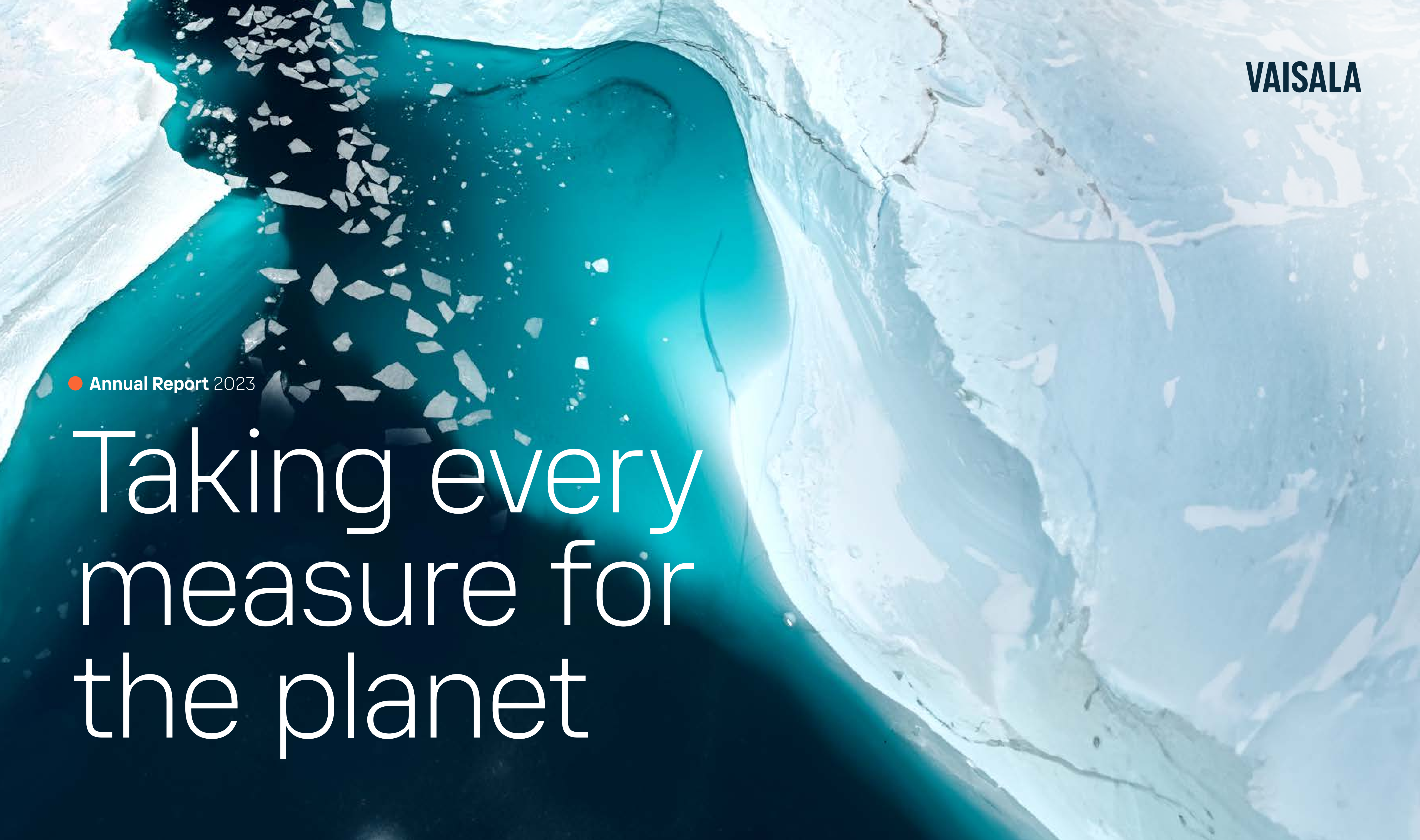
VAISALA

Annual Report 2023

Taking every measure for the planet



For close to a century, Vaisala has been building world-leading measurement technologies. Growing from one entrepreneur to a global team of more than 2,300 experts. Measuring in over 150 countries and on two planets. One of these planets is our home, the planet Earth. And it is facing a critical challenge: climate change.

To elevate our commitment to the planet, we have refined our purpose.

Our new purpose is

Taking every measure for the planet.

Furthermore, to show our future direction, we are refreshing our brand — unveiled for the first time in this Annual Report.

We invite you to explore our year 2023 and to join the journey of enabling data-driven climate action that our planet needs.

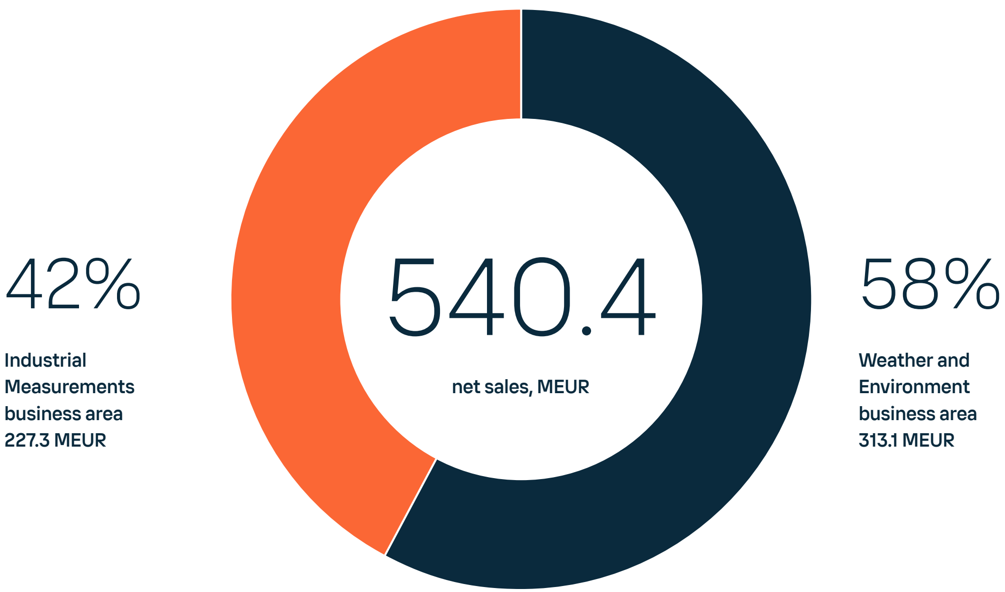
Contents

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 eighth 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 Chapter 3 a of the Finnish Accounting Act is presented in the Sustainable business practices section as well as in the chapters Business model in Our business section, Dashboard and EU Taxonomy on Sustainable Finance in the Creating value section, and Risk management in the Governance section.

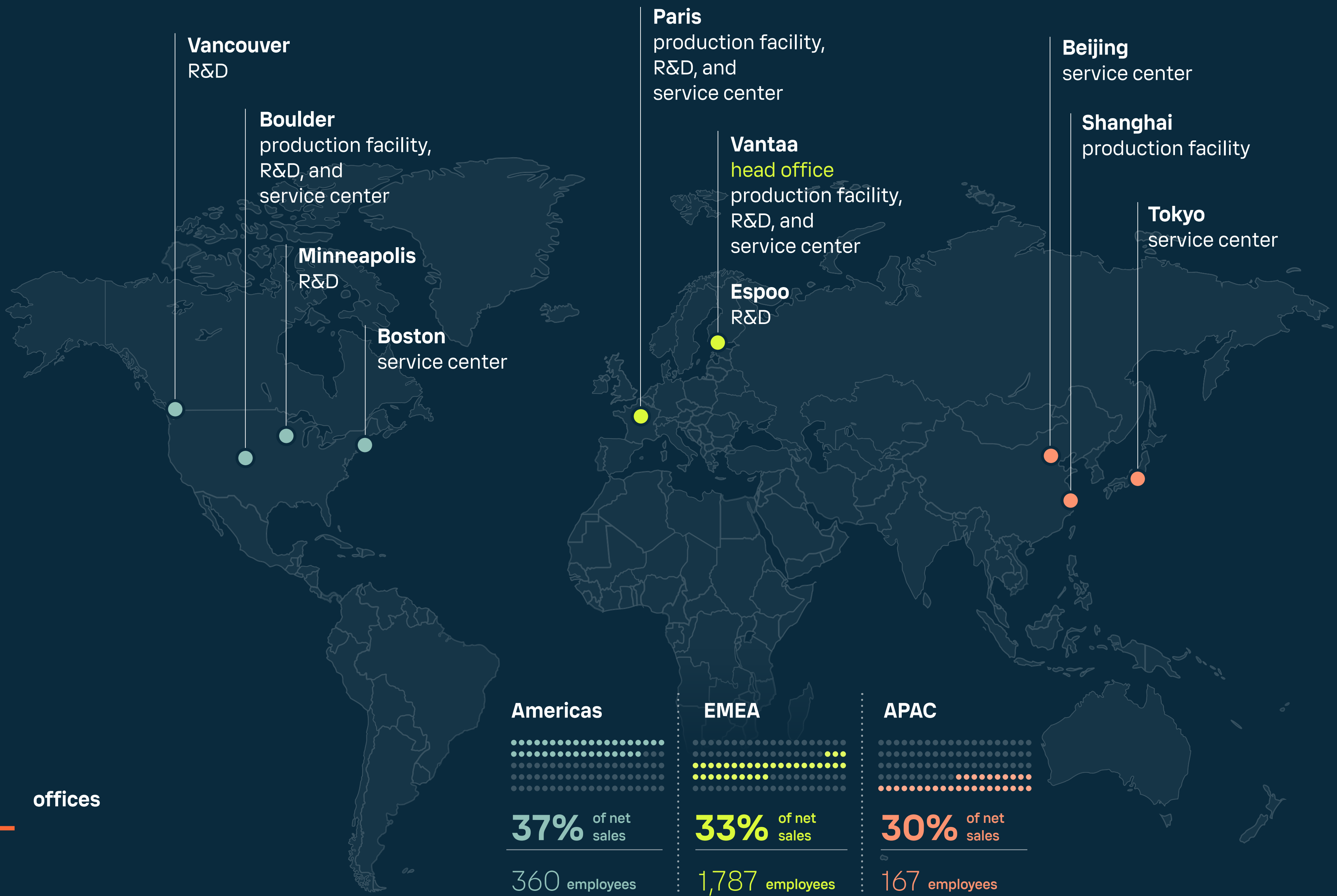
Year 2023 ended with record-high order book



Key figures for 2023

66.6 operating result, MEUR	172.5 order book on December 31, 2023, MEUR
R&D 12.5% of net sales	100% renewable electricity
2,300+ employees	4.1/5 employee engagement rate

Operating all over the world



Americas
37% of net sales
360 employees

EMEA
33% of net sales
1,787 employees

APAC
30% of net sales
167 employees

17 **countries**

24 **offices**

Elevating our commitment to climate action

The global turbulence that marked 2022 continued in 2023. The environment included uncertainty for Vaisala, our customers, and the economy in general. This was especially visible in our Industrial Measurements business. Nevertheless, Vaisala showed resilience and adapted well in a fast-changing and unpredictable environment.

While the current market situation is difficult, our planet has an even bigger challenge to conquer. The Earth's temperature is already up by 1.2°C and the 1.5°C target of the Paris Climate Agreement is slipping out of reach. Unless we all act, climate change will continue to harm the environment and add social as well as economic inequalities worldwide.

Reliable measurement instruments and intelligence – the very core of Vaisala – play a crucial role in helping us understand, mitigate, and adapt to climate change. Our world needs to unite to speed up efforts to reduce emissions, especially in energy,


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

industry, and transportation. The COP28 commitment in December 2023 to transition away from fossil fuels is an important step to continue to build on.

All in for the planet through new purpose and brand

For close to 90 years, Vaisala has provided the cornerstone for understanding the weather and climate: reliable data. For decades, we have enabled our industrial customers to understand and improve their processes and make a mark on a more sustainable, resource-efficient future.

Our purpose has been a testament of our commitment to our customers and the planet. However, the alarming state of the planet calls for us to take an even stronger and more active role. Therefore, we worked on refining our purpose during 2023.

Our new purpose is *Taking every measure for the planet*. Maintaining the essence of our reason for being, our new purpose emphasizes our critical role in enabling data-driven climate action and shows our commitment to sustainability. With climate action and technology leadership at our core, we aim to reinforce our positive impact on the challenges of both our customers and the planet, and to drive sustainable and scalable growth.

To show our future direction, we are also refreshing our brand, which is revealed in connection with this Annual Report. Our new brand identity builds upon the strengths of Vaisala's present and the opportunities of the future. You will still recognize the reliable partner dedicated to excellence, quality, and technology leadership – but with an elevated and more dynamic profile, committed to building a more sustainable future.

Expertise from science to AI

To enable climate action, we combine deep customer understanding with science-based technology leadership. Our expertise spans from measurement sensors and instruments to the latest artificial intelligence and machine learning technologies. In 2023, our investments in research and development were 12.5% of our net sales.

During the year, we launched several new products. The year started with the launch of Polaris™, an optical inline process refractometer series for industrial liquid measurements. The Polaris platform optimizes manufacturing processes in various industries. It helps to improve product quality, enhance productivity, and save resources, energy, and time.

We also continued developing our subscription-based Vaisala Xweather data and software offering, with new self-serve subscription data sets and mapping APIs for lightning, maritime, renewable energy, road weather, and air quality. Together with the automotive industry, we continued to drive innovation in weather-aware assisted and ultimately autonomous driving.

Furthermore, we keep working to make our own products as sustainable as possible. In 2023, we introduced new radiosonde models that reduce the plastic content in the product by 66%, helping to reduce plastic waste originating from sounding operations.

The year 2023 also marked 50 years of our HUMICAP® innovation, the standard for humidity measurements in various industries worldwide. HUMICAP's reliability and precision have made it a foundational element of industrial measurements. It has allowed Vaisala to advance in its field and achieve the market leadership it has today.

Reducing our carbon footprint with science-based targets

Our commitment to the planet covers the sustainability of our solutions, operations, and the entire value chain worldwide. We have integrated the United Nation's Sustainable Development Goals (SDGs) both to our strategic planning and to the development of new products for climate action. We continue our commitment to the UN Global Compact initiative and its 10 principles regarding human rights, labor standards, environment, and anti-corruption.

In 2023, we finalized our near-term science-based targets to reduce greenhouse gas emissions by 2030. We submitted our targets for validation by the Science-Based Targets initiative (SBTi) in September. Our main opportunity to lower our footprint is by decreasing indirect Scope 3 emissions, which represent over 99% of Vaisala's total emissions. We expect that SBTi will approve the targets in early 2024.

Together we thrive

We see it as vital to be a preferred employer for talented and engaged employees with diverse perspectives and backgrounds. We actively track employee engagement. In our annual Voice of People survey, 85% of our employees state that they are proud to work for Vaisala and our employee satisfaction score is 4.1/5. We are immensely grateful for the engagement and dedication, and are committed to improving our employee development and well-being further.

Moreover, we set our new Diversity, Equity, and Inclusion (DEI) strategy in 2022. This year, we have continued with our DEI work by building awareness, establishing Employee Resource Groups, and following quantitative key performance indicators.

To make an impact on the planet, we all need to work together – our employees, our customers, partners, and other stakeholders. We want to thank all of you for the collaboration in 2023. Let's together continue to write a future success story where our joint success and the well-being of our planet go hand in hand.

Ville Voipio
Chair of the Board

Kai Öistämö
President and CEO

Highlights 2023

Q1

We introduced a new optical inline process refractometer series Polaris™, a pioneering solution for industrial liquid measurements.

We improved our Helideck Monitoring System with a new alerting feature that uses real-time Vaisala Xweather lightning data.

We added portability to our Indigo product family with Indigo80 Handheld Indicator, which allows our customers to use our Indigo compatible probes in different settings and applications.

We responded to the growing demand for energy efficiency and sustainability in buildings by launching the new Vaisala GMD110 carbon dioxide transmitter.

Q2

We launched the most comprehensive weather station for the renewable energy industry, the Automatic Weather Station AWS810 Solar Edition, to help solar power plant operators optimize their efficiency and performance.

We announced the launch of our new industrial transmitter Indigo300, a part of our innovative Indigo modular product line.

We introduced the world’s first continuous and autonomous water vapor monitoring solution created for observation networks, the DIAL Atmospheric Profiler DA10.

We were delighted to welcome Anne Jalkala, our Chief Sustainability and Strategy Officer and Heli Lindfors, CFO, to the Vaisala Leadership Team as of May 2023.

Q3

We took the next steps in our journey of increasing climate action and reducing emissions by finalizing our near-term science-based targets and submitting them for validation by the Science-Based Targets initiative (SBTi).

Vaisala Xweather introduced new self-serve subscription data sets and mapping APIs for air quality, lightning, maritime, renewable energy, and road weather.

We launched the new Vaisala Radiosonde RS41 E-models, which introduce new materials biodegradable in natural environment and 66% less plastic.

Q4

We celebrated the 50th anniversary of the HUMICAP® technology. Since its development in 1973 by Tuomo Suntola, HUMICAP® has become the standard for humidity measurements in various industries worldwide.

We launched Beam Weather Station, a flexible and robust monitoring station for hyperlocal weather and air quality needs.

We signed a contract with the Directorate General of Civil Aviation for airport surface observation system and airport meteorological system to Kuwait International Airport.

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Our business

Global megatrends drive our innovation

Transformational megatrends provide a source of innovation and opportunities for growth. We develop solutions to address the pressing societal, environmental, and industrial needs and challenges posed by these megatrends together with our customers. We are committed to creating innovative solutions that empower people and communities to take data-driven climate action.

Climate change – more than a megatrend

Climate change is humanity's most pressing challenge. It is a key driver of extreme weather, leading to increased temperatures, rising sea levels, and significant health concerns. It also intensifies challenges for already vulnerable communities. Reliable measurement instruments and intelligence play a vital role in understanding, mitigating, and adapting to these issues.

Climate change connects to other transformational megatrends which affect nations, businesses, societies, and individuals worldwide: the shift towards sustainable energy and decarbonization, the rise of artificial intelligence and the need for process optimization, and the focus on health and well-being. These megatrends reshape industry operations, energy production, distribution, and consumption, as well as how we interact with our environment. They also drive the demand for our solutions. Together with our customers, we are dedicated to finding solutions that tackle the complex demands of these widespread changes.

CASE

Improving the energy efficiency of Fortum district heating system

Weather is critical in district heating, and errors in forecasts can lead to unnecessary costs and emissions. Fortum, one of the cleanest energy producers in Europe, was able to optimize the heating supply temperature more precisely than before in Espoo, Finland, by switching from general weather information to observation-enhanced forecasts through Vaisala Xweather's Xcast API. This new solution reduced large errors (2.5+°C) by 59% in Fortum's 24-hour forecast by utilizing a unique combination of Vaisala's ML/AI weather forecasting and observation technologies deployed to the customer's area of interest.

Energy transition and decarbonization

The global energy shift from fossil fuels to renewable sources like wind, solar, biogas, and hydrogen requires careful site selection, real-time forecasting capabilities, and continuous monitoring to ensure stable production. Our instruments and intelligence help customers monitor their power plants and infrastructure in real time and enhance the output of these variable sources.

Decarbonization, the reduction of carbon emissions for a CO_2-free economy, is achieved, for instance, through electrification, energy efficiency, and carbon capture and storage. We aid in these areas by providing instruments and systems for energy efficiency and electrification. Our instruments are used, for example, to monitor the dew point in the lithium-ion battery manufacturing process, improving quality, sustainability, and cost-efficiency. They are also used in carbon capture applications to measure the inlet and outlet CO_2 for process and efficiency optimization, as well as in carbon utilization applications such as measuring the CO_2 concentration to optimize the mineralization of carbon dioxide into concrete.

AI and process optimization

Artificial intelligence and process optimization are reshaping industries, enabling smarter decisions, automating tasks, and contributing to limiting climate change.

Reliable and accurate data is essential for AI and process optimization. Our instruments provide precise data even in the most demanding environments. They are used for diverse applications, such as collecting data points from various locations for data center environmental monitoring, weather forecasting, and winter maintenance optimization. Vaisala Xweather's customers use weather and environmental data to optimize their processes.

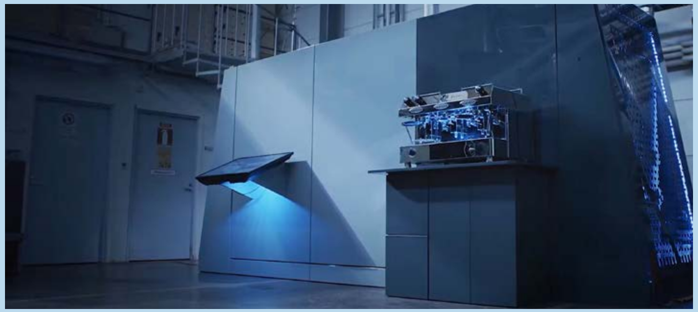
The growing infrastructure requirements for AI are driving the demand for computational power and data storage and thus the growth of semiconductor and data center markets. Our instruments enable high-quality electronic manufacturing and data center efficiency. For instance, semiconductor manufacturers use Vaisala's moisture, temperature, and other monitoring instruments to achieve the required quality standards and optimal production output. Data center operators use our temperature and humidity measurement instruments for energy optimization.

Health and well-being

Vaisala's solutions play a significant role in people's growing health consciousness, stricter pharmaceutical safety requirements, and climate change impacts. Our solutions monitor the development, manufacturing, and supply chains of pharmaceutical drugs and vaccines, as well as the bio-decontamination of spaces and equipment. We also provide accurate and reliable condition-monitoring solutions that are crucial in labs and hospitals, particularly in cold storage and incubators.

Our technologies also support people's health and well-being by monitoring indoor air quality in public buildings and offices. Outdoors, our ambient air quality systems monitor urban environments and provide data for better decision-making.

As extreme weather events increase due to climate change, reliable measurements and observations become critical because people face heightened risks to their health and well-being. Our solutions enable societies and institutions to build capabilities to understand, mitigate, and resiliently adapt to changing environments with environmental observations, forecasting, and early warning systems.



CASE

Soletair Power uses Vaisala's instruments for its building-integrated carbon capture technology

Soletair Power's unique solution for extracting CO_2 from the air is key in several carbon net zero and negative building projects. The company chose Vaisala's instruments due to their accuracy, long-term stability, and overall reliability to measure important parameters such as CO_2 concentration, temperature, and humidity. The goal of the capture system, which traps CO_2 from the air through temperature vacuum swing adsorption, is to reduce a building's energy consumption while maintaining the same level of air quality inside.

Refining our purpose and strategic priorities

Vaisala is at the intersection of several global megatrends. This gives us an excellent position in the market, drives our strategy work, and offers opportunities for sustainable growth and innovation.

With climate action and technology leadership at our core, we refined our purpose and strategic priorities during 2023. We aim to reinforce our positive impact on the challenges of both our customers and the planet, and to drive sustainable growth.

We adjusted our purpose to bring a stronger emphasis on our active role in enabling data-driven climate action. Our new purpose is *Taking every measure for the planet*. The purpose was updated to communicate how our measurement technologies provide customers with relevant data to improve their operations and create a positive climate impact, and to show our full commitment to sustainability.

We build our strategy on four main success drivers

At the center of our strategy are four success drivers: deep customer understanding and application know-how; product and technology leadership from sensors to digital solutions; excellence in supply chain; and purpose-driven culture and talent.

Customer understanding and application know-how

Our measurement solutions are based on a thorough understanding of our customers' needs in diverse applications from meteorology and renewable energy to industrial processes and life science. We continuously collaborate with our customers and partners to meet their measurement requirements and enable climate action.

Product and technology leadership

To develop our technology leadership position, we invest strongly in our growth markets that range from sensors to digital solutions. We make significant investments into R&D. In 2023, Vaisala's R&D investments were 12.5% of net sales. We continuously develop our innovation process and practices.

Excellence in supply chain

Our offering includes hundreds of product families and thousands of products, and we serve customers in over 150 countries. As different applications require different products and solutions, our products are almost always made to order. This requires excellence and agility throughout our supply chain and operations. We continuously develop scalable ways of working and adopt new technologies like automated and data-driven smart factory.

Purpose-driven culture and talent

Our motivated and talented employees are a key factor behind our success, and we continue developing our culture. We aim to enhance the well-being and personal growth of our people and develop a diverse and inclusive community to support our business and our positive impact on the planet. We encourage pioneering, curious, and committed cultural behaviors and have established employee resource groups to support empowerment and inclusivity at work.

Strategic priorities to drive scalable and sustainable growth

To complement the success drivers of our current strategy, we have identified four strategic priorities for execution to both sustain our market leadership and expand into new markets with growth opportunities.

We continue our growth in industrial measurements with breakthrough technologies. We grow by expanding in energy transition as well as building recurring revenue in data business. We drive profitability as a global leader in weather systems. Also, we simplify and scale our operations for greater impact and efficiency.

Instruments and intelligence for climate action

MEGATRENDS

Energy transition & decarbonization

AI & process optimization

Health & well-being

PURPOSE

Taking every measure for the planet

SUCCESS DRIVERS

Customer understanding and application know-how

Product and technology leadership

Excellence in supply chain

Purpose-driven culture and talent

STRATEGIC PRIORITIES

Grow in industrial measurements with breakthrough technologies

Expand in energy transition and build recurring revenue in data

Drive profitability as global leader in weather systems

Simplify and scale

VALUES

Customer focus • Innovation & renewal • Strong together • Integrity

Business model at the core of leading technologies

Partners

- Key customers and end-users
- Meteorological institutes and agencies
- Distributors and integrators
- 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.

VAISALA

Value propositions

World-leading measurement instruments and intelligence for decision-making, safety, and efficiency

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

Excellence in supply chain

Solid dividend payer

Resources

- Product and technology leadership
- Application know-how
- 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

Customer segments

Wide customer base covering public and private sector customers

Industrial Measurements

Industrial instruments
Life science
Power and energy
Liquid measurements

Weather and Environment

Meteorology
Aviation
Renewable energy
Roads and automotive

Cost structure

- R&D investment 12.5% of net sales
- Personnel costs 210.9 MEUR
- Material costs 151.6 MEUR
- Asset-light business model
- Capital expenditure 13.9 MEUR

Revenue streams

Net sales 540.4 MEUR →

Products 74%
Projects 13%
Services 7%
Subscription sales 6%

→

Americas 37%
APAC 30%
EMEA 33%

→ **EBIT 66.6 MEUR**

Advancing resource efficiency and industrial decarbonization

In Industrial Measurements business area, we focus on product leadership and aim to grow with breakthrough technologies. Our instruments and solutions provide customers with reliable and accurate data that helps them optimize their processes profitably and decrease their environmental footprint, among others.

We serve a wide range of customers in various industries. We maintain our strong position in high-end humidity and carbon dioxide measurement markets. Our growth markets are life science, liquid measurements, as well as power and energy.

The growth of Industrial Measurements' business is based on continuous investments in research and development, particularly in our core technologies for humidity and carbon dioxide measurements to enable new application areas. We are expanding our product portfolio to include cloud-based measurement solutions, accelerating industrial decarbonization, and focusing on strengthening customer experience and service business.

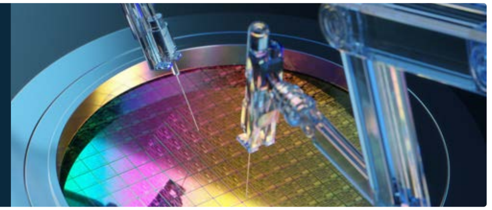
In 2023, we further expanded our Indigo family with key product launches. Indigo ecosystem is our modular measurement system of interchangeable smart probes, transmitters, and software. The new Vaisala Indigo80 Handheld Indicator extends this product family's measurement capabilities to portable use, and the new Indigo300 Transmitter is ideal for customers' measurement needs in various industrial applications. In addition, we introduced our first fully inhouse-developed next-generation inline process refractometer platform Polaris™ for industrial liquid measurements.

