to additional costs from component spot purchases. Growth business exceeded clearly its net sales growth target and succeeded especially in renewable energy market segment. Volume growth also led to improved profitability. Emerging business reached expected strong double-digit growth and the business improved its gross margin significantly. Acquisition of AerisWeather had an important role in achieving these results.

Weather and Environment business area launched C-band weather radar with solid-state power amplifier technology to enable weather detection across large areas with unprecedented longevity. Combined with Vaisala's industry-leading data processing, the new SSPA C-band weather radar excels at delivering high-resolution weather information that differentiates between snow, hail, sleet, graupel, and rain. When paired with the Vaisala X-band radar, which provides unparalleled short-range coverage, decision-makers receive the most comprehensive intelligence in the industry.

Weather and Environment business area also launched WindCube Scan with new features including a more robust exterior, new scanning head, and enhanced laser design to allow for an operationally consistent range of up to 10 kilometers and more. The new solution has numerous benefits including enhanced atmospheric measurements used in meteorological forecasting, windshear assessment to mitigate wind hazards for airports, and simplicity, flexibility, and data accuracy at any stage of a wind energy project including off-shore wind.

Weather and Environment business area renamed its weather and environmental data offering to Vaisala Xweather. Xweather is a suite of data and solution services offered as subscriptions providing real-time and hyperlocal weather and environmental data. As part of the Xweather service suite, Weather and Environment business area launched several new solutions:

- Wx Horizon with Vaisala Cast Sensors. These solutions deliver hyperlocal road weather forecasts that are automatically enhanced using local observation.
- MapsGL, which visualizes global weather and geospatial data as never before with new, enhanced and customizable mapping features.
- Hyperlocal air quality forecast, which connects to local air quality observations, for proactive air quality management in cities.

Vaisala Operations manufacturers products for both business areas and develops operational excellence in high mix low volume supply chain through Vaisala Production System. Strategic programs are enabling Vaisala's growth, early involvement to product creation, as well as deploying automation through data-focused smart factory. In 2022, Operations maintained high on-time delivery despite challenging component availability situation. Capacity expansion focused on high-volume products and sensor factory. Operations participated in multiple product development projects together with business areas in order to ensure good producibility and timely production ramp-up.

Vaisala's process development focused on customer facing processes and ERP (Enterprise Resource Planning). Implementation of CPQ (Configure, Price and Quote) was finalized in both business areas. Development of new ERP solution as well as data and analytics solutions progressed well and the go-live is expected within a year.

Long-term financial targets

Vaisala's long-term target is to achieve an average annual net sales growth of 7% and an operating result margin (EBIT) of 15% during the strategy period.

Vaisala does not consider the long-term financial targets as market guidance for any given year.

Recognitions for sustainability work

Vaisala was ranked 5th on the Financial Times list of European climate leaders. The list includes European companies that achieved the greatest reduction in their greenhouse gas (GHG) emissions between 2015 and 2020. Vaisala increased its ranking from place 14 the previous year. Vaisala was the best ranked out of the 20 Finnish companies on the list.

Vaisala was granted with the Carnegie Sustainability Award 2022 in the category for small cap companies. The award acknowledges both Vaisala's sustainable business practices and the positive handprint of the business.

Vaisala received an ESG Risk Rating of 9.7 and was assessed by Sustainalytics to be at negligible risk of experiencing material financial impacts from ESG factors. This means that, when it comes to environmental, social, and governance (ESG) risk factors, Vaisala is a very low-risk investment thanks to its strong ESG risk management. Vaisala's ESG Risk Rating places it in the 2nd percentile in the electronics equipment industry assessed by Sustainalytics.

Group structure

Vaisala's headquarters are located in Vantaa, Finland. On December 31, 2022, Vaisala had subsidiaries in Australia, Brazil, Canada, China, Finland, France, Germany, India, Japan, Kenya, Korea, Malaysia, Mexico, United Kingdom, and United States. The parent company has branches in Argentina and Colombia.



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Board of Directors

The Annual General Meeting held on March 29, 2022, confirmed that the number of the Board members is eight.

Members of the Board of Directors on December 31, 2022

- Ville Voipio, Chair
- Raimo Voipio, Vice Chair
- Petri Castrén
- Antti Jääskeläinen
- Petra Lundström
- Jukka Rinnevaara
- Kaarina Ståhlberg
- Tuomas Syrjänen

Leadership Team

On November 3, 2022, Vaisala appointed Heli Lindfors as Chief Financial Officer and a member of the Vaisala Leadership Team as Kaarina Muurinen will be retiring. Lindfors will start in her position latest May 1, 2023, and report to President and CEO Kai Öistämö.

On December 31, 2022, Vaisala's Leadership Team members were

- Kai Öistämö, President and CEO, Chair of the Leadership Team
- Sampsa Lahtinen, EVP, Industrial Measurements business area
- Timo Leskinen, EVP, Human Resources
- Kaarina Muurinen, CFO
- Olli Nastamo, EVP, Operational Excellence
- Vesa Pylvänäinen, EVP, Operations
- Jarkko Sairanen, EVP, Weather and Environment business area
- Katriina Vainio, EVP, Group General Counsel

Risk management

The objective of Vaisala's risk management is to identify and manage material risks related to strategy implementation and business operations. Vaisala's Risk Management Policy, approved by the Board of Directors, covers the company's strategic, operational, hazard, and financial risks. The policy aims to ensure the safety of the company's employees, operations, and products as well as the continuity and compliance of business operations.

The Board of Directors defines and approves risk management principles and assesses the effectiveness of risk management. The Audit Committee reviews compliance with Risk Management Policy and processes.

Risk management is integrated into key business processes and operations by incorporating risk identification, assessment, management, and risk reporting actions into the core processes. The most significant risks are reported to the Vaisala Leadership Team quarterly and to the Audit Committee annually.

Financial risk management

Vaisala is exposed to a number of financial risks in its operations of which key ones are currency risk, interest rate risk, refinancing and liquidity risks as well as financial counterparty risk and trade receivables credit risks. Vaisala's objective is to limit the impact of these risks on statement of income, statement of financial position and cash flow statement. The management of financial risks is based on the treasury and credit policies approved by the Board of Directors.

Currency risk

Currency risk refers to the uncertainty in statement of income, statement of financial position and cash flow statement arising from exchange rate fluctuations. Vaisala's business is global and is exposed to transaction and translation risks in multiple currencies. The transaction risk is related to the currency flows of sales and expenses. The translation risk arises from net investments in entities outside the euro area.

Vaisala's sales are denominated in various currencies. In 2022, 42% of the group's sales was in EUR, 34% in USD, 11% in CNY, 5% in JPY and 3% in GBP. Expenses and purchases occur mostly in EUR and USD. The group's policy is to hedge foreign currency positions which consists of the order book, purchase commitments, net receivables, cash and cash equivalents and intercompany loans. Vaisala does not hedge forecasted cash flows that are not in the order book. Vaisala does not apply hedge accounting in accordance with IFRS and changes in fair value are recognized in the statement of income.

Intercompany loans and deposits are mainly initiated in subsidiaries' local currencies. Vaisala does not hedge equities of subsidiaries. Translation of subsidiaries' equities into euros caused translation difference of EUR 2.4 (4.5) million. The most significant translation risk exposures are in USD.

The IFRS 7 currency risk sensitivity analysis is based on the group companies' foreign currency receivables, cash and cash equivalents and liabilities. The calculation does not include internal loans, order book or forecasted cash flows, but includes foreign exchange forwards in their nominal value. The effect of a 10% appreciation in all open net currency positions against EUR on Vaisala's result after taxes and equity would have been EUR 0.2 (-0.4) million. Three largest foreign



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exchange net exposures in euro and their sensitivity analysis based on a 10% change (before taxes) are presented in the following table:

Foreign exchange net exposures against EUR

EUR million	2022		2021	
	Net position	Sensitivity	Net position	Sensitivity
USD	-10.2	+/-1.0	USD -8.3	+/-0.8
CNY	4.7	+/-0.4	PLN -3.1	+/-0.3
GBP	3.0	+/-0.3	HRK -3.0	+/-0.3

Interest rate risk

Interest rate risk refers to the uncertainty in statement of income, statement of financial position and cash flow statement arising from interest rate changes. The group is exposed to cash flow interest rate risk, if it has floating rate liabilities. At the end of the financial year 2022, Vaisala's interest-bearing liabilities and loans totaled to EUR 63.4 (50.2) million, of which EUR 40.1 (40.1) million were at floating rates. EUR 10.9 (10.1) million of interest-bearing liabilities and loans related to lease liabilities.

Refinancing and liquidity risks

Refinancing and liquidity risk refers to the uncertainty in the ability to maintain liquidity. In order to ensure liquidity, cash and cash equivalents and availability of credit facilities are maintained at a sufficient level.

On December 31, 2022, Vaisala's cash and cash equivalents amounted to EUR 55.5 (77.9) million. Vaisala has a EUR 40.0 million unsecured term loan which was signed on May 25, 2020. The loan matures on May 25, 2023, and has a financial covenant (gearing), which is tested semi-annually. On December 31, 2022, Vaisala was in

compliance with the covenant. This facility is used for refinancing of existing indebtedness as well as for general corporate and working capital purposes. The management plans to refinance the term loan with maturity date in 2023.

In addition, Vaisala has a domestic commercial paper program amounting to EUR 150 million, of which EUR 12.5 (0.0) million has been withdrawn at the end of reporting period. Consequently, Vaisala had interest-bearing liabilities totaling EUR 63.4 (50.2) million on December 31, 2022. Vaisala has no loans that would mature after five years or more. In addition, Vaisala has a EUR 50 million unsecured revolving credit facility, which was signed on October 5, 2018, and which was undrawn at the end of reporting period, as year before. The committed credit facility agreement matures on October 5, 2023, and it has no financial covenants. The management plans to refinance the revolving credit facility with maturity date in 2023.

Financial counterparty risk

Financial counterparty risk refers to the uncertainty about the counterparty's ability to assume the obligations related to the financing. Vaisala is exposed to financial counterparty risk in respect of cash and cash equivalents and derivative financial instruments. Vaisala's cash and cash equivalents amounted to EUR 55.5 (77.9) million and the nominal value of derivative financial instruments to EUR 38.3 (35.2) million. Vaisala deposits its assets and concludes derivative financial contracts with counterparties with good creditworthiness and approved according to Vaisala's treasury policy. The creditworthiness of banks is constantly assessed.

Trade receivables credit risk

Trade receivables credit risk means the customer-related uncertainty about the collectability of receivables. These trade receivables credit risks are managed by using letter of credit, advance payments and bank guarantees as payment terms. Additionally, trade receivables credit risk is managed by utilizing credit risk insurance and by

monitoring customer liquidity. Management estimates that the group does not have significant credit risk concentrations. No single customer or a group of customers constitutes a significant risk due to globally distributed customer base. During the financial year, credit losses and related reversals for trade receivables recognized in the statement of income amounted to EUR -0.6 (-0.1) million. Credit loss is recognized once it has been officially declared that the receivable will not be paid as a result of liquidation or bankruptcy.

Further information about risk management and risks is available in the Annual Report's sections Governance/Risk Management and on the company's website at vaisala.com.

Annual General Meeting 2022

Vaisala Corporation's Annual General Meeting was held on March 29, 2022. The meeting approved the financial statements and discharged the members of the Board of Directors and the President and CEO from liability for the financial period January 1-December 31, 2021.

Dividend

The Annual General Meeting decided a dividend of EUR 0.68 per share. The record date for the dividend payment was March 31, 2022, and the payment date was April 11, 2022.

Board of Directors

The Annual General Meeting confirmed that the number of Board members is eight. Petri Castrén, Antti Jääskeläinen, Petra Lundström, Jukka Rinnevaara, Kaarina Ståhlberg, Tuomas Syrjänen, Raimo Voipio and Ville Voipio will continue as members of the Board of Directors.

The Annual General Meeting confirmed that the annual remuneration payable to the Chair of the Board of Directors is EUR 55,000 and each Board member EUR 40,000 per year. Approximately 40% of the annual remuneration will be paid in Vaisala Corporation's



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series A shares acquired from the market and the rest in cash. In addition, the Annual General Meeting confirmed that the meeting fee for the Chair of the Audit Committee will be EUR 1,500 per attended meeting and EUR 1,000 for each member of the Audit Committee and Chair and each member of the People and Sustainability Committee and any other committee established by the Board of Directors for a term until the close of the Annual General Meeting in 2023. The meeting fees are paid in cash. Possible travel expenses are reimbursed according to the travel policy of the company.

Auditor

The Annual General Meeting re-elected Deloitte Oy as the auditor of the company and APA Reeta Virolainen will act as the auditor with the principal responsibility. The Auditors are reimbursed according to invoice presented to the company.

Authorization for the directed repurchase of own series A shares

The Annual General Meeting authorized the Board of Directors to resolve on the directed repurchase of a maximum of 800,000 of the company's own series A shares in one or more instalments by using company's unrestricted equity. The authorization is valid until the closing of the next Annual General Meeting, however, no longer than September 29, 2023.

Authorization on the issuance of the company's own series A shares

The Annual General Meeting authorized the Board of Directors to resolve on the issuance of a maximum of 1,008,487 company's own series A shares. The issuance of own shares may be carried out in deviation from the shareholders' pre-emptive rights (directed issue). The authorization entitles the issuance of treasury series A shares as a directed issue without payment as part of the company's share-based incentive plans. The subscription price of the shares can instead

of cash also be paid in full or in part as contribution in kind. The authorization is valid until September 29, 2023. The authorization for the company's incentive program shall however be valid until March 29, 2026.

The organizing meeting of the Board of Directors

At its organizing meeting held after the Annual General Meeting, the Board elected Ville Voipio as the Chair of the Board of Directors and Raimo Voipio as the Vice Chair.

Kaarina Ståhlberg was elected as the Chair and Petri Castrén, Antti Jääskeläinen and Raimo Voipio as members of the Audit Committee. Ville Voipio was elected as the Chair and Petra Lundström, Jukka Rinnevaara and Tuomas Syrjänen as members of the People and Sustainability Committee. The Chair and all members of the Audit Committee as well as the People and Sustainability Committee are independent both of the company and of significant shareholders.

Shares and shareholders

Share capital and shares

Vaisala's share capital totaled EUR 7,660,808 on December 31, 2022. Vaisala has 36,436,728 shares, of which 6,731,092 are series K shares and 29,705,636 series A shares. The series K shares and series A shares are differentiated by the fact that each series K share entitles its owner to 20 votes at a General Meeting of Shareholders while each series A share entitles its owner to 1 vote. The series A shares represented 81.5% of the total number of shares and 18.1% of the total votes. The series K shares represented 18.5% of the total number of shares and 81.9% of the total votes.

Trading and share price development

In 2022, a total of 2,384,806 series A shares with a value totaling EUR 102.5 million were traded on the Nasdaq Helsinki Ltd. During the year, the share price decreased by 26% while OMXHCAPPI index decreased by 16%. The closing price of the series A share on the Nasdaq Helsinki stock exchange was EUR 39.45. Shares registered a high of EUR 54.40 and a low of EUR 36.15. Volume-weighted average share price was EUR 43.03.

The market value of series A shares on December 31, 2022, was EUR 1,163.7 million, excluding company's treasury shares. Valuing the series K shares - which are not traded on the stock market - at the rate of the series A share's closing price on the last trading day of December, the total market value of all the series A and series K shares together was EUR 1,429.2 million, excluding company's treasury shares.

Treasury shares

In March 2022, a total of 125,950 of Vaisala's treasury shares were conveyed without consideration to the 42 key employees participating in Share-based incentive plan 2019-2021 under the terms and conditions of the plan. Of these shares, 2,000 were conveyed to the President and CEO Kai Öistämö. In addition, a total of 1,218 of Vaisala's treasury shares were conveyed without consideration to an employee participating in the Share-based incentive plans 2020-2022 and 2021-2023 under the terms and conditions of the plans. This directed share issue was based on an authorization given by the Annual General Meeting held on March 30, 2021.

Following this directed share issue, the number of series A treasury shares on December 31, 2022, was 208,487, which represents 0.7% of series A shares and 0.6% of total shares.



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Major shareholders December 31, 2022

	A shares	K shares	Total	% of shares	% of votes
Novamator Oy	2,778,000	998,358	3,776,358	10.36	13.84
Finnish Academy of Science and Letters	105,464	1,757,760	1,863,224	5.11	21.46
Nordea Nordic Small Cap Fund	1,700,710	0	1,700,710	4.67	1.03
Weisell-säätiö	1,440,000	0	1,440,000	3.95	0.88
Mandatum Life Insurance Company Ltd.	1,098,673	274,800	1,373,473	3.77	4.01
Voipio Mikko	666,000	602,312	1,268,312	3.48	7.74
Caspers Anja	406,560	562,936	969,496	2.66	7.10
Voipio Raimo*	515,360	404,296	919,656	2.52	5.23
Ilmarinen Mutual Pension Insurance Company	889,275	0	889,275	2.44	0.54
Voipio Tauno	568,520	269,304	837,824	2.30	3.62
Voipio Lauri	561,692	108,376	670,068	1.84	1.66
Voipio Riitta	561,692	108,376	670,068	1.84	1.66
Voipio Ville	397,642	119,712	517,354	1.42	1.70
Voipio Mari	414,486	96,712	511,198	1.40	1.43
Voipio Timo	391,484	119,712	511,196	1.40	1.70
Total	12,495,558	5,422,654	17,918,212	49.18	73.60
Nominee registered shares**	7,696,565	0	7,696,565	21.12	4.68

* In addition to direct share ownership, Raimo Voipio's controlled organization Imar Oy owned 56,000 series A shares.

** Includes 1,180,376 series A shares owned by Lannebo Fonder, which represented 3.24% of all shares and 0.72% of all votes (according to Lannebo's notification).

Ownership structure (series A and K shares)
December 31, 2022

	Shares	% of shares
Households	14,683,518	40.30
Nominee registered and outside Finland	7,747,078	21.26
Private companies	4,696,386	12.89
Financial and insurance institutions	4,246,277	11.65
Non-profit organizations	3,680,756	10.10
Public sector organizations	1,382,713	3.80
Total	36,436,728	100.00



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Ownership distribution (series A and K shares) December 31, 2022

	Share- holders	% of share- holders	Shares	% of shares
1-100	8,123	58.89	292,469	0.80
101-500	3,696	26.79	977,074	2.68
501-1,000	974	7.06	731,775	2.00
1,001-5,000	773	5.60	1,658,380	4.55
5,001-10,000	97	0.70	670,583	1.84
10,001-50,000	80	0.58	1,700,234	4.67
50,001-100,000	18	0.13	1,197,329	3.29
100,001-500,000	16	0.12	3,625,510	9.95
500,001-	17	0.12	25,583,374	70.21
Total	13,794	100.00	36,436,728	100.00
Nominee registered	9			

Shareholders' agreements

The Board of Directors is not aware of any agreements concerning the ownership of the company's shares and the use of their voting rights.

Shareholding by the Board of Directors and the Leadership Team

On December 31, 2022, the Board of Directors held and controlled 992,647 (989,565) series A shares. These shares accounted for 3.3 (3.3) % of series A shares and 2.7 (2.7) % of total shares. The number of series K shares held and controlled by the Board was 524,008 (551,008). Total votes attached to the series A and K shares held and controlled by the Board were 11,427,807 (12,009,725), which accounted for 7.0 (7.3) % of the total votes of all shares.

On December 31, 2022, Kai Öistämö, the President and CEO, held and controlled 6,000 (4,000) series A shares but no series K shares. Other Leadership Team members held and controlled 166,768 (118,018) series A shares but no series K shares.

Corporate Governance Statement includes more details on the shareholdings of the Board of Directors and the Leadership Team.

More information about Vaisala's shares and shareholders are presented on the company's website at vaisala.com/investors.

Donations

Vaisala collaborates with the Colorado State University (CSU) in the US in the field of weather radars, among others. In 2020, Vaisala's Board of Directors renewed the annual donation of USD 25,000 to the university for three years.

In January 2022, Vaisala donated USD 250,000 to the Community Foundation of Boulder County Wildfire Fund to support the community and assist those impacted in wildfires.

In March 2022, Vaisala donated EUR 100,000 to humanitarian aid in Ukraine. The donation was made through Finnish Red Cross.

Non-financial information

Disclosure of non-financial information in accordance with Finnish Accounting Act chapter 3 a is presented in the Sustainable business practices section as well as in the chapters Business model in Our business section, Dashboard in the Creating value section, and Risk management in the Governance section. The Sustainable business practices section includes information on environmental matters, social and employee matters, respecting human rights, as well as anti-corruption and anti-bribery compliance.

EU sustainable finance taxonomy

The indicators required by the EU Taxonomy Regulation are reported in the chapter EU sustainable finance taxonomy, located in the Creating value section of the Annual Report.

Corporate Governance Statement

Corporate Governance Statement will be published as a part of the Annual Report as well as a separate report on the company's website at vaisala.com/investors.

Remuneration Report

Remuneration Report will be published as a part of the Annual Report as well as a separate report on the company's website at vaisala.com/investors.

Near-term risks and uncertainties

The war in Ukraine will affect economic situation especially in Europe and increase risk of achieving Vaisala's financial targets. COVID-19 pandemic's impact on Vaisala's business is depending on development of possible new virus variants and regional outbreaks such as in China.

Vaisala's delivery capability may deteriorate due to disruptions in suppliers' operations, Vaisala's production or project delivery operation, or disruptions in incoming and/or outgoing logistics. Industrial actions in Finland may cause disruptions in Vaisala's operations and deteriorate Vaisala's delivery capability. Component shortage may cause delays or interruptions in deliveries or generate additional material costs. Cyber risk and downtime of IT systems may impact operations and delivery capability.



New and changing regulations impacting product acceptance, operation's capability to meet changing compliance requirements, and changes in international trade policies may cause delays or interruptions in supply chain. Customers' preference for local manufacturing may reduce demand for Vaisala's products and services. Customers' budgetary constraints, complex decision-making processes, and missing financing solutions may postpone closing of infrastructure contracts in Weather and Environment business area.

Further information about risk management and risks are available on Annual Report's Corporate Governance/Risk management section and on the company's website at vaisala.com.

Market development and business outlook for 2023

Markets for high-end industrial instruments, life science, power and energy, and liquid measurements are expected to grow.