Global market size and growth

Market size
~1,500
MEUR

CAGR
5–10
% p.a.

Industrial instruments



Life science

Power and energy

Liquid measurements

Product categories

- **Industrial instruments:** The product area serves customers in various industries to ensure reliability and high quality, as well as to help them reduce carbon emissions. Industrial instruments are used in data centers, battery manufacturing, life science, as well as electronics and semiconductor industries, among others. Key products include instruments optimized for high-end humidity, dew point and carbon dioxide measurements, and vaporized hydrogen peroxide measurements.
- **Continuous monitoring systems:** The key markets are regulated manufacturing and production environments, such as laboratories, cleanrooms, and warehouses in the life science industry, and other demanding industrial applications. The products include data loggers for temperature, humidity, carbon dioxide, differential pressure, and other critical parameters, as well as monitoring software and cloud-based SaaS solutions for local and remote use.
- **Power and energy:** The product area serves the energy sector by offering measurement solutions for power and bioenergy industries. The key products are the Dissolved Gas Analyzer (DGA) developed for continuous monitoring of power transformers and instruments for biogas and biomethane production optimization
- **Liquid measurements:** Some of the key markets are the pulp and paper, food and beverage, chemical, semiconductor, and life science industries. The inline process refractometers developed for industrial applications measure liquid concentration in various applications.

We help customers to improve

- environmental footprint
- 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 and reliable delivery times
- global sales and services network

"As stated in our strategic priorities, we continue to grow in industrial measurements with breakthrough technologies and by expanding in energy transition. We provide instruments and systems supporting our customers to improve energy efficiency, reduce emissions, and enhance product quality. In 2023, Industrial Measurements had a slight growth in a challenging market environment.

Sampsa Lahtinen
EVP, Industrial Measurements business area

Expanding in energy transition and new weather data services

Our reliable weather and environmental measurements help customers make data-driven decisions to ensure people’s safety, protection of property, and efficient operations. Our customers span from energy, power, mining, and technology companies to meteorological institutes, airport operators, road authorities, and urban resilience providers.

In Weather and Environment business area, we seek growth by expanding in energy transition as well as in subscription-based data and software business. In the more mature market of weather systems, we seek to drive profitability as a global market leader.

In 2023, we continued developing our offering in the subscription-based data and software business. Vaisala Xweather introduced new self-serve subscription data sets and mapping APIs for lightning, maritime, renewable energy, road weather, and air quality. We also continued to build strong partnerships with the automotive industry to drive innovation in weather-aware assisted and ultimately autonomous driving technologies. In the renewable energy segment, we launched a new weather station to help optimize solar power plant performance.

We also continued to find ways to advance sustainability of our products. In 2023, we introduced new radiosonde models that are the industry’s first with materials biodegradable in natural environment. The new materials reduce the plastic content in the product by 66%, helping to reduce plastic waste originating from sounding operations.

Global market size and growth

Market size	CAGR*
~1,600 MEUR	0–10 % p.a.

*CAGR for meteorology, aviation, and roads businesses 0–5% p.a., for renewable energy 5–10% p.a.

Meteorology

Aviation

Renewable energy

Roads and automotive

Decision-making support solutions for

- transportation
- lightning observations
- renewable energy
- B2B weather services
- industries
- automotive
- air quality

Product categories

- ceilometers and lidar-based vertical atmospheric profilers
- visibility and present weather sensors
- lightning sensors
- road and surface state sensors
- air quality sensors
- pressure, temperature, wind, and humidity sensors
- weather stations
- wind lidars
- weather radars
- radiosondes and sounding systems
- weather and environmental data and forecasts

Growth through expansion

- decision-making support solutions, IoT measurement instruments, as well as weather and environmental data and forecasts
- solutions for developers, operators, and traders in renewable energy
- large meteorological infrastructure development projects

We help our customers to

- understand and prepare for increasing extreme weather events
- enhance the development and operations in renewable energy
- ensure the functionality of critical transportation infrastructure
- optimize weather-dependent commercial operations and processes
- make well-informed decisions

We partner with

- industry-specific service providers
- meteorological institutes and agencies
- authorities and other governmental organizations
- universities and research organizations
- companies and software developers

Our competitive advantages are

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

" Climate change is a key driver for more frequent severe weather events. This was evident in 2023, which was yet another warmest year on record. To effectively protect people and assets as well as to adapt and optimize business processes, we need reliable weather and environmental insights. In 2023, we significantly improved the profitability of the business in meteorology and aviation and won the largest ever aviation project in Kuwait. The growth of both renewable energy and Xweather data business continued to be very strong.

Jarkko Sairanen
EVP, Weather and Environment business area

Enabling growth and sustainability

Vaisala's Operations organization sources, manufactures, and ships all our products. Our factories operate in Finland, France, the United States, and China.

In 2023, Operations remained committed to serving our customers with fast and reliable deliveries. We made significant strides in advancing our strategy and expanding our production capacity.

The market situation allowed us to procure components from our suppliers on time, which reduced the need for spot purchases. This not only impacted our cost levels positively but also ensured timely deliveries.

Throughout 2023, we continued to develop our Smart Factory concept. In the Vantaa factory, we added new collaborative and mobile robots, deployed mistake-proof pick-to-light solutions, and enhanced automation. We also established new automated calibration, configuration, and testing stations, making them more scalable.

In 2023, we built a new 500-square-meter cleanroom for sensor assembly in Vantaa. The new facility allows us to enhance both capacity and quality.

" Our resilient supply chain supported Vaisala's success by timely product deliveries, which helped us to meet our customers' needs across the globe. We have invested in future growth by expanding our production facilities and developing automation.

Vesa Pylvänäinen
EVP, Operations

Operations in numbers 2023

4 factories

Over 500 production equipment

Over 450 suppliers

300 product families

Over 67,000 different components

Over 1,100 engineering changes in products

Over 1,400 shipments weekly

To customers in over 150 countries annually

Product life cycles of more than 20 years

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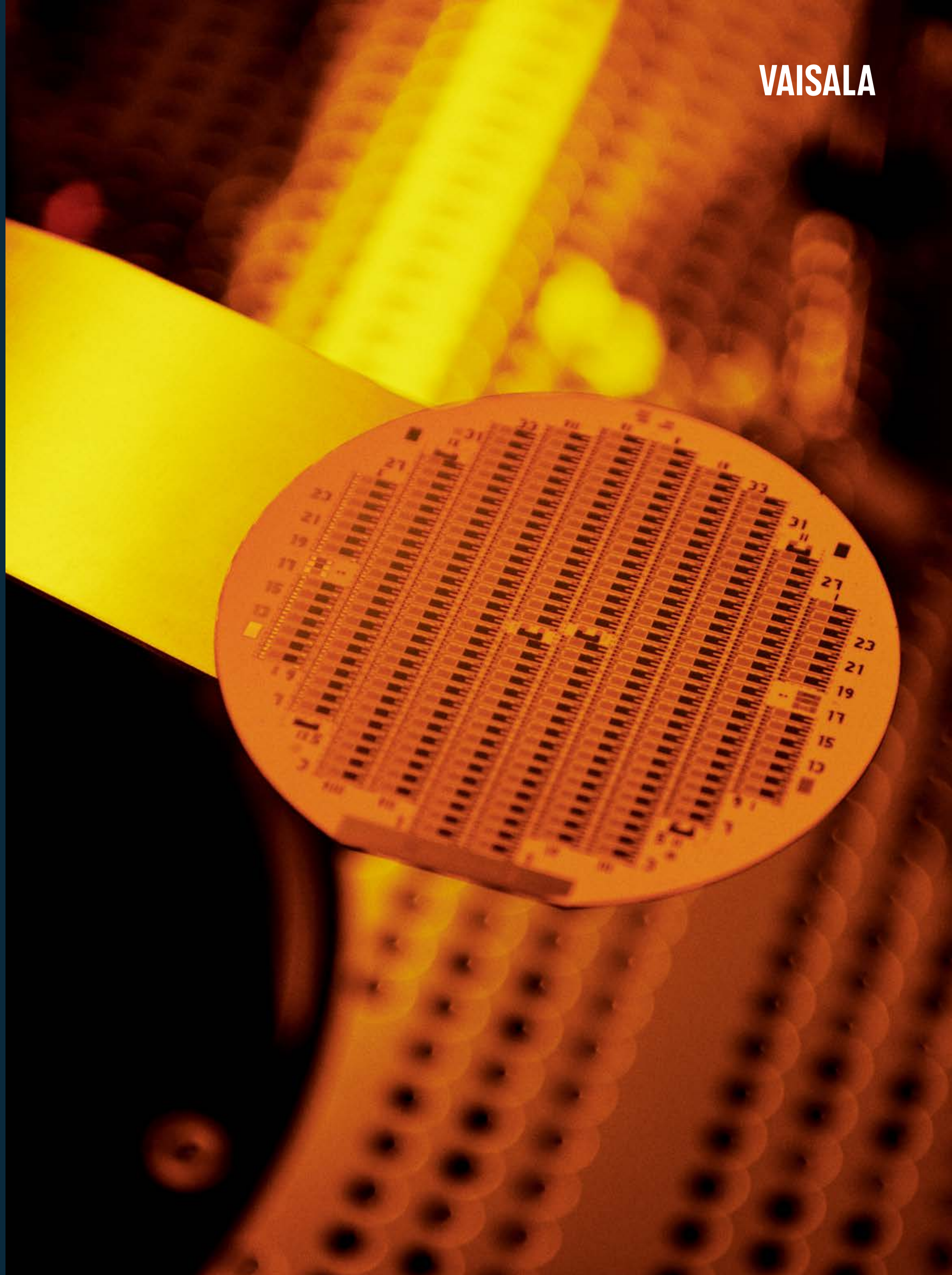
Creating value



UN Sustainable Development Goals accelerate business

In 2023, 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

UN sustainable development goal (SDG)	The most relevant UN SDG targets for Vaisala	Vaisala's solutions	Read more
9 Industry, innovation and infrastructure	**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 Vaisala's refractometer, a dairy customer reduced waste by two thirds.	Megatrends: AI and process optimization Value for customers: Reliable decisions, Productivity Value for society and the environment: Resource efficiency
13 Climate action	**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 climate change and enabling adaptation 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.	Value for customers: Productivity, Quality Value for society and the environment: Better-informed societies, Safety
7 Affordable and clean energy	**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 wind and solar power production Optimizing the production and upgrading process of biogas **Fact** A customer decreased its natural gas consumption by 20% by using Vaisala's probes in its drying process of gypsum plaster blocks.	Megatrends: Energy transition and decarbonization Value for customers: Reliable decisions, Productivity Value for society and the environment: Resource efficiency, Safety
3 Good health and well-being	**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: Health and well-being Value for society and the environment: Better-informed societies
11 Sustainable cities and communities	**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: Health and well-being Value for society and the environment: Safety

Sustainable business practices

UN sustainable development goal (SDG)	The most relevant UN SDG targets for Vaisala	Vaisala's business practices	Indicators	Read more
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	**12.2** By 2030, achieve the sustainable management and efficient use of natural resources. **12.5** By 2030, reduce waste generation substantially through prevention, reduction, recycling, and reuse.	Design for environment and long product life cycles Increasing the recycling rate	% of employees working on ISO 14001 certified sites Recycling rate	Environment: Environmental management, Waste, Sustainable product design and management
7 AFFORDABLE AND CLEAN ENERGY	**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.	Using renewable electricity Improving energy efficiency in our facilities Designing energy efficient products	% of renewable electricity Energy consumption and energy intensity	Environment: Energy, Emissions
13 CLIMATE ACTION	**13.3** Improve education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning.	Reducing emissions Encouraging employees' climate-friendly choices	Emissions and emission intensity	Environment: Emissions
8 DECENT WORK AND ECONOMIC GROWTH	**8.1** Sustain per capita economic growth in accordance with national circumstances. **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. **8.8** Protect labor rights and promote safe and secure working environments for all workers.	Positive economic impact on communities through direct employment and taxes, as well as through the supply chain Upholding labor standards and occupational health and safety as well as managing human rights risks in our own operations and partner network	Economic value generated and distributed % of suppliers rated with ESG metrics and suppliers that have signed the Supplier Code of Conduct Total Recordable Injuries rate (TRI) and Proactive reports	Value for society and the environment: Economic value Ethics and compliance: Respect for human rights, Conflict minerals Responsible supply chains Occupational health and safety
10 REDUCED INEQUALITIES	**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.	Promoting diversity and providing equal opportunities, for example, in recruitment and career development	Diversity indicators, such as gender distribution Equality in remuneration Diversity, equity, and inclusion index	Value for employees: Well-being Employees: Diversity, equity, and inclusion
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	**16.5** Reduce corruption and bribery in all their forms substantially.	Ensuring compliance with our International Anti-Corruption Policy	% of employees completed the Code of Conduct training	Ethics and compliance: Prevention of corruption and bribery

Positive handprint on society

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, environment, and 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.

Megatrends Energy transition and decarbonization | AI and process optimization | Health and well-being

Our fundamentals

Product and technology leadership

Application knowhow

Engaged and talented people

Vaisala Production System

Partnerships

Strong financial position

Sustainability

Taking every measure for the planet

VAISALA

We enable data-driven climate action.

Value created

Customers
Reliable decisions, productivity, quality

Employees
Purposeful work, well-being, learning and development

Investors
Responsible returns

Society and the environment

Direct impact
Economic value, active community outreach and scientific collaboration

Through customers
Better-informed societies, resource efficiency, safety

Key figures of our value creation

Our fundamentals	Topic	Performance 2023	Target
Product and technology leadership Application know-how	R&D investments, % of net sales	12.5% (12%)	Over 10% of net sales
Engaged and talented people	Employee engagement index	4.1/5 (4.2/5)	4.0/5
	Learning index	3.8/5 (3.9/5)	4.0/5
	DEI index	4.0/5 (4.2/5)	4.3/5
Vaisala Production System Partnerships	On-time delivery accuracy (OTD)	95.8% (91.5%)	95%
Strong financial position	Net sales growth year-on-year	5% (17%)	7% growth year-on-year
	EBIT % of net sales	12.3% (12.2%)	15%
	Return on equity (ROE)	18.9% (18.7%)	
	Earnings per share (EPS), euros	1.35 (1.24)	
Sustainability	Greenhouse gas emissions (Scope 1–3) in relation to net sales	141 tonnes CO_2e/ MEUR (145 tonnes CO_2e/ MEUR*)	Continuous reduction
	Waste recycling rate	67% (66%)	66%
	Total recordable injuries rate (TRI)	2.25 injuries per million working hours (4.69)	Continuous reduction
	Suppliers scored for ESG metrics, % of spend	91% (83%)	85%

*Due to changes in calculation methods, the 2022 figure is not fully comparable.

Towards the future together with stakeholders

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

We identify and evaluate our stakeholders by defining how they impact our company and 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 regularly conduct interviews with our most important external stakeholders related to sustainability development. Stakeholders' feedback on our sustainability work has been largely positive, confirming that our sustainability actions are effective. However, we carefully assess stakeholders' development suggestions, and they have influenced our decision to set science-based targets for climate emissions, for example.

	Description	Main activities
Customers	Thousands of private and public sector customers in more than 150 countries Distributors in more than 100 countries	· Continuously developing and managing customer relationships, for example, via our new Customer Frontline function and 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 · Listening to the voice of customers in our customer-facing digital platforms and conducting NPS surveys
Employees	Over 2,300 professionals globally	· Learning and career development opportunities · Developing employee satisfaction and well-being · Active two-way internal communication · Frequent collaboration with employee representatives · Diverse remuneration models · Developing culture with several company-wide and cross-functional actions · Improving inclusivity
Society and the environment	Universities and research collaborators, meteorological institutes and agencies, manufacturing partners and suppliers, supply chain workers, governments and regulators, local communities, non-governmental organizations, the media, and the public	· 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
Owners and investors	Major shareholders include descendants of the founder Professor Vilho Väisälä, Novametor 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 21.6% of shares on December 31, 2023.	· 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

Enabling climate action with our customers

Our instruments and intelligent solutions help to safeguard life and property, while enabling decision-making that facilitates productive, efficient, and high-quality operations. Accurate measurements enable our customers to make more reliable decisions and ensure safer and more sustainable operations.

Our measurement solutions are based on a thorough understanding of our customers' needs in diverse industries and applications from meteorology and renewable energy to industrial processes and life science. We work together with our customers and partners to meet their measurement needs and enable climate action. During 2023, we continued to develop our customer experience, both in our customer-facing digital channels as well as conducting various culture and process development initiatives.

Reliable decisions

We enable our customers to make fact-based decisions with relevant, accurate, and reliable data. For example, accurate energy forecasts are essential to asset owners, project managers, energy traders, and power schedulers. Our renewable energy customers, among others, need weather intelligence for very different applications, which requires forecasts not only for individual wind and solar projects but across vast geographic regions too. ***Vaisala Xweather forecasts*** how weather affects the power produced by renewable energy projects.

By helping our customers to optimize production processes through data-driven precision, we contribute to more sustainable use of resources as well as reduced emissions and waste. With energy prices rising and environmental concerns growing, improving efficiency is essential in processes using a lot of energy for example in food production. Bühler, a market-leading producer of commercial food equipment including baking ovens, is committed to helping its customers ***improve production consistency and efficiency***, and reducing waste and energy consumption in the process. Humidity measurements are one of the most important insights in making the baking process more efficient and achieving consistent product quality.

Productivity

Our instruments and intelligence improve the cost and resource efficiency of our customers' operations, thus increasing productivity. For example, UPM, a global forest industry company, ***improves their situational weather awareness*** to reduce cargo damages and increase operational efficiency, particularly during sensitive port operations. Vaisala's all-in-one weather sensors contribute to increased fuel efficiency and optimized port operations. The alliance between UPM and Vaisala underscores a commitment to sustainable innovation. Maritime weather challenges are increasing due to climate change, and improved weather data sharing can transform sea-bound forecasts.

With over seven million data centers around the world, anything that can increase their energy efficiency will have a big impact. On average, cooling and air conditioning account for 40% of a data center's energy consumption – making accurate heating, ventilation, and air conditioning (HVAC) measurements critical to optimizing energy use. ***High-quality HVAC sensors*** improve reliability in data centers, contribute to precise controls and saving energy, and ensure stable indoor environments.

Quality

High-quality instruments and solutions have always been at the core of Vaisala. It is also 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, our 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, companies developing high-quality hydrogen fuel cell and membrane R&D instrumentation in high dew point environments face specific calibration and measurement challenges. In response to the demanding calibration requirements in high dew point environments, Scribner uses Vaisala's instruments to ***calibrate the humidifiers used in its fuel cell and membrane test systems***. By utilizing high-quality humidity monitoring systems with appropriate sensitivity, accuracy, and response time, Scribner ensures that its customers can confidently assess the performance, efficiency, stability, and durability of fuel cells under various operating conditions.

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

CASE

Accurate environmental measurements in microbiology

The biopharmaceutical industry has many special requirements for patient safety. As an important service provider in the industry, Neutral Bioassay must maintain high quality standards. For environmental monitoring, our solutions not only meet industry standards in measurement accuracy, but also go beyond Neutral Bioassay's own high standards.

CASE

World's first highly accurate tropical forecast model

Tropical rains originate in convective processes, which global climate models cannot accurately predict – a situation that is accelerating with climate change. The resulting low-quality weather data makes it hard for tropical farmers to adapt and prevent crop failure and mitigate risks. Ignitia, in Ghana, launched their own weather awareness solution specifically for this climate's weather patterns and challenges using our lightning data. In addition to 24/7 access to accurate current weather conditions, farmers now get alerts on approaching storms that may not be detected by any ground observation systems, plus accurate forecasts, resulting in improved crop quality and increased yields.

Our employees driven by making a difference

Vaisala offers versatile opportunities for talented and motivated professionals who value purpose-driven work and continuous learning. We support the well-being of our people and provide them with various learning opportunities to grow and develop. Learning is part of everything we do.

Purposeful work

Vaisala's products and solutions enable climate action and have a positive impact on the environment, societies, businesses, and individuals. Our people are driven by the opportunity to solve some of the most pressing challenges of our time. We uphold sustainable and ethical behavior as a core value of both Vaisala and our employees. We invest in research and development, which ensures that we can continue to respond to global issues and grow our business sustainably. This makes working at Vaisala meaningful and rewarding.

We conducted our annual employee survey in November 2023. The survey results show that Vaisala's people were engaged and proud of their work. The Engagement Index in the survey remained on a good level and was 4.1 on a scale of 1–5. The survey had a response rate of 82%, with answers from 1,873 employees.

During 2023, we have continued the culture development program, based on the development areas that we identified in our employee interviews and surveys. Our goal with the program is to foster a purpose-driven and future-proof culture, based on meaningful work and supporting Vaisala's strategy and growth.

In 2023, we geared our focus towards diversity, culture, and empowerment. We took a proactive step in building a culture of understanding by launching our first Diversity, Equity, and Inclusion (DEI) training program. This initiative aims to educate and empower our employees to embrace diversity and promote equity at every level. We launched our Employee Resource Groups program, symbolizing our commitment to creating a workplace where everyone feels seen, heard, and valued. These groups will serve as pillars of support, creating spaces for employees to connect, share experiences, and drive positive change within the organization. These initiatives mark significant steps in our journey toward a more inclusive Vaisala community.

We emphasize strong and inspirational leadership, and we support managers and experts systematically in developing their leadership skills by organizing training programs and courses. During 2023, we trained managers in, for example, coaching skills and change management.

The Leadership Index remained on a good level and was 4.0 on a scale of 1–5. The key strengths of Vaisala managers are fairness and objectivity, ability to listen, and positive attitude towards initiatives.

Well-being

At Vaisala, we value well-being at work as a holistic concept, encompassing the work community, leadership, the company, and the individuals themselves. Well-being consists of strong leadership, motivating and inclusive work community, balanced workload, meaningful work, and a safe working environment. We promote well-being and energy at work by supporting sports and recovery, providing occupational healthcare, and preventing problems early on.

These preventive measures help our people to manage their work, ensure recovery, and maintain a healthy lifestyle. In Finland, we offer our employees sports and recreational clubs, sports and cultural benefit, company bike benefit, trainings on time management and recovery, and the opportunity to participate in a well-being analysis on stress and quality of sleep. In 2023, Vaisala continued the low threshold Employee Assistance Programs (EAP) first piloted in 2022. EAP service offers easily accessible discussion support in different life situations. In the United States, Vaisala FIT program supports the well-being of employees.

We measure also employee well-being annually in Vaisala's employee surveys. The results show that Vaisala employees find their work meaningful and are proud to work for Vaisala. We also strive to ensure that workloads are manageable. In November 2023, Vaisala Well-Being Index score was 3.9 on a scale of 1–5.

We advanced diversity, equity, and inclusion (DEI) as part of our culture work in 2023. DEI topics are vital for our business – not only for the benefits they bring for innovation but also for sustainability. As a sustainability leader, we take 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. In 2023, we executed our DEI strategy that lays the foundation for systematic development, versatile actions, and KPIs to ensure an inclusive community.

During the year, we organized panel discussions on DEI topics. DEI topics are also included in our employee survey, and the Diversity and Equity Index was 4.0 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. Our employees embrace continuous learning to adapt to the changes in the business environment, technologies, ways of working, and tools.

We have continued our Future of Work program in 2023, with workspace development in Finland as an example. Our employees suggested various improvements to the office environment, which we implemented this year.

We support our employees in actively developing and maintaining their expertise and knowledge. Managers play a key role in enabling and supporting learning, and they plan development and learning activities together with their teams. Developing expertise and knowledge aligns with Vaisala's values and behaviors as well as our business needs and objectives. We define competence development needs as part of the annual People Forum process.

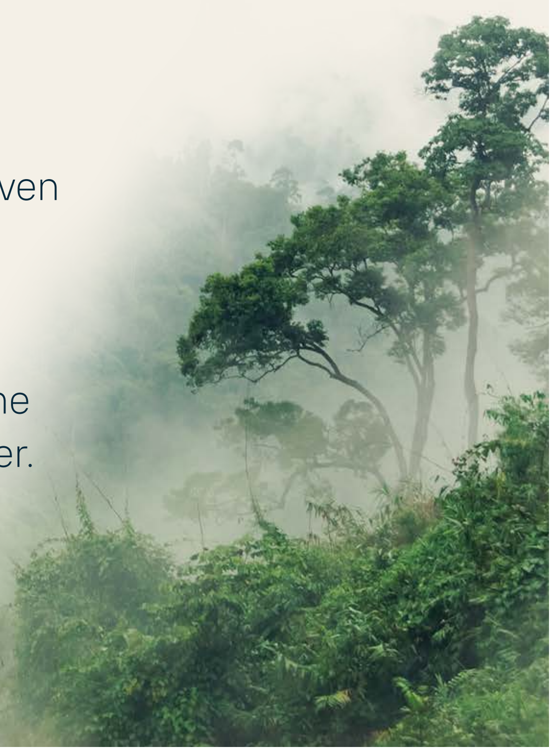
In 2023, we offered new development opportunities to all employees, such as coaching skills, self-leadership, and change leadership trainings. We also provided new online learning opportunities on global platforms. In addition, we focused on mentoring and conducted various global and local mentoring programs. Vaisala Learning Index, derived from the employee survey, was 3.8 on a scale of 1–5. Employee training costs amounted to 1.76 million euros and averaged 755 euros per employee in 2023.

Introducing Employee Resource Groups

In 2023, we reinforced our commitment to diversity by introducing the Employee Resource Groups program, highlighting our dedication to an inclusive workplace. Our first ERG, Women@Vaisala and Allies, showcases our efforts to cultivate connections, amplify voices, and inspire positive change within the organization. These initiatives signify substantial progress in creating a workplace where every individual feels recognized, heard, and valued.

More resource efficient societies and safer environment

At Vaisala, we aim to make a positive impact on society and the environment by enabling data-driven climate action. We bring value to society through accurate and reliable measurements and data 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

We work 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 funders and weather experts to build capacity for weather observing networks and competence in developing economies. This collaboration strengthens the preparedness of these societies for extreme weather and its impacts.

Health services are also one of the foundation pillars of an informed society. For example, ***one of the largest health care providers in the U.S.*** leverages our humidity and temperature instruments to meet strict accreditation standards for safe operating room and laboratory environments. It is vital to ensure that critical health care spaces meet certain standards for humidity, temperature, and other important parameters to improve patient safety, care quality, and health care delivery.

Resource efficiency

Our 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 leading to reduction in emissions. With the accurate data from Vaisala's measurement instruments, ***data center conditions can be optimized*** energy efficiently, for example.

We support our customers in the global energy transition from fossil fuels to renewable sources like wind, solar, biogas, and hydrogen, as well as in the deployment of smarter grids. These sources require careful site selection, real-time observation and forecasting capabilities, and continuous monitoring for optimized power generation. For example, wind resource assessment is a crucial stage in wind energy development allowing. Our WindCube lidar helps measure wind precisely and thus optimize financial performance, providing the bankable data needed for reducing measurement uncertainties. Wind power is taking off also in the Philippines, and ***Triconti ECC Renewables Corporation*** is one of the early innovators there to use wind lidar for Wind Resource Assessments, where the technology plays a crucial role.

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.

Weather intelligence and pre-emptive driving conditions insights are rising up the agenda for car makers. CARIAD, the Volkswagen Group automotive software company, and NIRA Dynamics as part of CARIAD ***cooperate*** with Vaisala Xweather for road condition and road weather data. These insights and data will be used to develop and support advanced driver assistance systems and autonomous driving functions in VW Group vehicles. By adding pre-emptive road weather intelligence to the vehicles' driver assistance systems, drivers get accurate and real-time warnings for their route, highlighting sections of road that have a high risk of aquaplaning, for example.

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

CASE

New air quality insights on wildfire smoke using ceilometers

The Puget Sound Clean Air Agency in Washington, U.S., gains air quality insights and better informs the public with vertical profiles from our ceilometers. Puget Sound keeps close track of air pollution levels and mitigation measures to protect public health and informs citizens of current air quality and pollutants. It is now able to develop far more accurate smoke prediction models.

Read more examples of how Vaisala creates value for society and the environment at vaisala.com.

CASE

Creating optimal living and working environments

Ryoki Kogyo's mission is to help create optimal living and working environments and contribute to the creation of a more sustainable society. They are especially focused on improvements in public health, safety, and comfort by improving the quality of the air people breathe. By measuring CO_2 concentration, temperature, and humidity along with regional epidemiological data, they can quantify the likelihood of infection. Ryoki Kogyo's objective is to reduce infection risk not only in the medical field but throughout society as a whole.

Economic value

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

Vaisala as taxpayer

Our head office is located in Vantaa, Finland. We have 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, we provide here more information on our approach to tax, tax management, and global tax footprint.

Approach to tax

Our values guide 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 we have a liability to pay taxes that are legally due in any country in accordance with the rules set by the relevant authorities. We also have a responsibility to our shareholders to structure our business in an efficient manner to ensure that strategic business objectives are met without incurring unnecessary tax costs.

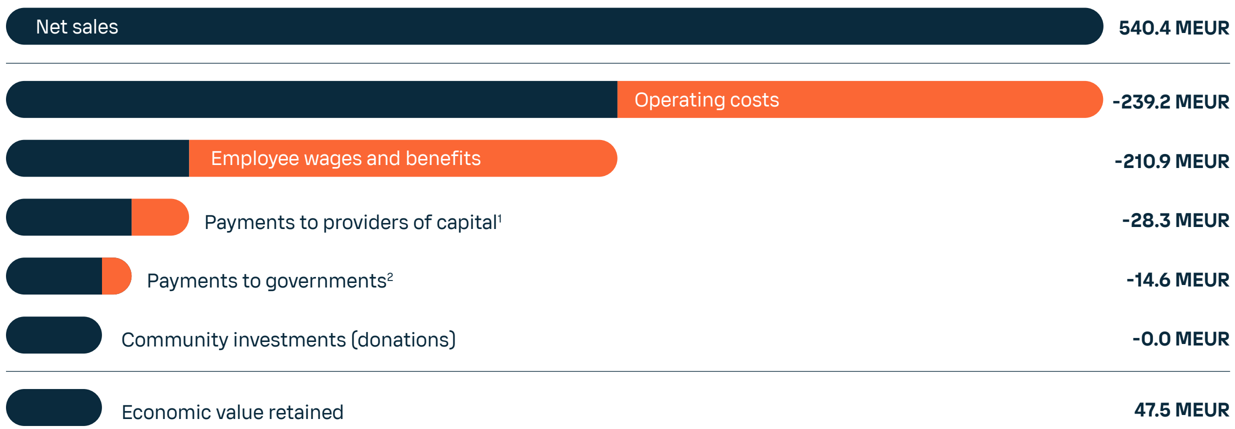
We are committed to ensuring that we follow local and international tax rules and regulations in all jurisdictions where we conduct our business. We do not operate in tax haven countries for tax reasons. We do not practice tax planning that would aim at artificially decreasing the Group's taxable income. We pay and report taxes in countries where we have reporting obligations as a result of our activities.

Our transfer pricing is aligned with the arm's length principle in accordance with OECD Transfer Pricing Guidelines. The rationale of the

Direct economic value generated and distributed in 2019–2023

MEUR	2023	2022	2021	2020	2019
Net sales	540.4	514.2	437.9	379.5	403.6
Operating costs	-239.2	-237.9	-192.1	-162.2	-181.9
Employee wages and benefits	-210.9	-190.4	-174.3	-154.1	-157.7
Payments to providers of capital[1]	-28.3	-25.3	-22.5	-22.4	-21.1
Payments to governments[2]	-14.6	-15.9	-10.5	-6.6	-8.4
Community investments (donations)	-0.0	-0.3	-	-0.1	-0.2
Economic value retained	**47.5**	**44.4**	**38.5**	**34.1**	**35.2**

Direct economic value generated and distributed in 2023



[1] Includes dividends and interest of borrowings
[2] Includes income taxes

chosen transfer pricing methods is properly documented. We comply with the arm's length principle in relation to all intercompany transactions.

Tax management

In our 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 our 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.

We have engaged a few service providers to provide support and ensure compliance with local rules and regulations in foreign recurring tax compliance work. Our Finance & Control regularly monitors the transparency, quality, and outputs of these engagements.

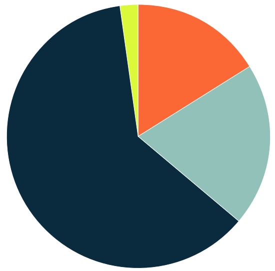
Global tax footprint

To ensure focus on process implementation and comparable data collection, we started our tax footprint initiative in 2019. We report corporate income taxes, value-added taxes, payroll taxes, and property and other taxes paid in 2023 and comparable figures for 2022. We observe the principle of materiality in the collection and presentation of figures.

We benefit from R&D tax credits in France and Finland. In addition, prior year tax losses in the United States and France reduced our corporate income tax payments in 2023. The tax contribution of the parent company in Finland totaled 38.3 (41.7) million euros in 2023.

Total taxes paid 2023 – Vaisala Group

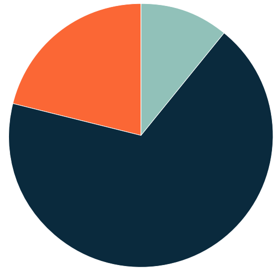
PAID IN 2023 – ALL VAISALA COMPANIES (2022)



16% Corporate Income Tax (CIT) (19%)
20% Value-Added Tax (VAT) (20%)
61% Payroll Tax (59%)
2% Property and other taxes (2%)

The presentation of tax footprint has been changed, and 0.9 million euros presented in value-added taxes in 2022 have been reclassified to property and other taxes.

TOTAL TAXES PAID BY REGION 2023 (2022)



11% APAC 8.7 MEUR (7.9)
68% EMEA 53.1 MEUR (52.2)
21% Americas 16.7 MEUR (14.2)

Tax	Paid in 2023 (MEUR)	Paid in 2022 (MEUR)
Corporate Income Tax (CIT)	12.7	14.2
Value-Added Tax (VAT)	16.0	15.0
Payroll Tax	48.2	43.8
Property and other taxes	1.7	1.2
Total	**78.6**	**74.3**

Strengthening scientific collaboration and community outreach

In addition to our own research and development work, scientific collaboration strengthens our position as an industry pioneer and an innovative technology leader. We continue 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

Our solutions are used to observe and measure aviation weather, and thus we are 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. We participate in various expert teams and commissions working under WMO.

These groups focus on developing weather observations and forecasts globally. Such expert teams include the Infrastructure Commission and its Standing Committee on Measurements, Instrumentation and Traceability (SC-MINT) as well as the Standing Committee on Earth Observing Systems and Monitoring Networks (SC-ON). We are an active member of the Association of Hydro-Meteorological and Environmental 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). We also apply IEC61400-50 and IEC61400-15 wind energy standards. We are an active member in two working groups of International Energy Agency's Wind Technology Collaboration Programme (Wind TCP). 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, we operate 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. We have representation in the Technology Industries of Finland and its branch groups, such as in the semiconductor group. 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). We are also a strong contributor to the American Meteorological Society (AMS) that is a leading scientific organization dedicated to atmospheric, oceanic, and hydrologic sciences. Vaisala representatives contribute to the AMS through several activities, such as scientific committees, journals, and articles.

In France, we have 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, SIRTA Atmospheric Research Observatory, and IFP Energies nouvelles (IFPEN).

Regarding software development, we are 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

Communication 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. We are 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.

We are 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 our 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 master students and doctoral candidates. For example, we collaborate with Sorbonne University which uses Vaisala's condition monitoring system in environmental research on pesticides.

Another example of university collaboration is the Black Carbon Footprint project, realized together with Tampere University and the Finnish Meteorological Institute, among others. The project aimed to develop a scientific basis to create in-depth knowledge about black carbon, including measurement methods. The project created a black carbon footprint concept that can be used for calculating the black carbon footprint of a certain action or product. The link between black carbon emissions and climate impacts was also studied. We are also a member of the Atmospheric Physics and Turbulence for Wind Energy (AptWind) Doctoral Network. We also collaborate with FMI by co-leading a postdoctoral candidate for studies of using ceilometers for novel observations of the atmosphere in the Tandem Industry Academia program.

In the United States, we collaborate with the Colorado State University (CSU) in the field of weather radars, among others. In 2023, Vaisala's Board of Directors renewed the annual donation of USD 25,000 to the university for three years.

We encourage children, youngsters, and others who are interested in discovering the field of science also as a long-term partner of Finnish Science Centre Heureka. Overall, we support natural sciences and science education in different projects annually.

Support for important climate and environmental projects

We provide 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. We do 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.

CASE

Safe and efficient marine scientific research

Scientific Research Vessel Tan Kah Kee (R/V TKK) is a comprehensive marine scientific research vessel operating in the South China Sea and the Western Pacific. R/V TKK can conduct real-time and synchronous observation and on-site scientific experimental research in hydrology, chemistry, biology, geology, geophysics, atmospherics, and related interdisciplinary fields. Accurate, and reliable real-time atmospheric observation data is required during navigation to ensure safe and efficient scientific research activities.

Data-driven technology leader

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

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

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 (2023: 67.7 MEUR or 12.5% 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
- 2023 geographical net sales split: 37% Americas | 30% APAC | 33% 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 large CAPEX investment: annual maintenance CAPEX roughly at a level of depreciations
- 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 (2023: 1.3)
- Solvency ratio 61.3% (2023)
- Gearing -10.5% (2023)

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 65% on earnings and the average effective dividend yield of share 2.0%

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, energy transition and decarbonization, and health and well-being, for example
- Very low ESG risk: in the evaluation by Sustainalytics, Vaisala's ESG risk score is 9.6 which is defined as negligible
- We use 100% renewable electricity. In 2023, we formulated our near-term science-based emissions reduction targets aligned with the requirements of the Science-Based Targets initiative (SBTi) and sent them to SBTi for validation

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, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems.

Climate Delegated Act

Evaluation of the taxonomy-eligibility of Vaisala's activities

We have evaluated the taxonomy-eligibility of our activities according to the descriptions of economic activities in Annexes 1 and 2 of the Climate Delegated Act, including the amendments to the annexes. The majority of Vaisala's activities are not yet covered by the climate change taxonomy. We view, however, that a significant share of our activities should be considered as enabling activities for the future versions of the climate change taxonomy, as for example, weather measurements and data contribute significantly to climate change adaptation.

We have identified taxonomy-eligible net sales under activities 3.1 Manufacture of renewable energy technologies and 3.5 Manufacture of energy efficiency equipment for buildings. These activities are eligible to be enabling activities for climate change mitigation.

- We have determined that the manufacture of remote wind sensing solutions for the wind energy sector, the manufacture of automatic weather stations for the solar energy sector, and the manufacture of multi-gas measurement instruments for biogas processes are taxonomy-eligible activities based on the description of economic activity 3.1 within Annexes 1 and 2 of the Climate Delegated Act, as these technologies are primarily intended for use in the renewable energy sector.
    - The 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.
    - The automatic weather stations for the solar energy sector help to optimize the performance of solar power plants.
    - The multi-gas measurement instruments help biogas and biomethane producers minimize methane slip and enable them to control the process and increase their biogas yield and quality.
- In addition, we have determined that the manufacture of HVAC instruments for humidity, CO_2, and temperature measurements is a taxonomy-eligible activity, based on the description of economic activity 3.5 within Annexes 1 and 2 of the Climate Delegated Act.
    - The HVAC instruments are integrated into building automation and control systems, which help to improve energy efficiency.

Evaluation of the taxonomy-alignment of Vaisala's activities

We have evaluated the extent to which our taxonomy-eligible activities meet the technical screening criteria for climate change mitigation (Annex 1) and climate change adaptation (Annex 2).

- We have assessed that our taxonomy-eligible activities meet the criteria for substantial contribution to climate change mitigation, but do not meet them for substantial contribution to climate change adaptation.
- We have also assessed the Do No Significant Harm (DNSH) criteria related to other environmental objectives and concluded that our taxonomy-eligible activities fulfil the DNSH criteria to a large extent.

However, according to our understanding, it is very challenging to fulfil the generic criteria for DNSH to pollution prevention and control regarding use and presence of chemicals set out in Annex 1, Appendix C, point (f). In accordance with the EU REACH legislation, we have collected information about those substances in our products that have been identified as substances of very high concern (SVHC) under the EU REACH legislation. However, the DNSH criteria for pollution prevention and control in the EU Taxonomy go beyond the current legislation and require that the products should not contain SVHCs, except if it is assessed and documented by the operators that no other suitable alternative substances or technologies are available on the market, and that they are used under controlled conditions. The SVHCs in our products are mainly used by actors in the supply chain and not directly by Vaisala. As it is currently unclear how the required information could be collected from the supply chain, we cannot fulfil this criterion before practices for collecting this information emerge.

- In addition, we have assessed that we have good readiness to comply with the Minimum Safeguards defined in the EU Taxonomy Regulation.

Environmental Delegated Act

Evaluation of the taxonomy-eligibility of Vaisala's activities

We have evaluated the taxonomy-eligibility of our activities according to the descriptions of economic activities in Annexes 1–4 of the Environmental Delegated Act. We have identified taxonomy-eligible net sales under activity 1.2 Manufacture of electrical and electronic equipment listed in Annex 2 (transition to a circular economy) of the Environmental Delegated Act.

Accounting principles

Net sales

Besides software and service sales, we have determined our net sales as taxonomy-eligible under the circular economy objective, as all the products we manufacture are electrical and electronic equipment. We have included both product and project sales in our taxonomy-eligible net sales. Under the objectives of climate change mitigation and climate change adaptation, we have included the sales of remote wind sensing solutions, automatic weather stations for the solar energy sector, multi-gas measurement instruments for biogas processes, and HVAC instruments for humidity, CO_2, and temperature measurement as taxonomy-eligible net sales. Of the sales of remote wind sensing solutions, we have included only sales to the wind energy sector as taxonomy-eligible net sales under the objectives of climate change mitigation and climate change adaptation, as these products are also sold for other purposes. Due to the inability to fulfil the DNSH criteria for pollution prevention and control, we don't report any taxonomy-aligned net sales.

Capital expenditure (CapEx)

In the context of Taxonomy reporting, our total CapEx includes additions to the right-of-use assets, in addition to the tangible and intangible assets detailed in note 16 to the consolidated financial statements. We have identified taxonomy-eligible CapEx related only to the purchase of outputs of activities that are taxonomy-eligible under the objectives of climate change mitigation and climate change adaptation. These are additions related to leased buildings (purchase of an output of the taxonomy-eligible activity 7.7 Acquisition and ownership of buildings) and additions related to leased cars (purchase of an output of the taxonomy-eligible activity 6.5 Transport by motorbikes, passenger cars, and light commercial vehicles). As we are unable to assess the taxonomy alignment of these activities that are unrelated to our own activities, we don't report any taxonomy-aligned CapEx.

Operating expenses (OpEx)

In the context of Taxonomy reporting, our total OpEx comprises only research and development expenses, excluding the cost of managing research and development projects. In the taxonomy-eligible OpEx, we have included research and development expenses related to taxonomy-eligible activities. For remote wind sensing solutions, we have only included the share of research and development expenses that corresponds to the share of sales of these products to the wind energy sector as taxonomy-eligible OpEx under the objectives of climate change mitigation and climate change adaptation. For HVAC instruments, we are unable to separate research and development expenses, so we don't report any taxonomy-eligible OpEx under the objectives of climate change mitigation and climate change adaptation for these products. The research and development expenses related to taxonomy-aligned activities would be counted as taxonomy-aligned OpEx, but as there are no such activities, we don't report any taxonomy-aligned OpEx.

Avoiding double counting

To avoid double counting, when counting Vaisala's total net sales and OpEx which are taxonomy-eligible under different objectives, we have included only figures that are taxonomy-eligible under the circular economy objective, as these include also the figures that are taxonomy-eligible under the objectives of climate change mitigation and climate change adaptation.

Proportion of turnover* from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2023

Financial year 2023		2023		Substantial Contribution Criteria						DNSH criteria ('Does Not Significantly Harm')									
Economic activities (1)	Code (2)	Turnover (3)	Proportion of Turnover, year 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Circular Economy (8)	Pollution (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Circular Economy (14)	Pollution (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy aligned (A.1) or eligible (A.2) turnover, year 2022 (18)	Category enabling activity (19)	Category transitional activity (20)
		tEUR	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	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)																			
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	0%														0%		
Of which Enabling		0	0%														0%		
Of which Transitional		0	0%														0%		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Manufacture of electrical and electronic equipment	CE 1.2	467,653	86.5%	N/EL	N/EL	N/EL	EL	N/EL	N/EL										
Manufacture of renewable energy technologies	CCM/ CCA 3.1	42,905	7.9%	EL	EL	N/EL	N/EL	N/EL	N/EL								7.2%		
Manufacture of energy efficiency equipment for buildings	CCM/ CCA 3.5	30,778	5.7%	EL	EL	N/EL	N/EL	N/EL	N/EL								5.5%		
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		467,653	86.5%	13.6%	13.6%	0%	0%	86.5%	0%								12.7%		
A. Turnover of Taxonomy-eligible activities (A.1 + A.2)		467,653	86.5%	13.6%	13.6%	0%	0%	86.5%	0%								12.7%		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
Turnover of Taxonomy-non-eligible activities		72,760	13.5%																
TOTAL		540,413	100%																

* Turnover = Net sales in Vaisala's reporting

Proportion of CapEx from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2023

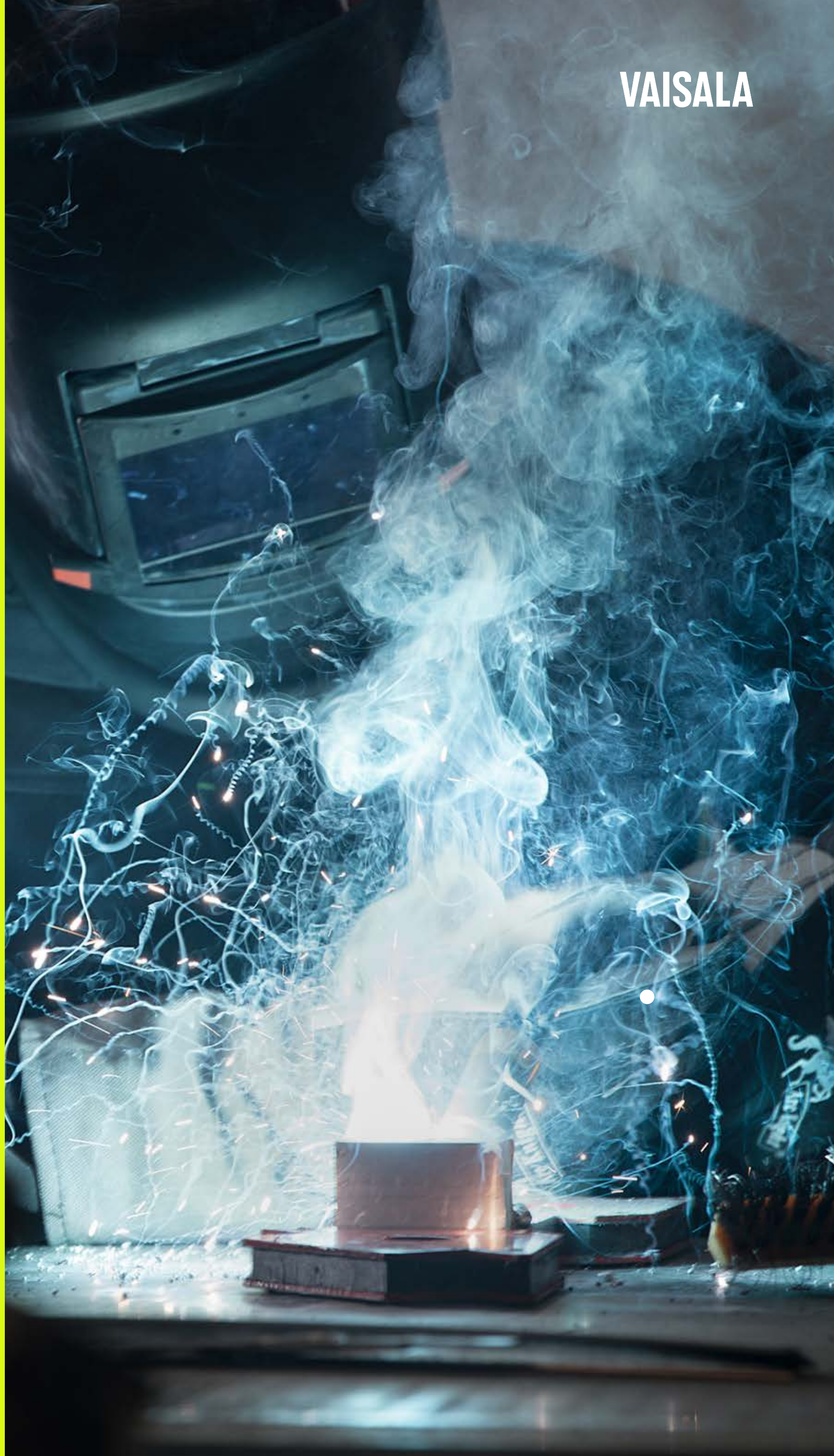
Financial year 2023	2023			Substantial Contribution Criteria						DNSH criteria ('Does Not Significantly Harm')									
Economic activities (1)	Code (2)	CapEx (3)	Proportion of CapEx, year 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Circular Economy (8)	Pollution (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Circular Economy (14)	Pollution (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy aligned (A.1) or eligible (A.2) CapEx, year 2022 (18)	Category enabling activity (19)	Category transitional activity (20)
		tEUR	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	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%														0%		
Of which Enabling		0	0%														0%		
Of which Transitional		0	0%														0%		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Acquisition and ownership of buildings	CCM/ CCA 7.7	4,152	22.7%	EL	EL	N/EL	N/EL	N/EL	N/EL								9.1%		
Transport by motorbikes, passenger cars and light commercial vehicles	CCM/ CCA 6.5	322	1.8%	EL	EL	N/EL	N/EL	N/EL	N/EL								0.7%		
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		4,475	24.4%	24.4%	24.4%	0%	0%	0%	0%								9.9%		
A. CapEx of Taxonomy-eligible activities (A.1 + A.2)		4,475	24.4%	24.4%	24.4%	0%	0%	0%	0%								9.9%		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
CapEx of Taxonomy-non-eligible activities		13,840	75.6%																
TOTAL		18,315	100%																

Proportion of OpEx from products or services associated with Taxonomy-aligned economic activities - disclosure covering year 2023

Financial year 2023		2023		Substantial Contribution Criteria						DNSH criteria ('Does Not Significantly Harm')									
Economic activities (1)	Code (2)	OpEx (3)	Proportion of OpEx, year 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Circular Economy (8)	Pollution (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Circular Economy (14)	Pollution (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy aligned (A.1) or eligible (A.2) OpEx, year 2022 (18)	Category enabling activity (19)	Category transitional activity (20)
		tEUR	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	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)																			
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	0%														0%		
Of which Enabling		0	0%														0%		
Of which Transitional		0	0%														0%		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Manufacture of electrical and electronic equipment	CE 1.2	48,099	75.0%	N/EL	N/EL	N/EL	EL	N/EL	N/EL										
Manufacture of renewable energy technologies	CCM/ CCA 3.1	5,019	7.4%	EL	EL	N/EL	N/EL	N/EL	N/EL								7.1%		
Manufacture of energy efficiency equipment for buildings	CCM/ CCA 3.5	0	0%	EL	EL	N/EL	N/EL	N/EL	N/EL								0.0%		
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		48,099	75.0%	7.4%	7.4%	0%	0%	75.0%	0%								7.1%		
A. OpEx of Taxonomy-eligible activities (A.1 + A.2)		48,099	75.0%	7.4%	7.4%	0%	0%	75.0%	0%								7.1%		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
OpEx of Taxonomy-non-eligible activities		16,045	25.0%																
TOTAL		64,143	100%																

Annual Report 2023

Sustainable business practices



VAISALA

Reporting principles

Non-financial information

Disclosure of non-financial information in accordance with Chapter 3 a of the Finnish Accounting Act is presented in the Sustainable business practices section as well as the chapters Business model in Our business section, Dashboard and EU Taxonomy on Sustainable Finance 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 68–75 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, PricewaterhouseCoopers 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 67.

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, such as investors and customers, 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 help of external experts is used in the materiality analysis when needed.

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
- Diversity, equity, and inclusion

Occupational health and safety
- 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

Vaisala's Code of Conduct reflects our 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. In the human rights commitment of the Code of Conduct, we give particular attention to the rights of our employees and the prevention of forced and child labor. The Code of Conduct is approved by the Board of Directors.

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 Anti-Corruption Policy as part of their employment contracts as well as participate in induction trainings on the Code of Conduct and different policies. All Vaisala employees must complete a Code of Conduct training at regular intervals and confirm their commitment to the Code of Conduct and the Anti-Corruption Policy. In late 2023, we organized a mandatory Code of Conduct training for all employees. Of them, 96% had completed the training by January 22, 2024.

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

Vaisala has a compliance function that aims to prevent, identify, and correct possible wrongdoings. The compliance function supports Vaisala's management and operational units in their responsibility for compliance risk management. The compliance function can also be asked for advice on compliance with laws, regulations, and Vaisala's internal rules.

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 Anti-Corruption Policy, it leads to disciplinary action and may even lead to termination of the contract or employment.

In 2023, we opened a new whistleblowing channel that uses an external portal. Through this channel, which enables anonymity, employees and external stakeholders can report suspicions or findings related to actions that violate laws, regulations, and Vaisala's internal rules. Employees or external stakeholders can also report any negative impacts caused to them and seek remedy through the channel. The effectiveness of the new channel will be evaluated based on the number of reports and feedback from stakeholders.

In line with its Whistleblowing Policy, Vaisala seeks to ensure that the reporting of concerns does not cause harm to the complainant. The reported concerns are addressed without delay, and the complainants are informed about the starting of the handling process. Vaisala has a whistleblowing team, which processes reports of suspected non-compliance with laws, regulations, and Vaisala's internal rules. The Compliance Officer presents the reported cases and other factors that have emerged during the investigation to the team. The members of the team are the Group General Counsel, the Chief Financial Officer, the Executive Vice President of Human Resources, and as needed, the Executive Vice Presidents of both business areas. Concerns raised through the whistleblowing channel are reported to the Audit Committee 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 2023, we received a total of 15 reports of suspected violations, six of which can be classified as critical concerns (as defined by the GRI standards) based on their severity. The critical concerns were related to conflicts of interest, compliance with laws and regulations, and employee matters. Out of the reported cases, 11 have been resolved. In four cases, the investigation is ongoing, or the matter is otherwise pending.