Markets for renewable energy as well as roads and automotive are expected to grow. Market for aviation is expected to be stable or to grow. Market for meteorology is expected to be stable.

The war in Ukraine and sanctions against Russia are not expected to have direct material impact on Vaisala's operations, financial position or cash flow. The uncertainty in the business environment is high due to weak economic outlook and high inflation and continuing COVID-19 pandemic especially in China. The availability of components is expected to normalize during the first half of 2023. Vaisala estimates

that its full-year 2023 net sales will be in the range of EUR 530–570 million and its operating result (EBIT) will be in the range of EUR 70–85 million.

Board of Directors' proposal for dividend

The parent company's distributable earnings amount to EUR 167,443,963.45 of which the result for the period is EUR 26,965,941.48.

The Board of Directors proposes to the Annual General Meeting that a dividend of EUR 0.72 per share be paid out of distributable earnings totaling EUR 26.1 million and the rest to be carried forward in the shareholders' equity. No dividend will be paid for treasury shares held by the company.

There have been no significant changes in the company's financial position since the close of the financial period. According to the Board of Directors, the proposed dividend distribution does not endanger the company's financial standing.

Annual General Meeting 2023

Vaisala Corporation's Annual General Meeting will be held on Tuesday March 28, 2023, at 2:00 p.m. Finnish time at Vaisala Corporation's head office, Vanha Nurmijärventie 21, 01670 Vantaa, Finland. The reception of persons who have registered for the meeting will commence at 1:00 p.m. Shareholders can follow the meeting via live webcast at Vaisala

website vaisala.com/agm. Shareholders following the webcast are not deemed to attend the Annual General Meeting so they cannot ask questions or vote online during the webcast. A shareholder, who wants to participate in the General Meeting, shall register for the meeting no later than on March 23, 2023, at 4.00 p.m. by giving prior notice of participation. Such notice can be given on the company's website at vaisala.com/agm or by email to agm@vaisala.com.

Vantaa, February 15, 2023

Vaisala Corporation
Board of Directors

The forward-looking statements in this Board of Directors' Report are based on the current expectations, known factors, decisions, and plans of Vaisala's management. Although the management believes that the expectations reflected in these forward-looking statements are reasonable, there is no assurance that these expectations would prove to be correct. Therefore, the results could differ materially from those implied in the forward-looking statements, due to for example changes in the economic, market and competitive environments, regulatory or other government-related changes, or shifts in exchange rates.



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The audited financial statements comprise the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of financial position, consolidated cash flow statement, consolidated statement of changes in equity and notes to the consolidated financial statements, as well as the parent company income statement, parent company balance sheet, parent company cash flow statement and notes to the parent company financial statements.



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Consolidated statement of income

EUR million	Note	Jan 1–Dec 31, 2022	Jan 1–Dec 31, 2021
Net sales	1, 2, 3	514.2	437.9
Cost of goods sold	5, 13, 16	-232.2	-196.0
Gross profit		282.0	241.8
Sales, marketing and administrative costs	5, 7, 16	-157.3	-131.2
Research and development costs	5, 7, 8, 16	-62.4	-55.3
Other operating income and expenses	4	0.3	-5.2
Operating result		62.5	50.1
Share of result in associated company	27	0.2	0.2
Financial income and expenses	9	-3.1	-2.1
Result before taxes		59.6	48.3
Income taxes	10	-14.5	-8.9
Result for the financial year		45.0	39.5
Attributable to			
Owners of the parent company		45.0	39.0
Non-controlling interests		0.0	0.5
Result for the financial year		45.0	39.5
Earnings per share for result attributable to the equity holders of the parent company	11		
Earnings per share, EUR		1.24	1.08
Diluted earnings per share, EUR		1.24	1.07

Consolidated statement of comprehensive income

EUR million	Note	Jan 1–Dec 31, 2022	Jan 1–Dec 31, 2021
Items that will not be reclassified to profit or loss (net of taxes)			
Actuarial profit (loss) on post-employment benefits	6	-0.2	-0.1
Total		-0.2	-0.1
Items that may be reclassified subsequently to profit or loss			
Translation differences		2.4	4.5
Total		2.4	4.5
Total other comprehensive income		2.2	4.3
Comprehensive income for the financial year		47.3	43.8
Attributable to			
Owners of the parent company		47.3	43.4
Non-controlling interests		0.0	0.5
Comprehensive income for the financial year		47.3	43.8

The notes are an essential part of the financial statements.



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Consolidated statement of financial position

EUR million	Note	Dec 31, 2022	Dec 31, 2021
Assets			
Non-current assets			
Intangible assets	16	71.3	56.9
Property, plant and equipment	16	96.0	94.1
Right-of-use assets	17	11.9	11.1
Investments in shares		0.1	0.1
Investment in associated company	27	1.4	1.3
Non-current receivables	20	1.0	0.9
Deferred tax assets	10	9.5	9.2
Total non-current assets		191.1	173.5
Current assets			
Inventories	13	61.6	49.9
Trade and other receivables	12	101.7	73.5
Contract assets and other accrued revenue	3	26.2	28.1
Income tax receivables		3.1	5.1
Cash and cash equivalents	23	55.5	77.9
Total current assets		248.1	234.5
Total assets		439.2	408.0

EUR million	Note	Dec 31, 2022	Dec 31, 2021
Equity and liabilities			
Equity	18		
Share capital		7.7	7.7
Other reserves		3.5	7.0
Translation differences		4.1	1.7
Treasury shares		-3.3	-4.6
Retained earnings		238.7	218.0
Total equity attributable to owners of parent company		250.7	229.6
Non-controlling interests		0.0	0.7
Total equity		250.7	230.3
Non-current liabilities			
Interest-bearing borrowings	21	0.0	40.0
Interest-bearing lease liabilities	17	8.3	7.7
Post-employment benefits	6	2.7	2.7
Deferred tax liabilities	10	4.3	6.7
Provisions	15	0.3	0.3
Other non-current liabilities	21	2.1	1.3
Total non-current liabilities		17.6	58.6



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EUR million	Note	Dec 31, 2022	Dec 31, 2021
Current liabilities			
Interest-bearing borrowings	21	52.5	0.1
Interest-bearing lease liabilities	17	2.7	2.4
Trade and other payables	14	74.0	83.9
Contract liabilities and other deferred revenue	3	37.1	29.0
Income tax liabilities		1.8	1.8
Provisions	15	2.8	2.0
Total current liabilities		170.8	119.1
Total liabilities		188.5	177.7
Total equity and liabilities		439.2	408.0

The notes are an essential part of the financial statements.



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Consolidated cash flow statement

EUR million	Note	Jan 1-Dec 31, 2022	Jan 1-Dec 31, 2021
Cash flow from operating activities			
Result for the financial period		45.0	39.5
Depreciation, amortization and impairment	16	23.6	21.6
Financial income and expenses	9	3.1	2.1
Gains and losses on sale of intangible assets and property, plant and equipment	4	0.0	0.0
Share of result in associated company	27	-0.2	-0.2
Income taxes	10	14.5	8.9
Other adjustments	22	0.3	3.1
Inventories, increase (-) / decrease (+)	13	-11.2	-6.7
Non-interest-bearing receivables, increase (-) / decrease (+)	12	-26.0	-11.5
Non-interest-bearing liabilities, increase (+) / decrease (-)	14	-0.8	34.7
Changes in working capital		-38.0	16.6
Financial items paid/received	9	-4.9	-0.2
Income taxes paid	10	-13.6	-11.2
Cash flow from operating activities		29.8	80.0
Cash flow from investing activities			
Acquisition of subsidiaries, net of cash acquired	25	-23.1	-
Capital expenditure on intangible assets and property, plant and equipment	16	-13.7	-19.2
Proceeds from sale of intangible assets and property, plant and equipment	4	0.0	0.1
Cash flow from investing activities		-36.8	-19.1

EUR million	Note	Jan 1-Dec 31, 2022	Jan 1-Dec 31, 2021
Cash flow from financing activities			
Dividends paid	18	-24.6	-22.0
Change in loan receivables		-0.1	-0.0
Proceeds from borrowings	21	114.9	45.0
Repayment of borrowings	21	-102.4	-49.9
Principal payments of lease liabilities	17	-2.9	-3.1
Cash flow from financing activities		-15.1	-30.0
Change in cash and cash equivalents, increase (+) / decrease (-)		-22.1	30.8
Cash and cash equivalents at the beginning of the financial year		77.9	45.4
Change in cash and cash equivalents		-22.1	30.8
Effect from changes in exchange rates		-0.3	1.7
Cash and cash equivalents at the end of the financial year	23	55.5	77.9

The notes are an essential part of the financial statements.



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Consolidated statement of changes in equity

EUR million	Note	Share capital	Other reserves	Translation differences	Treasury shares	Retained earnings	Equity attributable to owners of the parent company	Non-controlling interests	Total
Equity at Dec 31, 2020		7.7	5.6	-2.8	-6.3	200.8	205.1	0.4	205.5
Result for the financial year	18					39.0	39.0	0.5	39.5
Other comprehensive income	18		0.0	4.4		-0.1	4.3		4.3
Dividend distribution	18					-22.0	-22.0		-22.0
Share-based payments	7, 18		1.3		1.7		2.9		2.9
Transfer between items	18		0.0			-0.0			
Changes in non-controlling interests that did not result in changes in control						0.2	0.2	-0.2	
Equity at Dec 31, 2021		7.7	7.0	1.7	-4.6	218.0	229.6	0.7	230.3
Result for the financial year	18					45.0	45.0	0.0	45.0
Other comprehensive income	18		-0.0	2.4		-0.2	2.2		2.2
Dividend distribution	18					-24.6	-24.6		-24.6
Share-based payments	7, 18		-3.4		1.4		-2.1		-2.1
Changes in non-controlling interests that did not result in changes in control						0.7	0.7	-0.7	
Equity at Dec 31, 2022		7.7	3.5	4.1	-3.3	238.7	250.7	0.0	250.7



Notes to the consolidated financial statements

Basic information

Vaisala is a global leader in weather, environmental, and industrial measurement. With over 85 years of experience, Vaisala provides measurement solutions and services for chosen weather-related and industrial markets.

The parent company, Vaisala Corporation, is a Finnish public limited company, domiciled in Vantaa, Finland. The registered address is Vanha Nurmijärventie 21, FI-01670 Vantaa, Finland (P.O. Box 26, FI-00421 Helsinki). The company's Business ID is 0124416-2.

These financial statements have been approved for publication by the Board of Directors of Vaisala Corporation on February 15, 2023. Under the Finnish Companies Act, shareholders have the right to approve, reject or make changes to the financial statements in the Annual General Meeting to be held after the publication. A copy of the consolidated financial statements is available on the company's website at vaisala.com/investors or at the parent company head office at the address Vanha Nurmijärventie 21, FI-01670 Vantaa, Finland (P.O. Box 26, FI-00421 Helsinki).

Accounting principles for the consolidated financial statements

The consolidated financial statements of Vaisala have been prepared in accordance with International Financial Reporting Standards (IFRS) approved for adoption by the European Union, including International Accounting Standards (IAS) and the SIC and IFRIC Interpretations valid on December 31, 2022. In the Finnish Accounting Act and ordinances based on the provisions of the Act, IFRS refer to the standards and their interpretations adopted in accordance with the procedures laid down in regulation (EC) No. 1606/2002 of the European Parliament and of the Council. The notes to the consolidated financial statements are also in accordance with the Finnish accounting and corporate law.

The consolidated financial statements are presented in millions of euros, if not otherwise stated. All presented figures have been rounded and consequently the sum of individual figures may deviate from the presented sum. Financial statements are based on original acquisition costs, if not otherwise stated in the accounting principles. In the text sections figures from previous years are presented in parenthesis. Calculation of key figures and alternative performance measures are presented in the Board of Directors' Report.

Consolidation principles

Subsidiaries

The consolidated financial statements include the parent company Vaisala Corporation and those subsidiaries in which the group has control. The group has control of an entity when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Subsidiaries, acquired or founded during the financial period, are consolidated from the date on which control is transferred to the group and are no longer consolidated from the date that control ceases.

Business combinations are accounted for using the acquisition method. The consideration transferred is the fair value of transferred assets, issued equity interests and liabilities incurred to former owners. Any contingent consideration is recognized at fair value at the acquisition date and classified as a liability or equity. Contingent considerations classified as a liability are measured at fair value on each reporting date with changes recognized in consolidated statement of income. Identifiable assets acquired as well as assumed liabilities and contingent liabilities are measured initially at their fair values on the date of acquisition without deducting non-controlling interest. The amount by which the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition date fair value of any previous equity interest exceeds the fair value of identifiable net assets is recognized as goodwill. If the consideration transferred is lower than the acquired net assets, the gain is recognized in the consolidated statement of income on the acquisition date. All acquisition-related costs, except for the costs to issue debt or equity securities, are expensed in the periods in which the costs are incurred and the services are received.

The group's intercompany transactions, unrealized margins on internal deliveries, receivables and liabilities as well as dividends are eliminated. Unrealized losses on internal transactions are also eliminated unless costs are not recoverable or the loss results from an impairment. The consolidated financial statements are prepared applying consistent accounting principles to similar transactions and other events under equal conditions.

Associated companies

The share of results of associated companies, i.e. companies of which Vaisala owns 20-50% or over which it otherwise has significant influence, are included in the consolidated financial statements applying the equity method. If Vaisala's share of an associated company's losses exceeds the carrying amount of the investment, the investment is recognized in the consolidated statement of financial position at zero



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value and further losses are not recognized unless the group has incurred obligations on behalf of the associated company. Unrealized gains on transactions between the group and its associated companies have been eliminated to the extent of the group's interest in the associated companies. The group's share of associated companies' results is presented in the consolidated statement of income as a separate item before 'financial income and expenses'. Investments in associated companies are initially recognized at cost and the carrying amount is increased or decreased by the share of post-acquisition results. Distribution of profit received from an investment reduces the carrying amount of the results.

Non-controlling interests

The non-controlling interests' share of the result and of the comprehensive income for the financial year are presented in the consolidated statement of income and in the consolidated statement of comprehensive income. The non-controlling interests' share of the equity is presented as a separate item in the consolidated statement of financial position.

Foreign currency translation

Items relating to the consolidated result and financial position are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). The consolidated financial statements have been presented in euros, which is the parent company's functional and presentation currency.

Transactions in foreign currencies are recorded in the functional currency using the exchange rate on the date of transaction. Receivables and payables in foreign currency have been valued at the rates quoted by European Central Bank on the last trading date of the financial year. Exchange rate differences resulting from the settlement of monetary items or from the presentation of items in the financial statements at different exchange rates from which they were originally recognized during the financial period or presented in the previous financial statements, are recognized as financial income or expenses in the financial period in which they arise.

Statements of financial position of subsidiaries in other functional currency than euro have been translated into euros using the rates quoted by European Central Bank on the last trading date of the financial year. Translating statements of income monthly average exchange rates have been used. Translating net income for the financial year using different exchange rates in the consolidated statements of income and in the consolidated statement of financial position, results in a translation difference, which is recognized in other comprehensive income. Translation differences arising from the elimination of the acquisition cost of foreign subsidiaries and the translation of the accumulated equity items after the acquisition are recognized in other comprehensive income. When a foreign subsidiary or associated company is disposed of or partly disposed of, the translation difference is recognized in the consolidated statement of income as part of the gain or loss on the sale.

Goodwill or fair value adjustments arising from the acquisition of a foreign entity are treated as assets and liabilities in the functional currency of the foreign entity and are translated at the rate of the last trading date of the financial year.

Key exchange rates

	Average rates		Period end rates	
	2022	2021	Dec 31, 2022	Dec 31, 2021
USD	1.0555	1.1894	1.0666	1.1326
CNY	7.0607	7.6758	7.3582	7.1947
JPY	137.28	130.00	140.66	130.38
GBP	0.8509	0.8633	0.8869	0.8403

Climate-related matters

Climate-related matters have been considered from the point of view of both opportunities and risks.

Climate change provides Vaisala with business opportunities. Vaisala's solutions help our customers to adapt to, mitigate and increase understanding of the climate change. By utilizing the data provided by Vaisala's measurement instruments, our industrial customers can increase their resource efficiency and optimize their processes in order to reduce energy consumption, emissions and loss. With environmental observations, forecasting, and early warning systems, societies and institutions can better prepare for the consequences of climate change. With solutions related to renewable energy Vaisala helps to mitigate climate change.

In 2022, Vaisala committed to setting a near-term science-based target aligned with the requirements of the Science-Based Targets initiative (SBTi). Vaisala will formulate the targets and an emissions reduction roadmap during 2023 and apply for the official SBTi approval by 2024.

Climate change has been assessed to increase the likelihood of risks related to natural disasters, epidemics (other than COVID-19), civil unrest and terrorism (hazard risks) and business continuity risks related to suppliers (operational risks).

Above mentioned have been taken into account in the preparation of the financial statements. Identified risks and targets do not have a material impact on the financial statement items requiring management judgment and estimates. Vaisala has not yet identified significant investment needs related to risks and targets of climate change.



New and amended IFRS standards that are effective for the year 2022

Vaisala has adopted the following new or revised IFRS standards from January 1, 2022. Their adoption has not had no material impact on the disclosures or on the amounts reported in these financial statements.

Amendments to IFRS 3 Reference to the Conceptual Framework

The group has adopted the amendments to IFRS 3 Business Combinations for the first time in the current financial year. The amendments update IFRS 3 so that it refers to the 2018 Conceptual Framework instead of the 1989 Framework. They also add to IFRS 3 a requirement that, for obligations within the scope of IAS 37 Provisions, Contingent Liabilities and Contingent Assets, an acquirer applies IAS 37 to determine whether at the acquisition date a present obligation exists as a result of past events. For a levy that would be within the scope of IFRIC 21 Levies, the acquirer applies IFRIC 21 to determine whether the obligating event that gives rise to a liability to pay the levy has occurred by the acquisition date.

Amendments to IAS 16 Property, Plant and Equipment—Proceeds before Intended Use

The group has adopted the amendments to IAS 16 Property, Plant and Equipment for the first time in the current financial year. The amendments prohibit deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced before that asset is available for use, i.e. proceeds while bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Consequently, an entity recognises such sales proceeds and related costs in profit or loss. The entity measures the cost of those items in accordance with IAS 2 Inventories.

The amendments also clarify the meaning of "testing whether an asset is functioning properly". IAS 16 now specifies this as assessing whether the technical and physical performance of the asset is such that it is capable of being used in the production or supply of goods or services, for rental to others, or for administrative purposes.

If not presented separately in the statement of comprehensive income, the financial statements shall disclose the amounts of proceeds and cost included in profit or loss that relate to items produced that are not an output of the entity's ordinary activities, and which line item(s) in the statement of comprehensive income include(s) such proceeds and cost.

Amendments to IAS 37 Onerous Contracts—Cost of Fulfilling a Contract

The group has adopted the amendments to IAS 37 for the first time in the current financial year. The amendments specify that the cost of fulfilling a contract comprises the costs that relate directly to the contract. Costs that relate directly to a contract consist of both the incremental costs of fulfilling that contract (examples would be direct labour or materials) and an allocation of other costs that relate directly to fulfilling contracts (an example would be the allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract).

Annual Improvements to IFRS Accounting Standards 2018–2020 Cycle: amendments to IFRS 1, IFRS 9, IFRS 16 ja IAS 41

The group has adopted the amendments included in the Annual Improvements to IFRS Accounting Standards 2018–2020 Cycle for the first time in the current financial year. The Annual Improvements include amendments to four standards.

The amendments to IFRS 1 First-time Adoption of International Financial Reporting Standards and to IAS 41 Agriculture has no impact to the consolidated financial statements.

IFRS 9 Financial Instruments

The amendment clarifies that in applying the "10 per cent" test to assess whether to derecognise a financial liability, an entity includes only fees paid or received between the entity (the borrower) and the lender, including fees paid or received by either the entity or the lender on the other's behalf.

IFRS 16 Leases

The amendment removes the illustration of the reimbursement of leasehold improvements.

Accounting principles requiring management judgment and the main uncertainty factors relating to estimates

The preparation of financial statements in accordance with IFRS requires management to make estimates and judgment in the application of the accounting policies. The financial statements are based on estimates and assumptions concerning the future, the outcome of which may differ from the estimates and assumptions made. The estimates and judgments made are based on past experience and other factors, such as assumptions about future events that may reasonably be expected to occur in the circumstances. Estimates and assumptions are reviewed on a regular basis.

Estimates and judgment have been used in particular in the following areas for which significant accounting policies and accounting estimates and judgments have been described in the accompanying notes:

- Revenue recognition (note 3) (judgment and estimate)
- Income taxes (note 10) (judgment and estimate)
- Allowances for excess and obsolete inventory (note 13) (estimate)
- Fair value allocation of purchase price in business combinations (notes 16 and 25) (estimate)
- Impairment testing (note 16) (estimate)
- Leases (note 17) from lessee's perspective (judgment)



In addition, estimates, judgment and assumptions are related to the following areas:

- With regard to pension obligations (note 6) assumptions in actuarial calculations related to e.g. discount interest rate, inflation and development of salary and pension indexes (assumption)
- With regard to share-based payments (note 7) estimate related to e.g. profitability forecasts and attrition of participants benefiting from the share-based payment plans (estimate)
- With regard to warranty provision (note 15) estimate related to future costs (estimate)
- With regard to leases (note 17) from lessor's perspective estimate related to exercise of extension and termination option (estimate)
- With regard to credit loss allowance for trade receivables and contract assets (note 21) estimate related to expected credit loss risk for different groups of receivables (estimate)

Financial development

1. REPORTABLE SEGMENTS

§ Accounting principles

Vaisala has two operating and reportable segments, which are based on the type of business operations: Industrial Measurements business area and Weather and Environment business area. Operating segments have not been aggregated to build the reportable segments.

Operating segments are based on the management reports reviewed by Vaisala Leadership Team, which is the chief operating decision-maker. Vaisala Leadership Team is responsible for allocating resources and assessing performance of the operating segments. Vaisala Leadership Team assesses the performance of the operating segment based on the operating result. The reporting provided to Vaisala Leadership Team is prepared in consistency with the principles of IFRS consolidated financial statements. Income and expenses related to discontinued businesses are not allocated to operating segments and are presented in Other operations. Transfer pricing between segments is based on arm's length principle.