Read more
Vaisala's policies: vaisala.com/standards-and-policies
Vaisala whistleblowing channel: vaisala.com/en/code-conduct/vaisala-whistleblowing-channel

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. In 2023, we passed the Green Office audit conducted by WWF every three years, where we received thanks especially for the use of renewable energy, employee bicycle benefits, and effective waste sorting.

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 indirect emissions, which arise mainly from the energy consumption of sold products, purchased goods and services, and logistics. We also have environmental impacts related to energy consumption and waste, which is why our reporting covers these topics.

Before 2020, we were also reporting the water withdrawal 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 water withdrawal 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 2023

Renewable electricity
100% (2022: 100%)

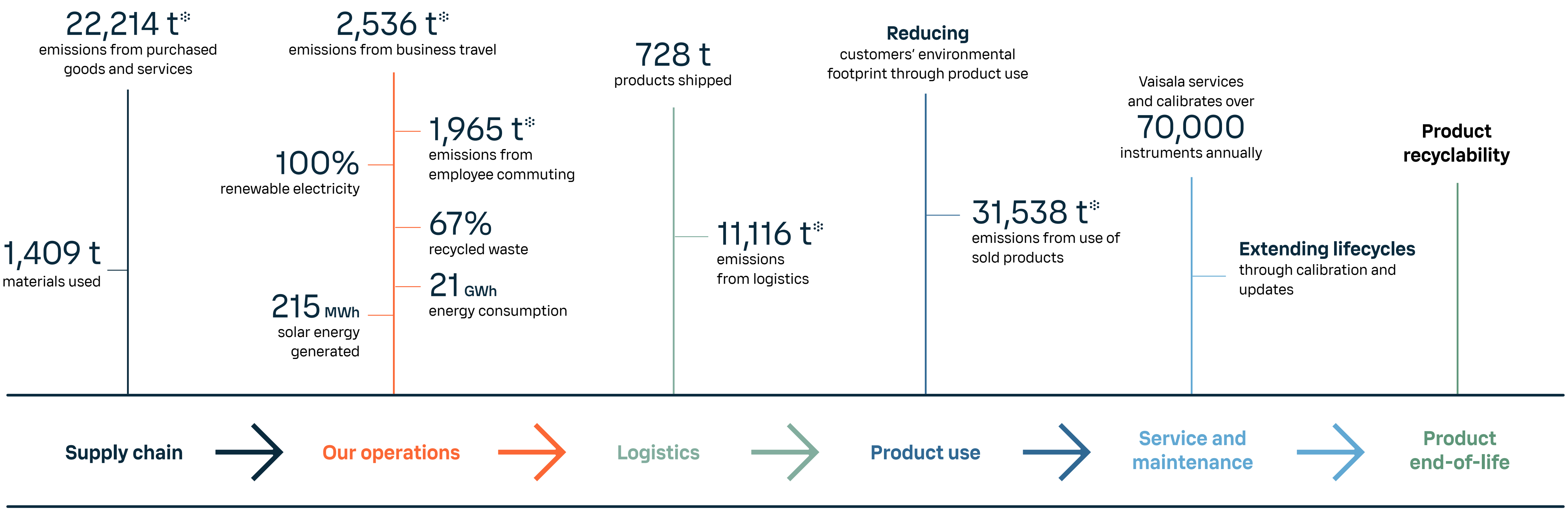
Waste recycling rate*
67% (2022: 66%)

Employees working on ISO 14001 certified sites
91% (2022: 91%)

Scope 3 emissions in relation to gross profit**
229 tCO_2e/MEUR (2021: 255 tCO_2e/MEUR)

* Recycling rate includes reuse, material recycling, and composting.
** Scope 3 emissions related to our emissions reduction target.

Environmental impacts



*CO_2-equivalent

Energy

We have used 100% renewable electricity since 2020. 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 electricity 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 manufacturing 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 by decreasing room temperature in the office spaces of our headquarters, and we continued the same practice in 2023. In addition, we continued changing our Vantaa site's lighting to energy-efficient LED lights.

Our energy intensity, i.e. our total energy consumption (including electricity and heating) in relation to net sales, was 38.7 megawatt hours per million euros (2022: 39.9 MWh/MEUR). The share of non-renewable energy was 4.3% of our total energy consumption in 2023 (2022: 2.9%).

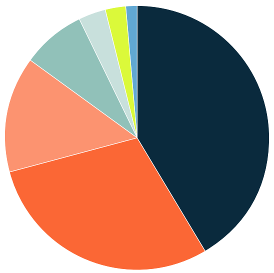
Emissions

In 2023, we formulated our near-term science-based emissions reduction targets aligned with the criteria of the Science-Based Targets initiative (SBTi) and sent them to SBTi for validation. Our most important emissions reduction target is related to Scope 3 emissions which make up most of our carbon footprint. Our target is to reduce Scope 3 GHG emissions from the use of sold products, purchased goods and services, upstream transportation and distribution, business travel and employee commuting 52% per MEUR value-added by 2030 from a 2021 base year (value-added is the gross profit reported in the financial statement).

During 2023, we also composed a preliminary emissions reduction plan and started taking measures to implement it. For example, we are developing our product design process to reduce the carbon footprint of our products and piloting the substitution of air transport with road transport with selected customers.

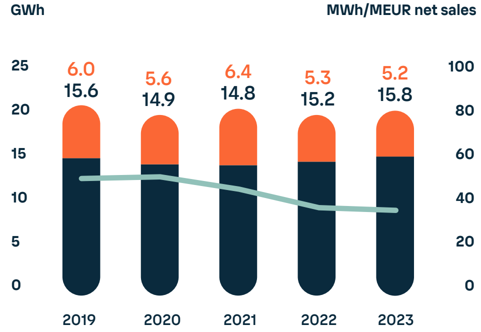
In 2023, our Scope 1 emissions (direct emissions) were 398 metric tons of CO_2e. Our market-based Scope 2 emissions (purchased energy emissions calculated with supplier-specific emission factors) were 80 metric tons of CO_2e. Our location-based Scope 2 emissions (purchased energy emissions calculated with country-specific average emission

SCOPE 3 EMISSIONS



- 41.6% Use of sold products
- 29.3% Purchased goods and services
- 14.2% Upstream transportation and distributio
- 7.7% Capital goods
- 3.3% Business travel
- 2.6% Commuting
- 1.2% Other

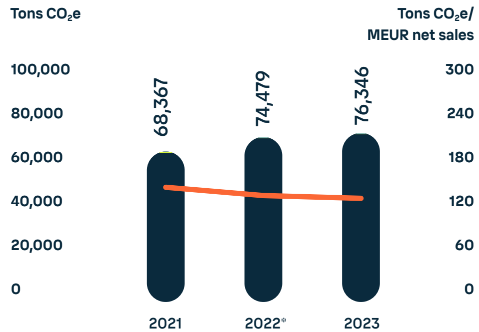
ENERGY CONSUMPTION*



Electricity | Heating | Energy consumption in relation to net sales

* Vaisala does not consume any cooling or steam.

CARBON FOOTPRINT



	2021	2022*	2023
Scope 1	343	481	398
Scope 2	135	34	80
Scope 3	67,889	73,964	75,868

Emissions in relation to net sales

* Due to changes in calculation methods, the 2022 figures are not fully comparable with the years 2021 and 2023.

factors) were 2,587 metric tons of CO_2e. However, the majority (99%) of our emissions were Scope 3 emissions (other indirect emissions), mostly from the use of sold products, purchased goods and services, and logistics. In 2023, our Scope 3 emissions were 75,868 metric tons of CO_2e. Our emission intensity, i.e. all Scope 1-3 emissions in relation to net sales, was 141 metric tons of CO_2e/MEUR.

We updated our emission calculations for 2021 and 2022 according to the guidelines of the Science Based Target initiative, using emission factors for air travel that consider only direct greenhouse gas emissions from flying, and not the warming effect caused by other factors. In addition, we recalculated our baseline year 2021 Scope 1 emissions and spend-based Scope 3 emissions with a new calculation software to make the emission figures comparable to the 2023 figures.

Waste

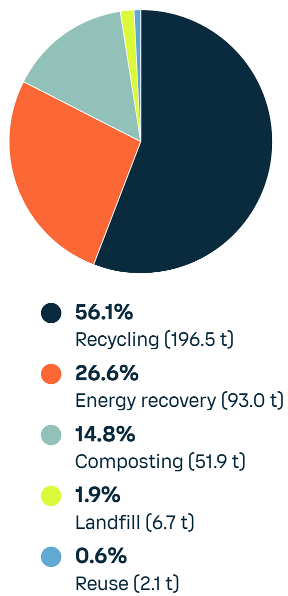
Waste associated with Vaisala's business operations is produced at the beginning of the supply chain in the manufacture of materials and components, in Vaisala's own operations related to manufacturing, repairing, and servicing of products and the work of our employees, as well as at the end of the value 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 multiple different 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.

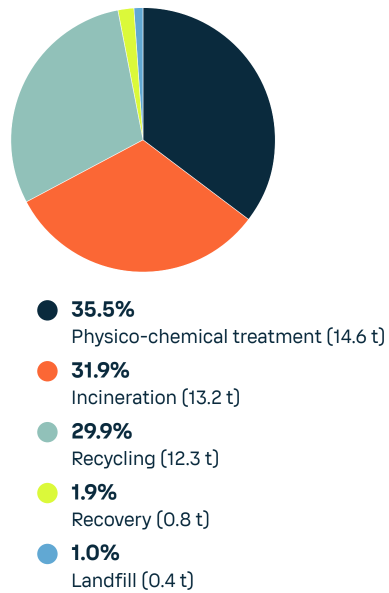
In 2023 our recycling rate was 67% (2022: 66%). We continued the reuse and recycling of wooden pallets together with our supplier. In addition, we improved recycling in break rooms by adding new waste bins for different types of waste. Furthermore, our major waste service provider continuously develops their waste treatment technologies so that an even larger share of the waste we generate can be recycled as material. Our goal for 2024 is to maintain at least a 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 instruct our customers on how to recycle our products at the end of their life cycles.

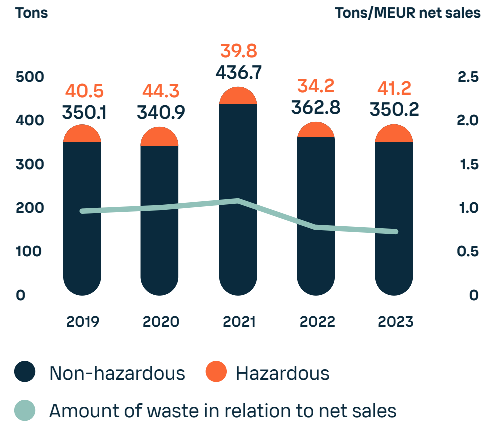
DISPOSAL METHODS FOR NON-HAZARDOUS WASTE



DISPOSAL METHODS FOR HAZARDOUS WASTE

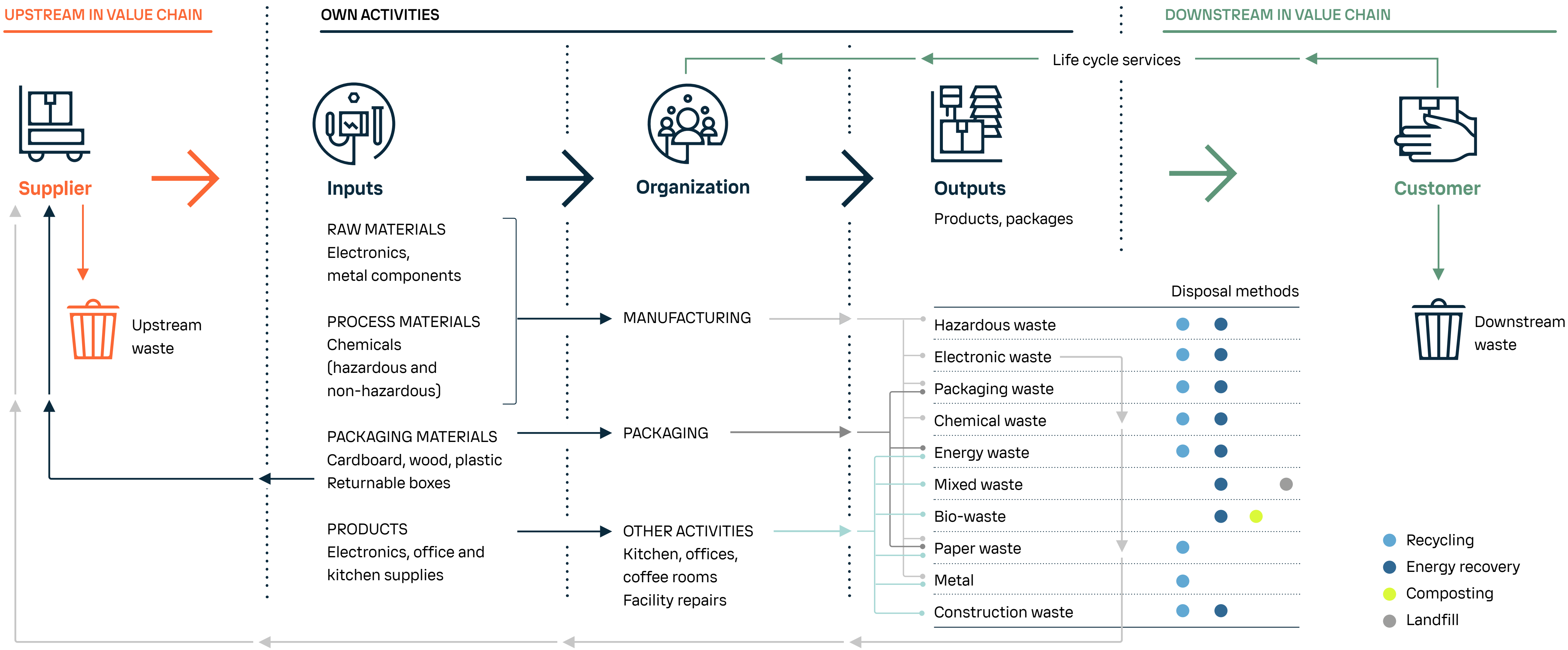


WASTE*



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

Waste process flow



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 (SVHC) in our products. We piloted the approach in 2023 and identified the first substance to be removed from our products, as well as other SVHCs, which we aim to remove in the coming years. To improve the expertise of our personnel, we organized a training session on the management of restricted substances for our departments working with products and components, which will become an annual practice in the future.

* 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 of Vaisala's global activities (consolidated using the financial control approach) and all applicable emission categories as defined in the GHG Protocol Corporate Accounting and Reporting Standard.

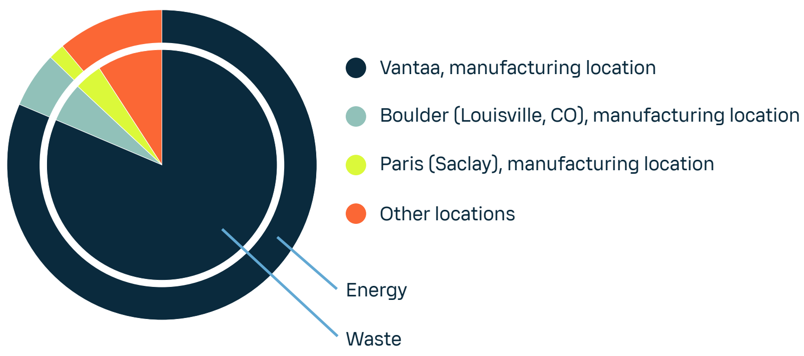
Data sources and assumptions

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 2023 to estimate the proportions of different modes of transport and share of remote work.

The environmental figures for 2023 are based, for the most part, on the last 12 months' data that was available at the time of the preparation of the report (including data for the first 9–11 months of the year and data from the year before). In some cases, the data for the missing months has been estimated 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 2023.

DIVISION OF ENVIRONMENTAL IMPACTS BY LOCATION



Emission factors

Greenhouse gas emissions are calculated using the best available emission factors. The primary databases used as sources of emission factors are: BEIS 2023 (UK Department for Business, Energy & Industrial Strategy), Ecoinvent 3.9.1, IEA Emissions Factors 2023, and eGRID2020. For the calculation of Scope 1 and spend-based Scope 3 emissions, the service provider for our new calculation software has chosen the factors used. Certain emission factors are received from other sources, such as our logistics partners, local energy companies, and vehicle manufacturers.

To calculate our Scope 2 emissions, we primarily use the market-based calculation method, which takes our purchased energy specific emissions into account (including all greenhouse gas emissions). We use 0.0 g CO_2e/kWh as the emission factor for renewable 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 (including only CO_2 emissions).

In Scope 3 emissions calculation, we primarily use emission factors that take into account all greenhouse gas emissions.

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:** The calculation is based on the waste streams on our manufacturing sites. According to our estimates, these cover more than 90% 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, and kilometer reimbursements for business trips traveled by employees' own cars. For air and rail travel and rental cars, we have received data from our service providers.
7. **Employee commuting:** We conducted a commuting survey among all our global employees in 2023. We got 860 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 ∑(number of products sold in reporting period x total lifetime expected use hours of product x average power consumption x 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 head count at the end of 2023 was 2,314. The average head count during the year was 2,327. The head count increased from the previous year by 4%. The average age of employees was 44 years. At the end of the year, 94% of employees were permanent and 6% temporary. In addition, there were approximately 30 non-employee workers (head count at the end of the year) at Vaisala. These were temporary agency workers working in various different functions, such as R&D and logistics. The reported number of non-employee workers is lower than in 2022, as we changed the definition of non-employee workers whose work is controlled by Vaisala to include only temporary agency workers and self-employed people, leaving out consultants working in R&D that formed the majority of non-employee workers reported in 2022.

Employee turnover

During 2023, 216 permanent employees were recruited, and 151 permanent employees left the company, out of whom 14 retired. The turnover rate (the number of permanent leavers divided by the number of permanent employees at the end of the year) was 7%, and the recruitment rate (the number of permanent new hires divided by the number of permanent employees at the end of the year) was 10%.

Collective agreements and compensation

Globally, 72% of our employees are covered by collective bargaining agreements. In Finland, Vaisala is a member of the Technology Industry Employers of Finland. Employees 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

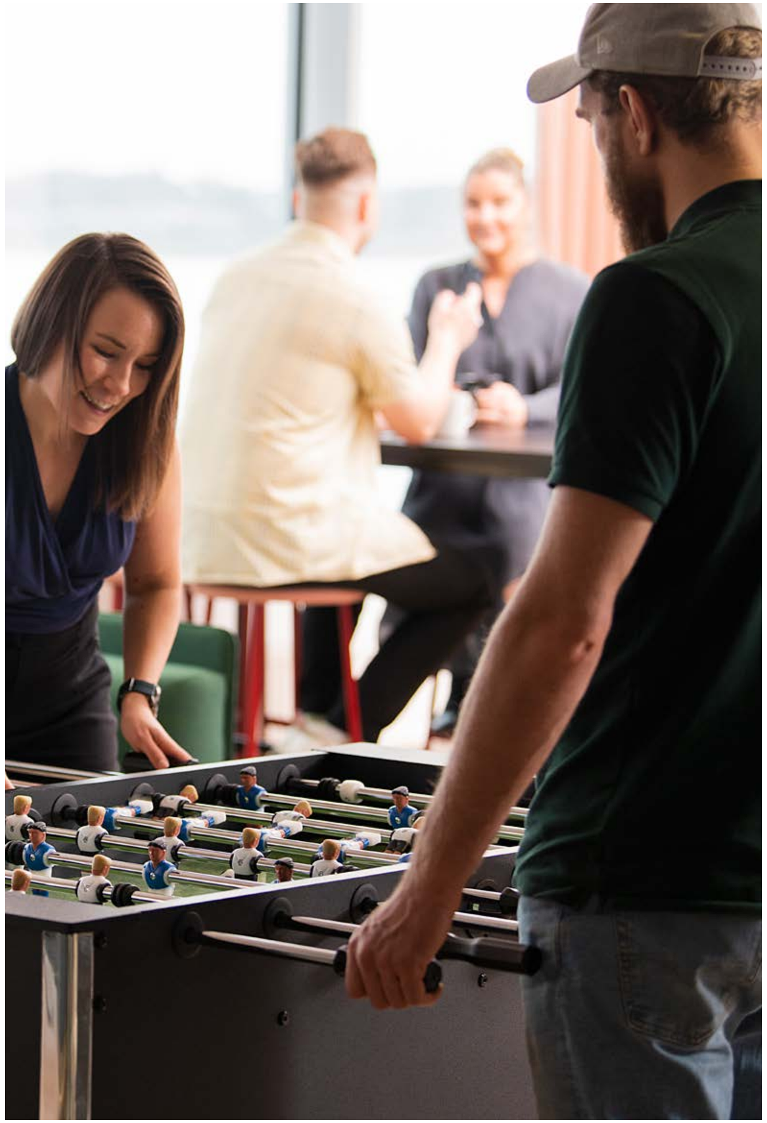
Employees by contract and gender at the end of the year (head count)

	Female	Male	Unknown	Total
Total	702	1,611	1	2,314
Permanent	654	1,516	1	2,171
Temporary	48	95	0	143
Full-time	655	1,543	1	2,199
Part-time (guaranteed hours)	24	22	0	46
Part-time (non-guaranteed hours)	23	46	0	69

Employees by contract and area at the end of the year (head count)

	Finland	Americas	EMEA	APAC
Total	1,533	360	254	167
Permanent	1,440	360	244	127
Temporary	93	0	10	40
Full-time	1,431	359	246	163
Part-time (guaranteed hours)	33	1	8	4
Part-time (non-guaranteed hours)	69	0	0	0

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



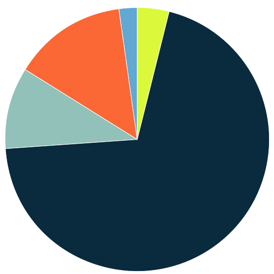
technology industries. Also in France, 99% of employees are covered by collective bargaining agreements. In countries where employees are not covered by collective bargaining agreements, the working conditions and terms of employment are not influenced or determined based on other collective bargaining 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 of our employees.

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 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.

EMPLOYEES BY LEVEL OF EDUCATION*



- 4% Doctoral degree
- 70% University degree
- 10% College/vocational school
- 14% High school/vocational institute
- 2% Comprehensive school

* Covers 86% of permanent employees

Recruitments by age group

	–19	20–29	30–39	40–49	50–59	60–	Total
Male	13	106	60	47	24	1	**251**
Female	2	56	38	22	7	2	**127**
Total	**15**	**162**	**98**	**69**	**31**	**3**	**378**

Turnover by age group

	–19	20–29	30–39	40–49	50–59	60–	Total
Male	11	71	40	32	28	11	**193**
Female	0	37	29	10	10	10	**96**
Total	**11**	**108**	**69**	**42**	**38**	**21**	**289**

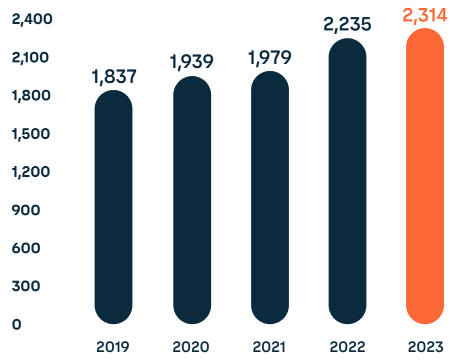
Recruitments by region

	Finland	Americas	EMEA	APAC	Total
Permanent	119	51	36	10	**216**
Temporary	119	10	24	9	**162**
Total	**238**	**61**	**60**	**19**	**378**

Turnover by region

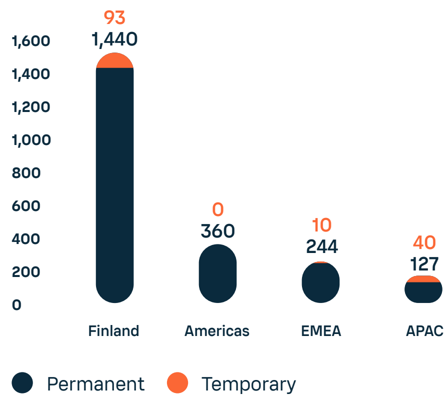
	Finland	Americas	EMEA	APAC	Total
Permanent	72	42	23	14	**151**
Temporary	98	10	19	11	**138**
Total	**170**	**52**	**42**	**25**	**289**

HEAD COUNT AT THE END OF THE YEAR*



* Includes also persons in long-time absence as of 2020

HEAD COUNT BY REGION AND CONTRACT



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

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.

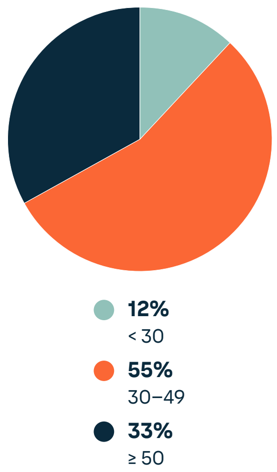
We want to support our employees in different stages of life and circumstances. We take a positive view on family leaves, irrespective of gender. The professional capacity and skills of more senior employees are

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

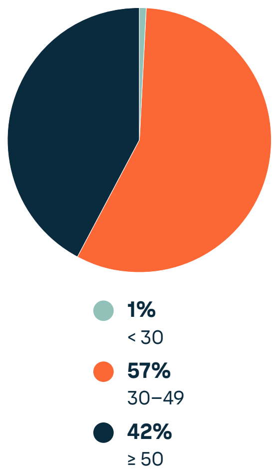
	All employee groups	Production employees	Managers and professionals
All countries	96%	101%	95%
Finland	98%	100%	97%
United States	92%	97%	92%
France	96%	N/A*	94%

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

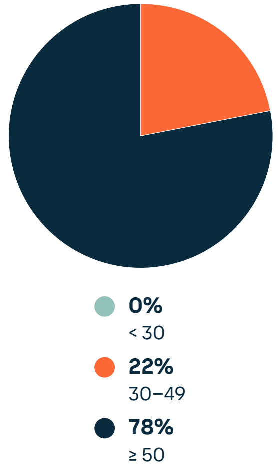
AGE DISTRIBUTION



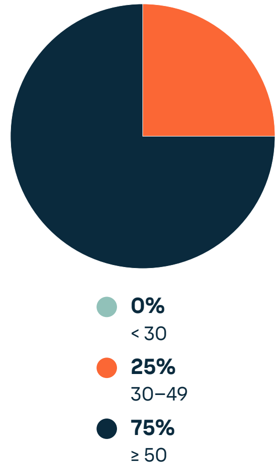
MANAGER AGE DISTRIBUTION



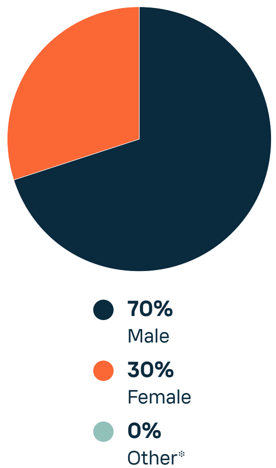
LEADERSHIP TEAM AGE DISTRIBUTION



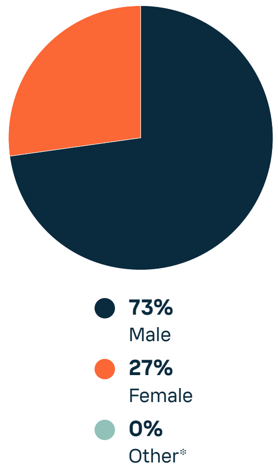
BOARD OF DIRECTORS AGE DISTRIBUTION



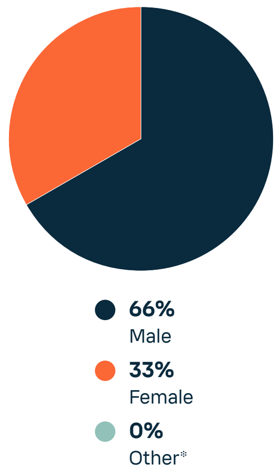
GENDER DISTRIBUTION



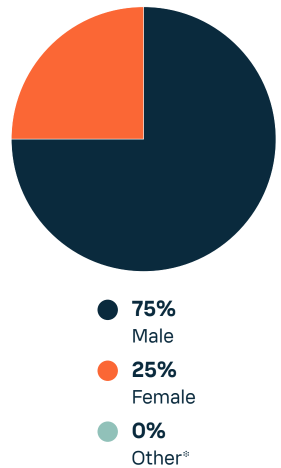
MANAGER GENDER DISTRIBUTION



LEADERSHIP TEAM GENDER DISTRIBUTION



BOARD OF DIRECTORS GENDER DISTRIBUTION



* Gender unknown, undeclared, or other

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.

We have maintained a good level of wage equality between genders. In 2023, we conducted a wage survey covering all locations, which showed that women's wages were, on average, 96% of men's wages on the same job requirement level for managers and professionals and 101% of men's wages for production employees. We have made progress in closing the pay gap for all employee groups, and especially the managers and professionals category. However, we will investigate the causes of the remaining differences further during 2024.

Our DEI strategy launch in 2022 paved the way forward for our 2023 DEI initiatives as we remain committed to building awareness, establishing inclusive ways of working, and monitoring measurable KPIs.

According to our DEI vision, we strive to become a DEI leader in the technology field, 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 dedication to creating a future-proof culture, we have taken steps to enhance DEI awareness among our employees. To lead these efforts, we appointed a Global Head of DEI who serves as the driving force behind our DEI initiatives. In the year 2023, we introduced a DEI e-learning training module, providing our employees with valuable insights into fostering inclusivity in the workplace.

In our continued pursuit of advancing DEI, we created an Employee Resource Group (ERG) program, with our first ERG being Women@ Vaisala & Allies. Through the Employee Resource Groups, we aim to connect expertise and perspectives to foster an environment of inclusivity and support. ERGs, such as Women@Vaisala & Allies, play a key role in developing our workplace culture, contributing to the overall success of our company.

The DEI index in our latest employee survey recorded a score of 4.0, slightly lower than the previous year's score of 4.2. Recognizing the importance of fostering an inclusive environment for all employees, especially those identifying as minorities, we acknowledge that there is room for improvement. Our focus is not only on understanding the factors contributing to the observed difference but also on implementing targeted actions to enhance the experience of inclusion within different minority groups.

Vaisala's DEI targets

- **target in 2026**
- **target in 2030**

Target	2023	Target in 2026	Target in 2030
DEI index	4.0/5	4.3	5
DEI index gap[1]	0.35	0.15	0.00
Gender balance[2] in tech roles[3]	17%	22%	30%
Gender balance in management[4]	27%	30%	40%
Gender balance in top management	28%	34%	40%
Multicultural talent in Finland[5]	10%	10%	15%
Multicultural talent in top management	28%	35%	40%
DEI training completion	38%	70%	90%

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, employees, and temporary agency workers.

The identification, assessment, and management of occupational health and safety related risks is systematic work, and it is done in cooperation with our employees and other stakeholders. Occupational health care participates as an expert in identifying and managing risks according to the practices of each country. The severity and probability of risks to which an employee may be exposed are determined in the risk assessment process. Risk assessment covers both routine and non-routine work. The most significant accident risks occur in electrical work, work at high places, and when working with chemicals. We apply the hierarchy of controls to minimize risks. If it is assessed that an employee may be exposed to a non-negligible risk, measures to reduce the risk will be planned. We primarily aim to eliminate the hazards or substitute them with less dangerous alternatives. If this 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. The quality of the risk assessment and management process is ensured as part of internal and external audits of the system.

Every Vaisala employee has the right to refrain from work without consequences if they consider it to endanger their own or other persons' safety or health at the workplace. Any reprisal for refraining from work would be against Vaisala's practices, and employees can report such situations through the whistleblowing channel.

We invest in health and safety training for employees and ensure that all employees have the necessary qualifications to perform their work. Our occupational health and safety practices are covered in a mandatory e-learning course. In addition to general orientation, we offer training for supervisors and various trainings for employees who are exposed to special risks in their work. Occupational safety training is free for our employees, and the training can be conducted during working hours.

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, temporary agency workers, 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 and documented. An employee representative and line management, as well as experts on a case-by-case basis, participate in the investigation. In addition to immediate corrective measures, actions are determined to prevent the recurrence of the case. A globally consistent reporting procedure and database improve the efficiency and transparency of health and safety performance monitoring.

In 2023, the proactive reporting index (reported risks, near misses, and improvement suggestions per 100 employees) was 30.08. The reporting frequency increased significantly from the previous year. With these reports, we have gained valuable information and been able to remove hazards, improving safety. Our employees' safety awareness has increased, and the health and safety culture is developing in a positive direction.

Injuries

The number of injuries decreased in 2023 compared to the previous year. A total of 11 injuries occurred to Vaisala's employees, of which four led to sick leave. There were no high-consequence injuries (as defined by the GRI standards) or fatalities. The Total Recordable Injury Frequency (TRIF) was 2.25 injuries per million hours worked, with the total number of hours worked being 4.88 million. The Lost Time Injury Frequency (LTIF) was 0.82 per million hours worked. Five of the injuries were caused by stumbling, falling, or slipping. The other injuries were related to the use of tools and protective equipment as well as chemicals. No injuries occurred to temporary agency workers. Thus, both TRIF and LTIF were 0 injuries per million hours worked for temporary agency workers.

During the year, there was one serious injury involving a contractor's employee who worked at Vaisala's premises under the supervision of the contractor's management. The contractor's employee fell off a ladder and the injury caused a long sick leave. The case was investigated in cooperation with the contractor and the authorities. The agreed measures have been taken by Vaisala.

Other injuries have also been investigated and corrective actions have been defined. Some of the corrective actions will continue to be executed during 2024.

To prevent accidents, we carried out an outdoor area and traffic risk assessment for the Vantaa office in 2023, and based on it, improvement measures were taken, such as a new pedestrian walkway and a pedestrian bridge between two buildings. As part of the development of the health and safety culture, 54% of supervisors completed a tailored health and safety training program. In addition, management safety walks were carried out quarterly. 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 healthcare

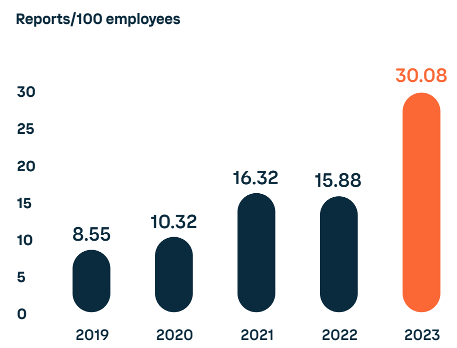
In Vaisala, occupational healthcare is organized by following legislative requirements and practices in each country. The services we offer cover also a wide range of non-occupational healthcare services. Employees are informed about the services through our intranet, for example.

In Finland, we offer 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.

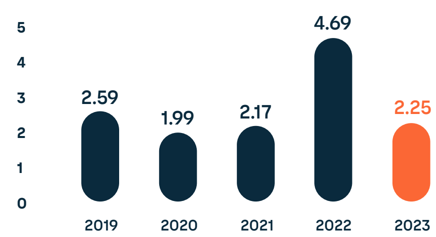
In the United States, we share the cost of a complete healthcare package with our employees, including medical, dental, and vision coverage. In France, we pay 50% of employees' compulsory private health insurance that covers all medical treatments. In China, we provide annual medical check-ups to all employees and an exclusive commercial medical insurance for employees and their dependents.

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

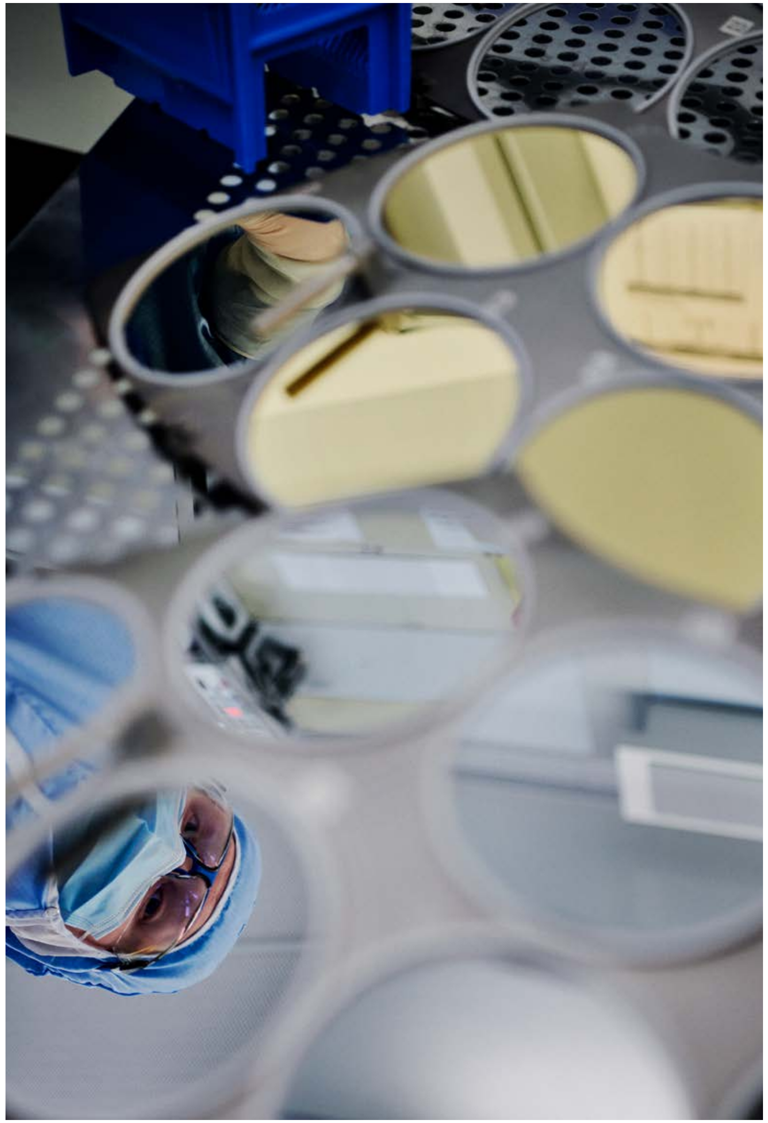
PROACTIVE REPORTING



INJURIES PER MILLION WORKING HOURS (TRIF)



Ethics and compliance



Prevention of corruption and bribery

We have 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 prevention of corruption and bribery. 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.

The prevention of corruption and bribery is important also in our network of partners through which we serve our customers around the world. The network includes 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 our Code of Conduct or 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

We are committed to respecting human rights as defined in the United Nations' Universal Declaration of Human Rights and endorse ILO's Declaration of Fundamental Principles and Rights at Work. We do not condone violations of human rights or labor laws in any part of our supply chain and take appropriate measures to ensure that the risk of violations of our Code of Conduct or Supplier Code of Conduct is minimized in our immediate supply chain.

Our 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 our 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.

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

We are 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.

Our 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

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 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.

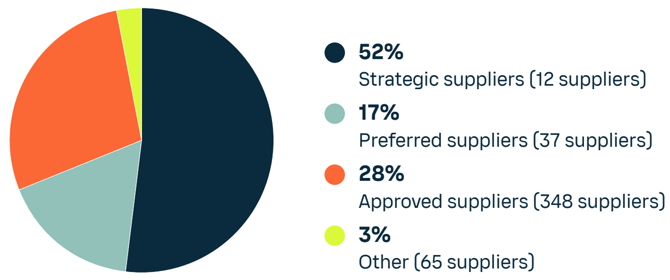
If a supplier's assessment does not meet Vaisala's requirements, the supplier is expected to implement corrective measures to improve their sustainability as part of their comprehensive development plan, and any weaknesses are addressed in cooperation with the supplier. The SAQ is used also for assessing new suppliers' ESG risks.

In 2023, we started a partnership with EcoVadis, which conducts sustainability assessments. With EcoVadis, we can further strengthen our supply chain's sustainability assessment and continuous improvement. Our goal is that by the end of 2024, 60% of our purchases (based on spend) will be made from suppliers who have been evaluated by EcoVadis.

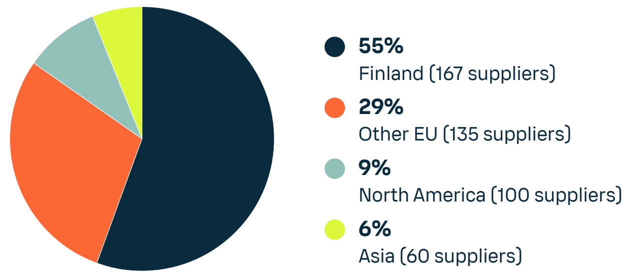
As part of supplier management, we conduct quality, supply chain, and process audits. In these audits, we also check aspects related to sustainability, such as suppliers' knowledge and application of Vaisala's Supplier Code of Conduct, labor and human rights, occupational safety, environmental management, product safety (RoHS and REACH), and conflict mineral management. In 2023, we audited 22 suppliers.

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

SPEND BY SUPPLIER CATEGORY



SPEND BY REGION



Key figures of Vaisala's direct supply chain*

462
(2022: 497)
active suppliers

22
(2022: 32)
suppliers audited during the year

94%
(2022: 87%)
of purchases (based on spend) were made from suppliers who had signed the Supplier Code of Conduct

91%
(2022: 83%)
of purchases (based on spend) were made from suppliers rated on ESG metrics

41%
of purchases (based on spend) were made from suppliers evaluated by EcoVadis

* By direct suppliers, we mean suppliers related to our products, which includes manufacturing partners as well as mechanics and other component 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. 61–62 Ethics and compliance
Principle 2: Make sure that they are not complicit in human rights abuses.	p. 61–62 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. 61–62 Ethics and compliance
Principle 5: The effective abolition of child labor.	p. 61–62 Ethics and compliance
Principle 6: The elimination of discrimination in respect of employment and occupation.	p. 56–58 Diversity, equity, and inclusion, p. 61–62 Ethics and compliance

Environment	
Principle 7: Businesses should support a precautionary approach to environmental challenges.	p. 53 Sustainable product design and management
Principle 8: Undertake initiatives to promote greater environmental responsibility.	p. 48 Environmental management, p. 50 Energy, p. 50 Emissions, p. 51 Waste
Principle 9: Encourage the development and diffusion of environmentally friendly technologies.	p. 53 Sustainable product design and management

Anti-corruption	
Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	p. 61–62 Ethics and compliance

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 and EU Taxonomy on Sustainable Finance in the Creating value section, and Risk management in the Governance section.

Vantaa February 13, 2024

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 practitioner's limited assurance report

Translation of the Finnish original

To the Management of Vaisala Corporation

We have been engaged by the Management of Vaisala Corporation (hereinafter also the "Company") to perform a limited assurance engagement on selected sustainability information for the reporting period 1 January 2023 to 31 December 2023, disclosed in the Sustainability business practices of Vaisala Annual Report 2023 presented GRI content index (hereinafter the Selected sustainability information).

Selected sustainability information

The selected sustainability information within the scope of assurance covers:

- Indicators as set out in GRI Standards of the Global Reporting Initiative – standards identified in Company's Annual Report 2023 presented GRI content index.

Management's responsibility

The Management of Vaisala Corporation is responsible for preparing the Selected sustainability information in accordance with the GRI Standards of the Global Reporting Initiative reporting criteria described in the Sustainability business practices of Vaisala Corporation Annual Report 2023.

The Management of Vaisala Corporation is also responsible for such internal control as the management determines is necessary to enable the preparation of the Selected sustainability information that is free from material misstatement, whether due to fraud or error.

Practitioner's independence and quality management

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

PricewaterhouseCoopers Oy applies International Standard on Quality Management (ISQM) 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Practitioner's responsibility

Our responsibility is to express a limited assurance conclusion on the Selected sustainability information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (revised) "Assurance Engagements Other than Audits or Reviews of Historical Financial Information", and, in respect of greenhouse gas emissions, International Standard on Assurance Engagements (ISAE) 3410 "Assurance Engagements on Greenhouse Gas Statements". These standards require that we plan and perform the engagement to obtain limited assurance about whether the Selected sustainability information is free from material misstatement.

In a limited assurance engagement, the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. An assurance engagement involves performing procedures to obtain evidence about the amounts and other

information in the Selected sustainability information. The procedures selected depend on the practitioner's judgment, including an assessment of the risks of material misstatement of the Selected sustainability information.

Our work consisted of, amongst others, the following procedures:

- Interviewing senior management of the Company.
- Visiting the Company's Head Office in Finland and one site in USA.
- Interviewing employees responsible for collecting and reporting the information presented in the Selected sustainability information at Group level.
- Testing the accuracy and completeness of the information from original documents and systems on a sample basis.
- Testing the consolidation of information and performing recalculations on a sample basis.
- Considering the disclosure and presentation of the Selected sustainability information.

Limited assurance conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Vaisala Corporation's Selected sustainability information for the reporting period 1 January 2023 to 31 December 2023 is not properly prepared, in all material respects, in accordance with the Reporting criteria.

When reading our limited assurance report, the inherent limitations to the accuracy and completeness of sustainability information should be taken into consideration.

Our assurance report has been prepared in accordance with the terms of our engagement. We do not accept, or assume responsibility to anyone else, except to Vaisala Corporation for our work, for this report, or for the conclusions that we have reached.

Helsinki, 13 February 2024
PricewaterhouseCoopers Oy

Tiina Puukkoniemi
Partner, Authorised
Public Accountant (KHT)
Sustainability Reporting & Assurance

Niina Vilske
Partner, Authorised
Public Accountant (KHT)

GRI content index

STATEMENT OF USE: Vaisala has reported in accordance with the GRI Standards for the period January 1 - December 31, 2023.

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: p. 155 Consolidated financial statements: Note 26. Subsidiaries				X
	2-2 Entities included in the organization's sustainability reporting	p. 45 Boundaries				X
	2-3 Reporting period, frequency and contact point	Reporting period: January 1–December 31, 2023, reporting frequency: annual, publication date: February 29, 2024. Contact infromation: p. 183 Contact information				X
	2-4 Restatements of information	p. 51 Emissions				X
	2-5 External assurance	p. 45 Independent assurance, p. 67 Independent limited assurance report				X
	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. 63 Responsible supply chains				X
	2-7 Employees	p. 55 Personnel				X
	2-8 Workers who are not employees	p. 55 Personnel				
	2-9 Governance structure and composition	p. 46 Governance, p. 77–83 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/fi/investors/corporate-governance/board-directors				
	2-10 Nomination and selection of the highest governance body	p. 78 Board of Directors				
	2-11 Chair of the highest governance body	The Chair of the Board of Directors is not a senior executive in the organization.				X

GRI standard	Disclosure	Location and additional information	Omission			Assurance
			Requirement(s) omitted	Reason	Explanation	
GRI 2: General Disclosures 2021	2-12 Role of the highest governance body in overseeing the management of impacts	p. 46 Governance				X
	2-13 Delegation of responsibility for managing impacts	p. 46 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.				X
	2-15 Conflicts of interest	p. 78 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. 47 Compliance monitoring and violations				X
	2-17 Collective knowledge of the highest governance body	Sustainability knowledge has been added to the Board of Directors' nomination criteria. In addition, the Board of Directors' knowledge is increased by including sustainability related matters on the Board of Directors' agenda.				X
	2-18 Evaluation of the performance of the highest governance body	p. 77–83 Corporate Governance Statement				
	2-19 Remuneration policies	p. 84–87 Remuneration report				
	2-20 Process to determine remuneration	p. 84–87 Remuneration report. Remuneration consultants are not involved in determining remuneration.				
	2-21 Annual total compensation ratio	p. 84–87 Remuneration report				
	2-22 Statement on sustainable development strategy	p. 6–7 Chair and CEO's message				
	2-23 Policy commitments	p. 46–47 Governance, policies, and due diligence, p. 47 Supplier Code of Conduct				X
	2-24 Embedding policy commitments	p. 46–47 Governance, policies, and due diligence				X
	2-25 Processes to remediate negative impacts	p. 47 Compliance monitoring and violations				X
	2-26 Mechanisms for seeking advice and raising concerns	p. 47 Compliance monitoring and violations				X

GRI standard	Disclosure	Location and additional information	Omission: Requirement(s) omitted	Omission: Reason	Omission: Explanation	Assurance
GRI 2: General Disclosures 2021	2-27 Compliance with laws and regulations	No incidents				X
	2-28 Membership associations	p. 35–36 Strengthening scientific collaboration and community outreach				
	2-29 Approach to stakeholder engagement	p. 26 Stakeholder engagement				
	2-30 Collective bargaining agreements	p. 55–56 Collective agreements and compensation				X
Material topics						
GRI 3: Material Topics 2021	3-1 Process to determine material topics	p. 45 Materiality				X
	3-2 List of material topics	p. 45 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, p. 46–47 Governance, policies, and due diligence				X
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	p. 33 Economic value	Reporting separately by country or region.	Not applicable	Not considered relevant.	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 – more than a megatrend, 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. 88–91 Risk management, p. 121 Climate-related matters				
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				

GRI standard	Disclosure	Location and additional information	Omission			Assurance
			Requirement(s) omitted	Reason	Explanation	
Prevention of corruption and bribery						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 46–47 Governance, policies, and due diligence, p. 61 Prevention of corruption and bribery				X
GRI 205: Anti-corruption 2016	205-3 Confirmed incidents of corruption and actions taken	No incidents				X
Fair competition						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 46–47 Governance, policies, and due diligence, p. 62 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. 46–47 Governance, policies, and due diligence, p. 48 Environmental management, p. 48 Environmental impacts, p. 50 Energy				X
GRI 302: Energy 2016	302-1 Energy consumption within the organization	p. 50 Energy, p. 53 Data sources and assumptions	Consumption by fuel, sold energy, energy consumption in joules	Not applicable	Vaisala does not consume process fuels or sell electricity in any significant quantities. Energy consumption reported in watt-hours instead of joules.	X
	302-3 Energy intensity	p. 50 Energy				X

GRI standard	Disclosure	Location and additional information	Omission: Requirement(s) omitted	Omission: Reason	Omission: Explanation	Assurance
Emissions						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 26 Stakeholder engagement, p. 46–47 Governance, policies, and due diligence, p. 48 Environmental management, p. 48 Environmental impacts, p. 50–51 Emissions				X
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	p. 50–51 Emissions, p. 53 Scope of environmental reporting, p. 53 Data sources and assumptions, p. 54 Emission factors	GHGs included in calculation, biogenic emissions	Information unavailable/ incomplete	Information not available from service providers.	X
	305-2 Energy indirect (Scope 2) GHG emissions	p. 50–51 Emissions, p. 53 Scope of environmental reporting, p. 53 Data sources and assumptions, p. 54 Emission factors				X
	305-3 Other indirect (Scope 3) GHG emissions	p. 50–51 Emissions, p. 53 Scope of environmental reporting, p. 53 Data sources and assumptions, p. 54 Emission factors, p. 54 Calculation methodology for Scope 3 emissions	Biogenic emissions	Information unavailable/ incomplete	Information not available from service providers.	X
	305-4 GHG emissions intensity	p. 50–51 Emissions	GHGs included in calculation	Information unavailable/ incomplete	Information not available from service providers.	X
Waste						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 46–47 Governance, policies, and due diligence, p. 48 Environmental management, p. 48 Environmental impacts, p. 51–52 Waste				X
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	p. 51–52 Waste				X
	306-2 Management of significant waste-related impacts	p. 51–52 Waste, p. 53 Data sources and assumptions				X
	306-3 Waste generated	p. 51–52 Waste, p. 53 Data sources and assumptions				X
	306-4 Waste diverted from disposal	p. 51–52 Waste, p. 53 Data sources and assumptions				X
	306-5 Waste directed to disposal	p. 51–52 Waste, p. 53 Data sources and assumptions				X

GRI standard	Disclosure	Location and additional information	Omission: Requirement(s) omitted	Omission: Reason	Omission: Explanation	Assurance
Employee turnover						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 46–47 Governance, policies, and due diligence, p. 55 Turnover				X
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	p. 55 Turnover				X
Occupational health and safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 46–47 Governance, policies, and due diligence, p. 59–60 Occupational health and safety				X
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	p. 59 Occupational health and safety management				X
	403-2 Hazard identification, risk assessment, and incident investigation	p. 59 Occupational health and safety management, p. 59–60 Proactive reporting and investigation				X
	403-3 Occupational health services	p. 59 Occupational health and safety management, p. 60 Occupational healthcare				X
	403-4 Worker participation, consultation, and communication on occupational health and safety	p. 59 Collaboration				X
	403-5 Worker training on occupatio-nal health and safety	p. 59 Occupational health and safety management				X
	403-6 Promotion of worker health	p. 30 Well-being, p. 60 Occupational healthcare				X
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	p. 61–62 Respect for human rights and human rights due diligence				X
	403-8 Workers covered by an occupational health and safety management system	p. 59 Occupational health and safety management				X
	403-9 Work-related injuries	p. 59 Occupational health and safety management, p. 60 Injuries				X

GRI standard	Disclosure	Location and additional information	Omission			Assurance
			Requirement(s) omitted	Reason	Explanation	
Value to employees						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 29–30 Value to employees p. 46–47 Governance, policies, and due diligence				X
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
Diversity, equity and inclusion						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 46–47 Governance, policies, and due diligence, p. 56–58 Diversity, equity and inclusion				X
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	p. 56–58 Diversity, equity and inclusion				X
	405-2 Ratio of basic salary and remuneration of women to men	p. 56–58 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. 46–47 Governance, policies, and due diligence, p. 61–62 Respect for human rights and human rights due diligence, p. 62 Conflict minerals				X
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	p. 61–62 Respect for human rights and human rights due diligence, p. 62 Conflict minerals, p. 63–64 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. 61–62 Respect for human rights and human rights due diligence, p. 62 Conflict minerals, p. 63–64 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: Requirement(s) omitted	Omission: Reason	Omission: Explanation	Assurance
Responsible supply chains						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 46–47 Governance, policies, and due diligence, p. 63–64 Responsible supply chains				X
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	We did not approve any new suppliers in 2023.				X
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	We did not approve any new suppliers in 2023.				X
Product safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	p. 46–47 Governance, policies, and due diligence, p. 53 Sustainable product design and management, p. 62 Product safety				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

Annual Report 2023

Governance

Corporate Governance Statement 2023

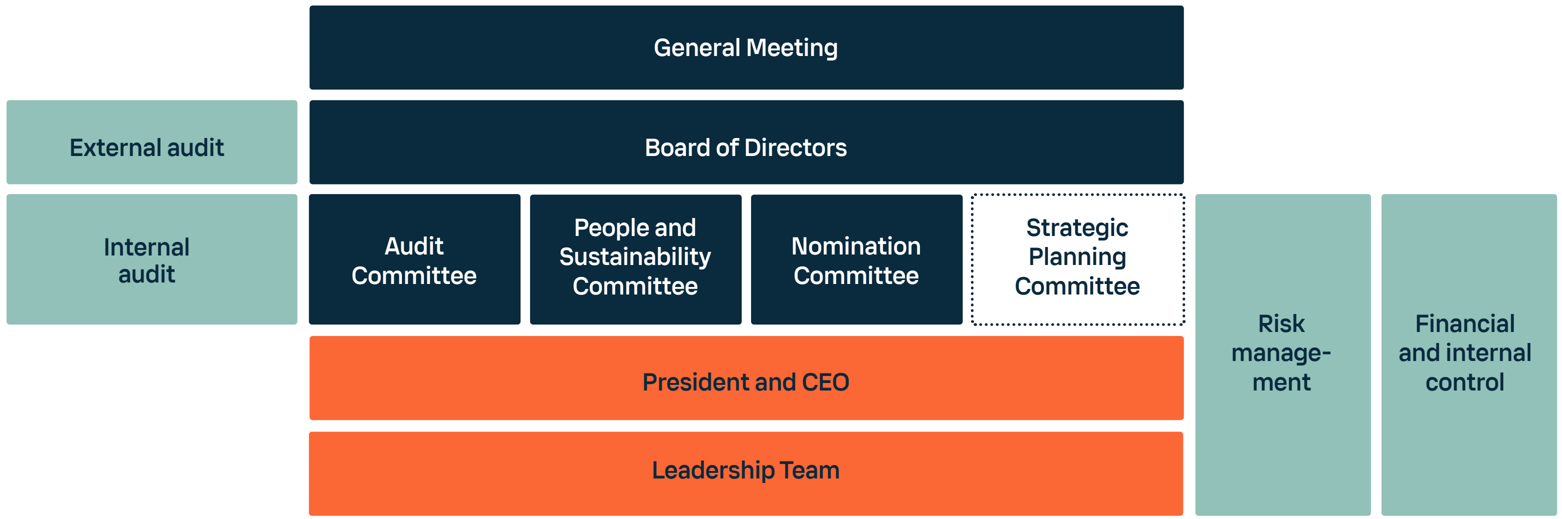
Vaisala's general governance principles

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 the Finnish Supervisory Authority as well as the Finnish Corporate Governance Code 2020 published by the Securities Market Association (available at www.cgfinland.fi/en/).