Industrial Measurements business area serves a wide range of industrial customers. It offers a broad range of accurate and reliable measurement instruments, continuous monitoring systems, and services that help the customers optimize processes, improve efficiency, minimize energy consumption, and ensure the high quality of the end-products. Main markets are high-end humidity and carbon dioxide measurements, continuous monitoring systems, liquid measurements, and new markets.

Weather and Environment business area serves selected weather-dependent customers where accurate, real-time, uninterrupted, and reliable weather data is essential to run efficient operations. Main markets are meteorology, aviation, ground transportation and renewable energy.

Revenue recognition principles are presented in note 3, Revenue from contracts with customers and 17, Leases.



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Reportable segments

2022 EUR million	Industrial Measurements	Weather and Environment	Other operations	Vaisala total
Products	208.1	167.4		375.5
Projects		73.5		73.5
Services	17.5	46.0		63.5
Lease income		1.7		1.7
Net sales	225.6	288.6		514.2
Performance obligations satisfied at a point in time	222.2	185.9		408.1
Performance obligations satisfied over time	3.3	101.1		104.4
Lease income recognized on a straight-line basis		1.7		1.7
Net sales	225.6	288.6		514.2
Operating result	51.5	11.1	-0.1	62.5
Share of result in associated company				0.2
Financial income and expenses				-3.1
Result before taxes				59.6
Income taxes				-14.5
Result for the financial year				45.0

Reportable segments

2021 EUR million	Industrial Measurements	Weather and Environment	Other operations	Vaisala total
Products	165.9	154.4		320.3
Projects		63.6		63.6
Services	15.1	36.7		51.8
Lease income		2.1		2.1
Net sales	181.0	256.9		437.9
Performance obligations satisfied at a point in time	178.3	168.3		346.6
Performance obligations satisfied over time	2.7	86.5		89.2
Lease income recognized on a straight-line basis		2.1		2.1
Net sales	181.0	256.9		437.9
Operating result	43.9	7.6	-1.4	50.1
Share of result in associated company				0.2
Financial income and expenses				-2.1
Result before taxes				48.3
Income taxes				-8.9
Result for the financial year				39.5



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2. GEOGRAPHICAL SEGMENTS

Vaisala's reportable segments operate in geographical areas which are Americas, APAC and EMEA. ¹⁾

Geographical segments

2022 EUR million	Net sales, by destination country ²⁾	Net sales, by location country ³⁾	Non-current assets ³⁾
Americas	191.2	176.3	47.8
of which United States	155.3	167.3	47.5
APAC	160.3	103.2	2.9
EMEA	162.8	435.5	130.9
of which Finland	9.1	343.3	118.3
Eliminations		-200.8	
Total	514.2	514.2	181.7

Geographical segments

2021 EUR million	Net sales, by destination country ²⁾	Net sales, by location country ³⁾	Non-current assets ³⁾
Americas	150.2	137.8	37.3
of which United States	116.6	128.2	37.1
APAC	144.7	83.3	3.6
EMEA	143.0	388.7	123.4
of which Finland	7.8	299.7	111.3
Eliminations		-172.0	
Total	437.9	437.9	164.4

¹⁾ Americas: North and South America, APAC: Asia Pacific, EMEA: Europe, Middle East and Africa

²⁾ Sales to external customers have been presented as net sales by destination country

³⁾ Net sales and non-current assets have been presented according to the group's and associated companies' countries

3. REVENUE FROM CONTRACTS WITH CUSTOMERS

Accounting principles

Vaisala's net sales consist of revenue recognized from contracts with customers and lease income. Net sales from contracts with customers are divided into products, projects and services. Indirect taxes and discounts have been deducted from sales revenue. Exchange rate differences are recognized in the financial income and expenses.

Product net sales include revenue from products, spare parts and system deliveries. A system delivery contains a standard product delivery with limited amount of configuration. Each distinct product delivery is a performance obligation under IFRS 15. Revenue from the sale of products is recognized at a point in time when the control is transferred to the customer.

Projects are integrated projects, in which observation solutions, consisting of products, services and software, are delivered. Solutions are integrated to customer systems according to customer specifications. One project consists of one or multiple performance obligations under IFRS 15. Revenue for all projects is recognized over time using percentage of completion method. Progress is measured by cost-to-cost method, comparing incurred costs and forecasted costs, as it best describes the satisfaction of a performance obligation by transferring the promised asset to a customer. Projects meet the over-time revenue recognition criteria mainly by creating an asset without an alternative use and Vaisala having an enforceable right to payment for performance completed to date.

Services are divided into service contracts and one-off service deliverables. Services may include maintenance, calibration and repair, modernization, extended warranties and data-based solutions supporting decisions in weather-dependent operations. Service contracts are continuous services including for example extended warranty, availability of customer support and availability of spare part delivery. One service contract or one service deliverable is one performance obligation. Service contracts are recognized over time or at a point of time depending on the nature of the service and content of a contract. In case of one-off request services, the revenue is recognized at a point in time when the service has been rendered.

Standard warranty period for products is one year and 2, 5 or 10 years for selected products. Standard warranty period for services is 6 or 12 months. Extended warranty is a separately sold and priced service over a separately agreed period. Revenue for extended warranty is recognized over time starting at the time of standard warranty expiration. Provision for warranty costs is recognized as described in Note 15, Provisions.

Accounting principles requiring management judgment and the main uncertainty factors relating to estimates

Revenue recognition over time under IFRS 15 requires management judgment related to cost throughout the project delivery. When the outcome of a project cannot be estimated reliably, project costs are recognized as expenses in the same period when they arise and project revenues only to the extent



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of project costs incurred where it is probable that those costs will be recoverable. When it is probable that total costs necessary to complete the project will exceed total project revenue, the expected loss is recognized as an expense immediately.

Additionally, judgment is exercised in defining the timing of revenue recognition, estimating the probability of payments related to contracts with customers, defining performance obligations and combining contracts. Judgment related to all of these factors may have an impact on timing and/or amount of revenue recognized.

Disaggregation of revenue

Disaggregation of revenue is presented in Note 1, Reportable segments and Note 2, Geographical segments.

Payment terms

Payment terms vary based on geographical areas. In product and service business, the standard payment term is 30 days net, but in some areas prepayments are commonly used. Project invoicing is based on milestones and typically follows the general project delivery terms (where 30% is advance payment, 60% against delivery documents and 10% after site acceptance test) or terms as per contract. In project business the most common payment terms are letter of credit or as per contract.

Vaisala takes advantage of IFRS 15 practical expedient related to the significant financing component. In those cases, in which Vaisala expects, at contract inception, that the period between when Vaisala transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less, Vaisala does not adjust the promised amount of consideration for the effects of a significant financing component. Additionally, financing component is considered only if significant prepayment is received over one year in advance before related delivery.

Contract balances

The following table provides information about receivables, contract assets and contract liabilities from contracts with customers included in the statement of financial position.

Assets and liabilities related to contracts with customers

EUR million	Dec 31, 2022	Dec 31, 2021
Trade receivables	87.6	59.2
Contract assets	26.2	28.1
Contract liabilities	36.6	28.4

Contract assets include the balance of project and service revenue recognized but not yet invoiced.

In general, most of project revenue is recognized after the product manufacturing as percentage of completion increases and most of the performance obligation is satisfied. According to general project delivery terms, majority of project is invoiced before the delivery. Therefore, the amount of contract assets is typically at its highest between product manufacturing phase of the project and delivery of the product to the customer. For services, which are satisfied over time, the customer is mainly invoiced in advance and only in some cases in arrears after the customer has received or consumed the service. Arrears invoicing generates contract asset balance as revenue is recognized before invoicing.

Contract liabilities include the balance of projects, products and services invoiced but revenue not yet recognized as well as customer payments related to contracts not yet invoiced. Project-related contract liabilities often arise in the early stages of a project, when the prepayment has been invoiced, but the project is only at an early stage and there is none or little revenue recognized under percentage of completion method. Services, which are recognized over time, are often invoiced in advance and therefore contract liability is generated in the beginning of service period. For products and services, which are recognized at a point in time, contract liability is generated when customer has been invoiced, but performance obligation has not been satisfied and consequently revenue has not been recognized.

In 2022, Vaisala recognized EUR 15 (13) million revenue that was included in the contract liability balance at the beginning of the financial year.

At the end of financial year 2022, the order book was EUR 181.5 (160.0) million, of which the performance obligations that were unsatisfied or partially unsatisfied amounted to EUR 180.4 (159.4) million and the amount related to lease income was EUR 1.1 (0.6) million. Of the performance obligations that were unsatisfied or partially unsatisfied EUR 141.9 (124.7) million is estimated to be recognized as revenue in 2023 and EUR 38.5 (34.7) million is estimated to be recognized later. The whole order book related to lease agreements is estimated to be recognized as revenue in 2023.

4. OTHER OPERATING INCOME AND EXPENSES

Other operating income

EUR million	2022	2021
Indemnities	0.0	0.1
Gain on the disposal of tangible assets	0.0	-
Other	0.2	0.2
Total	0.3	0.3



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Other operating expenses

EUR million	2022	2021
Loss on items related to business combinations	-	4.5
Restructuring expenses	-	0.4
Loss on the disposal of tangible assets	0.0	0.0
Other	-	0.6
Total	0.0	5.5
Other operating income and expenses, net	0.3	-5.2

5. PERSONNEL EXPENSES AND NUMBER OF PERSONNEL

Personnel expenses

EUR million	2022	2021
Salaries	154.3	141.1
Share-based payments	4.0	5.0
Social costs	13.0	11.4
Pensions		
Defined benefit plans	0.1	0.1
Defined contribution plans	19.0	16.6
Total	190.4	174.3

Personnel expenses by function

EUR million	2022	2021
Procurement and production	52.0	49.7
Sales, marketing and administration	82.0	74.3
Research and development	56.5	50.2
Total	190.4	174.3

Personnel, average by business area

Persons	2022	2021
Industrial Measurements	548	486
Weather and Environment	821	780
Other operations	772	701
Total	2,141	1,967

Personnel, average by geographical area

Persons	2022	2021
Americas	332	284
APAC	168	165
EMEA (excluding Finland)	240	231
Finland	1,401	1,287
Total	2,141	1,967

Information on share-based payments is disclosed in Note 7, Share-based payments.

Information on key management compensation is disclosed in Note 28, Related party transactions.

6. PENSION OBLIGATIONS

Accounting principles

The group has several pension plans around the world based on local practices. These pension schemes are classified either as defined contribution or as defined benefit plans. In defined contribution plans expenses are recognized in the statement of income on an accrual basis. TyEL pensions managed in insurance companies are defined contribution plans.

In defined benefit pension plans, liability to be recognized is the net amount of the present value of the defined benefit obligation in the end of the financial year and the fair value of the plan assets adjusted by the unamortized portion of unrecognized past service cost. The defined benefit obligation is calculated by actuaries independent of Vaisala and it is based on the projected unit credit method in which the estimated future cash flows are discounted to their present value using the interest rates approximating high quality corporate bonds. Pension costs are recognized in the statement of income on an accrual basis over years of service. Actuarial gains and losses are recognized in statement of comprehensive income.



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Defined benefit plans

The defined benefit plans are in the parent company. The additional pension coverage of parent company personnel was arranged by Vaisala Pension Fund that was closed on January 1, 1983. The pension fund liability was transferred to a pension insurance company on December 31, 2005 and the fund was dissolved in 2006. The company retains, however, an obligation under IAS 19 for future index and salary increases in terms of individuals covered by the Pension Fund who are employed by the company.

Defined benefit pension liability

EUR million	2022	2021
Fair value of funded obligations	3.9	4.6
Fair value of assets	-2.9	-3.8
Net liability in the statement of financial position at Dec 31	1.0	0.8

Post-employment benefits totaled EUR 2.7 million in the balance sheet as of December 31, 2022. The amount includes the defined benefit plan recognized in the parent company (EUR 1.0 million) and pension obligations recognized in other group companies (EUR 1.8 million).

Amounts recognized in the statement of income and the statement of other comprehensive income

EUR million	2022	2021
Current service cost	0.0	0.0
Interest	0.0	0.0
Expense recognized in the statement of income	0.0	0.0
Net actuarial gain and loss	0.3	0.2
Total recognized in the statement of income and the statement of other comprehensive income	0.3	0.2

The actuarial gains and losses in the above table are excluding the impact of deferred taxes. In the consolidated statement of comprehensive income, the actuarial gains and losses include the impact of deferred taxes.

Pension costs in the statement of income have been recognized in sales, marketing and administrative costs.

Present value of obligation

EUR million	2022	2021
Changes in the present value of obligation		
Present value of obligation Jan 1	4.6	4.9
Current service cost	0.0	0.0
Interest cost	0.0	0.0
Remeasurements		
Actuarial gain (-) / loss (+) arising from changes in financial assumptions	-0.7	0.2
Experience adjustment	0.3	-0.1
Benefits paid	-0.4	-0.4
Present value of obligation Dec 31	3.9	4.6

Changes in the fair value of plan assets

EUR million	2022	2021
Fair value of plan assets Jan 1	3.8	4.4
Interest income on assets	0.0	0.0
Remeasurements		
Net return on plan assets	-0.6	-0.1
Benefits paid	-0.4	-0.4
Contributions	0.1	-0.1
Fair value of plan assets Dec 31	2.9	3.8



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Changes of liabilities presented in the statement of financial position

EUR million	2022	2021
Liabilities Jan 1	0.8	0.6
Expense (+) / income (-) recognized in statement of income	0.0	0.0
Total recognized in other comprehensive income	0.3	0.2
Contributions paid	-0.1	0.1
Liabilities Dec 31	1.0	0.8

Actuarial assumptions used

	2022	2021
Discount rate, %	3.16	0.87
Rate of salary increase, %	3.51	2.90
Rate of inflation, %	2.55	1.94
Annual adjustments to pensions, %	2.79	2.18

Sensitivity of the net liability changes in the principal assumptions

Assumption	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	0.25%	2.14% decrease	2.22% increase
Salary increase rate	0.25%	0.00% increase	0.00% decrease
Pension increase rate	0.25%	8.91% increase	8.72% decrease

Assumption	Increase by one year	Decrease by one year
Life expectancy at birth	4.96% increase	4.72% decrease

The sensitivity analyses presented above are based on the assumption that if one assumption changes, all other assumptions remain unchanged. In practice, this is unlikely, and changes in some assumptions may correlate with each other. The sensitivity of defined benefit obligation to changes in significant actuarial assumptions has been calculated using the same method as that used to calculate the pension liability recognized in the statement of financial position.

7. SHARE-BASED PAYMENTS

Accounting principles

Group's share-based payments are related to share-based incentive plans. Share-based payments are recognized as costs and additions to equity during the vesting period. The costs are based in regards to market conditions and other than market conditions on an estimate of the number of shares to be paid at the end of vesting period. Other than market conditions, on which estimates are based, are updated whenever changes occur and the effect of changes in assumptions are recognized in the statement of income. The cost of the share (equity-settled) part as well as the cash (cash-settled) part of the share-based payments correspond to the value of share (Vaisala's series A) closing price on the grant date of the share-based incentive plan less expected dividends.

Share-based incentive plans

The share issue without payment approved by Vaisala's Annual General Meeting on April 10, 2018, doubled the total number of series K and A shares. All share related figures have been adjusted to reflect the increased number of shares.

Share-based incentive plans are targeted to the Group key employees. The performance criterion for 2018 performance share plan was based on the group's profitability in respective calendar year. From 2019 onwards the performance criteria of the performance share plans are based on the development of the total shareholder return (TSR) and the group's profitability during the three-year plan period. Matching share plan consists of matching periods as decided by the Boards of Directors and the participants are given an opportunity to receive matching shares for the predetermined personal investment in Vaisala's series A shares. Restricted share plan consists of vesting periods as decided by the Board of Directors and the participants are given an opportunity to receive a pre-determined number of restricted shares. The rewards are paid partly in Vaisala's series A shares and partly in cash. The cash portion covers taxes and tax-related costs arising from the reward to a key employee. No reward is paid if a key employee's employment or service ends before the reward payment date. From the plan 2019-2021 onwards, Vaisala's Board of Directors requires that the President and CEO and each member of the Leadership Team retains their ownership of shares received under this plan until the value of their ownership in Vaisala corresponds to at least their annual gross base salary.

On February 7, 2018, the Board of Directors resolved a performance share-based incentive plan 2018. On March 10, 2021, the reward corresponding to 166,200 series A shares, 55% of the maximum, was paid to 27 key employees. On June 28, 2019, the reward corresponding to 923 series A shares was paid to a key employee. On March 10, 2021, the reward corresponding to 8,000 series A shares was paid to Kai Öistämö, President and CEO. Closing price of Vaisala's series A share was EUR 22.10 on the grant date of the incentive plan. A total expense of this plan of EUR 3.8 million was recorded for 2018-2021.

On February 12, 2019, the Board of Directors resolved a performance share-based incentive plan 2019-2021. On March 3, 2022 the reward corresponding to 251,900 series A shares, 100% of the maximum,



was paid to 42 key employees. Of these shares, 2,000 were conveyed to the President and CEO Kai Öistämö. In addition, on March 3, 2022, a total of 1,218 series A shares were conveyed without consideration to an employee participating in the performance share-based incentive plans 2020–2022 and 2021–2023. Closing price of Vaisala's series A share was EUR 19.06 on the grant date of the incentive plan. On March 10, 2021, the reward corresponding to 23,040 series A shares was paid to former President and CEO, Kjell Forsén.

On February 12, 2020, the Board of Directors resolved for a performance share-based incentive plan 2020–2022 for approximately 45 key employees. The reward will be paid in spring 2023. The maximum amount of this plan originally corresponded to 240,000 series A shares. The expenses of this plan are accrued from May 2020 to March 2023. Closing price of Vaisala's series A share was EUR 28.65 on the grant date of the incentive plan. On March 10, 2021, the reward corresponding to 5,529 series A shares was paid to former President and CEO, Kjell Forsén.

On December 17, 2020, the Board of Directors resolved for a performance share-based incentive plan 2021–2023 for approximately 40 key employees. The reward will be paid in spring 2024. The maximum amount of this plan originally corresponded to 180,000 series A shares. The expenses of this plan are accrued from April 2021 to March 2024. Closing price of Vaisala's series A share was EUR 32.10 on the grant date of the incentive plan.

On February 17, 2022, the Board of Directors resolved for three share-based incentive plans.

Performance share-based incentive plan was resolved for the period 2022–2024 for approximately 40 key employees. The reward will be paid in spring 2025. The maximum amount of this plan originally corresponded to 161,000 series A shares. The expenses of this plan are accrued from May 2022 to March 2025. Closing price of Vaisala's series A share was EUR 41.45 on the grant date of the incentive plan.

Matching share-based incentive plan was resolved for the period 2022–2026 and shares are earned in matching periods lasting for 12 to 36 months. Restricted share-based incentive plan was resolved for the period 2022–2026 and shares are earned in vesting periods lasting for 12 to 36 months. The maximum amount of matching and restricted share-based incentive plans originally corresponded to 100,000 series A shares. The expenses of the matching share plan are accrued from May 2022 to March 2025. The expenses of the restricted share plan are accrued depending on the timing and length of the vesting period(s).

In 2022, expenses related to share-based incentive plans totaled EUR 4.0 (5.0) million.

8. RESEARCH AND DEVELOPMENT EXPENDITURE

Accounting principles

Research and development expenditure is recognized as costs in the financial year in which they incur, except for machinery and equipment acquired for research and development purposes, which are capitalized and depreciated on a straight-line basis.

According to IAS 38, an intangible asset is recognized in the statement of financial position only when it is probable that the expected future economic benefits will flow to the entity. Vaisala does not capitalize costs related to the development of new products and processes as their future returns will not be realized until the products enter the market. According to IAS 38 no intangible asset arising from research shall be recognized and if an entity cannot distinguish the research phase from the development phase of an internal project, the entity treats the expenditure as if it were incurred in research phase only. It is typical for the industry, in which Vaisala operates, that it is not possible to distinguish the research phase of an internal project that aims to create an asset from its development phase.

The statement of income includes research and development costs of EUR 62.4 (55.3) million in 2022.

9. FINANCIAL INCOME AND EXPENSES

Accounting principles

Exchange rate differences resulting from settlement of monetary items or from presentation of items in the financial statements at different exchange rates from which they were originally recognized during the financial period or presented in the previous financial statements, are recognized as financial income or expenses in the financial period in which they arise.

All derivative financial contracts are initially recognized at cost and subsequently remeasured at their fair value. Derivative financial contracts are valued at their fair value using the market prices of derivative financial contracts at the closing date of the financial year. Unrealized and realized gains and losses arising from changes in the fair value are recognized in the statement of income in 'financial income and expenses' in the period in which they arise.

Interest income and expenses related to financial assets and liabilities at amortized cost are recognized over time. Principles related to interest expenses related to lease liabilities are presented in note 17, Leases.



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Financial income

EUR million	2022	2021
Interest and financial income	0.3	0.0
Gains arising from changes in fair values of derivative financial contracts	2.6	1.1
Foreign exchange gains	4.8	4.0
Total	7.7	5.1

Financial expenses

EUR million	2022	2021
Interest expenses	0.7	0.6
Interest expenses on lease liabilities	0.3	0.4
Other financial expenses	0.4	0.4
Losses arising from changes in fair values of derivative financial contracts	3.8	3.5
Foreign exchange losses	5.5	2.4
Total	10.8	7.2
Financial income and expenses, net	-3.1	-2.1

Foreign exchange gains and losses include gains and losses mainly from revaluation of cash and cash equivalents, trade and other receivables, internal loans as well as trade and other payables.

10. INCOME TAXES

Accounting principles

The group tax expense includes taxes of group companies based on taxable profit for the financial year, tax adjustments for previous years and changes in deferred taxes. Taxes are recognized in the consolidated statement of income except when they are related with items recognized in other comprehensive income or directly in shareholder's equity. Current taxes are calculated on the taxable corporate income based on the tax rates enacted or substantively enacted for each jurisdiction by the end of the financial year. Taxes are adjusted for the taxes of previous financial periods, if applicable.