Vaisala Board of Directors has approved this Corporate Governance Statement in its meeting on February 13, 2024. PricewaterhouseCoopers 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.

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. The 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.

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 six and maximum nine 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 one year. The term begins at the close of the General Meeting in which the member is elected and ends at the close of the 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 a team where the joint capabilities of the members enable the Board to support the development of the company's current and future business, impact, and sustainability. The Board should be considered as a whole that is capable of managing its tasks and duties in the best possible way. In addition, the Board should consist of members of different genders, different educational and professional backgrounds, and different nationalities.

The Board of Directors and the Nomination Committee are taking measures to make sure the company meets the requirement of at least 40% of the underrepresented sex holding non-executive director positions by June 2026.

Vaisala complies with the Finnish Corporate Governance Code 2020 in the 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 themself.

Vaisala's Board of Directors in 2023 represents adequate expertise and experience as well as diversity on the established goals. All members of the Board in 2023 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 themself and the company or between the company and a third party when there is a possibility to achieve essential advantage to themself, 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.

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, including employment terms, as well as the same of other direct reports of the President and CEO, 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 effectiveness 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 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 review and approve a Financial Statement Release, non-financial reporting, Financial Statements, and the Board of Directors' Report as well as Corporate Governance Statement
- to make a dividend proposal to the General Meeting
- to review and approve Interim Reports and Half Year Financial Report
- to monitor the evaluation and management of risks related to the company's strategy and business operations, and
- to decide on Remuneration Policy and management remuneration and incentive systems.

Composition of the Board of Directors Dec. 31, 2023

Member	Member since	End of term	Born	Education	Nationality	Main occupation	Shareholding Dec. 31, 2023
Ville Voipio, Chair	2015 Chair since 2021	2024	1974	D.Sc. (Tech.)	Finnish	Professor of Practice, Sustainable Global Business, Turku School of Economics, University of Turku	398,187 (A share) 119,712 (K share)
Raimo Voipio Vice Chair	1989 Chair in 1994–2021	2024	1955	M.Sc. (Eng.)	Finnish	Board professional	571,757 (A share) 404,296 (K share)
Petri Castrén	2017	2025	1962	LL.M., MBA	Finnish	Interim President and CEO, CFO, Kemira Oyj	4,040 (A share)
Antti Jääskeläinen	2020	2024	1972	M.Sc. (Eng.), M.Sc. (Econ.), MBA	Finnish	Executive Vice President, UPM Raflatac	1,639 (A share)
Petra Lundström	2014	2024	1966	M.Sc. (Tech. Physics)	Finnish	EVP, Nuclear Generation, Fortum Power and Heat Oy	7,440 (A share)
Jukka Rinnevaara	2019	2024	1961	M.Sc. (Econ.)	Finnish	Board professional	2,359 (A share)
Kaarina Ståhlberg	2016	2025	1966	LL.M	Finnish	General Counsel and M&A, Posti Group Oyj	6,840 (A share)
Tuomas Syrjänen	2019	2025	1976	M.Sc. (El. Eng.)	Finnish	Program Director – AI Renewal, Futurice Oy	3,709 (A share)
Total							**995,971 (A share) 524,008 (K share) 1,519,979 (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.

Members of the Board of Directors in 2023

During January 1–March 28, 2023, 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 Ståhlberg, and Tuomas Syrjänen. The Board of Directors' secretary was General Counsel Katriina Vainio.

The Annual General Meeting held on March 28, 2023, 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 2023

Member	Attendance/ Number of meetings	Attendance %
Ville Voipio	10/10	100%
Raimo Voipio	10/10	100%
Petri Castrén	9/10	90%
Antti Jääskeläinen	10/10	100%
Petra Lundström	9/10	90%
Jukka Rinnevaara	10/10	100%
Kaarina Ståhlberg	10/10	100%
Tuomas Syrjänen	10/10	100%

Board committees

The Board of Directors has three permanent committees: Audit Committee, People and Sustainability Committee, and Nomination Committee, as well as Strategic Planning Committee that was established in 2023 for dealing with significant matters as needed. 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 with the exception of the Strategic Planning Committee, members of which are nominated among the members of the Board of Directors as needed.

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 reviews Interim Reports, Half Year Financial Report, Financial Statement Release and Financial Statements as well as Board of Directors' Report including non-financial reporting. 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's plans for employee development, talent attraction and management, succession planning, and their progress. The 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

The 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.

Strategic Planning Committee

The Strategic Planning Committee is responsible for formulating, reviewing and evaluating strategic initiatives and special projects, and provides recommendations on such initiatives for Board. The Committee is merely temporary in its nature to address topical matters arising. The committee's charter is published as part of the charter of the Board of Directors on the company's website. When operative, the committee reports about its actions to the Board of Directors.

The Strategic Planning Committee comprises at least three members and is appointed by the Board of Directors among its members as needed. The majority of members of the committee must be independent of the company.

Committee members and their attendance in committee meetings in 2023

Committee	Member	Attendance/ Number of meetings	Attendance %
Audit Committee	Kaarina Ståhlberg (Chair)	6/6	100%
	Petri Castrén	6/6	100%
	Antti Jääskeläinen	6/6	100%
	Raimo Voipio	6/6	100%
People and Sustainability Committee	Ville Voipio (Chair)	5/5	100%
	Petra Lundström	4/5	80%
	Jukka Rinnevaara	4/5	80%
	Tuomas Syrjänen	5/5	100%
Nomination Committee	Ville Voipio (Chair)	5/5	100%
	Petra Lundström	5/5	100%
	Kaarina Ståhlberg	5/5	100%
	Raimo Voipio	5/5	100%
Strategic Planning Committee	Ville Voipio (Chair)	1/1	100%
	Petri Castrén	1/1	100%
	Antti Jääskeläinen	1/1	100%
	Kaarina Ståhlberg	1/1	100%

All members of the Audit Committee, the People and Sustainability Committee, the Nomination Committee, as well as the Strategic Planning 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 nine 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, the Executive Vice President, Sustainability and Strategy, as well as the Group General Counsel. The General Counsel acts as secretary to the Leadership Team.

Heli Lindfors started as Chief Financial Officer on May 6, 2023. Anne Jalkala was appointed Executive Vice President, Sustainability and Strategy and member of the Vaisala Leadership Team as of May 5, 2023.

Members of the Leadership Team Dec. 31, 2023

Director	Member since	Born	Education	Nationality	Position at Vaisala	Shareholding Dec. 31, 2023
Kai Öistämö	2020	1964	TkT	Suomi	President and CEO	14,860 (A share)
Anne Jalkala	2023	1982	TkT	Suomi	EVP, Sustainability and Strategy	500 (A shares)
Sampsa Lahtinen	2013	1963	DI	Suomi	EVP, Industrial Measurements business area	47,846 (A share)
Timo Leskinen	2021	1970	PsM	Suomi	EVP, Human Resources	2,250 (A share)
Heli Lindfors	2023	1984	KTM	Suomi	CFO	- (A share)
Olli Nastamo	2021	1956	DI	Suomi	EVP, Operational Excellence	- (A share)
Vesa Pylvänäinen	2011	1970	KTM	Suomi	EVP, Operations	24,418 (A share)
Jarkko Sairanen	2016	1963	DI, MBA	Suomi	EVP, Weather and Environment business area	44,916 (A share)
Katriina Vainio	2017	1967	OTK	Suomi	EVP, Group General Counsel	13,231 (A share)
Total						**148,021 (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 provides 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. Further information on risk management can be found in the Board of Directors' Report on pages 99-109.

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 the internal control environment and by monitoring the effectiveness of the control design. The 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.

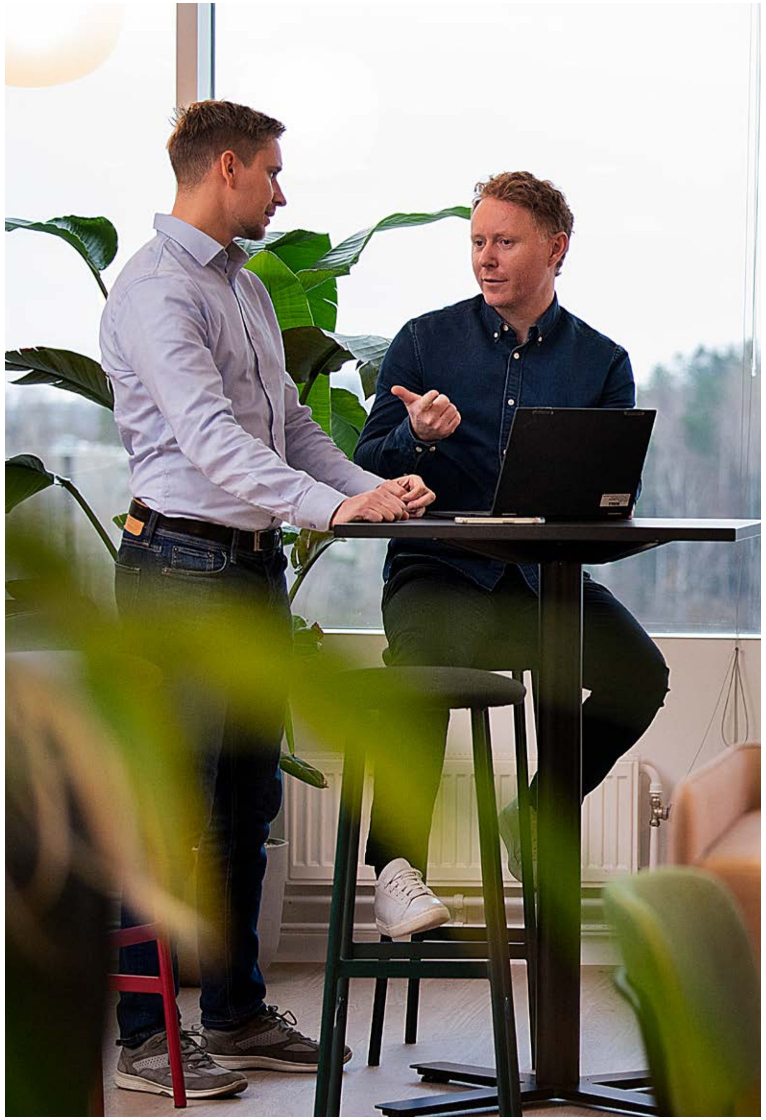
Risk assessment

Risk assessment as regards financial reporting aims to identify and systematically evaluate the 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 controls.

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 on 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 the 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, the internal audit, and the auditor coordinate audit planning and monitoring regularly.

General development measures in internal control and risk management in 2023
In 2023, the internal audit carried out site, function, and process audits. Audits provided input to the 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 the 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. The Board of Directors will resolve 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. The auditor's term of office covers the current fiscal year and expires at the close of the following Annual General Meeting. The Annual General Meeting elects the auditor and decides on the compensation paid to them.

The Annual General Meeting held on March 28, 2023, elected PricewaterhouseCoopers Oy, audit firm, as the Auditor for a term of one year. APA Niina Vilske acts as the auditor with the principal responsibility.

Auditor's fees

EUR 1,000	2023	2022
Audit	610	469
Tax advice	18	47
Statements	8	46
Other fees	105	113
Total	**740**	**676**

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. The closed window ends on the day following the publication day. The closed window also applies to the persons engaged in the 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 the 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 the publication of insider information. When the company makes the decision to delay 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 2023

Remuneration Report 2023 for Governing Bodies of Vaisala Corporation has been prepared pursuant to the Finnish Corporate Governance Code 2020. The remuneration of governing bodies in 2023 has been in alignment with the Remuneration Policy.

Chair's foreword

Dear shareholders,

The global turbulence that marked 2022 continued in 2023. The environment included uncertainty for Vaisala, our customers, and the economy in general. This was especially visible in our Industrial Measurements business. Nevertheless, Vaisala showed resilience and adapted well in a fast-changing and unpredictable environment.

Even during these uncertain and turbulent times, our commitment to competitive and transparent compensation practices remains firm.

We are committed to being fair, competitive, and open about how we pay our employees. With the rising cost of living, we have looked at what is happening in the markets where we operate. We took this into account in our 2023 salary budget to make sure we are supporting our employees effectively. We are also making our pay policies clearer to everyone, so our team can better understand and engage with how we make salary decisions.

We are proud of the positive feedback on our work in Diversity, Equity, and Inclusion (DEI). We are working hard to make sure everyone at Vaisala feels valued and supported.

As employees expect their jobs to develop, we change too. We strive for fair and competitive pay practices, but we are also updating them to stay ahead of the curve. We are refining our benchmarking process by specifically identifying the market for comparison, especially for executives and leadership roles. We include Nordic high-growth technology companies within a defined range of market capitalization. This tailored approach is relevant and sets the stage for robust remunerations. To respond to our new purpose *Taking every measure for the planet* and to highlight our unwavering dedication to sustainability, we are also going to include sustainability goals in both Short-Term and Long-Term Incentives, which the Board of Directors will set each year. Through these refinements, our aim is to achieve better alignment with industry norms and market realities, helping us attract the best talent and ensuring our company's growth in the long run.

We welcome shareholder feedback on our Remuneration Report.

Ville Voipio,
Chair of the People and Sustainability Committee

Remuneration linked to long-term business performance

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.

The Annual General Meeting approved an increase for the Board remuneration in 2021. In addition, year-on-year variation of total remuneration is influenced by meeting fees. In 2023, the remuneration of the Board remained unchanged.

In adherence to Vaisala's remuneration principles, we have designed the remuneration to promote performance and shareholder alignment. Also, we have designed the Short-Term Incentive schemes (STI) so that they incentivize and reward for the achievement of short-term business goals. Based on the principles of growth and profitability, the STIs have been linked to EBITA and net sales of the year in question. This not only recognizes immediate successes but also propels the company towards sustainable growth. The Long-Term Incentive (LTI) schemes are based on our commitment to long-term financial success and share value creation. It is approved by the Board of Directors annually. The current LTI scheme includes a measurement of average EBITA % and Total Shareholder Return (TSR). This combination creates alignment that the participants are not only rewarded for the company's financial performance but also for the overall value creation for our shareholders.

The remuneration of the President and CEO is tied to performance. A substantial proportion of their remuneration is derived from variable pay, i.e. short- and long-term incentives. This structure aims to build a robust connection between performance and rewards.

As a global company, Vaisala's remuneration policy applies to all its employees worldwide. Thus comparing the development of the President and CEO and Board of Director's remuneration with the global employee base is pivotal to help building transparent and sustainable long-term development. The following table presents the development of the average employee remuneration, alongside that of the President and CEO and Board of Directors, in conjunction with the company's financial performance over the past five financial years.

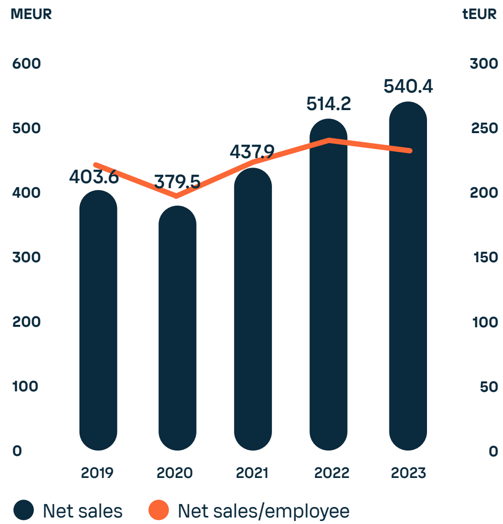
All rewards have been paid by Vaisala Corporation. During 2023, the company has not exercised any rights to modify, cancel, or reclaim any paid rewards.

Development of remuneration and company performance during past years

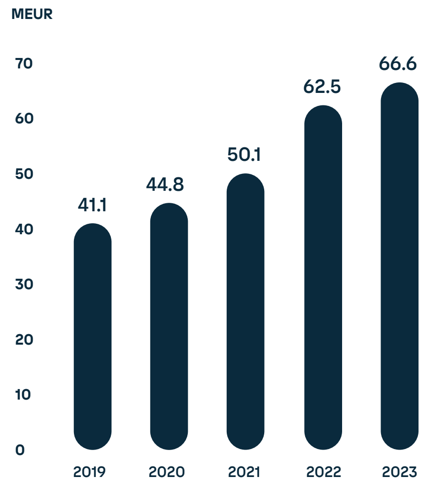
EUR 1,000	2023	2022	2021	2020	2019
Chair of the Board	66	62	61	55	46
Vice Chair of the Board	51	48	45	46	39
President & CEO*	1,663	1,004	784	2,092	1,291
Vaisala employee on average**	74	72	72	67	71
Net sales, MEUR	540.4	514.2	437.9	379.5	403.6
Operating result (EBIT), MEUR	66.6	62.5	50.1	44.8	41.1

* Values are excluding pension fees. Year 2020 includes remuneration of two CEO's pro-rated to their time in service.
** Vaisala employee on average: total personnel expenses without social and pension costs divided by the average number of personnel during the year.

NET SALES



OPERATING RESULT (EBIT)



VAISALA'S SERIES A SHARE PRICE 2019–2023

Remuneration of the Board of Directors for 2023

The Annual General Meeting of Vaisala Corporation held on March 28, 2023, 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. The company compensates for the asset transfer tax. 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, the Nomination Committee, and any other committee established by the Board of Directors. The meeting fees are paid in cash. Travel expenses for all Board members were reimbursed according to Vaisala's travel policy.

Remuneration of the Board of Directors 2023 (payment basis)

EUR 1,000		Annual remuneration	Compen-sation, Audit Committee	Compen-sation, People and Sustainability Committee	Compen-sation, Nomination Committee	Compen-sation, Strategic Planning Committee	Total
Ville Voipio	Chair of the Board	55		5	5	1	66
Raimo Voipio	Vice Chair of the Board	40	6		5		51
Petri Castrén	Member of the Board	40	6.5			1	48
Antti Jääskeläinen	Member of the Board	40	6			1	47
Petra Lundström	Member of the Board	40		4	5		49
Jukka Rinnevaara	Member of the Board	40		4			44
Kaarina Ståhlberg	Member of the Board	40	8.5		5	1	55
Tuomas Syrjänen	Member of the Board	40		5			45
Total		**337**	**27**	**18**	**20**	**4**	**406**

Remuneration of the President and CEO for 2023

In 2023, the total remuneration paid to Vaisala's President and CEO Kai Öistämö amounted to EUR 1,662,942. The relative proportion of fixed pay was 39% and variable pay 61%. The fixed pay includes a base salary, fringe benefits, and a defined contribution scheme in addition to the Finnish statutory pension, while variable pay includes short- and long-term incentives.

Remuneration of the President and CEO in 2023

EUR 1,000	Kai Öistämö
Base salary and benefits	526
Supplementary pension	122
Short-Term Incentives (STI)	288
Long-Term Incentives (LTI)	728
Total	**1,663**

The total target remuneration for the President and CEO for 2023 was 47% fixed pay, 17% short-term incentives (37% of the fixed pay), and 36% long-term incentives (at target 13,000 shares, share price EUR 38.65 at the time of the grant).

For the performance period 2022, the maximum short-term incentive (STI) for the President and CEO was 72% of the annual base salary. The payout was 58.5% of the annual base salary constituting the payment of EUR 287,690 which was paid in March 2023.

For the performance period 2023, the maximum Short-Term Incentive (STI) for the President and CEO was 72% (45% at target) of the annual base salary. The payout is 23.4% of the annual base salary. The payment of EUR 119,803 will be paid in March 2024.

A long-term incentive reward of 17,720 shares for the 2020–2022 performance period for the President and CEO Kai Öistämö was paid in 2023. 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 728,024.

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 plan periods.

The grant at target performance for the 2021–2023 performance-based share incentive plan is 11,550 performance shares, for 2022–2024 performance-based share incentive plan is 10,000 performance shares, and for 2023–2025 performance-based share incentive plan is 13,000 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 EBITA % for the performance 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 contractual retirement age is 62 years.

No other financial benefits were paid to the President and CEO in 2023.

STI 2022 paid in 2023			STI 2023 paid in 2024	
KPI	**Weighting**	**Achievement**	**KPI**	**Weighting**
Vaisalan EBITA	50%	Between minimum and target	Vaisalan EBITA	50%
Vaisala net sales	45%	Between target and maximum	Vaisala net sales	45%
Environmental, Social and Governance (diversity)	5%	Above maximum	Environmental, Social and Governance (emission reduction)	5%

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 sustainability

Environment

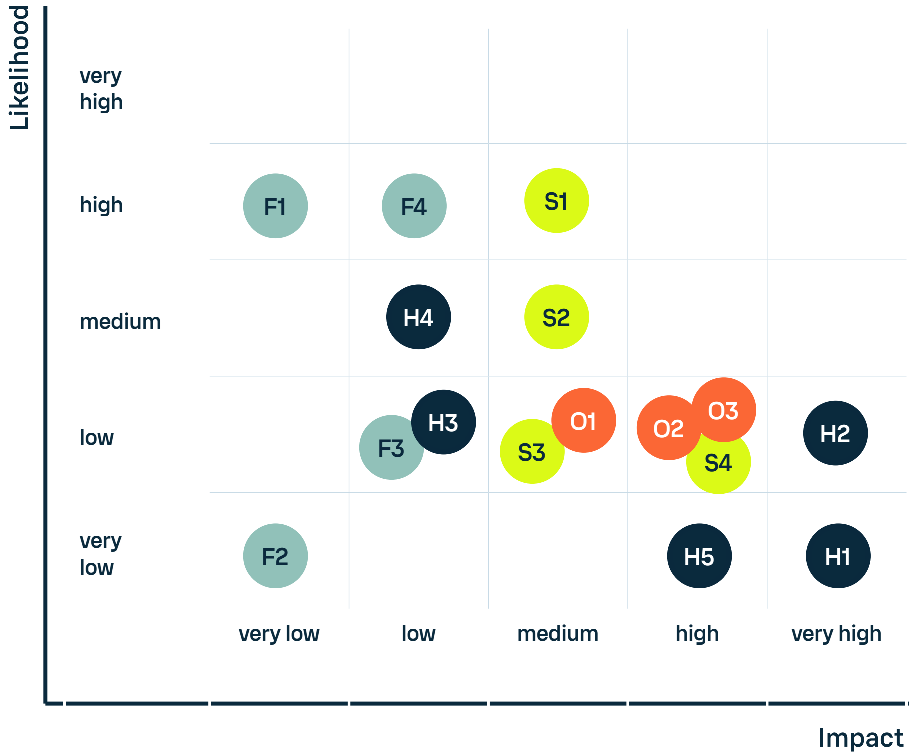
We assess environmental risks regularly as part of our environmental management system. The most significant environmental risks of our operations are related to potential emergency situations that can lead to local contamination. These risks are controlled as part of our emergency preparedness and our 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 provides 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 can impact corporate reputation and brand. 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 our partners is assessed and monitored.



Key risks 2024

		Impact/Likelihood
Strategic risks		
S1	Long-term inflation and slow economic growth	medium/high
S2	Change in competitive situation	medium/medium
S3	Risks relating to China	medium/low
S4	Geopolitical situation	high/low
Hazard risks		
H1	Long disruption in the cleanroom operation	very high/very low
H2	Severe field service personnel 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/low
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/high

Strategic risks

S1 Long-term inflation and slow economic growth

A prolonged period of inflation and slow economic growth lead to decrease in investments.

Managing risk

- Management of costs and pricing
- Marketing of easy-to-purchase digital and remote management services

S2 Change in competitive situation

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

Managing risk

- Further development of the product portfolio's competitiveness
- Customer orientation and pricing management
- Partnerships in China and India

S3 Risks relating to China

Requirements for increased utilization of Chinese technology in certain fields may decrease demand. Local type approvals are increasing, which declines the exports of products to the Chinese market. Expansion of 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
- Management of expense level in accordance with the development of the business

S4 Geopolitical situation

The geopolitical situation creates significant uncertainty to the business environment and slows down economic growth.

Managing risk

- Scenario work and preparation for different alternatives
- Monitoring changes in trade policy
- Management of expense level in accordance with the development of the business

Hazard risks

H1 Long disruption in the cleanroom operation

A 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 and carefully ensuring continuity also during expansion work
- 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

A 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
- Debt maturity profile
- Committed credit facility

F3 Financial counterparty and interest rate risk

Managing risk

- High credit rating of financial counter parties
- Low risk and limited investment maturities

F4 Currency risk

Managing risk

- Currency hedging

Board of Directors

1 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. (Meas. Tech.)

- Independent member of the Vaisala Board of Directors since 2015 and Chairman since 2021
- End of term 2024

Main occupation:
Professor of Practice, Sustainable Global Business, Turku School of Economics, University of Turku
Vaisala shares
Dec 31, 2023: 398,187 A shares and 119,712 K shares
Dec 31, 2022: 397,642 A shares and 119,712 K shares

2 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. (Eng.)

- Independent member of the Vaisala Board of Directors since 1989 and Chairman 1994–2021
- End of term 2024

Main occupation:
Board professional
Vaisala shares
Dec 31, 2023: 571,757 A shares and 404,296 K shares
Dec 31, 2022: 571,360 A shares and 404,296 K shares

3 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:
Interim President and CEO, CFO, Kemira Oyj
Vaisala shares
Dec 31, 2023: 4,040 A shares
Dec 31, 2022: 3,643 A shares

4 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 2024

Main occupation:
Executive Vice President, UPM Raflatac, Member of the UPM Group Executive Team
Vaisala shares
Dec 31, 2023: 1,639 A shares
Dec 31, 2022: 1,242 A shares

5 Petra Lundström

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

- Independent member of the Vaisala Board of Directors since 2014
- End of term 2024

Main occupation:
Executive Vice President, Nuclear Generation, Fortum Power and Heat Oy
Vaisala shares
Dec 31, 2023: 7,440 A shares
Dec 31, 2022: 7,043 A shares

6 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 2024

Main occupation:
Board professional
Vaisala shares
Dec 31, 2023: 2,359 A shares
Dec 31, 2022: 1,962 A shares

7 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
Dec 31, 2023: 6,840 A shares
Dec 31, 2022: 6,443 A shares

8 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
Dec 31, 2023: 3,709 A shares
Dec 31, 2022: 3,312 A shares

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**.

Leadership Team

1 Kai Öistämö

President and CEO,
Chair of the Leadership Team since 2020
b. 1964, Finnish citizen, D.Sc. (Tech.)
Vaisala shares
Dec 31, 2023: 14,860 A shares
Dec 31, 2022: 6,000 A shares

2 Anne Jalkala

Executive Vice President,
Sustainability and Strategy since 2023
b. 1982, Finnish citizen, D.Sc. (Tech.)
Vaisala shares
Dec 31, 2023: 500 A shares
Dec 31, 2022: -

3 Sampsa Lahtinen

Executive Vice President,
Industrial Measurements since 2013
b. 1963, Finnish citizen, M.Sc. (El. Eng.)
Vaisala shares
Dec 31, 2023: 47,846 A shares
Dec 31, 2022: 39,970 A shares

4 Timo Leskinen

Executive Vice President,
Human Resources since 2021
b. 1970, Finnish citizen, M.Sc. (Psy.)
Vaisala shares
Dec 31, 2023: 2,250 A shares
Dec 31, 2022: 2,250 A shares

5 Heli Lindfors

CFO since 2023
b. 1984, Finnish Citizen, M.Sc. (Econ.)
Vaisala shares
Dec 31, 2023: -
Dec 31, 2022: -

6 Olli Nastamo

Executive Vice President,
Operational Excellence since 2021
b. 1956, Finnish Citizen, M.Sc. (Eng.)
Vaisala shares
Dec 31, 2023: -
Dec 31, 2022: -

7 Vesa Pylvänäinen

Executive Vice President,
Operations since 2011
b. 1970, Finnish citizen, M.Sc. (Econ.)
Vaisala shares
Dec 31, 2023: 24,418 A shares
Dec 31, 2022: 26,236 A shares

8 Jarkko Sairanen

Executive Vice President,
Weather and Environment since 2016
b. 1963, Finnish citizen, M.Sc. (Ind. Eng.), MBA
Vaisala shares
Dec 31, 2023: 44,916 A shares
Dec 31, 2022: 37,040 A shares

9 Katriina Vainio

Executive Vice President,
Group General Counsel since 2017
b. 1967, Finnish citizen, LL.M.
Vaisala shares
Dec 31, 2023: 13,231 A shares
Dec 31, 2022: 10,412 A shares

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

Information for shareholders

Vaisala Corporation's Annual General Meeting will be held on Tuesday, March 26, 2024, 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 0.75 per share for the fiscal year 2023 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 28, 2024. The Board of Directors proposes that the dividend will be paid on April 12, 2024.

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 Financial Report

- May 3, 2024: Interim Report January–March 2024
- July 25, 2024: Half Year Financial Report 2024
- October 24, 2024: Interim Report January–September 2024

Silent period

The 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**.

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 2023 in accordance with ESEF regulations are available at www.vaisala.com.

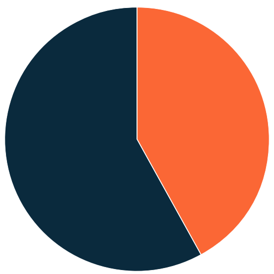
Annual Report 2023

Financial statements & Board of Directors' Report

VAISALA

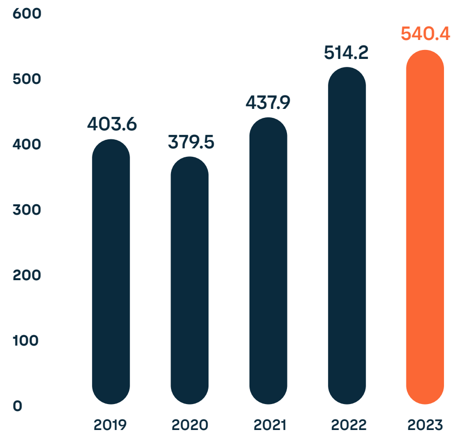
Key figure graphs

NET SALES BY BUSINESS AREA 2023

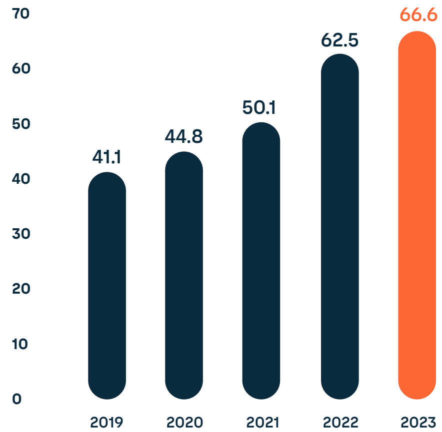


- **42%** Industrial Measurements 227.3 MEUR
- **58%** Weather and Environment 313.1 MEUR

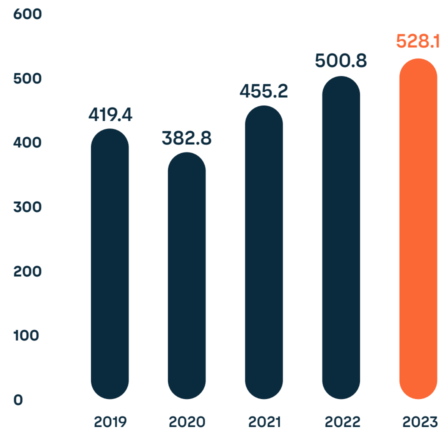
NET SALES, MEUR



OPERATING RESULT (EBIT), MEUR



ORDERS RECEIVED, MEUR

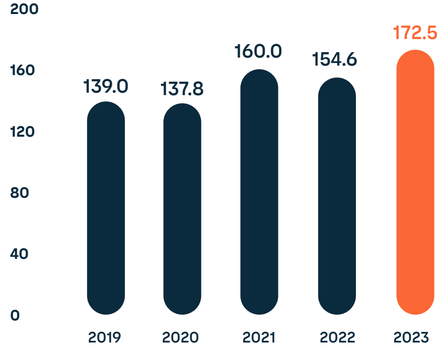


NET SALES BY REGION 2023

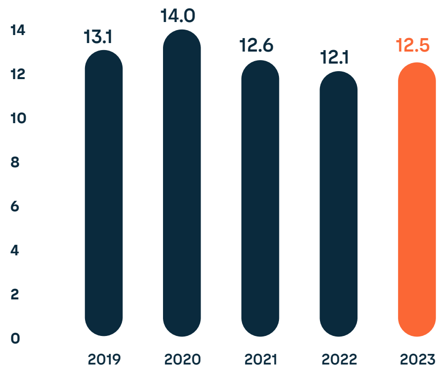
- **37%** Americas 200.4 MEUR
- **30%** APAC 160.2 MEUR
- **33%** EMEA 179.8 MEUR

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

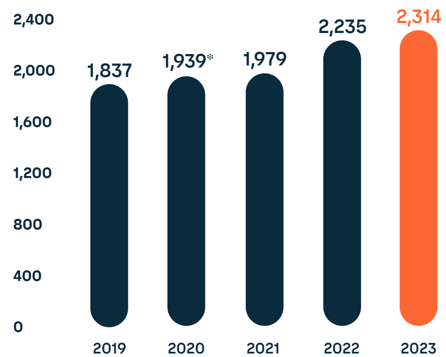
ORDER BOOK, MEUR



R&D 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 2023

The global turbulence that marked 2022 continued in 2023. The environment included uncertainty for Vaisala, its customers, and the economy in general. This was especially visible in Industrial Measurements business. Nevertheless, Vaisala showed resilience and adapted well in a fast changing and unpredictable environment. In 2023, Vaisala's net sales grew by 5% and were EUR 540.4 (514.2) million. In constant currencies, net sales increased by 8%. Operating result increased to EUR 66.6 (62.5) million and was 12.3 (12.2) % of net sales. The company continued IT system renewal and long-term investments in R&D as well as in sales and marketing. The new company-wide ERP system with related systems went live at the beginning of 2024. Earnings per share was EUR 1.35 (1.24). Financial position remained strong. The Board of Directors proposes to the Annual General Meeting that a dividend of EUR 0.75 (0.72) per share be paid out of distributable earnings totaling EUR 27.2 (26.1) million.

Main key figures

EUR million	2023	2022	2021
Net sales	540.4	514.2	437.9
Gross profit, %	55.8	54.8	55.2
Operating result	66.6	62.5	50.1
% of net sales	12.3	12.2	11.5
Result for the financial year	48.9	45.1	39.5
Earnings per share, EUR	1.35	1.24	1.08
Order book at the end of the financial year	172.5	154.6	160.0
Return on equity, %	18.9	18.7	18.1
Solvency ratio, %	61.3	58.1	57.2
Net debt	-28.2	7.9	-27.7
Gearing, %	-10.5	3.2	-12.0
Net working capital	72.9	82.4	44.5
Capital expenditure	13.9	13.7	19.2
Cash flow from operating activities	83.8	29.8	80.0
Research and development costs	67.7	62.4	55.3
% of net sales	12.5	12.1	12.6
Average personnel	2,327	2,141	1,967

Calculation of key figures is presented after the Board of Directors' Report.

As of the beginning of 2023, Weather and Environment business area's subscription business has been excluded from orders received and order book. Year 2022 has been reported accordingly.

Financial review 2023

Orders received and order book

EUR million	2023	2022	Change	FX*
Orders received	528.1	500.8	5%	8%
Order book, end of period	172.5	154.6	12%	

* Change with comparable exchange rates

In 2023, orders received increased by 5% compared to previous year and totaled EUR 528.1 (500.8) million. Orders received grew very strongly in Weather and Environment business area but decreased in Industrial Measurements business area. Orders received grew very strongly in aviation, roads and automotive, as well as in power and energy market segments, whereas in life science market segment orders received decreased strongly. Orders received included approximately EUR 20 million airport surface observation system order for Kuwait International airport.

At the end of 2023, order book was all-time high and amounted to EUR 172.5 (154.6) million and increased by 12% compared to previous year. Order book increased very strongly in Weather and Environment business area but decreased very strongly in Industrial Measurements business area. EUR 127.7 (126.8) million of the order book is scheduled to be delivered in 2024.

Financial performance

EUR million	2023	2022	Change	FX**
Net sales	540.4	514.2	5%	8%
Product sales	397.7	375.5	6%	
Project sales	69.5	73.5	-5%	
Service sales	38.9	35.0	11%	
Subscription sales	32.5	28.4	14%	
Lease income	1.8	1.7	10%	
Gross margin, %	55.8	54.8		
Operating result	66.6	62.5		
% of net sales	12.3	12.2		
R&D costs	67.7	62.4	8%	
Amortization*	8.1	8.2		

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

In 2023, net sales increased by 5% compared to previous year and were EUR 540.4 (514.2) million. In constant currencies, net sales increased by 8%. Operations outside Finland accounted for 98 (98) % of net sales. Net sales grew in Weather and Environment business area and were at previous year's level in Industrial Measurements business area. Net sales increased very strongly in roads and automotive, renewable energy, as well as in power and energy market segments, but net sales decreased in life science market segment.

Gross margin improved to 55.8 (54.8) %. Additional costs related to component spot purchases had a 0.7 (2.7) percentage point negative impact on gross margin.

In 2023, operating result increased from previous year following net sales growth and improved gross margin and totaled EUR 66.6 (62.5) million, 12.3 (12.2) % of net sales. Operating expenses increased due to investments in sales and marketing as well as in R&D and IT system renewal.

In 2023, financial income and expenses were EUR -3.7 (-3.1) million. This was mainly a result of valuation of foreign currency denominated items, currency hedging and interest expenses. Income taxes decreased somewhat from previous year and were EUR 14.2 (14.5) million and effective tax rate was 22.5 (24.4) %. Result before taxes was EUR 63.1 (59.6) million and result for the period EUR 48.9 (45.1) million. Earnings per share was EUR 1.35 (1.24).

Statement of financial position and cash flow

Vaisala's financial position remained strong in 2023. At the end of December, statement of financial position totaled EUR 442.8 (439.2) million. Net debt amounted to EUR -28.2 (7.9) million. Cash and cash equivalents totaled EUR 90.3 (55.5) million. Dividend payment, decided by the Annual General Meeting on March 28, 2023, totaled EUR 26.1 million. On December 31, 2023, Vaisala had interest-bearing borrowings totaling EUR 50.0 (52.5) million, which related to an unsecured term loan due in 2026. The loan has a financial covenant (gearing) tested semi-annually. On December 31, 2023, Vaisala was in compliance with the covenant. Vaisala had not issued any domestic commercial papers on December 31, 2023 (EUR 12.5 million). Vaisala has also a EUR 50 million committed revolving credit facility, which was undrawn on December 31, 2023, as at the end of 2022. In addition, interest-bearing lease liabilities totaled EUR 12.1 (10.9) million.

In 2023, cash flow from operating activities increased to EUR 83.8 (29.8) million. Change in net working capital was EUR 9.5 (-38.0) million and this was mainly a result of decrease in trade receivables.

Capital expenditure

In 2023, capital expenditure in intangible assets and property, plant, and equipment totaled EUR 13.9 (13.7) 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 24.3 (23.6) million. This included EUR 8.1 (8.2) million of amortization of identified intangible assets related to the acquired businesses.

Research and development

Product and technology leadership from sensors to digital solutions is the very core of Vaisala. Vaisala's measurement solutions are based on a thorough understanding of its customers' needs in diverse applications from meteorology and renewable energy to industrial processes and life science. Vaisala continuously collaborates with its customers and partners to meet their measurement requirements and enable climate action. In addition to its own research and development work, scientific collaboration strengthens the company's position as an industry pioneer and an innovative technology leader. To develop its technology leadership position, Vaisala invests strongly in its growth markets and makes significant investments into research and development. In 2023, Vaisala's research and development costs were EUR 67.7 (62.4) million, 12.5 (12.1) % of net sales. Research and development costs include both development of new products as well as maintenance and further development of services and existing products.

Research and development costs are 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. More information on accounting principles is available in Consolidated Financial Statements note 8. Research and development expenditure.

Further information about major product launches in 2023 is presented in the chapter Strategy and its implementation in 2023 in this Board of Directors' Report.

Personnel

The average number of personnel employed in 2023 was 2,327 (2,141). At the end of 2023, the number of employees was 2,314 (2,235). 77 (77) % of employees were located in EMEA, 16 (16) % in Americas and 7 (8) % in APAC. 66 (66) % of employees were based in Finland.

Number of employees by region

	Dec 31, 2023	Dec 31, 2022	Change
Americas	360	350	10
APAC	167	173	-6
EMEA (excluding Finland)	254	237	17
Finland	1,533	1,475	58
Total	**2,314**	**2,235**	**79**

Number of employees by function

	Dec 31, 2023	Dec 31, 2022	Change
Sales and marketing	442	431	11
R&D	647	637	10
Operations	566	567	-1
Services	390	350	40
Administration	269	250	19
Total	**2,314**	**2,235**	**79**

Increase in number of employees reflects business growth. Services personnel increased partly due to internal transfers from a subunit to another.

In November 2023, Weather and Environment business area in Finland started change negotiations to reshape the operations and organization. The changes support the execution of Weather and Environment business area's strategy and performance priorities. The negotiations resulted in reduction of 15 people's employment.

In January–December 2023, personnel expenses totaled EUR 210.9 (190.4) million.

Vaisala has share-based incentive plans that are targeted to its key employees. In 2023, expenses related to share-based incentive plans totaled EUR 3.4 (4.0) million.

Further information about share-based incentive plans is available in Consolidated Financial Statements note 7. Share-based payments.

2023 review by business area

Industrial Measurements business area

EUR million	2023	2022	Change	FX**
Orders received	222.4	234.2	-5%	-1%
Order book, end of period	35.2	41.8	-16%	
Net sales	227.3	225.6	1%	5%
Product sales	207.4	208.1	0%	
Service sales	19.9	17.5	14%	
Gross margin, %	61.8	61.9		
Operating result	45.2	51.5		
% of net sales	19.9	22.8		
R&D costs	25.9	25.3	3%	
Amortization*	1.7	1.7		

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

Industrial Measurements business area's 2023 orders received decreased by 5% compared to previous year and totaled EUR 222.4 (234.2) million. Orders received decreased strongly in life science and somewhat in industrial instruments market segment. Orders received increased very strongly in power and energy market segment and somewhat in liquid measurements market segment.

At the end of 2023, Industrial Measurements business area's order book amounted to EUR 35.2 (41.8) million and decreased by 16% compared to previous year. EUR 31.6 (39.0) million of the order book is scheduled to be delivered in 2024. Order book decreased in life science and industrial instruments market segments. Order book for power and energy and well as in liquid measurements market segments was at previous year's level.

In 2023, net sales were at previous year's level and totaled EUR 227.3 (225.6) million. In constant currencies, net sales increased by 5%. Net sales grew strongly in power and energy market segment and were flat in industrial instruments and liquid measurements market segments. Net sales in life science market segment decreased compared to previous year.

Gross margin was at previous year's level 61.8 (61.9) %. Additional costs related to component spot purchases had a 1.0 (3.6) percentage point negative impact on gross margin. Price pressure especially in China burdened gross margin.

Industrial Measurements business area's 2023 operating result decreased compared to previous year following increase in operating expenses and totaled EUR 45.2 (51.5) million, 19.9 (22.8) % of net sales. Operating expenses increased due to investments in sales and marketing as well as in R&D and IT system renewal.

Weather and Environment business area

EUR million	2023	2022	Change	FX**
Orders received	305.8	266.6	15%	16%
Order book, end of period	137.3	112.8	22%	
Net sales	313.1	288.6	8%	10%
Product sales	190.3	167.4	14%	
Project sales	69.5	73.5	-5%	
Service sales	19.0	17.5	8%	
Subscription sales	32.5	28.4	14%	
Lease income	1.8	1.7	10%	
Gross margin, %	51.5	49.3		
Operating result	21.1	11.1		
of net sales, %	6.7	3.8		
R&D costs	41.8	37.2	12%	
Amortization*	6.4	6.6		

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

Weather and Environment business area's 2023 orders received increased by 15% compared to previous year and totaled EUR 305.8 (266.6) million. Orders received grew very strongly in aviation as well as in roads and automotive market segments, whereas orders received in meteorology and renewable energy market segments were at previous year's level. Orders received included approximately EUR 20 million airport surface observation system order for Kuwait International airport.

At the end of December 2023, Weather and Environment business area's order book amounted to EUR 137.3 (112.8) million and increased by 22% compared to previous year. EUR 96.1 (87.8) million of the order book is scheduled to be delivered in 2024. Order book increased in aviation market segment but decreased in all other market segments.

In 2023, net sales increased by 8% compared to previous year and were EUR 313.1 (288.6) million. In constant currencies, net sales increased by 10%. Net sales grew very strongly in roads and automotive as well as in renewable energy market segments and were at previous year's level in meteorology and aviation market segments.

Gross margin improved compared to previous year and was 51.5 (49.3) %. Additional costs related to component spot purchases had a 0.5 (1.9) percentage point negative impact on gross margin. Higher share of more profitable product and subscription sales improved gross margin. In addition, gross margin improved in more mature market of weather systems.

Weather and Environment business area's 2023 operating result increased compared to previous year following growth in net sales and improved gross margin and totaled EUR 21.1 (11.1) million, 6.7 (3.8) % of net sales. Operating expenses increased due to investments in sales and marketing as well as in R&D and IT system renewal.

Strategy and its implementation in 2023

Vaisala's strategy for 2022–2024 focuses on sustainable growth and innovation. With climate action and technology leadership at its core, the company refined its purpose and strategic priorities during 2023. Vaisala adjusted its purpose to bring a stronger emphasis on our active role in enabling data-driven climate action. The company's new purpose is *Taking every measure for the planet*. The purpose was updated to communicate how our measurement technologies provide customers with relevant data to improve their operations and create a positive climate impact, and to show our full commitment to sustainability.

At the center of the strategy are four success drivers: deep customer understanding and application know-how; product and technology leadership from sensors to digital solutions; excellence in supply chain; and purpose-driven culture and talent. To complement the success drivers of its current strategy, the company identified four strategic priorities for execution. Vaisala continues its growth in industrial measurements with breakthrough technologies, grows by expanding in energy transition as well as building recurring revenue in data business, drives profitability as a global leader in weather systems, and simplifies and scales its operations for greater impact and efficiency. The strategy is implemented by managing different types of businesses in a different way by focusing on profitability and/or growth.

Vaisala has integrated the United Nation's Sustainable Development Goals (SDGs) both to its strategic planning and to the development of new products for climate action. In 2023, the company finalized its near-term science-based targets to reduce greenhouse gas emissions by 2030. Vaisala submitted its targets for validation by the Science-Based Targets initiative (SBTi) in September, and the targets are expected to be approved in early 2024.

Industrial Measurements business area

Industrial Measurements business area drives profitable growth in industrial measurements with breakthrough technologies and by expanding in energy transition. In 2023, business area had a slight growth in a challenging market environment. Net sales growth in power and energy market segment was very strong, while net sales in life science market segment decreased compared to previous year.

In the beginning of 2023, Industrial Measurements business area launched a new optical inline process refractometer series Polaris™, a pioneering solution for industrial liquid measurements. It is built on the proven measurement principle and core technology providing accurate, stable, and reliable measurements for customers in pulp, food and beverage, chemical, sugar, semiconductor, life science and various other industries.

The business area added portability to its Indigo product family with the Indigo80 handheld indicator, which allows its customers to use our Indigo compatible probes in different settings and applications.

Along with a handheld indicator, Industrial Measurements business area launched two new probes: a humidity and temperature probe as well as a dew point and temperature probe. These probes and designed especially for portable use and to be hold in hand, and they operate seamlessly with the handheld indicator.

Industrial Measurements business area completed its Indigo product family with the launch of new industrial transmitter Indigo300, a part of innovative Indigo modular product line. This compact and robust transmitter offers user friendly experience to various industrial customers looking for the best measurement accuracy, clear and simple user interface together with solid housing.

In addition, Industrial Measurements business area responded to the growing demand for energy efficiency and sustainability in buildings by launching the new Vaisala GMD110 carbon dioxide transmitter. It supports precise and reliable controls of HVAC systems even in demanding conditions or sites.

Weather and Environment business area

Weather and Environment business area's strategy is to seek growth by expanding in energy transition as well as in subscription-based data and software business. In the more mature market of weather systems, the business area seeks to drive profitability as a global market leader. In 2023, the business area significantly improved the profitability of the business in the more mature market of weather systems such as in meteorology and aviation. The net sales growth of both renewable energy and subscription sales continued very strong.

During 2023, Weather and Environment business area launched the new Vaisala Radiosonde RS41 E-models, which introduce new biodegradable materials and 66% less plastic.

The business area also launched DIAL Atmospheric Profiler DA10, which is the industry's first atmospheric profiler with continuous and autonomous water vapor monitoring solution. This new profiler provides meteorologists and forecasters with 24/7 monitoring of atmospheric moisture for improved severe weather warnings.

Weather and Environment business area launched a new digital receiver and signal processor RVP10, which provides unmatched meteorological data for ultimate situational awareness. The new RVP10 offers exceptional and future-proof weather radar signal processing for both new deliveries and upgrading existing weather radar networks.

The business area also launched the most comprehensive weather station for the renewable energy industry, Automatic Weather Station AWS810 Solar Edition. This new weather station helps solar power plant operators optimize their efficiency and performance.

In addition, the business area launched a new Beam Weather Station BWS500, which is a flexible and robust monitoring station for hyperlocal weather and air quality measurement needs. This new weather station is designed as a turnkey monitoring station that provides access to reliable information on multiple parameters, including for instance on current weather conditions, air pollutants, visibility, as well as road condition and temperature. With its affordable price and compact size, it allows for customers to deploy effectively denser observation networks, which support the needs for increasing capabilities to understand weather and optimize processes accordingly.

During the year, Vaisala Xweather launched Wx Beacon solution with AtmoCast and new TempCast sensors delivering the most accurate hyperlocal weather forecast for optimizing for instance district heating.

In addition, Vaisala Xweather launched Xweather Insight platform with Observe, Protect and Explore modules, which help weather dependent customers to protect people and assets such as buildings, wind turbines and power grids, and to optimize their business.

Vaisala Xweather also introduced new self-serve subscription data sets and mapping APIs for air quality, lightning, maritime, renewable energy, and road weather.

Production

Vaisala's Operations organization sources, manufactures, and ships all Vaisala's products for both business areas and develops Vaisala Production System. In 2023, Operations remained committed to serving Vaisala's customers with fast and reliable deliveries. The market situation allowed Vaisala to procure components from its suppliers on time, which reduced the need for spot purchases compared to previous year. Operations continued to develop its Smart Factory concept. In the Vantaa factory, Operations added new collaborative and mobile robots, deployed mistake-proof pick-to-light solutions, and enhanced automation. Operations also established new automated calibration, configuration, and testing stations, making them more scalable. In 2023, a new 500-square-meter cleanroom for sensor assembly was built in Vantaa. The new facility allows Vaisala to enhance both capacity and quality.

Process development

During a couple of past years, Vaisala has invested in the development and implementation of new ERP system. The new ERP system with related systems went live at the beginning of 2024. In addition, the company started preparations for corporate sustainability reporting (CSRD, Corporate Sustainability Reporting Directive), which will be in effect 2024 onwards.

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.

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, 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.

Vaisala is exposed in its operations to strategic, hazard, operational, and financial risks, which may originate from the company's own operations or changes in the business environment. If risks materialize, they may have negative impact on Vaisala's business or financial position and thus, on company's value.

The most significant strategic risks for Vaisala are weakening of global economic situation, change in competitive situation, and instability of geopolitical situation. Vaisala's wide product portfolio and geographical coverage decentralizes impact of risks on one customer segment. To maintain its competitiveness, Vaisala further develops the product portfolio and customer orientation, and manages pricing costs in line with the development of the business. Through scenario work Vaisala prepares for different alternatives and monitors changes in geopolitics and trade policies.

The most significant hazard risks for the company are long disruption in cleanroom operation, severe field service employee accident caused by working conditions, and long disruption in radiosonde production. A long disruption of cleanroom operation would have a major impact on the delivery capability of both business areas. The company manages this risk with emergency stock of sensor components, management of production equipment and spare parts, and safety of facilities. Accidents caused by hazardous working conditions are prevented with continuous development of occupational safety, job hazard analysis, emergency procedures, and maintaining a tracking system for employees working in hazardous conditions. Vaisala prepares for risks caused by external events with geographic diversity of business and risk assessment of business opportunities.

Vaisala is exposed to operational risks such as cyber risk and long unavailability of IT systems. Cyberattack may interrupt manufacturing or digital services, cause financial loss or loss of trade secrets or personal data. Vaisala maintains ISO 27000 compliant Information Security Management System (ISMS) and performs GDPR controls on regular basis. Long unavailability of IT systems may lead to interruptions in operations and manufacturing. Vaisala has an IT Disaster Recovery Plan as part of its Information Security Management System and manages risk with Change management process of systems, including impact assessments and formal approvals.