Deferred taxes are calculated for all temporary differences between the carrying amount of an asset or a liability and its tax base, and those are measured with enacted or substantively enacted tax rates for each jurisdiction by the end of the financial year. Main temporary differences arise from depreciation and amortization, accruals for share-based incentive plans and tax losses carried forward. Other temporary timing differences consist mainly of provisions and accruals of operating expenses. Deferred tax assets are recognized to the extent that it is probable that these can be utilized against future taxable profits.

Accounting principles requiring management judgment and the main uncertainty factors relating to estimates

Defining income taxes and deferred tax assets and liabilities as well as to what extent deferred tax assets may be recognized require management judgment. Group is subject to income taxation in several jurisdictions, in which interpretation of tax legislation may require management judgment and uncertainty may relate to the applied interpretations. Each uncertain tax treatment is considered separately or together depending on which approach predicts the uncertainty the best way. All these effects of uncertainties are reflected in the tax accounting when it is not probable that the tax authorities or appeal courts will accept treatments. Group follows all tax legislation in its operating countries and has limited tax exposure to transactions between group entities located in different jurisdictions.

Management assumptions and estimates are needed especially in recognizing deferred tax assets related to tax losses carried forward. Key assumptions relate to the facts that recoverability periods for tax losses carried forward will not change and enacted tax laws and rates remain unchanged in the near future. When an entity has a history of recent losses the deferred tax asset arising from unused tax losses is recognized only to the extent that there are sufficient taxable temporary differences or there is convincing evidence that sufficient future taxable profit will be generated. At each balance sheet date, the expected utilization of deferred tax assets related to unused tax losses are assessed while considering the likelihood of a) expected future taxable profits including availability of tax credits, b) identifiable causes to unused tax losses to be unlikely recurred and c) available tax planning opportunities.



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Income taxes

EUR million	2022	2021
Tax based on taxable income for the financial year	14.2	10.3
Taxes from previous financial years	1.7	0.2
Change in deferred tax assets and liabilities	-1.5	-1.6
Total	14.5	8.9

Reconciliation statement between the statement of income tax item and taxes calculated at the tax rate of the group country of domicile

EUR million	2022	2021
Result before taxes	59.6	48.3
Taxes calculated at the Finnish tax rate	11.9	9.7
Effect of foreign subsidiaries' tax rates	2.1	2.2
Non-deductible expenses	1.2	1.0
Tax free income and tax incentives	-0.9	-1.5
Taxes from previous financial years	1.7	0.2
Other direct taxes	0.0	0.0
Reassessment of deferred tax assets	0.0	-1.8
Other	-1.5	-1.0
Total	14.5	8.9
Effective tax rate	24.4%	18.4%

Vaisala has not any carry forward tax losses for which deferred tax assets have not been recognized as of December 31, 2022 and December 31, 2021.

Deferred taxes in the statement of financial position

EUR million	2022	2021
Deferred tax assets	9.5	9.2
Deferred tax liabilities	-4.3	-6.7
Total	5.2	2.5

Gross change in deferred taxes recognized in the statement of financial position

EUR million	2022	2021
Deferred taxes Jan 1	2.5	-0.4
Items recognized in the statement of income	1.5	1.7
Effect of business combinations	2.1	-
Translation differences	-0.2	-0.1
Items recognized in the statement of comprehensive income	-0.7	1.3
Deferred taxes Dec 31	5.2	2.5



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Changes in deferred taxes during 2022

EUR million	Jan 1, 2022	Recognized in the statement of income	Translation differences	Recognized in the statement of comprehensive income	Effect of business combinations	Dec 31, 2022
Deferred tax assets						
Internal margin of inventories, intangible assets and property, plant and equipment	1.4	0.3	0.0	0.0		1.7
Employee benefits and share-based payments	3.8	0.0	-0.1	-0.7		3.0
Unused tax losses	3.7	-1.6	-0.1	0.0		2.0
Timing difference of amortization on intangible assets and depreciation on property, plant and equipment	0.7	-0.1	0.0	0.0	2.1	2.7
Other temporary timing differences	2.4	1.9	0.1	0.0		4.4
Netted against deferred tax liabilities	-2.8	-1.4				-4.2
Total	9.2	-0.9	-0.2	-0.7	2.1	9.5
Deferred tax liabilities						
Timing difference of amortization on intangible assets and depreciation on property, plant and equipment	9.1	-1.0	0.1	0.0		8.2
Other	0.3	0.0	0.0	0.0		0.3
Netted against deferred tax assets	-2.8	-1.4				-4.2
Total	6.7	-2.4	0.1	0.0		4.3
Deferred tax assets, net	2.5	1.5	-0.2	-0.7	2.1	5.2



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Changes in deferred taxes during 2021

EUR million	Jan 1, 2021	Reclassification	Recognized in the statement of income	Translation differences	Recognized in the statement of comprehensive income	Dec 31, 2021
Deferred tax assets						
Internal margin of inventories, intangible assets and property, plant and equipment	1.0	0.6	0.0	-0.1	0.0	1.4
Employee benefits and share-based payments	2.0	0.3	0.2	0.0	1.3	3.8
Unused tax losses	3.1	0.0	0.6	0.0	0.0	3.7
Timing difference of amortization on intangible assets and depreciation on property, plant and equipment	1.7	-0.9	0.0	0.0	0.0	0.7
Other temporary timing differences	2.0	0.0	0.2	0.0	0.0	2.4
Netted against deferred tax liabilities	-2.5		-0.3			-2.8
Total	7.3	0.0	0.7	-0.1	1.3	9.2
Deferred tax liabilities						
Timing difference of amortization on intangible assets and depreciation on property, plant and equipment	9.8	0.0	-0.7	0.0	0.0	9.1
Other	0.5	0.0	0.0	0.0	0.0	0.3
Netted against deferred tax assets	-2.5		-0.3			-2.8
Total	7.7	0.0	-1.0	0.0	0.0	6.7
Deferred tax assets, net	-0.4	0.0	1.7	-0.1	1.3	2.5



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11. EARNINGS PER SHARE

Accounting principles

Earnings per share is calculated by dividing the result for the period attributable to the parent company's shareholders by weighted average number of issued shares during the financial year. Diluted earnings per share is calculated by adjusting the weighted average number of shares outstanding during the financial year with the diluted effect of potential shares from the share-based payments.

Earnings per share

	2022	2021
Result attributable to the shareholders of the parent company, EUR million	45.0	39.0
Weighted average number of shares outstanding, 1,000 pcs	36,207	36,082
Effect of share-based incentive plans, 1,000 pcs	160	272
Weighted average diluted number of shares, 1,000 pcs	36,367	36,354
Earnings per share, EUR	1.24	1.08
Diluted earnings per share, EUR	1.24	1.07

Net working capital

12. TRADE RECEIVABLES AND OTHER RECEIVABLES

Accounting principles related to trade receivables and other receivables are presented in Note 21, Financial assets and liabilities.

Trade receivables and other receivables

EUR million	2022	2021
Trade receivables*)	88.1	59.2
Advances paid	1.3	1.6
Value-added tax receivables	3.3	4.3
Other receivables	2.2	2.2
Derivative financial contracts	0.9	0.0
Other prepaid expenses and accrued income	5.7	6.2
Total	101.7	73.5

*) In 2022, trade receivables included EUR 0.6 (0.1) million lease receivables.

The fair value of trade and other receivables is, in all material respects, equivalent to their carrying amounts.

Expected credit losses of trade receivables, Dec 31, 2022

EUR million	Trade receivables, gross amount	Credit loss allowance	Trade receivables, net amount
Current	58.4	0.2	58.3
Due less than 90 days	21.5	0.1	21.4
Due 91-180 days	2.2	0.3	1.9
Due over 180 days	1.4	0.9	0.5
Credit loss allowance other than those based on age analysis	6.6	0.6	6.0
Total	90.1	2.0	88.1



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Expected credit losses of trade receivables, Dec 31, 2021

EUR million	Trade receivables, gross amount	Credit loss allowance	Trade receivables, net amount
Current	40.9	0.1	40.7
Due less than 90 days	10.8	0.0	10.8
Due 91-180 days	1.2	0.2	1.0
Due over 180 days	1.2	0.8	0.3
Credit loss allowance other than those based on age analysis	6.6	0.3	6.4
Total	60.7	1.5	59.2

Reconciliation of credit loss allowance of trade receivables

EUR million	2022	2021
Opening balance for credit loss allowance on Jan 1	1.5	1.7
Change in credit loss allowance recognized in profit or loss during the financial year, net	0.6	0.1
Receivables recognized as final credit losses during the financial year due to uncollectability	-0.2	-0.3
Exchange rate differences	0.0	0.1
Total	2.0	1.5

Credit losses and related reversals arising from trade receivables recognized for the financial year amounted to EUR -0.6 (-0.1) million.

Trade receivables by currency

EUR million	2022	2021
EUR	34.7	28.1
USD	30.1	17.1
GBP	5.1	3.1
JPY	5.0	4.1
AUD	0.9	0.9
CNY	6.5	2.8
CAD	2.3	1.5
PLN	2.8	0.3
Others	0.8	1.3
Total	88.1	59.2

13. INVENTORIES

Accounting principles

Inventories are stated at the lower of standard cost or net realizable value. Inventory cost includes the cost of purchase (including mainly raw materials, import duties and transport), direct labor and a proportion of production overhead. An allowance is recognized for excess inventory and obsolescence.

Accounting principles requiring management judgment and the main uncertainty factors relating to estimates

Allowance for inventory is recognized for possible excess, obsolescence and decrease in net realizable value below inventory cost. Estimates and judgment are required in determining the value of the allowance for excess and obsolete inventory. Management analyses estimates of demand and determines allowance for excess and obsolete inventory. Possible changes in the assumptions may cause revaluation of inventory valuation in the future periods.

Inventories

EUR million	2022	2021
Materials, supplies and finished goods	61.6	49.9
Total	61.6	49.9



The cost of inventories recognized in the statement of income as an expense corresponding to net sales was EUR 143.6 (126.6) million.

Write-offs and excess and obsolescence allowances for slow moving and obsolete inventory recognized during the financial year amounted to EUR 1.6 (1.6) million.

At the beginning of financial year 2021 Vaisala amended the accounting principles on leases to include accounting by a lessor. Consequently, the leased assets, EUR 1.2 million, were transferred from inventory to property, plant and equipment.

14. TRADE PAYABLES AND OTHER LIABILITIES

Accounting principles

Due to the short maturity of trade payables and other liabilities the carrying amount is considered to be the fair value. Trade and other payables are classified as current liabilities if they are due within 12 months from the balance sheet date or are to be settled within the normal operating business cycle. Accounting principles for derivative financial contracts are presented in note 21, Financial assets and liabilities.

Trade payables and other liabilities

EUR million	2022	2021
Trade payables	25.2	21.4
Personnel cost accruals	36.4	38.1
Derivative financial contracts	0.5	1.3
Other accrued expenses and deferred income	6.0	7.4
Other current liabilities	5.9	15.6
Total	74.0	83.9

Trade payables arise from ordinary course of business, and they relate to purchases of inventories, intangible and tangible assets and other goods and services. Personnel cost accruals are mainly related to bonuses and unused vacations.

15. PROVISIONS

Accounting principles

A provision is recognized when group has a legal or constructive obligation as a result of a prior event, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. The amount recognized as a provision is the best estimate of the expenditure required to settle the present obligation at the end of reporting period. If the effect of the time value of money is material, the amount of provision is the present value of the expenditure expected to be required to settle the obligation. The discount factor used in calculating the present value is selected so that it reflects the market view of the time value of money and the risks related to the obligations at the time of examination.

Where some or all of the expenditure required to settle a provision is expected to be reimbursed by a third party, the reimbursement is recognized as a separate asset but only when the reimbursement is virtually certain.

The amount of provisions is reviewed at end of each reporting period and the amount is adjusted to reflect the current best estimate. A provision is reversed when the probability of financial settlement has been removed. A change in provision is recognized in the same item of the statement of income in which the provision was originally recognized.

Provisions can relate to restructuring of operations, loss-making contracts, warranties, legal disputes and other commitments.

A restructuring provision is recognized when a detailed and appropriate plan for restructuring has been prepared and the company has started to implement the plan or has announced it to those affected by it. Restructuring provisions include mainly lease termination penalties and redundancy payments.

A provision for a loss-making contract is recognized when unavoidable costs of meeting the obligation exceed the economic benefits expected to be received from the contract.

A warranty provision covers the cost of repairing or replacing the products. The warranty provision is based on past experience and an estimate of future costs.



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Non-current provisions

EUR million	2022	2021
Provisions Jan 1	0.3	0.1
Increase in provisions	0.1	0.2
Used provisions	-0.1	-
Provisions Dec 31	0.3	0.3

Current provisions

EUR million	2022	2021
Provisions Jan 1	2.0	1.7
Increase in provisions	0.7	0.3
Used provisions	-	-0.1
Provisions Dec 31	2.8	2.0

In 2022 and 2021 provisions related to warranties and other contractual commitments.

Intangible and tangible assets

16. INTANGIBLE AND TANGIBLE ASSETS

Accounting principles

Goodwill

Goodwill represents the excess of the consideration transferred of an acquisition over the fair value of the group's share of the net assets of the acquired entity at the date of acquisition. Goodwill is calculated in the currency of the operating environment of the acquired entity. If the consideration transferred is lower than the net asset value of the acquired entity, the difference is recognized in the statement of income. Goodwill is not amortized but tested annually for possible impairment and whenever there is an indication that the value may be impaired. For this purpose, goodwill has been allocated to cash-generating units. Vaisala's total goodwill is allocated to the cash-generating unit formed by the Weather and Environment business area. Goodwill is valued at acquisition cost less impairment losses. Impairment losses are recognized in the statement of income.

Technology-based and customer-related intangible assets

Intangible assets identified in connection with acquisitions are measured at the fair value at the acquisition date. In business combinations consideration transferred has been allocated to technology-based and customer related intangible assets. Initial measurement of technology-based and customer-related intangible assets has been prepared by applying income and cost approach method. Intangible assets identified in connection with acquisitions are amortized over their delivery times or estimated useful lifetimes.

Other intangible assets

Other intangible assets include mainly patents, trademarks and licenses. Other intangible assets are recognized initially at acquisition cost and amortized using the straight-line method over their useful lifetime. Intangible assets that have an indefinite useful lifetime are not amortized, but are tested annually for impairment. The carrying amount of these intangible assets is not material.



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Estimated useful lifetimes for intangible assets are:

Technology-based intangible assets	5–8 years
Customer-related intangible assets	1–10 years
Intangible rights	3–20 years
Software licenses	3–5 years
Other intangible assets	3–5 years

Property, plant and equipment

Property, plant and equipment comprise mainly land and buildings as well as machinery and equipment. The carrying amount of assets is based on original acquisition cost less accumulated depreciation as well as possible impairment losses. The cost of self-constructed assets includes materials and direct labor as well as a proportion of overhead costs attributable to construction labor. If a tangible asset consists of several parts which have different useful lifetimes, these parts are treated as separate assets. Accordingly, expenses relating to the renewal of a part are capitalized and the remaining part is recognized as an expense. Otherwise, expenditures that incur later are included in the carrying amount of the tangible assets only if it is probable that the future economic benefit connected with the asset is for the benefit of group and that the acquisition cost can be reliably determined. Other repair and maintenance expenses are recognized in the statement of income when realized.

Depreciation is calculated using the straight-line method and is based on the estimated useful lifetime of the asset. Land is not depreciated. Estimated useful lifetimes for assets are:

Buildings and structures	5–40 years
Machinery and equipment	3–8 years
Other tangible assets	3–8 years

The estimated useful lifetime of leased assets is three years. However, the assets are not depreciated as the residual value of the assets exceeds the carrying value.

The residual values, depreciation methods and useful lifetimes of the assets are reviewed, and adjusted if necessary, in connection with each financial statement to reflect changes in the expectations of future economic benefit. Gains and losses on disposals are determined by comparing the disposal proceeds with the carrying amount of the asset and are included in the operating result.

Public grants received for investments are recognized as a reduction in the carrying amounts of tangible assets. Thus, grants are recognized in the form of lower depreciation over the useful lifetime of the asset.

Impairment

In the end of each reporting period, the group reviews assets for any indication of impairment. The need for impairment is reviewed at cash-generating unit level, i.e. at the lowest level of units which is mainly

independent of other units and whose cash flows are separate and highly independent from the cash flows of other corresponding units. If there is an indication of impairment, the recoverable amount of the asset is assessed. Additionally, the recoverable amount is assessed annually for the following assets irrespective of whether there is indication of impairment: goodwill, intangible assets which have an indefinite useful lifetime, as well as incomplete intangible assets.

The recoverable amount is the higher of the asset's fair value less the cost arising from disposal and its value in use. In determining value in use, the estimated future cash flows are discounted to their present value using discount rates that reflect the average pre-tax cost of capital for the respective country and industry (WACC = weighted average cost of capital). The special risks associated with these assets are also taken into account in the discount rates. For an individual asset that does not independently generate future cash flows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss is recognized as an expense when the carrying amount of the asset is greater than its recoverable amount. An impairment loss is reversed if there has been a change in the circumstances that led to the estimates and the recoverable amount of the asset has changed since the impairment loss was recognized. An impairment loss is not reversed more than the carrying amount of the asset (less depreciation) without an impairment loss recognized. Impairment losses recognized for goodwill are not reversed under any circumstances

Accounting principles requiring management judgment and the main uncertainty factors relating to estimates

In business combinations, IFRS 3 requires the acquirer to recognize an intangible asset separately from goodwill, if the recognition criteria are met. Recognition of an intangible asset at fair value requires management estimates of future cash flows. To the extent possible, management has used available market values as the basis for allocating costs to determine fair values. When this is not possible, which is typical especially for intangible assets, valuation is mainly based on the expectations on returns of the asset and its intended use in the business. Valuations are based on discounted cash flows and require management's estimates and assumptions about the future use of the assets and their effect on the financial position of the company. Changes in the focus and direction of the company's business operations may, in the future, result in changes in the original valuation. Group tests goodwill annually for impairment and assesses indications of impairment of property, plant and equipment and intangible assets as described above. The recoverable amounts of cash-generating units are determined using value in use calculations. Although management believes that the assumptions used are appropriate, the estimated recoverable amounts might differ materially from those realized in the future.



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Intangible assets

EUR million	Goodwill	Technology-based intangible assets	Customer related intangible assets	Other intangible assets	Advance payments and construction in progress	Total
Acquisition cost Jan 1, 2022	29.6	39.1	14.1	32.4	0.3	115.6
Translation difference	1.1	0.1	0.1	0.4	0.0	1.8
Increases				0.2	0.2	0.4
Business combinations	15.9	3.0	2.5			21.4
Decreases		-0.0		-5.0		-5.0
Transfers between items				0.1	-0.1	-0.0
Acquisition cost Dec 31, 2022	46.6	42.3	16.8	28.2	0.4	134.2
Accumulated amortization and impairment Jan 1, 2022		17.5	10.1	31.0		58.7
Translation difference		-0.0		0.4		0.4
Accumulated amortization of decreases and transfers		-0.0		-5.0		-5.0
Amortization for the financial year		6.0	2.2	0.5		8.7
Impairment for the financial year				0.1		0.1
Accumulated amortization and impairment Dec 31, 2022		23.6	12.3	27.1		62.9
Carrying amount Dec 31, 2022	46.6	18.7	4.5	1.1	0.4	71.3



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Intangible assets

EUR million	Goodwill	Technology-based intangible assets	Customer related intangible assets	Other intangible assets	Advance payments and construction in progress	Total
Acquisition cost Jan 1, 2021	28.5	39.1	14.1	31.7	0.4	113.8
Translation difference	1.2	0.0		0.5	0.0	1.7
Increases				0.2	0.1	0.3
Decreases		-0.0		-0.2		-0.2
Transfers between items				0.2	-0.2	0.0
Acquisition cost Dec 31, 2021	29.6	39.1	14.1	32.4	0.3	115.6
Accumulated amortization and impairment Jan 1, 2021		12.1	8.2	30.0		50.2
Translation difference		0.0		0.5		0.5
Accumulated amortization of decreases and transfers		-0.0		-0.2		-0.2
Amortization for the financial year		5.5	1.9	0.8		8.2
Impairment for the financial year				0.0		0.0
Accumulated amortization and impairment Dec 31, 2021		17.5	10.1	31.0		58.7
Carrying amount Dec 31, 2021	29.6	21.6	4.0	1.4	0.3	56.9

Impairment testing

Vaisala assesses the value of goodwill, intangible assets which have an indefinite useful lifetime, as well as incomplete intangible assets for impairment annually and whenever there is an indication that the unit may be impaired. The recoverable amount of the cash-generating unit is based on value in use calculations and cash flows are based on three year forecasts approved by Vaisala management. Vaisala's total goodwill is allocated to the cash-generating unit formed by Weather and Environment business area.

In Weather and Environment business area cash-generating unit the recoverable amount exceeds the carrying amount by EUR 203 million. Weather and Environment business area sales are expected to grow in average 4% next three years. Terminal growth rate is 2% and Weighted Average Cost of Capital is 10.9%. Key assumptions in impairment testing are net sales, profitability and discount rate. Vaisala's management has estimated it to be unlikely that any expected change in key assumptions would lead to carrying amount of the cash-generating unit exceeding the recoverable amount.



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Property, plant and equipment

EUR million	Land and waters	Buildings and structures	Machinery and equipment	Leased assets	Other tangible assets	Advance payments and construction in progress	Total
Acquisition cost Jan 1, 2022	4.7	99.1	83.6	1.7	0.1	9.3	198.3
Translation difference	0.1	1.1	0.6			0.0	1.9
Increases		1.1	5.5	0.6		5.9	13.0
Business combinations			0.0				0.0
Decreases		-3.2	-9.9	-0.3			-13.4
Transfers between items		1.1	5.2	0.0		-6.4	-0.1
Acquisition cost Dec 31, 2022	4.8	99.2	85.0	2.0	0.1	8.7	199.7
Accumulated depreciation and impairment Jan 1, 2022		46.5	57.7	0.1			104.2
Translation difference		0.2	0.5	-0.0			0.7
Accumulated depreciation of decreases and transfers		-3.7	-9.4				-13.1
Business combinations			0.0				0.0
Depreciation for the financial year		4.2	7.5				11.7
Impairment for the financial year		0.0	0.1	0.0			0.2
Accumulated depreciation and impairment Dec 31, 2022		47.2	56.4	0.1	0.0	0.0	103.7
Carrying amount Dec 31, 2022	4.8	51.9	28.7	1.8	0.1	8.7	96.0



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Property, plant and equipment

EUR million	Land and waters	Buildings and structures	Machinery and equipment	Leased assets*)	Other tangible assets	Advance payments and construction in progress	Total
Acquisition cost Jan 1, 2021	4.5	92.9	74.9		0.1	8.0	180.4
Translation difference	0.1	1.5	1.2			0.0	2.9
Increases		4.3	6.4	1.0		7.0	18.7
Decreases		-0.4	-3.9	-0.5			-4.8
Transfers between items		0.7	5.1	1.2		-5.7	1.2
Acquisition cost Dec 31, 2021	4.7	99.1	83.6	1.7	0.1	9.3	198.3
Accumulated depreciation and impairment Jan 1, 2021		42.5	53.9				96.4
Translation difference		0.4	1.0				1.4
Accumulated depreciation of decreases and transfers		-0.4	-3.9	-0.0			-4.3
Depreciation for the financial year		3.9	6.6				10.5
Impairment for the financial year			0.1	0.1			0.2
Accumulated depreciation and impairment Dec 31, 2021		46.5	57.7	0.1			104.2
Carrying amount Dec 31, 2021	4.7	52.6	25.9	1.6	0.1	9.3	94.1

*) In the beginning of financial year 2021 Vaisala amended the accounting principles on leases to include accounting by a lessor. Consequently, the leased assets, EUR 1.2 million, were transferred from inventory to property, plant and equipment.



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Depreciation, amortization and impairment by function

EUR million	2022	2021
Procurement and production	4.6	4.0
Sales, marketing and administration	14.7	13.7
Research and development	1.5	1.2
Total	20.7	18.9

Depreciation, amortization and impairment by asset group 2022

EUR million	Depreciation and amortization	Impairment	Total
Technology-based intangible assets	6.0		6.0
Customer related intangible assets	2.2		2.2
Other intangible assets	0.5	0.1	0.6
Buildings and structures	4.2	0.0	4.2
Machinery and equipment	7.5	0.1	7.6
Leased assets		0.0	0.0
Total	20.4	0.3	20.7

Depreciation, amortization and impairment by asset group 2021

EUR million	Depreciation and amortization	Impairment	Total
Technology-based intangible assets	5.5		5.5
Customer related intangible assets	1.9		1.9
Other intangible assets	0.8	0.0	0.8
Buildings and structures	3.9		3.9
Machinery and equipment	6.6	0.1	6.7
Leased assets		0.1	0.1
Total	18.7	0.2	18.9

17. LEASES

Leases as lessee

Accounting principles

Vaisala acts as a lessee and its lease contracts consist mainly of offices, other premises, land area, apartments and cars.

Majority of Vaisala's lease contracts are fixed-term arrangements without one-sided extension or termination options and thus the lease term is defined based on the duration of the contract. If an arrangement includes extension, termination or purchase option management estimates the probable lease term for each arrangement based on an understanding of the business needs.

A contract may include both a lease component and other components (such as a service fee), for which the contract consideration is allocated on the basis of relative separate prices. Other components are excluded from IFRS 16 calculation, except for service fees for car leases, which are included in the lease component.

For leases, right-of-use asset and corresponding lease liability are recognized in the statement of financial position.

The cost of initial measurement of the right-of-use asset comprises the following items:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received (such as rent-free period);
- any initial direct costs incurred by the lessee; and
- the potential costs of restoring the underlying asset

Right-of-use assets are tested for impairment as described in Note 16, Intangible and tangible assets.

Subsequently right-of-use asset is measured at cost less accumulated depreciation and impairment losses, adjusted for any remeasurement of the lease liability.

The lease liability is initially measured at the present value of the future lease payments discounted by incremental borrowing rate. Incremental borrowing rate is the rate of interest that Vaisala would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. Subsequently, in valuation of lease liability effective interest rate method is applied, according to which lease liability is recognized at amortized cost and interest expense is accrued over the lease term.



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Lease liabilities include the net fair value of the following payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable by the lessee under residual value guarantees;
- the exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

Leases based on extension options that are reasonably certain to be exercised are also included in the liability.

Subsequently, the amount of lease liability is affected by, among other things, the interest accrued by the lease liability, the leases paid, the index increases in leases and the effects of changes in contract.

Depreciation and impairments of right-of-use assets, interest on lease liabilities and items arising from contractual changes are recognized in the consolidated statement of income.

Accounting principles requiring management judgment and the main uncertainty factors relating to estimates

The application of IFRS 16 in the situations, in which Vaisala acts as a lessee, requires management to consider the duration of the lease term if there is an option for extension, termination or purchase. When evaluating the likelihood of the option being exercised and, therefore, the duration of the lease term, management takes into account all known facts and circumstances that create a financial incentive to exercise, or not to exercise, the option on a contractual basis.

Management's estimates of the business needs and hence the likelihood of the exercise of various options are based on known short- and long-term strategies and action plans and on the possible reorganization plans and investment decisions based on them. When evaluating the likelihood of the exercise of options, the decision is also influenced by, among other things, the purpose of the use of the premises and the extent of the investments made.

Amounts recognized in the statement of financial position related to leases

Carrying amounts of right-of-use assets

EUR million	2022	2021
Land and waters	1.3	1.3
Buildings and structures	10.1	9.2
Machinery and equipment	0.5	0.6
Total	11.9	11.1

Additions to the right-of-use assets during the financial year 2022 were EUR 3.9 (1.1) million.

Interest-bearing lease liabilities

EUR million	2022	2021
Non-current	8.3	7.7
Current	2.7	2.4
Total	10.9	10.1

Maturity of lease liabilities is presented in note 21, Financial assets and liabilities.

Amounts recognized in the statement of income related to leases

Depreciation of right-of-use assets

EUR million	2022	2021
Buildings and structures	2.5	2.4
Machinery and equipment	0.4	0.4
Total	2.9	2.8

Write-downs of right-of-use assets

EUR million	2022	2021
Buildings and structures	0.1	-0.0
Total	0.1	-0.0

Other items recognized in the statement of income

EUR million	2022	2021
Interest expense on lease liabilities	0.3	0.4

The total cash outflow for leases in 2022 was EUR 3.2 (3.4) million.



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Leases as lessor

📌 Accounting principles

In Vaisala, all lease agreements, in which Vaisala acts as a lessor, are classified as operating leases as the risks and rewards incidental to ownership of the underlying assets are not substantially transferred to the lessee. The lease payments are recognized on straight-line basis as lease income. Lease income is presented as part of net sales. Vaisala recognizes costs incurred in earning the lease income as an expense in the cost of goods sold.

The lease term is determined as the non-cancellable period of a lease, together with both periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option and periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option.

Leased assets are included in property plant and equipment. The estimated useful lifetime of the assets is three years. However, the assets are not depreciated as the residual value of the assets is greater than the carrying value, but the assets are tested for impairment in accordance with IAS 36 Impairment of assets.

Vaisala as lessor

Vaisala leases wind lidars for wind measurements. The lease terms are usually short-term, but maximum two years.

Lease income recognized in financial year 2022 was EUR 1.7 (2.1) million.

At the end of the financial year 2022 the undiscounted lease payments to be received were EUR 1.2 (0.4) million and will be received during the financial year 2023.

In the beginning of financial year 2021 Vaisala amended the accounting principles to include accounting by a lessor due to the increase of lease arrangements, where Vaisala is acting as a lessor. Due to the change an amount totaling EUR 1.2 million was transferred on January 1, 2021 from inventory to property, plant and equipment.

Capital structure

18. SHAREHOLDERS' EQUITY

📌 Accounting principles

The group's equity consists of share capital, reserve fund, fund of invested non-restricted equity, translation differences and retained earnings.

Shares issued by the parent company are presented as share capital. Expenses related to the share issues or acquisition of own shares are presented as a reduction of equity. If the company acquires back its own shares, the consideration paid including direct costs is deducted from the equity.

The Board of Directors' proposal for dividend distribution is not recognized in the financial statements. The dividends are recognized only after the Annual General Meetings' approval.

Shares and share capital

Vaisala Corporation has 36,436,728 shares, of which 6,731,092 are series K shares and 29,705,636 series A shares. The shares do not have nominal value. The series K shares and A shares are differentiated by the fact that each series K share entitles its owner to twenty (20) votes at General Meeting of Shareholders while each series A share entitles its owner to one (1) vote. The shares have the same rights to dividend. Series K shares can be converted to series A shares according to specific rules stated in the Articles of Association.

On December 31, 2022 and 2021, the fully paid and registered share capital of Vaisala Corporation amounted to EUR 7,660,807.86.



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Share capital and reserves

EUR million	Number of shares 1,000	Share capital	Other reserves	Treasury shares	Total
Dec 31, 2020	36,000	7.7	5.6	-6.3	7.0
Share-based payments	101		1.3	1.7	2.9
Transfers between items			0.0		0.0
Translation difference			0.0		0.0
Dec 31, 2021	36,101	7.7	7.0	-4.6	10.0
Share-based payments	127		-3.4	1.4	2.9
Translation differences			-0.0		-0.0
Dec 31, 2022	36,228	7.7	3.5	-3.3	13.0
Own shares held by the company	208				
Total	36,437				

Other reserves

Other reserves consist of reserve fund and invested non-restricted equity. Share-based payments are also recognized in other reserves. The reserve fund, EUR 0.5 (0.5) million, includes items based on local rules of subsidiaries. Eligibility of the reserve fund is subject to restrictions based on local regulations.

Invested non-restricted equity includes funds transferred from the share premium fund. On December 31, 2022 the amount of other reserves totaled EUR 0.1 (0.1) million.

Own shares

Own shares (treasury shares) include the acquisition cost of own shares held by the group and are presented as a deduction from retained earnings.

	Number of shares	Purchase price EUR million
Treasury shares Dec 31, 2020	437,039	6.3
Distribution of treasury shares to key employees	-101,384	-1.7
Treasury shares Dec 31, 2021	335,655	4.6
Distribution of treasury shares to key employees	-127,168	-1.4
Treasury shares Dec 31, 2022	208,487	3.3

On December 31, 2022 the company held 208,487 (335,655) series A shares representing 0.6% (0.9) of the total number of shares and 0.1% (0.2) of the voting rights. The consideration paid for the shares held by the company was EUR 3.3 million.

Treasury shares can be used as consideration in possible acquisitions or in other business-related arrangements, to finance investments, as part of the company's incentive program, or be retained, conveyed, or cancelled by the company.

Translation differences

Translation differences include the translation differences arising from the elimination of the acquisition cost of non-euro area group companies and from post-acquisition equity items, and the translation differences arising from translation of profit or loss for the period. The group has not hedged any equity denominated in foreign currency.

The result for the financial year is recognized in retained earnings.

Dividend

For the financial year 2021 a dividend of EUR 0.68 per share was paid, totaling EUR 24.6 million.

The Board of Directors proposes to the Annual General Meeting to be held on March 28, 2023 that a dividend of EUR 0.72 per share be paid for the financial year 2022, representing a total dividend of EUR 26.1 million. The proposed dividend has not been recognized as a dividend liability in these financial statements.



19. FINANCIAL RISK MANAGEMENT

Vaisala is exposed to a number of financial risks in its operations of which key ones are currency risk, interest rate risk, refinancing and liquidity risks as well as financial counterparty risk and trade receivables credit risks. Vaisala's objective is to limit the impact of these risks on statement of income, statement of financial position and cash flow statement. The management of financial risks is based on the treasury and credit policies approved by the Board of Directors.

Currency risk

Currency risk refers to the uncertainty in statement of income, statement of financial position and cash flow statement arising from exchange rate fluctuations. Vaisala's business is global and is exposed to transaction and translation risks in multiple currencies. The transaction risk is related to the currency flows of sales and expenses. The translation risk arises from net investments in entities outside the euro area.

Vaisala's sales are denominated in various currencies. In 2022, 42% of the group's sales was in EUR, 34% in USD, 11% in CNY, 5% in JPY and 3% in GBP. Expenses and purchases occur mostly in EUR and USD. The group's policy is to hedge foreign currency positions which consists of the order book, purchase commitments, net receivables, cash and cash equivalents and intercompany loans. Vaisala does not hedge forecasted cash flows that are not in the order book. Vaisala does not apply hedge accounting in accordance with IFRS and changes in fair value are recognized in the statement of income.

Intercompany loans and deposits are mainly initiated in subsidiaries' local currencies. Vaisala does not hedge equities of subsidiaries. Translation of subsidiaries' equities into euros caused translation difference of EUR 2.4 (4.5) million. The most significant translation risk exposures are in USD.

The IFRS 7 currency risk sensitivity analysis is based on the group companies' foreign currency receivables, cash and cash equivalents and liabilities. The calculation does not include internal loans, order book or forecasted cash flows, but includes foreign exchange forward contracts in their nominal value. The effect of a 10% appreciation in all open net currency positions against EUR on Vaisala's result after taxes and equity would have been EUR 0.2 (-0.4) million. Three largest foreign exchange net exposures in euro and their sensitivity analysis based on a 10% change (before taxes) are presented in the following table:

Foreign exchange net exposures against EUR

2022			2021		
EUR million	Net position	Sensitivity	EUR million	Net position	Sensitivity
USD	-10.2	+/- 1.0	USD	-8.3	+/- 0.8
CNY	4.7	+/- 0.4	PLN	-3.1	+/- 0.3
GBP	3.0	+/- 0.3	HRK	-3.0	+/- 0.3

Interest rate risk

Interest rate risk refers to the uncertainty in statement of income, statement of financial position and cash flow statement arising from interest rate changes. The group is exposed to cash flow interest rate risk, if it has floating rate liabilities. At the end of the financial year 2022, Vaisala's interest-bearing liabilities and loans totaled EUR 63.4 (50.2) million, of which EUR 40.1 (40.1) million were at floating rates. EUR 10.9 (10.1) million of interest-bearing liabilities and loans related to lease liabilities.

Refinancing and liquidity risks

Refinancing and liquidity risk refers to the uncertainty in the ability to maintain liquidity. In order to ensure liquidity, cash and cash equivalents and availability of credit facilities are maintained at a sufficient level.

On December 31, 2022, Vaisala's cash and cash equivalents amounted to EUR 55.5 (77.9) million. Vaisala has a EUR 40.0 million unsecured term loan which was signed on May 25, 2020. The loan matures on May 25, 2023, and has a financial covenant (gearing), which is tested semi-annually. On December 31, 2022, Vaisala was in compliance with the covenant. This facility is used for refinancing of existing indebtedness as well as for general corporate and working capital purposes. The management plans to refinance the term loan with maturity date in 2023.

In addition, Vaisala has a domestic commercial paper program amounting to EUR 150 million, of which EUR 12.5 (0.0) million has been withdrawn at the end of reporting period. Consequently, Vaisala had interest-bearing liabilities totaling EUR 63.4 (50.2) million on December 31, 2022. Vaisala has no loans that would mature after five years or more. In addition, Vaisala has a EUR 50 million unsecured revolving credit facility, which was signed on October 5, 2018, and which was undrawn at the end of reporting period, as year before. The committed credit facility agreement matures on October 5, 2023, and it has no financial covenants. The management plans to refinance the revolving credit facility with maturity date in 2023.

Financial counterparty risk

Financial counterparty risk refers to the uncertainty about the counterparty's ability to assume the obligations related to the financing. Vaisala is exposed to financial counterparty risk in respect of cash and cash equivalents and derivative financial instruments. Vaisala's cash and cash equivalents amounted to EUR 55.5 (77.9) million and the nominal value of derivative financial instruments to EUR 38.3 (35.2) million. Vaisala deposits its assets and concludes derivative financial contracts with counterparties with good creditworthiness and approved according to Vaisala's treasury policy. The creditworthiness of banks is constantly assessed.

Trade receivables credit risk

Trade receivables credit risk means the customer-related uncertainty about the collectability of receivables. These trade receivables credit risks are managed by using letter of credit, advance payments and bank guarantees as payment terms. Additionally, trade receivables credit risk is managed by utilizing credit risk insurance and by monitoring customer liquidity. Management estimates that the group does not have



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significant credit risk concentrations. No single customer or a group of customers constitutes a significant risk due to globally distributed customer base. During the financial year, credit losses and related reversals for trade receivables recognized in the statement of income amounted to EUR -0.6 (-0.1) million. Credit loss is recognized once it has been officially declared that the receivable will not be paid as a result of liquidation or bankruptcy.

20. NON-CURRENT RECEIVABLES

EUR million	2022 carrying amounts	Fair values	2021 carrying amounts	Fair values
Non-current deposits	0.8	0.8	0.7	0.7
Other non-current receivables	0.2	0.2	0.1	0.1
Total	1.0	1.0	0.9	0.9

21. FINANCIAL ASSETS AND LIABILITIES

§ Financial assets and liabilities

Financial assets

Financial assets are classified into following categories: at amortized cost and at fair value through profit and loss. Financial assets are measured on the basis of the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets or by applying fair value option in connection with the original acquisition. All purchases and sales of financial assets are recognized on the clearance date.

Financial assets measured at amortized cost are held to maturity date within a business model to collect contractual cash flows and these cash flows consist solely of payments of principal and interest on the principal amount outstanding. Financial assets measured at amortized cost include mainly trade receivables, prepaid income, accrued income and other receivables.

In initial recognition of financial asset classified as at amortized cost, the asset is measured at fair value including transaction costs that are directly attributable to the acquisition. Due to their nature current trade receivables' and other receivables' carrying amount approximate to its fair value. Interest income related to these financial assets is measured with the effective interest rate method and is included in the financial income. Financial assets are derecognized from the statement of financial position when the contractual rights to the cash flows from the financial asset expire or the entity substantially transfers the risks and rewards outside the group. Profit or loss related to the derecognition of financial assets from the statement of financial position is recognized in the statement of income. Impairment losses are recognized in the statement of income.

Financial assets recognized at fair value through profit and loss are financial assets that are held for trading purposes such as derivative financial instruments for which Vaisala does not apply hedge accounting according to IFRS 9. Realized and unrealized gains and losses arising from changes in fair value are recognized in the statement of income in the period in which they arise. Financial assets held for trading as well as those maturing within 12 months are included in current assets.

Impairment of financial assets

Credit loss allowance for trade receivables and contract assets is measured applying simplified approach according to IFRS 9 as no significant financing component is included in those assets. Lifetime expected credit losses are determined based on the provision matrix, utilizing different credit risk across different receivable groups. The groupings are based on aging buckets, geographical regions, existence of collaterals and insolvency proceedings or other evidence of an increased credit risk of the receivables. Expected credit loss risks for different receivable groups are based on historical loss rates and management estimates. Changes in the credit loss allowance based on lifetime expected credit losses as well as final credit losses are recognized in the statement of income.

Cash and cash equivalents are recognized in the statement of financial position at original cost. Cash and cash equivalents consist of cash on bank accounts and bank deposits.

Financial liabilities

Financial liabilities are classified into following categories: at amortized cost and at fair value through profit and loss. Financial liabilities are initially measured at fair value based on the original consideration received. Transaction costs are included in the original carrying amount of the financial liabilities. Subsequently all financial liabilities, except for derivative financial instruments, are measured applying the effective interest method at amortized cost. Financial liabilities are included both in current and non-current liabilities and those may be both interest-bearing and non-interest-bearing. Liabilities maturing in less than 12 months are presented in current liabilities. Financial liabilities are derecognized from statement of financial position when the obligation specified in the contract is discharged, cancelled or expires.

Derivative financial instruments

The group's all derivative financial contracts are foreign exchange forward contracts. The group has sales in a number of currencies. All derivative financial contracts are classified at fair value through profit and loss and are initially measured at fair value on the closing date of the derivative financial contract. Derivative financial contracts are subsequently measured at fair value through profit and loss at the end of each reporting date. The fair value of a foreign exchange forward contract is measured at the present value of the future cash flows. Unrealized and realized gains and losses arising from changes in the fair value are recognized in the statement of income in financial income and expenses in the period in which they arise. Derivative financial contracts are included in the statement of financial position in other receivables and payables. The group does not apply hedge accounting under IFRS 9 to foreign exchange forward contracts.



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The fair value of the derivative financial contracts is based on information that is observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices). In addition to the quoted prices, Vaisala prepares own assessment using commonly acceptable valuation techniques. Hence Vaisala's derivative financial contracts belong to the level 2 in fair value hierarchy. There were no transfers between the hierarchy levels in 2021 or 2022.

The group has a number of investments in foreign subsidiaries whose net assets are exposed to currency risk. The group does not hedge the currency risk related to subsidiaries' net assets.

Classification of financial assets and liabilities as of December 31, 2022

EUR million	Fair value through profit and loss	Amortized cost	Carrying amount of statement of financial position items	Fair value	Note
Financial assets					
Non-current receivables	0.0	1.0	1.0	1.0	20
Trade receivables and other receivables	0.9	101.7	101.7	101.7	12
Cash and cash equivalents		55.5	55.5	55.5	23
Total	1.0	158.2	158.2	158.2	
Financial liabilities					
Interest-bearing non-current loans from financial institutions					
Interest-bearing non-current lease liabilities		8.3	8.3	8.3	17
Other non-current liabilities		2.1	2.1	2.1	21
Interest-bearing current loans from financial institutions		40.0	40.0	40.0	21
Interest-bearing current lease liabilities		2.7	2.7	2.7	17
Interest-bearing current liabilities		12.5	12.5	12.5	21
Trade payables and other liabilities	0.5	74.0	74.0	74.0	14
Total	0.5	139.5	139.5	139.5	

Classification of financial assets and liabilities as of December 31, 2021

EUR million	Fair value through profit and loss	Amortized cost	Carrying amount of statement of financial position items	Fair value	Note
Financial assets					
Non-current receivables	0.0	0.9	0.9	0.9	20
Trade receivables and other receivables	0.0	73.5	73.5	73.5	12
Cash and cash equivalents		77.9	77.9	77.9	23
Total	0.1	152.2	152.2	152.2	
Financial liabilities					
Interest-bearing non-current loans from financial institutions		40.0	40.0	40.0	21
Interest-bearing non-current lease liabilities		7.7	7.7	7.7	17
Other non-current liabilities		1.3	1.3	1.3	21
Interest-bearing current loans from financial institutions					21
Interest-bearing current lease liabilities		2.4	2.4	2.4	17
Interest-bearing current liabilities		0.1	0.1	0.1	21
Trade payables and other liabilities	1.3	82.6	83.9	83.9	14
Total	1.3	134.0	135.3	135.3	

Vaisala has a EUR 40.0 million unsecured term loan which was signed on May 25, 2020. The loan matures on May 25, 2023, and has a financial covenant (gearing), which is tested semi-annually. On December 31, 2022, Vaisala was in compliance with the covenant. This facility is used for refinancing of existing indebtedness as well as for general corporate and working capital purposes. The management plans to refinance the term loan with maturity date in 2023.



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In addition, Vaisala has a domestic commercial paper program amounting to EUR 150 million, of which EUR 12.5 (0.0) million has been withdrawn at the end of reporting period. Furthermore, Vaisala has a EUR 50 million unsecured revolving credit facility which was signed on October 5, 2018 and which was undrawn at the end of reporting period, as year before. The committed credit facility agreement matures on October 5, 2023, and it has no financial covenants. The management plans to refinance the revolving credit facility with maturity date in 2023.

On December 31, 2022, Vaisala had interest-bearing liabilities totaling EUR 63.4 (50.2) million. Group has no loans that would mature after five years or more.

Maturity and interest rates of interest-bearing liabilities 2022

EUR million	2023	2024-2027	2028-2032	2033	Interest rates
Loans from financial institutions	40.0				3.54%
Revolving credit facility					0.65%
Other interest-bearing loans	12.5				1.00-2.20%
Lease liabilities	3.0	5.6	2.4	1.4	0.41-8.69%
Total	55.5	5.6	2.4	1.4	

Maturity and interest rates of interest-bearing liabilities 2021

EUR million	2022	2023-2026	2027-2031	2032-2033	Interest rates
Loans from financial institutions		40.0			1.10%
Revolving credit facility					0.65%
Other interest-bearing loans	0.1				1.00%
Lease liabilities	2.7	4.7	2.5	1.8	0.52-8.69%
Total	2.8	44.7	2.5	1.8	

Derivative financial contracts

EUR million	2022	2021
Nominal value of derivative financial contracts made to hedge against exchange rate risk		
Foreign exchange forward contracts	38.3	35.2
Nominal value, total	38.3	35.2

Nominal value of derivative financial contracts in currencies

	2022		2021	
	Currency million	EUR million	Currency million	EUR million
USD	27.0	25.1	22.0	18.5
CNH	30.0	4.2	30.0	3.9
HRK	-	-	22.5	3.0
JPY	350.0	2.5	300.0	2.3
PLN	9.0	1.9	18.0	3.9
SEK	25.0	2.4	32.5	3.1
CAD	3.0	2.2	-	-
SGD	-	-	1.0	0.6
Total		38.3		35.2

Maturity of derivative financial contracts

EUR million	2022	2021
Less than 90 days	11.7	16.4
Over 90 days and less than 120 days	5.4	4.2
Over 120 days and less than 180 days	9.5	7.7
Over 180 days and less than 365 days	10.6	5.4
Over 365 days and less than 545 days	1.1	1.5
Total	38.3	35.2

Fair value of derivative financial contracts made to hedge against exchange rate risk

EUR million	2022	2021
Fair values of derivative financial contracts, assets	1.0	0.0
Fair values of derivative financial contracts, liabilities	0.5	1.3



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22. INTEREST-BEARING LIABILITIES AND OTHER ADJUSTMENTS IN CASH FLOW STATEMENT

Reconciliation of movements of interest-bearing liabilities to cash flow arising from financing activities

EUR million	Dec 31, 2021	Cash flow effect	Non-cash changes	Dec 31, 2022
Loans from financial institutions	40.0			40.0
Credit facility				
Lease liabilities	10.1	-2.9	3.7	10.9
Other interest-bearing liabilities	0.1	12.5		12.5
Exchange rate differences		0.0		
Total	50.2	9.6	3.7	63.4

Reconciliation of movements of interest-bearing liabilities to cash flow arising from financing activities

EUR million	Dec 31, 2020	Cash flow effect	Non-cash changes	Dec 31, 2021
Loans from financial institutions	40.0			40.0
Credit facility	5.0	-5.0		
Lease liabilities	11.9	-3.1	1.3	10.1
Other interest-bearing liabilities	0.2	-0.1		0.1
Exchange rate differences		0.1		
Total	57.1	-8.1	1.3	50.2

Specification of other adjustments in the cash flow from operating activities

EUR million	2022	2021
Change in bad debt provision	0.5	-0.2
Change in excess and obsolete provision in inventory	-0.3	0.7
Change in provisions	0.7	0.2
Adjustment related to share-based incentive plans	-1.4	1.7
Other adjustments	0.7	0.5
Total	0.3	3.1

23. CASH AND CASH EQUIVALENTS

Accounting principles related to cash and cash equivalents are presented in Note 21, Financial Assets and Liabilities.

Cash and cash equivalents

EUR million	2022	2021
Cash and cash equivalents	55.5	77.9

The fair values of cash and cash equivalents are equivalent to their carrying amounts.



24. CONTINGENT LIABILITIES AND PLEDGES GIVEN

Contingent liabilities and pledges given

EUR million	2022	2021
Bank guarantees issued for obligations	12.8	15.0

Investment commitments

On December 31, 2022, Vaisala had other commitments related to intangible and tangible assets for EUR 3 (3) million.

Purchase commitments

On December 31, 2022, Vaisala had purchase commitments totaling EUR 31 (30) million. Additionally, the group had commitments under the purchase agreements totaling a maximum of EUR 32 (29) million, if realized.

Consolidation

25. BUSINESS COMBINATIONS

On January 27, 2022, Vaisala acquired all membership units in US-based Whether or Knot, LLC (dba AeriWeather), a subscription-based software company providing weather and environmental information. The acquisition supports execution of Weather and Environment business area's strategy to drive growth in Data as a Service and Software as a Service recurring revenue businesses.

In 2021, AeriWeather's (unaudited) net sales were EUR 2.7 million and the statement of financial position totaled EUR 1.1 million on December 31, 2021.

Net sales of the acquired company between January 27, 2022, and December 31, 2022, were EUR 3.7 million and operating result EUR -2.1 million. If the acquisition had occurred on January 1, 2022, management estimates consolidated net sales during January–December 2022 would have been EUR 514 million and operating result EUR 63 million.

The consideration transferred (paid in cash) was EUR 23 million.

Goodwill was recognized for EUR 16,0 million and allocated to Weather and Environment business area cash-generating unit. Goodwill of this acquisition reflects synergies that Vaisala expects to be realized especially from the following areas:

- Utilization of AeriWeather's integration platform for third-party data as part of Vaisala's enhanced forecasting and analytics business
- Large scale utilization of AeriWeather's developer tools and data sales platform as channel for Vaisala's forecasting and analytics products, and
- Vaisala's access to new markets focusing especially on software developers

The total amount of goodwill is expected to be deductible for tax purposes.

During the measurement period, provisionally recognized liabilities have been adjusted to reduce the amount of deferred tax liabilities by EUR 0.8 million in the purchase price allocation. As a result, the amount of goodwill increased by EUR 0.8 million from the provisionally recognized amount.

Acquisition related costs are EUR 0.4 million, of which the majority has been recognized in the consolidated statement of income for the financial year 2022 as sales, marketing and administrative costs.

The amounts of the assets acquired and liabilities recognized, and the cash flow from the acquisition were as follows:



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Business combinations

EUR thousand	Fair value recognized on acquisition
Goodwill	15,853
Technology-based intangible assets	3,017
Customer related intangible assets	2,544
Tangible assets	9
Trade receivables and other receivables	177
Deferred tax assets	2,057
Cash and cash equivalents	1
Total assets	23,659
Trade and other payables	96
Contract liabilities and other deferred revenue	445
Total liabilities	541
Net assets	23,118
Purchase price paid in cash	-23,119
Cash and cash equivalents acquired	1
Total net cash outflow on acquisition	-23,118

There were no business combinations during financial year 2021.

A contingent consideration liability relating to prior acquisitions totaling EUR 5.6 (1.0) million was paid in 2022. The remaining contingent liability related to prior acquisitions was EUR 0.1 (5.6) million at the end of financial year 2022. In the financial year 2022, no contingent consideration liability was recognized as income or expense (2021: EUR 4.5 million was recognized as expense) based on the financial performance after the acquisition and based on the estimated future performance.

26. SUBSIDIARIES

Name	Country	Group ownership %, Dec 31, 2022	Group ownership %, Dec 31, 2021
Vaisala Holding Oy	Finland	100	100
Vaisala Limited	United Kingdom	100	100
Vaisala Pty. Ltd.	Australia	100	100
Vaisala GmbH	Germany	100	100
Vaisala KK	Japan	100	100
Vaisala Inc.	United States	100	100
Vaisala China Ltd.	China	100	100
Vaisala Canada Inc.	Canada	100	100
Vaisala Sdn. Bhd.	Malaysia	100	100
Vaisala Servicos De Marketing Ltda	Brazil	100	100
3TIER R&D India Private Limited	India	100	100
Vaisala East Africa Limited	Kenya	100	100
Vaisala Mexico Limited, S. de R. L. de C.V.	Mexico	100	100
Vaisala France SAS (former Leosphere SAS)	France	99.95	95.79
Upwind SAS	France	100	100
SCI Septentrion	France	100	100
K-Patents (Shanghai) Co.,Ltd.	China	100	100
Vaisala Shanghai Sensors Ltd.	China	100	100
Whether or Knot LLC	United States	100	-
Vaisala Korea Co. Ltd	South-Korea	100	-

On January 27, 2022, Vaisala acquired all membership units in US-based Whether or Knot, LLC (dba AerisWeather), a subscription-based software company providing weather and environmental information. In addition, Vaisala established a subsidiary Vaisala Korea Co. Ltd to South-Korea on April 22, 2022.

Vaisala SAS was merged into Leosphere SAS on July 30, 2021. The name of Leosphere SAS was changed to Vaisala France SAS on October 1, 2021.



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27. ASSOCIATED COMPANY

Accounting principles related to associated companies are presented in Consolidation principles.

The group has one associated company, SAS Meteorage. SAS Meteorage is a French company, which maintains lightning detection networks and sells information related to lightning strikes. Ownership in Meteorage supports Vaisala's role in the global lightning detection community.

Company name	Place of incorporation and principal place of business	Share of ownership	Measurement method
SAS Meteorage	France	35%	Equity method

Summarized financial information of the associated company

EUR million	2022	2021
Non-current assets	3.2	3.5
Current assets	3.5	3.3
Liabilities	2.8	3.1
Net assets	3.9	3.7
Vaisala's share of net assets	1.4	1.3
Net sales	4.6	4.6
Result for the financial year	0.5	0.7

The information presented in the table is based on the latest available financial information.

Carrying amount of investments in associated company

EUR million	2022	2021
Carrying amount at Jan 1	1.3	1.1
Share of result	0.2	0.2
Dividend received	-0.1	-0.1
Carrying amount at Dec 31	1.4	1.3

The carrying value of the associated company does not include goodwill.

Transactions with associated company and receivables and liabilities

EUR million	2022	2021
Sales	0.3	0.8
Receivables	-	0.0



Other notes

28. RELATED PARTY TRANSACTIONS

Related parties of Vaisala group are the parent company, subsidiaries, associated company, members of Board of Directors and Vaisala Leadership Team. Related party transactions are based on market prices of goods and services and on common market terms. Only transactions that are not eliminated in the consolidated financial statements are disclosed as related party information.

The subsidiaries are presented in note 26, Subsidiaries and the associated company in note 27, Associated company. Transactions with the associated company as well as receivables and liabilities are presented in note 27, Associated company.

Employee benefits of management

EUR thousand	2022	2021
Salary and bonuses of the President and CEO (payment basis)		
Öistämö Kai		
Salary	491	481
Short term incentives	345	40
Share-based payment	169	263
Statutory pension	138	81
Supplementary pension	114	114
Total	1,256	979

EUR thousand	2022	2021
Remuneration of the members of Vaisala Leadership Team (excl. the President and CEO) (payment basis)		
Salaries	1,694	1,730
Short term incentives	839	357
Share-based payment	5,041	2,185
Statutory pension	418	324
Supplementary pension	285	272
Total	8,277	4,868

In 2021, Kjell Forsén was paid EUR 185 thousand short-term incentive for 2020, as well as share-based payment for LTI 2018, LTI 2019–2021, and LTI 2020–2022 programs totaling EUR 1,864 thousand.

The President and CEO Kai Öistämö is entitled to participate in a supplementary defined contribution pension plan with an annual fee corresponding to three month's base salary. The President and CEO's retirement age is 62 years. The notice period for both parties is six months. If the company terminates the agreement, there is an additional severance pay equaling six times the monthly salary.



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Remuneration of the Board of Directors 2022 (payment basis)

EUR thousand		Annual remuneration	Compensation, Audit Committee	Compensation, People and Sustainability Committee	Total
Castrén Petri	Member of the Board	40	8		48
Jääskeläinen Antti	Member of the Board	40	8		48
Lundström Petra	Member of the Board	40		7	47
Rinnevaara Jukka	Member of the Board	40		7	47
Ståhlberg Kaarina	Member of the Board	40	12		52
Syrjänen Tuomas	Member of the Board	40		7	47
Voipio Raimo	Vice Chair of the Board	40	8		48
Voipio Ville	Chair of the Board	55		7	62
Total		335	36	28	399

Remuneration of the Board of Directors 2021 (payment basis)

EUR thousand		Annual remuneration	Compensation, Audit Committee	Compensation, Remuneration and Human Resources Committee	Total
Castrén Petri	Member of the Board	40	5		45
Jääskeläinen Antti	Member of the Board	40	5		45
Lundström Petra	Member of the Board	40		5	45
Rinnevaara Jukka	Member of the Board	40		5	45
Ståhlberg Kaarina	Member of the Board	40	8		48
Syrjänen Tuomas	Member of the Board	40		3	43
Voipio Raimo	Vice Chair of the Board	40	4		44
Voipio Ville	Chair of the Board	55	1	5	61
Total		335	23	18	376

The name of the Remuneration and HR Committee was changed to People and Sustainability Committee as of January 1, 2022.

To the President and CEO and the members of the Board have not been granted loans nor have guarantees or commitments been given on their behalf.



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29. AUDITOR'S FEES

Authorized Public Accountants Deloitte

EUR million	2022	2021
Audit	0.5	0.5
Tax advice	0.0	0.0
Statements	0.0	0.0
Other fees	0.1	0.0
Total	0.7	0.6

Other work than audit services given by the principal auditor Deloitte Oy during the year 2022 were EUR 0.2 (0.1) million.

30. APPLICATION OF NEW AND REVISED STANDARDS AND INTERPRETATIONS IN ISSUE BUT NOT YET EFFECTIVE

IASB published the following new or revised standards which the group has not yet adopted and which may have an effect on the consolidated financial statements of the group. The group will adopt each standard as from the effective date, or if the effective date is other than the first day of the financial year, from the beginning of the next financial year after the effective date.

At the date of authorisation of these financial statements, the group has not applied the following new and revised IFRS Standards that have been issued but are not yet effective and had not yet in some cases been adopted by the EU (marked with *):

- IFRS 17 Insurance Contracts (including the June 2020 and December 2021 amendments to IFRS 17)
- Amendments to IFRS 10 and IAS 28 Sale or Contribution of Assets between an Investor and its Associate or Joint Venture
- Amendments to IAS 1 Classification of Liabilities as Current or Non-current*
- Amendments to IAS 1 and IFRS Practice Statement 2 Disclosure of Accounting Policies
- Amendments to IAS 8 Definition of Accounting Estimates
- Amendments to IAS 12 Deferred Tax related to Assets and Liabilities arising from a Single Transaction
- Amendments to IFRS 16 Lease Liability in a Sale and Leaseback*

The management expects that the adoption of the standards will have no material impact on the financial statements of the group in future periods.

IFRS 17 Insurance Contracts

IFRS 17 establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts and supersedes IFRS 4 Insurance Contracts. In June 2020, the IASB issued Amendments to IFRS 17 that defer the date of initial application of IFRS 17 (incorporating the amendments) to annual reporting periods beginning on or after January 1, 2023. The application of the new standard and related amendments is not anticipated to have an impact on the group's consolidated financial statements in future periods as the group does not hold any insurance contracts.

Amendments to IFRS 10 Consolidated Financial Statements and IAS 28 Investments in Associates and Joint Ventures—Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The amendments to IFRS 10 and IAS 28 deal with situations where there is a sale or contribution of assets between an investor and its associate or joint venture. Specifically, the amendments state that gains or losses resulting from the loss of control of a subsidiary that does not contain a business in a transaction with an associate or a joint venture that is accounted for using the equity method, are recognised in the parent's profit or loss only to the extent of the unrelated investors' interests in that associate or joint venture. Similarly, gains and losses resulting from the remeasurement of investments retained in any former subsidiary (that has become an associate or a joint venture that is accounted for using the equity method) to fair value are recognised in the former parent's profit or loss only to the extent of the unrelated investors' interests in the new associate or joint venture.

The effective date of the amendments has yet to be set by the IASB; however, earlier application of the amendments is permitted. The application of these amendments may have an impact on the group's consolidated financial statements in future periods should such transactions arise.

Amendments to IAS 1 Presentation of Financial Statements—Classification of Liabilities as Current or Non-current

The amendments to IAS 1 published in January 2020 affect only the presentation of liabilities as current or non-current in the statement of financial position and not the amount or timing of recognition of any asset, liability, income or expenses, or the information disclosed about those items.

The amendments clarify that the classification of liabilities as current or non-current is based on rights that are in existence at the end of the reporting period, specify that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability, explain that rights are in existence if covenants are complied with at the end of the reporting period, and introduce a definition of 'settlement' to make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services.



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The amendments are applied retrospectively for annual periods beginning on or after January 1, 2023, with early application permitted. The IASB is currently considering further amendments to the requirements in IAS 1 on classification of liabilities as current or non-current, including deferring the application of the January 2020 amendments. The adoption of the amendment is not expected to have an impact on the consolidated financial statements in future periods.

Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2 Making Materiality Judgements—Disclosure of Accounting Policies

The amendments change the requirements in IAS 1 with regard to disclosure of accounting policies. The amendments replace all instances of the term 'significant accounting policies' with 'material accounting policy information'. Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements.

The supporting paragraphs in IAS 1 are also amended to clarify that accounting policy information that relates to immaterial transactions, other events or conditions is immaterial and need not be disclosed. Accounting policy information may be material because of the nature of the related transactions, other events or conditions, even if the amounts are immaterial. However, not all accounting policy information relating to material transactions, other events or conditions is itself material.

The IASB has also developed guidance and examples to explain and demonstrate the application of the 'four-step materiality process' described in IFRS Practice Statement 2.

The amendments to IAS 1 are effective for annual periods beginning on or after January 1, 2023, with earlier application permitted and are applied prospectively. The amendments to IFRS Practice Statement 2 do not contain an effective date or transition requirements. Vaisala will revise its materiality assessment principles related to disclosure of accounting principles in the group's consolidated financial statements to reflect the amendments, but the adoption of the amendments is not expected to have an impact on the consolidated financial statements in future periods.

Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors—Definition of Accounting Estimates

The amendments replace the definition of a change in accounting estimates with a definition of accounting estimates. Under the new definition, accounting estimates are "monetary amounts in financial statements that are subject to measurement uncertainty".

The definition of a change in accounting estimates was deleted. However, the IASB retained the concept of changes in accounting estimates in the Standard with the following clarifications:

- A change in accounting estimate that results from new information or new developments is not the correction of an error
- The effects of a change in an input or a measurement technique used to develop an accounting estimate are changes in accounting estimates if they do not result from the correction of prior period errors

The IASB added two examples (Examples 4–5) to the Guidance on implementing IAS 8, which accompanies the Standard. The IASB has deleted one example (Example 3) as it could cause confusion in light of the amendments.

The amendments are effective for annual periods beginning on or after January 1, 2023 to changes in accounting policies and changes in accounting estimates that occur on or after the beginning of that period, with earlier application permitted. The adoption of the amendment is not expected to have an impact on the consolidated financial statements in future periods.

Amendments to IAS 12 Income Taxes—Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The amendments introduce a further exception from the initial recognition exemption. Under the amendments, an entity does not apply the initial recognition exemption for transactions that give rise to equal taxable and deductible temporary differences.

Depending on the applicable tax law, equal taxable and deductible temporary differences may arise on initial recognition of an asset and liability in a transaction that is not a business combination and affects neither accounting nor taxable profit. For example, this may arise upon recognition of a lease liability and the corresponding right-of-use asset applying IFRS 16 at the commencement date of a lease.

Following the amendments to IAS 12, an entity is required to recognise the related deferred tax asset and liability, with the recognition of any deferred tax asset being subject to the recoverability criteria in IAS 12.

The IASB also adds an illustrative example to IAS 12 that explains how the amendments are applied.

The amendments apply to transactions that occur on or after the beginning of the earliest comparative period presented. In addition, at the beginning of the earliest comparative period an entity recognises:

- A deferred tax asset (to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised) and a deferred tax liability for all deductible and taxable temporary differences associated with:
 - Right-of-use assets and lease liabilities
 - Decommissioning, restoration and similar liabilities and the corresponding amounts recognised as part of the cost of the related asset
- The cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at that date

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The amendments are effective for annual reporting periods beginning on or after January 1, 2023, with earlier application permitted.

Vaisala will apply the amendment in accordance with transition rule with the effect of initial application recognized as of January 1, 2022. Based on the preliminary assessment, on December 31, 2022, the group recognizes deferred tax assets related to right-of-use assets amounting to EUR 2 million and deferred tax liability related to lease liabilities amounting to EUR 2 million.

Amendments to IFRS 16 Leases—Lease Liability in a Sale and Leaseback

The amendments clarify how a seller-lessee subsequently measures sale and leaseback transactions that satisfy the requirements to be accounted for as a sale. These amendments require a seller-lessee to subsequently measure lease liabilities arising from a leaseback in a way that it does not recognise any amount of the gain or loss that relates to the right of use it retains. The new requirements do not prevent a seller-lessee from recognising in profit or loss any gain or loss relating to the partial or full termination of a lease.

The amendments are effective for annual reporting periods beginning on or after January 1, 2024. Earlier application is permitted. The application of this amendment may have an impact on the group's consolidated financial statements in future periods should such transactions arise.



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Parent company financial statements*

Parent company income statement

EUR	Note	Jan 1-Dec 31, 2022	Jan 1-Dec 31, 2021
Net sales	2	343,315,466.88	299,731,553.65
Cost of production and procurement	4, 5	-174,206,561.33	-151,805,227.80
Gross profit		169,108,905.55	147,926,325.85
Cost of sales and marketing	4, 5	-40,087,775.66	-34,962,485.64
Cost of administration			
Research and development costs	4, 5	-49,867,740.47	-45,754,708.11
Other administrative costs	4, 5	-55,686,503.70	-48,839,666.98
Other operating income and expenses	3	72,112.36	85,723.75
Operating result		23,538,998.08	18,455,188.87
Financial income and expenses	6	10,276,507.00	1,600,673.53
Result before appropriations and taxes		33,815,505.08	20,055,862.40
Appropriations			
Change in depreciation difference		-834,605.39	-1,086,208.38
Result before taxes		32,980,899.69	18,969,654.02
Direct taxes	7	-6,014,958.21	-3,986,518.34
Result for the financial year		26,965,941.48	14,983,135.68

* The parent company financial statements are prepared in accordance with the principles of Finnish Accounting Standards (FAS).



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Parent company balance sheet

EUR	Note	Dec 31, 2022	Dec 31, 2021
Assets			
Non-current assets			
Intangible assets	8		
Goodwill		33,071.17	52,913.86
Intangible rights		12,787,059.77	931,049.20
Other intangible assets		8,667,011.16	12,269,359.88
Advance payments and intangible assets in progress		339,779.44	252,718.15
Total intangible assets		21,826,921.54	13,506,041.09
Property, plant and equipment	8		
Land and waters		2,904,868.22	2,904,868.22
Buildings		42,536,262.57	43,042,031.80
Machinery and equipment		23,742,698.09	21,475,340.43
Other tangible assets		74,417.51	74,417.51
Advance payments and construction in progress		7,921,239.84	8,354,294.35
Total property, plant and equipment		77,179,486.23	75,850,952.31
Investments	8		
Holdings in group undertakings		74,650,890.57	74,480,891.87
Other shares and holdings		101,000.00	100,000.00
Total investments		74,751,890.57	74,580,891.87
Total non-current assets		173,758,298.34	163,937,885.27

EUR	Note	Dec 31, 2022	Dec 31, 2021
Current assets			
Non-current receivables			
Other receivables		143,369.22	49,586.20
Total long-term receivables		143,369.22	49,586.20
Inventories			
Materials, consumables and finished goods		44,788,097.25	35,858,010.93
Total inventories		44,788,097.25	35,858,010.93
Current receivables			
Trade receivables	17	59,989,414.71	40,072,940.68
Other receivables	9, 17	5,300,801.72	5,048,548.29
Prepaid expenses and accrued income	10, 17	18,869,190.54	25,362,525.79
Total current receivables		84,159,406.97	70,484,014.76
Cash and cash equivalents		37,534,733.55	64,634,457.59
Total current assets		166,625,606.99	171,026,069.48
Total assets		340,383,905.33	334,963,954.75



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Parent company balance sheet

EUR	Note	Dec 31, 2022	Dec 31, 2021
Shareholders' equity and liabilities			
Shareholders' equity			
	13		
Share capital		7,660,807.86	7,660,807.86
Fund of invested non-restricted equity		422,034.34	422,034.34
Retained earnings		140,055,987.63	151,035,682.19
Result for the financial year		26,965,941.48	14,983,135.68
Total shareholders' equity		175,104,771.31	174,101,660.07
Appropriations			
Depreciation difference		1,920,813.77	1,086,208.38
Provisions			
	12	0.00	97,119.25

EUR	Note	Dec 31, 2022	Dec 31, 2021
Liabilities			
Non-current			
Loans from financial institutions	15	-	40,000,000.00
Other non-current liabilities	14	893.00	12,857.19
Current			
Advances received		2,191,679.39	2,068,348.53
Trade payables	17	22,847,352.95	19,209,492.93
Loans from financial institutions	15	40,000,000.00	-
Other current loans	17	44,378,233.23	35,257,332.86
Other current liabilities	14	2,688,754.88	11,842,938.50
Provisions	12	1,630,503.51	1,026,306.92
Accrued expenses and deferred income	16, 17	49,620,903.29	50,261,690.12
Current liabilities total		163,357,427.25	119,666,109.86
Total liabilities		165,279,134.02	160,862,294.68
Total shareholders' equity and liabilities		340,383,905.33	334,963,954.75



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Parent company cash flow statement

EUR thousand	Note	Jan 1-Dec 31, 2022	Jan 1-Dec 31, 2021
Result for the financial period		26,966	14,983
Depreciation, amortization and impairment	5	13,603	11,617
Financial income and expenses	6	-10,277	-1,601
Gains and losses on sale of intangible assets and property, plant and equipment	3	-27	29
Depreciation difference		835	1,086
Income taxes	7	6,015	3,987
Other adjustments		-207	1,952
Inventories, increase (-) / decrease (+)		-9,231	-6,410
Non-interest-bearing receivables, increase (-) / decrease (+)		-13,543	-5,138
Non-interest-bearing liabilities, increase (+) / decrease (-)		-5,413	20,487
Changes in working capital		-28,187	8,939
Paid financial items, net	6	-4,740	1,292
Dividend received from business operations	6	12,994	2,624
Income taxes paid	7	-5,460	-4,458
Cash flow from operating activities		11,516	40,450
Cash flow from investing activities			
Investments in shares	8	-171	-263
Investments in intangible assets	8	-13,693	-287
Investments in property, plant and equipment	8	-9,761	-15,841
Divestments	8	98	101
Proceeds from sale of shares	8	-4,456	-
Repayments on loan receivables	17	4,885	13,856
Cash flow from investing activities		-23,098	-2,434

EUR thousand	Note	Jan 1-Dec 31, 2022	Jan 1-Dec 31, 2021
Cash flow from financing activities			
Proceeds from short-term borrowings	14	114,888	63,479
Repayment of short-term borrowings	14	-105,770	-50,063
Dividend paid	13	-24,635	-22,022
Cash flow from financing activities		-15,517	-8,606
Change in cash and cash equivalents increase (+) / decrease (-)		-27,099	29,410
Cash and cash equivalents at Jan 1		64,634	35,225
Change in cash and cash equivalents increase (+) / decrease (-)		-27,099	29,410
Cash and cash equivalents at Dec 31		37,535	64,634



Notes to the parent company financial statements

1. ACCOUNTING PRINCIPLES

The financial statements of the parent company Vaisala Corporation have been prepared according to the Finnish Accounting Standards (FAS). Financial statement data are based on original acquisition costs or nominal value, less possible impairment, if not otherwise stated in the accounting principles outlined below.

Net sales and revenue recognition principles

The parent company's net sales consist of revenue recognized from contracts with customers. Net sales are divided into products, projects and services. Indirect taxes and discounts have been deducted from sales revenue. Exchange rate differences are recognized in the financial income and expenses.

Product net sales include revenue from products, spare parts and system deliveries. System deliveries contain a standard product delivery with limited amount of configuration. Revenue from the sale of product is recognized at a point in time when the control is transferred to the customer.

Projects are integrated projects, in which observation solutions, consisting of products, services and software, are delivered. Solutions are integrated to customer systems according to customer specifications. Revenue for all projects is recognized over time using percentage of completion method. Progress is measured by cost-to-cost method, comparing incurred costs and forecasted costs. Projects meet the over-time revenue recognition criteria, mainly by creating an asset without an alternative use and Vaisala having an enforceable right to payment for performance completed to date. The applied revenue recognition principles fulfill the Finnish Accounting Standard requirement related to the predictability of project margin.

Services are divided into service contracts and one-off service deliverables. Services may include maintenance, calibration and repair, modernization, extended warranties and data-based solutions supporting decisions in weather-dependent operations. Service contracts are continuous services including for example extended warranty, availability of customer support and availability of spare part delivery. Service contracts are recognized over time or at a point in time depending on the nature of the service and content of a contract. In case of one-off request services, the revenue is recognized at a point in time when the service has been rendered.

Standard warranty period for products is one year and 2, 5 or 10 years for selected products. Standard warranty period for services is 6 or 12 months. Extended warranty is a separately sold and priced service over a separately agreed period. Revenue for extended warranty is recognized over time starting at the time of standard warranty expiration. Provision for warranty costs is recognized in the balance sheet.

Other operating income and expenses

Other operating income and expenses include income and expenses, which are not directly attributable to operational activities.

Other operating income consists mainly of gains on the disposal of assets as well as income other than revenue from contracts with customers, such as reversal of liabilities related to acquisitions and indemnities. Other operating expenses consist mainly of losses on disposal of assets.

Research and development expenses

Research and development expenses are booked as cost in the financial period in which they occur.

Share-based incentive plans

Parent company's share-based payments are related to share-based incentive plans. Share-based payments are recognized as costs in the income statement and as accrued expenses in the balance sheet during the vesting period. The cost of the share part of the share-based payments as well as the cash part of the share-based payments correspond to the value of share closing price on the grant date of the incentive plan. The costs are based on an estimate of the amount of shares to be paid at the end of the vesting period. Assumptions, on which the estimates are based, are updated whenever changes occur and the effects of changes in assumptions are recognized in the income statement.

Pensions

The parent company's statutory pension insurance and voluntary pension plans are managed by external pension insurance companies. The pensions are all defined contribution plans and the contributions are expensed to the income statement as incurred.

The additional pension coverage of parent company personnel was arranged by Vaisala Pension Fund that was closed on January 1, 1983. The pension fund liability was transferred to a pension insurance company on December 31, 2005 and the fund was dissolved in 2006. The pension liability of the fund is fully covered.

Income taxes

Tax expense includes taxes based on taxable profit for the financial year and tax adjustments for previous years. Current taxes are calculated on the taxable income on the basis of the tax rates enacted by the end of the financial year.

Non-current assets

Non-current assets consist of intangible assets, property, plant and equipment as well as investments. Carrying amounts of non-current assets are measured at cost less accumulated depreciation, amortization and impairment and plus revaluations. Depreciation and amortization according to plan is calculated on a straight-line basis over the expected useful lifetime of the asset. Land and investments are not depreciated.



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The cost of assets produced for own use includes also overhead costs attributable to the production work. No interest is capitalized in non-current assets. Estimated useful lifetimes for assets are:

Intangible rights	3–10 years
Buildings and structures	5–40 years
Machinery and equipment	3–8 years
Other tangible assets	3–8 years

Other intangible assets include assets that have an indefinite useful lifetime and are not amortized. Additionally, merger losses have been allocated to other intangible assets and their useful lifetime is 5–6 years.

Inventories

Inventories are stated at the lower of standard cost and probable purchase or selling price. Inventory cost includes the cost of purchase (including mainly purchase price, import duties and transport), direct labor and a proportion of production overhead. An allowance is recorded for excess inventory and obsolescence.

Provisions

Provisions are future expenditure and losses arising from obligations, for which the company is committed and for which it is not certain or likely that revenue will be generated in the future and which are likely to occur. A change in the provision is recognized in the same item of the income statement in which the provision was originally recognized.

Provisions can relate to restructuring of operations, loss-making contracts, warranties, legal disputes and other commitments.

Derivative financial contracts

Vaisala applies in its accounting of financial instruments valuation according to Accounting Act 5.2§ and follows Accounting Board's opinion December 13, 2016 ("KILA 1963/2016") on valuation of derivative financial instruments in fair value. All parent company's derivative financial contracts are foreign exchange forward contracts. The parent company has sales in a number of foreign currencies, of which the most significant in 2022 were USD, CNY and JPY. All derivative financial contracts are initially measured at fair value on the closing date of the derivative financial contract. Derivative financial contracts are subsequently measured at fair value through profit and loss at the end of the financial year. The fair value of a foreign exchange forward contract is measured at the present value of the future cash flows. Unrealized and realized gains and losses arising from changes in the fair value are recognized in the income statement in financial income and expenses in the period in which they arise. Derivative financial contracts are included in the balance sheet in prepaid and accrued expenses. The parent company does not apply hedge accounting.

Foreign currency translation

Transactions in foreign currencies are recorded using the exchange rate on the date of transaction. Receivables and payables in foreign currency have been valued at the rates quoted by European Central Bank on the last trading date of the financial year. Foreign exchange gains and losses arising from revaluation of cash and cash equivalents, trade and other receivables, loan receivables as well as trade and other payables are recognized as financial income and expense in the income statement.

2. NET SALES

Disaggregation of revenue

Net sales by market area

EUR thousand	2022	2021
Americas	102,998	86,357
of which United States	75,077	58,046
APAC	114,045	98,953
EMEA	126,273	114,421
of which Finland	8,699	7,672
Total	343,315	299,732

Net sales by business area

EUR thousand	2022	2021
Weather and Environment		
Products	63,008	61,791
Projects	39,730	40,798
Services	7,604	7,135
Total	110,343	109,724
Industrial Measurements		
Products	51,402	42,312
Services	2,520	2,266
Total	53,922	44,579
Net sales from subsidiaries	179,051	145,428
Total	343,315	299,732



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Net sales by timing of revenue recognition

EUR thousand	2022	2021
Revenue recognized at a point in time	117,754	108,191
Revenue recognized over time	46,510	46,112
Net sales from subsidiaries	179,051	145,428
Total	343,315	299,732

Net sales from subsidiaries are mainly recognized at a point in time.

Payment terms

Payment terms vary based on geographical areas. In product and service business, the standard payment term is 30 days net, but in some areas prepayments are commonly used. Project invoicing is based on milestones and typically follows the general project delivery terms (where 30% is advance payment, 60% against delivery documents and 10% after site acceptance test) or terms as per contract. In project business the most common payment terms are letter of credit or as per contract.

Assets and liabilities related to net sales

The following table provides information about receivables and liabilities from contracts with customers included in the balance sheet.

Assets and liabilities related to net sales

EUR thousand	Dec 31, 2022	Dec 31, 2021
Trade receivables	59,989	40,073
Accrued revenue	11,684	18,949
Advances received	2,192	2,068
Deferred revenue	12,822	10,345

Accrued revenue includes the balance of project and service revenue recognized but not yet invoiced. In general, most of project revenue is recognized after the product manufacturing as percentage of completion increases and most of the performance obligation is satisfied. According to general project delivery terms, majority of a project is invoiced before the delivery. Therefore, the amount of accrued

revenue is typically at its highest between product manufacturing phase of the project and delivery of the product to the customer. For services, which are satisfied over time, the customer is mainly invoiced in advance and only in some cases in arrears after the customer has received or consumed the service. Arrears invoicing generates accrued revenue as the revenue is recognized before invoicing.

Advances received are customer payments related to contracts not yet invoiced.

Deferred revenue includes the balance of projects, services and products invoiced but revenue not yet recognized.

Project-related contract liabilities often arise in the early stages of a project, when the prepayment has been invoiced, but the project is only at an early stage and there is none or little revenue recognized under percentage of completion method. Services, which are recognized over time, are often invoiced in advance and therefore deferred revenue is generated in the beginning of the service period. For products and services, which are recognized at a point in time, deferred revenue is generated when customer has been invoiced, but performance obligation has not been satisfied and consequently revenue has not been recognized.

In the financial year 2022, the parent company recognized EUR 6 (6) million revenue that was included in the deferred revenue balance at the beginning of the period.

On December 31, 2022, the order book amounted to EUR 73.4 (77.9) million. Of the order book, EUR 58.3 (60.7) million is scheduled to be recognized as revenue in 2023 (2022) and EUR 15.1 (17.2) million is scheduled to be recognized later.

3. OTHER OPERATING INCOME

Other operating income

EUR thousand	2022	2021
Gains on disposal of assets	27	1
Other operating income		
Indemnities and other	46	115
Total	72	117

Other operating expenses

EUR thousand	2022	2021
Loss on disposal of assets	-	30
Total	-	30



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4. PERSONNEL EXPENSES AND NUMBER OF PERSONNEL

Personnel expenses

EUR thousand	2022	2021
Wages and salaries	96,537	95,770
Pension costs	15,861	13,942
Other personnel costs	3,050	2,897
Total	115,448	112,610

Personnel average

Persons	2022	2021
In Finland	1,401	1,287
Outside Finland	10	9
Total	1,411	1,297

Personnel Dec 31

Persons	2022	2021
In Finland	1,475	1,303
Outside Finland	9	10
Total	1,484	1,313

Salary and remunerations of the President and CEO (payment basis)

EUR thousand	2022	2021
Öistämö Kai		
Salary	491	481
Short term incentives	345	40
Share-based payment	169	263
Statutory pension	138	81
Supplementary pension	114	114
Total	1,256	979

In 2021, Kjell Forsén, Vaisala's former President and CEO, was paid EUR 185 thousand short-term incentive for 2020, as well as share-based payment for LTI 2018, LTI 2019-2021, and LTI 2020-2022 programs totaling EUR 1,864 thousand.

The President and CEO Kai Öistämö is entitled to participate in a supplementary defined contribution pension plan with an annual fee corresponding to three month's base salary. The President and CEO's retirement age is 62 years. The notice period for both parties is six months. If the company terminates the agreement, there is an additional severance pay equaling six times the monthly salary.

Remuneration of the Board of Directors 2022 (payment basis)

EUR thousand		Annual remuneration	Compensation, Audit Committee	Compensation, People and Sustainability Committee	Total
Castrén Petri	Member of the Board	40	8		48
Jääskeläinen Antti	Member of the Board	40	8		48
Lundström Petra	Member of the Board	40		7	47
Rinnevaara Jukka	Member of the Board	40		7	47
Ståhlberg Kaarina	Member of the Board	40	12		52
Syrjänen Tuomas	Member of the Board	40		7	47
Voipio Raimo	Vice Chair of the Board	40	8		48
Voipio Ville	Chair of the Board	55		7	62
Total		335	36	28	399



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Remuneration of the Board of Directors 2021 (payment basis)

EUR thousand		Annual remuneration	Compensation, Audit Committee	Compensation, Remuneration and Human Resources Committee	Total
Castrén Petri	Member of the Board	40	5		45
Jääskeläinen Antti	Member of the Board	40	5		45
Lundström Petra	Member of the Board	40		5	45
Rinnevaara Jukka	Member of the Board	40		5	45
Ståhlberg Kaarina	Member of the Board	40	8		48
Syrjänen Tuomas	Member of the Board	40		3	43
Voipio Raimo	Vice Chair of the Board	40	4		44
Voipio Ville	Chair of the Board	55	1	5	61
Total		335	23	18	376

The name of the Remuneration and HR Committee was changed to People and Sustainability Committee as of January 1, 2022.

To the President and CEO and the members of the Board have not been granted loans nor have guarantees or commitments been given on their behalf.

5. DEPRECIATION, AMORTIZATION AND IMPAIRMENT

EUR thousand	2022	2021
Amortization of intangible assets	5,301	4,176
Depreciation of property, plant and equipment	8,198	7,406
Impairment of intangible and tangible assets	104	34
Total	13,603	11,617

In the financial year 2022 amortization of intangible assets included amortization EUR 3.6 (3.5) million related to merger losses included in other intangible assets.

6. FINANCIAL INCOME AND EXPENSES

EUR thousand	2022	2021
Dividend income		
From group companies	12,994	2,624
Other interest and financial income		
From group companies	30	58
From others	2,811	1,068
Interest and other financial expenses		
To group companies	-281	-15
To others	-4,761	-4,308
Foreign exchange gains and losses	-517	2,174
Total	10,277	1,601

7. DIRECT TAXES

EUR thousand	2022	2021
Taxes from the financial year	4,279	4,014
Taxes from previous years	1,736	-27
Total	6,015	3,987



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8. NON-CURRENT ASSETS AND OTHER LONG-TERM INVESTMENTS

Intangible assets 2022

EUR thousand	Goodwill	Intangible rights	Other intangible assets	Advance payments and intangible assets in progress	Total
Acquisition cost Jan 1, 2022	88	29,691	20,361	253	50,392
Increases		13,496		197	13,693
Decreases		-4,808			-4,808
Transfers between items		102		-110	-8
Acquisition cost Dec 31, 2022	88	38,481	20,361	340	59,269
Accumulated amortization and write-downs Jan 1, 2022	35	28,760	8,092		36,886
Accumulated amortization of decreases and transfers		-4,808			-4,808
Amortization and write-downs for the financial year	20	1,742	3,602		5,364
Accumulated amortization and write-downs Dec 31, 2022	55	25,693	11,694		37,442
Carrying value Dec 31, 2022	33	12,787	8,667	340	21,827

Intangible assets 2021

EUR thousand	Goodwill	Intangible rights	Other intangible assets	Advance payments and intangible assets in progress	Total
Acquisition cost Jan 1, 2021	88	29,406	20,361	321	50,175
Increases		205		83	287
Decreases		-71			-71
Transfers between items		151		-151	-
Acquisition cost Dec 31, 2021	88	29,691	20,361	253	50,392
Accumulated amortization and write-downs Jan 1, 2021	15	28,264	4,490		32,769
Accumulated amortization of decreases and transfers		-71			-71
Amortization and write-downs for the financial year	20	566	3,602		4,188
Accumulated amortization and write-downs Dec 31, 2021	35	28,760	8,092		36,886
Carrying value Dec 31, 2021	53	931	12,269	253	13,506



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Property, plant and equipment 2022

EUR thousand	Land and waters	Buildings	Machinery and equipment	Other tangible assets	Advance payments and construction in progress	Total
Acquisition cost Jan 1, 2022	2,820	77,376	64,641	74	8,354	153,265
Increases		791	3,496		5,425	9,712
Decreases		-2,590	-5,019			-7,609
Transfers between items		1,102	4,612		-5,858	-144
Acquisition cost Dec 31, 2022	2,820	76,678	67,730	74	7,921	155,224
Accumulated depreciation and write-downs Jan 1, 2022		39,951	43,165			83,116
Accumulated depreciation of decreases and transfers		-3,085	-4,523			-7,608
Depreciation for the financial year		2,878	5,319			8,198
Write-downs		16	25			41
Accumulated depreciation and write-downs Dec 31, 2022		39,760	43,987			83,747
Revaluation	84	5,618				5,702
Carrying value Dec 31, 2022	2,905	42,536	23,743	74	7,921	77,179

On December 31, 2022, the carrying amount of machinery and equipment used in production was EUR 15.9 (14.7) million.



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Property, plant and equipment 2021

EUR thousand	Land and waters	Buildings	Machinery and equipment	Other tangible assets	Advance payments and construction in progress	Total
Acquisition cost Jan 1, 2021	2,820	73,006	57,766	74	7,321	140,987
Increases		4,104	5,043		6,460	15,607
Decreases		-358	-2,797			-3,156
Transfers between items		625	4,628		-5,427	-174
Acquisition cost Dec 31, 2021	2,820	77,376	64,641	74	8,354	153,265
Accumulated depreciation and write-downs Jan 1, 2021		37,566	41,246			78,812
Accumulated depreciation of decreases and transfers		-358	-2,766			-3,124
Depreciation for the financial year		2,743	4,663			7,406
Write-downs			22			22
Accumulated depreciation and write-downs Dec 31, 2021		39,951	43,165			83,116
Revaluation	84	5,618				5,702
Carrying value Dec 31, 2021	2,905	43,043	21,475	74	8,354	75,851



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Investments 2022

EUR thousand	Holdings in group undertakings	Other shares and holdings	Total
Acquisition cost Jan 1, 2022	74,481	100	74,581
Increases	170	1	171
Carrying value Dec 31, 2022	74,651	101	74,752

Investments 2021

EUR thousand	Holdings in group undertakings	Other shares and holdings	Total
Acquisition cost Jan 1, 2021	74,218	100	74,318
Increases	263	-	263
Carrying value Dec 31, 2021	74,481	100	74,581

9. OTHER RECEIVABLES

EUR thousand	2022	2021
Advances paid	422	690
Value added tax receivables	3,008	2,519
Grants	1,787	1,817
Other	84	22
Total	5,301	5,049

10. DEFERRED ASSETS

EUR thousand	2022	2021
Tax receivables	1,385	1,881
Deferred revenue	11,684	18,949
Derivative financial contracts	948	44
Other deferred assets	4,853	4,489
Total	18,869	25,363

Derivative financial contracts

EUR million	2022	2021
Nominal value of derivative financial contracts made to hedge against exchange rate risk		
Foreign exchange forward contracts	38.3	35.2
Nominal value, total	38.3	35.2

Nominal value of derivative financial contracts in currencies	2022		2021	
	Currency million	EUR million	Currency million	EUR million
USD	27.0	25.1	22.0	18.5
CNH	30.0	4.2	30.0	3.9
HRK	-	-	22.5	3.0
JPY	350.0	2.5	300.0	2.3
PLN	9.0	1.9	18.0	3.9
SEK	25.0	2.4	32.5	3.1
CAD	3.0	2.2	-	-
SGD	-	-	1.0	0.6
Total		38.3		35.2



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Maturity of derivative financial contracts

EUR million	2022	2021
Less than 90 days	11.7	16.4
Over 90 days and less than 120 days	5.4	4.2
Over 120 days and less than 180 days	9.5	7.7
Over 180 days and less than 365 days	10.6	5.4
Over 365 days and less than 545 days	1.1	1.5
Total	38.3	35.2

Fair value of derivative financial contracts made to hedge against exchange rate risk

EUR million	2022	2021
Fair values of derivative financial contracts, assets	1.0	0.0
Fair values of derivative financial contracts, liabilities	0.5	1.3

11. DEFERRED TAX ASSETS AND LIABILITIES

Deferred tax assets

EUR thousand	2022	2021
Share-based payments	1,661	2,542
Provisions	326	225
Credit loss allowance	18	-
Total	2,006	2,767

Deferred tax assets and liabilities have not been recognized in the parent company's balance sheet. Deferred tax liabilities arising from revaluation and depreciation difference have not been taken into account. If realized, the tax effect of depreciation difference would be EUR 0.4 million and from revaluation the tax effect would be EUR 1.1 million at the current tax rate of 20%. Other deferred tax liabilities were not material.

12. PROVISIONS

Non-current provisions

EUR thousand	2022	2021
Provisions Jan 1	97	97
Decreases	-97	-
Provisions Dec 31	-	97

Current provisions

EUR thousand	2022	2021
Provisions Jan 1	1,026	914
Increases	694	158
Decreases	-90	-46
Provisions Dec 31	1,631	1,026

In 2022 and 2021 provisions related to warranties and other contractual provisions.

13. SHAREHOLDERS' EQUITY

The parent company's shares are divided into series K shares and series A shares. Vaisala Corporation has 36,436,728 shares, of which 6,731,092 are series K shares and 29,705,636 series A shares. The shares do not have nominal value. The series K shares and A shares are differentiated by the fact that each series K share entitles its owner to twenty (20) votes at General Meeting of Shareholders while each series A share entitles its owner to one (1) vote. The shares have the same rights to dividend. Series K shares can be converted to series A shares according to specific rules stated in the Articles of Association.

On December 31, 2022 and 2021, the fully paid and registered share capital of Vaisala Corporation amounted to EUR 7,660,807.86.



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Shareholders' equity

EUR thousand	2022	2021
Share capital Jan 1	7,661	7,661
Share capital Dec 31	7,661	7,661
Fund of invested non-restricted equity Jan 1	422	422
Fund of invested non-restricted equity Dec 31	422	422
Retained earnings Jan 1	166,019	172,076
Dividend paid	-24,635	-22,022
Distribution of treasury shares	1,368	1,652
Loss on transfer of treasury shares	-2,695	-671
Retained earnings Dec 31	140,056	151,036
Result for the financial year	26,966	14,983
Total equity	175,105	174,102

Distributable funds

EUR thousand	2022	2021
Retained earnings	140,056	151,036
Result for the financial year	26,966	14,983
Fund of invested non-restricted equity	422	422
Total	167,444	166,441

For the financial year 2021 a dividend of EUR 0.68 per share was paid, a total of EUR 24.6 million.

14. OTHER NON-CURRENT AND CURRENT LIABILITIES

On December 31, 2022, the parent company had other non-current non-interest-bearing liabilities in total of EUR 0.0 (0.0) million. At the end of the financial year, the parent company had no non-current liabilities that will mature after five years.

On December 31, 2022, other current liabilities were EUR 2.7 (11.8) million. They included contingent consideration relating to prior acquisitions in total of EUR 0.1 (5.6) million. In the financial year 2022, no contingent consideration liability was recognized as income or expense (2021: EUR 4.5 million was recognized as expense) based on the financial performance after the acquisition and based on the estimated future performance. A contingent consideration liability relating to prior acquisitions totaling EUR 5.6 (1.0) million was paid in 2022.

15. LOANS FROM FINANCIAL INSTITUTIONS

Vaisala has a EUR 40.0 million unsecured term loan which was signed on May 25, 2020. The loan matures on May 25, 2023, and has a financial covenant (gearing), which is tested semi-annually. On December 31, 2022, Vaisala was in compliance with the covenant. This facility will be used for refinancing of existing indebtedness as well as for general corporate and working capital purposes. The management plans to refinance the term loan with maturity date in 2023.

In addition, Vaisala has a domestic commercial paper program amounting to EUR 150 million, of which EUR 12.5 (0.0) million has been withdrawn at the end of reporting period. Consequently, the parent company had interest-bearing liabilities totaling EUR 52.5 (40.1) million on December 31, 2022. Vaisala has no loans that would mature after five years or more. In addition, Vaisala has a EUR 50 million unsecured revolving credit facility, which was signed on October 5, 2018, and which was undrawn at the end of reporting period, as year before. The committed credit facility agreement matures on October 5, 2023, and it has no financial covenants. The management plans to refinance the revolving credit facility with maturity date in 2023.



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16. ACCRUED EXPENSES AND DEFERRED INCOME

EUR thousand	2022	2021
Personnel expense accruals	30,192	32,179
Deferred revenue	12,822	10,345
Derivative financial contracts	538	1,289
Direct tax accruals	62	-
Other accrued expenses and deferred income	6,008	6,449
Total	49,621	50,262

Notes related to derivative financial contracts are presented in the note to the financial statements 10, Deferred assets.

17. RECEIVABLES AND LIABILITIES FROM OTHER COMPANIES IN VAISALA GROUP

EUR thousand	2022	2021
Reveivables		
Trade receivables	27,080	20,992
Other receivables	32	8
Prepaid expenses and accrued income	1,850	2,343
Total receivables	28,962	23,344
Liabilities		
Current loans	31,837	35,165
Trade payables	1,553	1,447
Other liabilities	-	1
Accrued expenses and deferred income	3,583	1,921
Total liabilities	36,972	38,534

18. CONTINGENT LIABILITIES AND PLEDGES GIVEN

Contingent liabilities and pledges given

EUR thousand	2022	2021
For own debt or liability		
Bank guarantees issued for obligations	11,980	14,550
For group companies		
Guarantees	540	211
Leasing commitments		
Payable during the following financial year	398	192
Payable later	1,095	70
Total leasing liabilities	1,493	262
Total contingent liabilities and pledges given	14,013	15,023

Investment commitments

On December 31, 2022, the parent company had commitments related to intangible and tangible assets for EUR 3 (3) million.

Purchase commitments

On December 31, 2022, the parent company had purchase commitments totaling EUR 25 (24) million.

19. AUDITOR'S FEES

EUR thousand	2022	2021
Audit	332	326
Statements	46	28
Tax advice	28	-
Other fees	113	48
Total	520	402

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Signing of the Board of Directors' report and financial statements

Vantaa, February 15, 2023

Petri Castrén

Antti Jääskeläinen

Petra Lundström

Jukka Rinnevaara

Kaarina Ståhlberg

Tuomas Syrjänen

Raimo Voipio
Vice Chair of the Board

Ville Voipio
Chair of the Board

Kai Öistämö
President and CEO



Auditor's report

(Translation of the Finnish Original)

To the Annual General Meeting of Vaisala Oyj

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Vaisala Oyj (business identity code 0124416-2) for the year ended 31 December 2022. The financial statements comprise the consolidated income statement, statement of comprehensive income, balance sheet, statement of cash flows, statement of changes in equity and notes, including a summary of significant accounting policies, as well as the parent company's income statement, balance sheet, statement of cash flows and notes. In our opinion

- the consolidated financial statements give a true and fair view of the group's financial position, financial performance and cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU.
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

Our opinion is consistent with the additional report submitted to the Audit Committee.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report.

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

In our best knowledge and understanding, the non-audit services that we have provided to the parent company and group companies are in compliance with laws and regulations applicable in Finland regarding these services, and we have not provided any prohibited non-audit services referred to in Article 5(1) of regulation (EU) 537/2014. The non-audit services that we have provided have been disclosed in note 29 to the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have also addressed the risk of management override of internal controls. This included consideration of whether there was evidence of management bias that represented a risk of material misstatement due to fraud.



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Key audit matter

Revenue recognition of product and project sales

Refer to Notes 1, 2 and 3

- Vaisala group net sales EUR 514,2 million consists of product, service and project sales. Product and project sales account for EUR 449,0 million of the net sales.
- Revenue from the product sales is recognized at a point in time when the control is transferred to the customer. Large number of sales contracts and different nature of terms of contracts increase the risk of misstatement in timing of revenue recognition.
- Revenue for projects is recognized over time using percentage of completion method. Progress is measured by cost-to-cost method, comparing incurred costs and forecasted costs.
- Revenue recognition over time under IFRS 15 requires management estimate related to cost throughout the project delivery.
- This matter is a significant risk of material misstatement referred to in EU Regulation No 537/241, point (c) of Article 10(2).

Inventory valuation

Refer to Note 13

- Vaisala consolidated balance sheet includes inventory amounting to EUR 61,6 million. Inventory valuation is associated with the excess and obsolescence risk.
- As disclosed in the note 13 Vaisala has recognized write-offs and excess and obsolescence allowances for slow moving and obsolete inventory.
- Estimates and judgment are required in determining the value of the allowance for excess and obsolete inventory. Management analyses estimates of demand and determines allowance for excess and obsolete inventory.
- This matter is a significant risk of material misstatement referred to in EU Regulation No 537/241, point (c) of Article 10(2).

How our audit addressed the key audit matter

- Our audit procedures included an assessment of revenue recognition process and assessment of controls relating to timing of revenue recognition.
- We have reviewed Vaisala's accounting manual and principles regarding different types of revenue contracts to evaluate, whether they are in line with IFRS 15 accounting principles.
- We have audited the accurate timing and the amount of revenue arising from the sales of products and from the projects.
- As a part of our audit procedures covering the revenue recognition principles of product sales, we have compared the sales transactions recorded in accounting to the related sales agreements and delivery documentation.
- Regarding to the projects we have compared the project calculations to the existing agreements and to the possible amendments to the agreements.
- We have reviewed the project estimates prepared and reviewed by the management as well as the realization of these estimates and assessed the level of completion based on the documentation received.
- We have evaluated the appropriateness of the presentation in the financial statements.

- Our audit procedures included an assessment of inventory process and assessment of controls relating inventory valuation.
- We have assessed the valuation principles used by the group and analyzed the slow moving inventory to be able to assure the accuracy of obsolescence provision accounting.
- We have audited inventory valuation by comparing the accounting values to the acquisition and manufacturing costs as well as to the net realizable values to evaluate that value of inventory do not exceed the lower of the acquisition and manufacturing costs or net realizable value.
- We have assessed management judgements and estimates regarding the future life cycle and demand of products.
- We have evaluated the appropriateness of the presentation in the financial statements.



Responsibilities of the Board of Directors and President and CEO for the Financial Statements

The Board of Directors and President and CEO are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and President and CEO are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and President and CEO are responsible for assessing the parent company's and the group's ability to continue as going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or cease operations, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of Financial Statements

Our objectives are to obtain reasonable assurance on whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and Chief Executive Officer's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the parent company or the group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.



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Other Reporting Requirements

Information on our audit engagement

We were first appointed as auditors by the Annual General Meeting on March 26, 2014 and our appointment represents a total period of uninterrupted engagement of 9 years.

Other information

The Board of Directors and President and CEO are responsible for the other information. The other information comprises the Board of Directors' Report and the information included in the Annual Report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to the Board of Directors' Report, our responsibility also includes considering whether the Board of Directors' Report has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the Board of Directors' Report is consistent with the information in the financial statements and the Board of Directors' Report has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed we conclude that there is a material misstatement of the other information, we are required to report that fact. We have nothing to report in this regard.

Other opinions

We support that the financial statements should be adopted. The proposal by the Board of Directors regarding the treatment of distributable funds is in compliance with the Limited Liability Companies Act. We support that the Board of Directors of the parent company and the President and CEO should be discharged from liability for the financial period audited by us.

Vantaa, February 15, 2023

Deloitte Oy
Audit Firm

Reeta Virolainen
Authorised Public Accountant (KHT)



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Financial key figures

EUR million	2022	2021	2020	2019	2018
Net sales	514.2	437.9	379.5	403.6	348.8
Exports and international operations, %	98.0	98.0	97.0	98.0	98.0
Gross profit, %	54.8	55.2	56.1	54.8	53.1
Operating result	62.5	50.1	44.8	41.1	38.9
% of net sales	12.2	11.5	11.8	10.2	11.1
Result before taxes	59.6	48.3	41.3	40.2	37.5
% of net sales	11.6	11.0	10.9	10.0	10.8
Result for the financial year	45.0	39.5	32.8	33.6	29.5
% of net sales	8.8	9.0	8.7	8.3	8.5
R&D expenditure	62.4	55.3	53.2	52.8	45.4
% of net sales	12.1	12.6	14.0	13.1	13.0
Depreciation, amortization and impairment	23.6	21.6	21.1	23.5	12.1

EUR million	2022	2021	2020	2019	2018
Cash and cash equivalents	55.5	77.9	45.4	56.4	72.7
Equity	250.7	230.3	205.5	198.3	182.9
Statement of financial position total	439.2	408.0	351.8	361.5	334.4
Return on equity, %	18.7	18.1	16.3	17.7	16.0
Solvency ratio, %	58.2	57.2	59.0	55.7	55.6
Interest-bearing liabilities	63.4	50.2	57.0	51.5	40.5
Gearing, %	3.2	-12.0	5.7	-2.4	-17.6
Net working capital	82.4	44.5	61.5	40.4	25.9
Capital expenditure	13.7	19.2	31.0	26.8	14.5
% of net sales	2.7	4.4	8.2	6.6	4.2
Cash flow from operating activities	29.8	80.0	41.0	40.8	48.3
Orders received	533.7	455.2	382.8	419.4	334.2
Order book at the end of the financial year	181.5	160.0	137.8	139.0	120.6
Personnel expenses	190.4	174.3	154.1	157.7	133.6
Average personnel	2,141	1,967	*1,929	1,829	1,678
Personnel at the end of financial year	2,235	1,979	*1,939	1,837	1,816

* Number of employees includes persons in long-time absence as of January 1, 2021. Year 2020 has been adjusted accordingly.



Key figure graphs

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Share key figures

EUR	2022	2021	2020	2019	2018
Earnings per share (EPS)	1.24	1.08	0.91	0.94	0.82
Diluted earnings per share	1.24	1.07	0.91	0.93	0.81
Cash flow from operating activities per share	0.82	2.21	1.14	1.14	1.35
Equity per share	6.92	6.36	5.70	5.52	5.11
Dividend per share	*0.72	0.68	0.61	0.61	0.58
Dividend per earnings, %	**57.9	62.9	66.9	65.2	70.7
Effective dividend yield, %	**1.83	1.28	1.51	1.92	3.51
Price/earnings (P/E)	31.71	49.31	44.34	33.78	20.12
Series A share price development					
highest price	54.40	55.80	42.50	32.80	23.90
lowest price	36.15	30.00	21.65	15.95	15.85
volume weighted average price	43.03	39.45	32.58	23.56	20.14
closing price	39.45	53.30	40.35	31.75	16.50

	2022	2021	2020	2019	2018
Market capitalization at the end of financial year***, MEUR	1,429.2	1,924.2	1,452.6	1,139.2	590.5
A shares traded					
pieces	2,384,806	2,939,088	3,852,297	3,442,439	3,710,610
% of total series	8.0	9.9	13.0	11.6	12.5
Number of shares, pieces					
A shares	29,705,636	29,705,636	29,705,636	29,685,330	29,658,066
K shares	6,731,092	6,731,092	6,731,092	6,751,398	6,778,662
Outstanding shares at the end of financial year***, pieces					
	36,228,241	36,101,073	35,999,689	35,880,739	35,790,092

* Proposal by the Board of Directors

** Calculated according to the proposal by the Board of Directors

*** Including series A and K shares, excluding treasury shares. Series K shares are valued using the closing price for the series A share on the last trading day of December.

The share issue without payment approved by Vaisala's Annual General Meeting on April 10, 2018, doubled the total number of series K and A shares. All share related figures in this Board of Directors' Report have been adjusted to reflect the increased number of shares.

Trading information is based on Nasdaq Helsinki Ltd. statistics.



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Calculation of key figures

Earnings/share, EUR	=	$\frac{\text{Result for the period +/- non-controlling interest}}{\text{Average number of shares outstanding}}$
Cash flow from business operations/share, EUR	=	$\frac{\text{Cash flow from business operations}}{\text{Number of shares outstanding at the end of the period}}$
Equity/share, EUR	=	$\frac{\text{Total equity attributable to owners of parent company}}{\text{Number of shares outstanding at the end of the period}}$
Dividend/share, EUR	=	$\frac{\text{Dividend}}{\text{Number of shares outstanding at the end of the period}}$
Dividend/earnings, %	=	$\frac{\text{Dividend}}{\text{Result for the period +/- non-controlling interest}} \times 100$
Effective dividend yield, %	=	$\frac{\text{Dividend / share}}{\text{Closing price for the series A share at the end of the period}} \times 100$
Price/earnings (P/E)	=	$\frac{\text{Closing price for the series A share at the end of the period}}{\text{Earnings / share}}$
Market capitalization, MEUR	=	Closing price for the series A share x number of shares outstanding

Alternative performance measures

Vaisala presents in its financial reporting alternative performance measures, which describe businesses' financial performance and its development as well as investments and return on equity. In addition to accounting measures which are defined or specified in IFRS, alternative performance measures complement and explain presented information. Vaisala presents in its financial reporting the following alternative performance measures:

Net sales with comparable exchange rates	=	Net sales converted to euros with exchange rates used during the comparison period
Gross margin, %	=	$\frac{\text{Net sales} - \text{Cost of sales}}{\text{Net sales}} \times 100$
Operating expenses	=	Sales, marketing and administrative costs + research and development costs
Operating result	=	Result before income taxes, financial income and expenses, and share of result in associated company as presented in Consolidated Statement of Income. Operating result describes profitability and development of business areas' performance.
Result before taxes	=	Result before taxes as presented in Consolidated Statement of Income.
Return on equity (ROE), %	=	$\frac{\text{Result for the period}}{\text{Total equity (average)}} \times 100$
Solvency ratio, %	=	$\frac{\text{Total equity}}{\text{Statement of financial position total} - \text{advances received}} \times 100$
Investments	=	Gross investments in non-current intangible assets as well as property, plant and equipment
Order book	=	Performance obligations that were unsatisfied or partially unsatisfied and undelivered part the lease agreements at the end of the period
Gearing, %	=	$\frac{\text{Interest-bearing liabilities} - \text{cash and cash equivalents}}{\text{Total equity}} \times 100$
Net working capital	=	Inventories + non-interest-bearing receivables (trade receivables + contract assets and other non-interest-bearing receivables) - non-interest-bearing liabilities (trade payables + contract liabilities and other accrued revenue + other non-interest-bearing liabilities)



Contacts

Kaarina Muurinen

Chief Financial Officer

kaarina.muurinen@vaisala.com**Paula Liimatta**

Business Controller and Head of Investor Relations

paula.liimatta@vaisala.com**Vaisala Corporation**

P.O. Box 26

FI-00421 Helsinki, Finland

vaisala.com**Nina Eklund**

Director, Corporate Communications and Brand

nina.eklund@vaisala.com**Marjo Hietapuro**

Sustainability Manager

marjo.hietapuro@vaisala.com**Follow us**

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[vaisala.com](https://www.vaisala.com)

Vaisala Corporation
P.O. Box 26
FI-00421 Helsinki, Finland
B211913EN