The most essential financial risks for Vaisala are currency risk, interest rate risk, refinancing and liquidity risk as well as financial counterparty risk and trade receivables credit risk. Vaisala's objective is to limit the impact of these risks on statement of income, statement of financial position and cash flow statement. Vaisala manages these financial risks among other with currency hedging, by maintaining sustainable capital structure and debt maturity profile, by securing committed credit facility, by requiring high credit rating from the counterparties, and by implementing credit check for its diverse customer pool.

Further information about risk management and risks is available in the Annual Report's sections Governance/Risk Management, in Consolidated Financial Statements note 19. Financial risk management, and on the company's website at **vaisala.com**.

Group structure

Vaisala's headquarters are located in Vantaa, Finland. On December 31, 2023, 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. In the United States, Whether of Knot LLC was merged into Vaisala Inc. On December 1, 2023. K-Patents (Shanghai) Co., Ltd. was liquidated during the year.

Board of Directors

The Annual General Meeting held on March 28, 2023, confirmed that the number of the Board members is eight.

Members of the Board of Directors on December 31, 2023
- Ville Voipio, Chair
- Raimo Voipio, Vice Chair
- Petri Castrén
- Antti Jääskeläinen
- Petra Lundström
- Jukka Rinnevaara
- Kaarina Ståhlberg
- Tuomas Syrjänen

Leadership Team

On May 6, 2023, Heli Lindfors started as Chief Financial Officer and member of the Vaisala Leadership Team. Vaisala's Chief Sustainability and Strategy Officer Anne Jalkala was appointed member of the Vaisala Leadership Team as of May 5, 2023. They report to President and CEO Kai Öistämö.

On December 31, 2023, Vaisala's Leadership Team members were
- Kai Öistämö, President and CEO, Chair of the Leadership Team
- Anne Jalkala, Chief Sustainability and Strategy Officer
- Sampsa Lahtinen, EVP, Industrial Measurements business area
- Timo Leskinen, EVP, Human Resources
- Heli Lindfors, CFO
- Olli Nastamo, EVP, Operational Excellence
- Vesa Pylvänäinen, EVP, Operations
- Jarkko Sairanen, EVP, Weather and Environment business area
- Katriina Vainio, EVP, Group General Counsel

Annual General Meeting 2023

Vaisala Corporation's Annual General Meeting was held on March 28, 2023. 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, 2022.

Dividend

The Annual General Meeting decided a dividend of EUR 0.72 per share. The record date for the dividend payment was March 30, 2023, and the payment date was April 12, 2023.

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 Chairman 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 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 Chairman of the Audit Committee would be EUR 1,500 per attended meeting and EUR 1,000 for each member of the Audit Committee and Chairman and each member of the People and Sustainability Committee, the Nomination Committee and any other committee established by the Board of Directors for a term until the close of the Annual General Meeting in 2024. 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 elected PricewaterhouseCoopers Oy as the auditor of the company and APA Niina Vilske will act as the auditor with the principal responsibility. The Auditors are reimbursed according to invoice presented to the company.

Proposal by the Board of Directors to amend the articles of association

The Annual General Meeting resolved to amend the articles of association so that the § 6 of Articles of Association stipulates that the term of Board members from now on terminates on the closing of the first Annual General Meeting, and the number of board members is 6–9, and § 13 of Articles of Association stipulates that a general meeting can be organized without a meeting venue as a so-called remote meeting.

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 28, 2024.

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 935,976 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 plan. 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 28, 2024. The authorization for the company's incentive program shall however be valid until March 28, 2027.

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. Ville Voipio was elected as the Chair and Petra Lundström, Kaarina Ståhlberg and Raimo Voipio as members of the Nomination Committee. The Chair and all members of the Audit Committee, People and Sustainability Committee as well as Nomination 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, 2023. Vaisala has 36,436,728 shares, of which 6,731,092 are series K shares and 29,705,636 series A shares. Series A shares are listed on the Nasdaq Helsinki Ltd. 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 2023, a total of 3,089,946 series A shares with a value totaling EUR 118.3 million were traded on the Nasdaq Helsinki Ltd. During the year, the share price increased by 1% while OMXHCAPPI index decreased by 5%. The closing price of the series A share on the Nasdaq Helsinki stock exchange was EUR 39.70. Shares registered a high of EUR 44.55 and a low of EUR 30.30. Volume-weighted average share price was EUR 38.28.

The market value of series A shares on December 31, 2023, was EUR 1,172.0 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 1,439.2 million, excluding company's treasury shares.

Treasury shares

In September 2023, a total of 500 of Vaisala's Corporation's treasury shares were conveyed without consideration to a person participating in the Restricted Share Unit Plan 2022–2026 under the terms and conditions of the plan. The directed share issue was based on an authorization given by the Annual General Meeting held on March 28, 2023.

In May 2023, the Board of Directors decided to exercise the authorization of the 2023 Annual General Meeting to repurchase own series A shares. The repurchases started on May 10, 2023, and ended on June 15, 2023. During this period, Vaisala repurchased a total of 50,000 own series A shares for an average price of EUR 42.4587 per share. The shares were repurchased in public trading on Nasdaq Helsinki Ltd. at the market price prevailing at the time of purchase. The shares are planned to be used as a reward payment for Vaisala's share-based incentive plans.

In March 2023, a total of 72,511 of Vaisala Corporation's treasury shares were conveyed without consideration to the 43 key employees participating in the Performance Share Plan 2020–2022 under the terms and conditions of the plan. The directed share issue was based on an authorization given by the Annual General Meeting held on March 29, 2022.

The total number of series A treasury shares on December 31, 2023, was 185,476, which represents 0.6% of series A shares and 0.5% of total shares.

Major shareholders December 31, 2023

	A shares	K shares	Total	% of shares	% of votes
Novametor Oy	2,778,000	998,358	3,776,358	10.36	13.84
Finnish Academy of Science and Letters	82,164	1,757,760	1,839,924	5.05	21.44
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
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*	515,757	404,296	920,053	2.53	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
Mandatum Life Insurance Company Ltd.	405,024	274,800	679,824	1.87	3.59
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	398,187	119,712	517,899	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	**11,779,551**	**5,422,654**	**17,202,205**	**47.21**	**73.17**
Nominee registered shares**	7,811,848	0	7,811,848	21.43	4.75

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

** Includes 991,839 series A shares owned by Lannebo Fonder, which represented 2.72% of all shares and 0.60% of all votes (according to Lannebo's notification).

Ownership structure (series A and K shares) December 31, 2023

	Shares	% of shares
Households	14,734,949	40.44
Nominee registered and outside Finland	7,862,005	21.58
Private companies	4,949,143	13.58
Financial and insurance institutions	3,717,656	10.20
Non-profit organizations	3,650,966	10.02
Public sector organizations	1,522,009	4.18
Total	**36,436,728**	**100.00**

Ownership distribution (series A and K shares) December 31, 2023

	Share-holders	% of share-holders	Shares	% of shares
1–100	9,198	60.47	330,681	0.91
101–500	4,002	26.31	1,040,329	2.86
501–1,000	977	6.42	732,381	2.01
1,001–5,000	798	5.25	1,689,803	4.64
5,001–10,000	98	0.64	684,787	1.88
10,001–50,000	81	0.53	1,697,532	4.66
50,001–100,000	21	0.14	1,419,265	3.90
100,001–500,000	18	0.12	3,867,401	10.61
500,001–	17	0.11	24,974,549	68.54
Total	**15,210**	**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, 2023, the Board of Directors held and controlled 995,971 (992,647) series A shares. These shares accounted for 3.4 (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 (524,008). Total votes attached to the series A and K shares held and controlled by the Board were 11,476,131 (11,427,807), which accounted for 7.0 (7.0) % of the total votes of all shares.

On December 31, 2023, Kai Öistämö, the President and CEO, held and controlled 14,860 (6,000) series A shares but no series K shares. Other Leadership Team members held and controlled 133,161 (166,768) series A shares but no series K shares. Number of series A shares held and controlled by the Leadership Team members decreased compared to 2022 mainly due to change of CFO.

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

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

Donations

Vaisala continues its collaboration with the Colorado State University (CSU) in the US in the field of weather radars, among others. In 2023, Vaisala's Board of Directors renewed the annual donation of USD 25,000 to the university for 2023–2025.

Non-financial information

Disclosure of non-financial information in accordance with Chapter 3 a of the Finnish Accounting Act is presented in the Sustainable business practices section as well as in the chapters Business model in Our business section, Dashboard and EU Taxonomy on Sustainable Finance 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

Changes in inflationary environment, interest rates, and geopolitical situation may affect industrial investments and economic situation and increase risk of achieving Vaisala's financial targets.

Industrial actions in Finland may cause disruptions in Vaisala's operations and deteriorate Vaisala's delivery capability. 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. Component availability has normalized during the past 12 months, but temporary component shortage may cause delays or interruptions in deliveries or generate additional material costs. Cyber risk and long disruptions in 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 outlook for 2024

Markets for high-end industrial instruments and life science slowed down significantly during Q2/2023 and remained on a lower level for the rest of the year. Markets are expected to remain flat in H1/2024 and start improving during H2/2024. Markets for power and energy, and liquid measurements markets are expected to grow.

Markets for the more mature markets, meteorology, aviation, and roads, are expected to be stable. Market for renewable energy is expected to grow.

Business outlook for 2024

Vaisala estimates that its full-year 2024 net sales will be in the range of EUR 530–570 million and its operating result (EBIT) will be in the range of EUR 63–78 million.

Board of Directors' proposal for dividend

The parent company's distributable earnings amount to EUR 189,890,179.05 of which the result for the period is EUR 51,628,491.26.

The Board of Directors proposes to the Annual General Meeting that a dividend of EUR 0.75 per share be paid out of distributable earnings totaling EUR 27.2 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 2024

Vaisala Corporation's Annual General Meeting will be held on Tuesday March 26, 2024, 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 21, 2024, 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 13, 2024

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.

Key figures

Financial key figures

EUR million	2023	2022	2021	2020	2019
Net sales	540.4	514.2	437.9	379.5	403.6
exports and international operations, %	98.0	98.0	98.0	97.0	98.0
Gross margin, %	55.8	54.8	55.2	56.1	54.8
Operating result	66.6	62.5	50.1	44.8	41.1
% of net sales	12.3	12.2	11.5	11.8	10.2
Result before taxes	63.1	59.6	48.3	41.3	40.2
% of net sales	11.7	11.6	11.0	10.9	10.0
Result for the financial year	48.9	45.1	39.5	32.8	33.6
% of net sales	9.1	8.8	9.0	8.7	8.3
R&D costs	67.7	62.4	55.3	53.2	52.8
% of net sales	12.5	12.1	12.6	14.0	13.1
Depreciation, amortization, and impairment	24.3	23.6	21.6	21.1	23.5

EUR million	2023	2022	2021	2020	2019
Cash and cash equivalents	90.3	55.5	77.9	45.4	56.4
Equity	267.9	250.5	230.3	205.5	198.3
Statement of financial position total	442.8	439.2	408.0	351.8	361.5
Return on equity, %	18.9	18.7	18.1	16.3	17.7
Solvency ratio, %	61.2	58.1	57.2	59.0	55.7
Interest-bearing liabilities	62.1	63.4	50.2	57.0	51.5
Net debt	-28.2	7.9	-27.7	11.6	-4.9
Gearing, %	-10.5	3.2	-12.0	5.7	-2.4
Net working capital	72.9	82.4	44.5	61.5	40.4
Capital expenditure	13.9	13.7	19.2	31.0	26.8
% of net sales	2.6	2.7	4.4	8.2	6.6
Cash flow from operating activities	83.8	29.8	80.0	41.0	40.8
Orders received	528.1	500.8	455.2	382.8	419.4
Order book at the end of financial year	172.5	154.6	160.0	137.8	139.0
Personnel expenses	210.9	190.4	174.3	154.1	157.7
Average employees	2,327	2,141	1,967 *	1,929	1,829
Employees at the end of financial year	2,314	2,235	1,979 *	1,939	1,837

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

Key figures are a part of the Board of Directors' Report

As of the beginning of 2023, Weather and Environment business area's subscription business has been excluded from orders received and order book. Year 2022 has been reported accordingly.

Share key figures

EUR	2023	2022	2021	2020	2019
Earnings per share	1.35	1.24	1.08	0.91	0.94
Diluted earnings per share	1.35	1.24	1.07	0.91	0.93
Cash flow from operating activities per share	2.31	0.82	2.21	1.14	1.14
Equity per share	7.39	6.91	6.36	5.70	5.52
Dividend per share*	0.75	0.72	0.68	0.61	0.61
Dividend per earnings**, %	55.6	57.9	62.9	66.9	65.2
Effective dividend yield**, %	1.89	1.83	1.28	1.51	1.92
Price per earnings	29.51	31.71	49.31	44.34	33.78
Series A share price development					
highest price	44.55	54.40	55.80	42.50	32.80
lowest price	30.30	36.15	30.00	21.65	15.95
volume-weighted average price	38.28	43.03	39.45	32.58	23.56
closing price	39.70	39.45	53.30	40.35	31.75

EUR	2023	2022	2021	2020	2019
Market capitalization of shares outstanding at the end of financial year***, MEUR	1,439.2	1,429.2	1,924.2	1,452.6	1,139.2
Series A shares traded					
pieces	3,089,946	2,384,806	2,939,088	3,852,297	3,442,439
% of entire series	10.4	8.0	9.9	13.0	11.6
Number of shares	36,436,728	36,436,728	36,436,728	36,436,728	36,436,728
A shares	29,705,636	29,705,636	29,705,636	29,705,636	29,685,330
K shares	6,731,092	6,731,092	6,731,092	6,731,092	6,751,398
Number of shares outstanding at the end of financial year***, pieces	36,251,252	36,228,241	36,101,073	35,999,689	35,880,739

* 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.

Trading information is based on Nasdaq Helsinki Ltd. statistics.

Calculation of key figures

Earnings/share, EUR	=	Result for the period +/- non-controlling interest / Average number of shares outstanding
Cash flow from business operations/share, EUR	=	Cash flow from business operations / Number of shares outstanding at the end of the period
Equity/share, EUR	=	Total equity attributable to owners of parent company / Number of shares outstanding at the end of the period
Dividend/share, EUR	=	Dividend / Number of shares outstanding at the end of the period
Dividend/earnings, %	=	Dividend / Result for the period +/- non-controlling interest x 100
Effective dividend yield, %	=	Dividend / share / Closing price for the series A share at the end of the period x 100
Price/earnings (P/E)	=	Closing price for the series A share at the end of the period / 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, %	=	Net sales - Cost of sales / Net sales x 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), %	=	Result for the period / Total equity (average) x 100
Solvency ratio, %	=	Total equity / Statement of financial position total – advances received x 100
Investmets	=	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
Net debt	=	Interest-bearing liabilities - cash and cash equivalents
Gearing, %	=	Interest-bearing liabilities – cash and cash equivalents / Total equity x 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)

Financial statements 2023

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.

Consolidated financial statements

Consolidated statement of income

EUR million	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Net sales	1, 2, 3	540.4	514.2
Cost of goods sold	5, 13, 16	-238.8	-232.2
Gross profit		**301.7**	**282.0**
Sales, marketing and administrative costs	5, 7, 16	-168.2	-157.3
Research and development costs	5, 7, 8, 16	-67.7	-62.4
Other operating income and expenses	4	0.9	0.3
Operating result		**66.6**	**62.5**
Share of result in associated company	27	0.2	0.2
Financial income	9	8.2	7.7
Financial expenses	9	-11.9	-10.8
Result before taxes		**63.1**	**59.6**
Income taxes	10	-14.2	-14.5
Result for the financial year		**48.9**	**45.1**

EUR million	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Attributable to			
Owners of the parent company		48.9	45.0
Non-controlling interests		-	0.0
Result for the financial year		**48.9**	**45.1**
Earnings per share for result attributable to the equity holders of the parent company	11		
Earnings per share, EUR		1.35	1.24
Diluted earnings per share, EUR		1.35	1.24

Consolidated statement of financial position

EUR million	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Items that will not be reclassified to profit or loss (net of taxes)			
Actuarial profit (loss) on post-employment benefits	6	-0.0	-0.2
Total		**-0.0**	**-0.2**
Items that may be reclassified subsequently to profit or loss			
Translation differences		-3.3	2.4
Total		**-3.3**	**2.4**
Total other comprehensive income		**-3.3**	**2.2**
Comprehensive income for the financial year		**45.6**	**47.3**
Attributable to			
Owners of the parent company		45.6	47.3
Non-controlling interests		-	0.0
Comprehensive income for the financial year		**45.6**	**47.3**

The notes are an essential part of the financial statements.

Consolidated statement of financial position

EUR million	Note	Dec 31, 2023	Dec 31, 2022
Assets			
Non-current assets			
Intangible assets	16	62.5	71.3
Property, plant and equipment	16	95.0	96.0
Right-of-use assets	17	13.1	11.9
Investments in shares		0.1	0.1
Investment in associated company	27	1.4	1.4
Non-current receivables	20	1.3	1.0
Deferred tax assets	10	7.8	9.5
Total non-current assets		**181.1**	**191.1**
Current assets			
Inventories	13	58.8	61.6
Trade and other receivables	12	85.5	101.7
Contract assets and other accrued revenue	3	24.2	26.2
Income tax receivables		2.8	3.1
Cash and cash equivalents	23	90.3	55.5
Total current assets		**261.7**	**248.1**
Total assets		**442.8**	**439.2**

EUR million	Note	Dec 31, 2023	Dec 31, 2022
Equity and liabilities			
Equity	18		
Share capital		7.7	7.7
Other reserves		2.3	3.5
Translation differences		0.8	4.1
Treasury shares		-4.2	-3.3
Retained earnings		261.3	238.5
Total equity attributable to owners of parent company		**267.9**	**250.5**
Non-controlling interests		-	0.0
Total equity		**267.9**	**250.5**
Non-current liabilities			
Interest-bearing borrowings	21	50.0	0.0
Interest-bearing lease liabilities	17	9.3	8.3
Post-employment benefits	6	2.3	2.7
Deferred tax liabilities	10	2.9	4.5
Provisions	15	0.4	0.3
Other non-current liabilities	21	4.2	2.1
Total non-current liabilities		**69.0**	**17.9**

EUR million	Note	Dec 31, 2023	Dec 31, 2022
Current liabilities			
Interest-bearing borrowings	21	0.0	52.5
Interest-bearing lease liabilities	17	2.8	2.7
Trade and other payables	14	66.5	74.0
Contract liabilities and other deferred revenue	3	30.7	37.1
Income tax liabilities		3.3	1.8
Provisions	15	2.5	2.8
Total current liabilities		**105.9**	**170.8**
Total liabilities		**175.0**	**188.7**
Total equity and liabilities		**442.8**	**439.2**

The notes are an essential part of the financial statements.

Consolidated cash flow statement

EUR million	Note	Jan 1-Dec 31, 2023	Jan 1-Dec 31, 2022
Cash flow from operating activities			
Result for the financial period		48.9	45.1
Depreciation, amortization and impairment	16	24.3	23.6
Financial income and expenses	9	3.7	3.1
Gains and losses on sale of intangible assets and property, plant and equipment	4	-0.2	0.0
Share of result in associated company	27	-0.2	-0.2
Income taxes	10	14.2	14.5
Other adjustments	22	-0.7	0.3
Inventories, increase (-) / decrease (+)	13	3.0	-11.2
Non-interest-bearing receivables, increase (-) / decrease (+)	12	16.2	-26.0
Non-interest-bearing liabilities, increase (+) / decrease (-)	14	-9.7	-0.8
Changes in working capital		9.5	-38.0
Interests and other financial items received	9	1.7	0.2
Interests and other financial items paid	9	-4.4	-5.2
Income taxes paid	10	-12.9	-13.6
Cash flow from operating activities		**83.8**	**29.8**
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	-13.9	-13.7
Proceeds from sale of intangible assets and property, plant and equipment	4	0.3	0.0
Cash flow from investing activities		**-13.7**	**-36.8**

EUR million	Note	Jan 1-Dec 31, 2023	Jan 1-Dec 31, 2022
Cash flow from financing activities			
Dividends paid	18	-26.1	-24.6
Purchase of treasury shares	18	-2.1	-
Change in loan receivables		-0.3	-0.1
Proceeds from borrowings	21	77.4	114.9
Repayment of borrowings	21	-79.9	-102.4
Principal payments of lease liabilities	17	-3.1	-2.9
Cash flow from financing activities		**-34.1**	**-15.1**
Change in cash and cash equivalents, increase (+) / decrease (-)		**36.0**	**-22.1**
Cash and cash equivalents at the beginning of the financial year		55.5	77.9
Change in cash and cash equivalents		36.0	-22.1
Effect from changes in exchange rates		-1.2	-0.3
Cash and cash equivalents at the end of the financial year	23	**90.3**	**55.5**

The notes are an essential part of the financial statements.

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, 2021		**7.7**	**7.0**	**1.7**	**-4.6**	**218.0**	**229.6**	**0.7**	**230.3**
IAS 12 amendment						-0.2	-0.2		-0.2
Equity at Jan 1, 2022		7.7	7.0	1.7	-4.6	217.7	229.4	0.7	230.1
Result for the financial year	18					45.1	45.1	0.0	45.1
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**	**238.5**	**250.5**	**0.0**	**250.5**
Result for the financial year	18					48.9	48.9		48.9
Other comprehensive income	18		0.0	-3.3		-0.0	-3.3		-3.3
Dividend distribution	18					-26.1	-26.1		-26.1
Purchase of treasury shares	18				-2.1		-2.1		-2.1
Share-based payments	7, 18		-1.2		1.2		-0.1		-0.1
Changes in non-controlling interests that did not result in changes in control						0.0	0.0	-0.0	
Equity at Dec 31, 2022		**7.7**	**2.3**	**0.8**	**-4.2**	**261.3**	**267.9**		**267.9**

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 13, 2024. 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 the IFRS Accounting Standards as adopted by the European Union, including International Accounting Standards (IAS) and the IFRIC and SIC Interpretations valid on December 31, 2023. In the Finnish Accounting Act and ordinances based on the provisions of the Act, IFRS Accounting Standards 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 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	
	2023	2022	Dec 31, 2023	Dec 31, 2022
USD	1.0797	1.0555	1.1050	1.0666
CNY	7.6429	7.0607	7.8509	7.3582
JPY	151.87	137.28	156.33	140.66
GBP	0.8703	0.8509	0.8691	0.8869

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 2023, Vaisala formulated the science-based emissions reduction targets aligned with the criteria of the Science-Based Targets initiative (SBTi) and sent them to SBTi for validation.

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 Accounting standards that are effective for the year 2023

Vaisala has adopted the following new or revised IFRS Accounting standards from January 1, 2023. Their adoption has not had no material impact on the disclosures or on the amounts reported in these financial statements.

IFRS 17 Insurance Contracts

In 2023, the group has adopted IFRS 17, which establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts and supersedes IFRS 4 Insurance Contracts.

Amendment to IAS 12 Income Taxes—Deferred Tax related to Assets and Liabilities arising from a Single Transaction

Vaisala has adopted the amendment in accordance with transition rule with the effect of initial application recognized as of January 1, 2022.

The amendment introduce a further exception from the initial recognition exemption. Under the amendment, an entity does not apply the initial recognition exemption for transactions that give rise to equal taxable and deductible temporary differences. Following the amendment to IAS 12, an entity is required to recognize 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 amendment 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 recognizes:

- A deferred tax asset 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 recognized 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

Table below presents year 2022 quarterly comparative figures after amendment described above:

	1–12/2022	
EUR million	Earlier reported	Restated
Income taxes	-14.5	-14.5
Result for the period	45.0	45.1
Attributable to		
Owners of the parent company	45.0	45.0
Non-controlling interests	0.0	0.0
Comprehensive income for the period	47.3	47.3
Attributable to		
Owners of the parent company	47.3	47.3
Non-controlling interests	0.0	0.0
Retained earnings	238.7	238.5
Total equity	250.7	250.5
Deferred tax liabilities	4.3	4.5
Total non-current liabilities	17.6	17.9
Total liabilities	188.5	188.7
Total equity and liabilities	439.2	439.2
Earnings per share, EUR	1.24	1.24
Diluted earnings per share, EUR	1.24	1.24
Equity per share, EUR	6.92	6.91
Return on equity, %	18.7	18.7
Solvency ratio, %	58.2	58.1
Gearing, %	3.2	3.2

Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2 Making Materiality Judgements—Disclosure of Accounting Policies

In 2023, the group has adopted the amendments to IAS 1 and IFRS Practice Statement 2. 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.

Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors—Definition of Accounting Estimates

In 2023, the group has adopted the amendments to IAS 8. 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

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

The preparation of financial statements in accordance with IFRS Accounting Standards 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 Accounting Standards 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.

Reportable segments

2023 EUR million	Industrial Measurements	Weather and Environment	Other operations	Vaisala total
Product sales	207.4	190.3		397.7
Project sales		69.5		69.5
Service sales	19.9	19.0		38.9
Subscription sales		32.5		32.5
Lease income		1.8		1.8
Net sales	**227.3**	**313.1**		**540.4**
Performance obligations satisfied at a point in time	223.5	211.3		434.8
Performance obligations satisfied over time	3.8	100.2		104.0
Lease income recognized on a straight-line basis		1.7		1.7
Net sales	**227.3**	**313.1**		**540.4**
Operating result	**45.2**	**21.1**	**0.3**	**66.6**
Share of result in associated company				0.2
Financial income and expenses				-3.7
Result before taxes				**63.1**
Income taxes				-14.2
Result for the financial year				**48.9**

Reportable segments

2022 EUR million	Industrial Measurements	Weather and Environment	Other operations	Vaisala total
Product sales	208.1	167.4		375.5
Project sales		73.5		73.5
Service sales	17.5	17.5		35.0
Subscription sales		28.4		28.4
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				**45.1**

2. GEOGRAPHICAL SEGMENTS

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

Geographical segments

2023 EUR million	Net sales, by destination country[2]	Net sales, by location country[3]	Non-current assets[3]
Americas	200.4	179.8	36.0
of which United States	161.7	171.5	35.8
APAC	160.2	103.2	5.9
EMEA	179.8	468.0	131.5
of which Finland	9.1	358.8	119.7
Eliminations		-210.6	
Total	**540.4**	**540.4**	**173.4**

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**

[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, services and subscription sales. Disaggregation of revenue has been changed from the beginning of 2023. Subscription sales, which has been previously included in services, is disclosed as a separate category. Comparative information 2022 has been presented according to new categories. 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 include among others maintenance, calibration and repair, modernization and extended warranties. 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.

Subscription sales includes mainly data-based solutions supporting decisions in weather-dependent operations. One subscription sales contract is one performance obligation. Revenue is recognized over time.

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 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.

Disaggregation of revenue has been changed from the beginning of 2023. Subscription sales, which has been previously included in services, is disclosed as a separate category. Comparative information 2022 has been presented according to new categories.

Payment terms

Payment terms vary based on geographical areas. In product, service and subscription sales 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, 2023	Dec 31, 2022
Trade receivables	69.9	87.6
Contract assets	24.2	26.2
Contract liabilities	30.6	36.6

Contract assets include the balance of project, service and subscription sales related revenue recognized but not yet invoiced.

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 and subscription sales, 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, services and subscription sales 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 and subscription sales, 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 2023, Vaisala recognized EUR 16 (15) million revenue that was included in the contract liability balance at the beginning of the financial year.

At the end of financial year 2023, the order book was EUR 172.5 (154.6) million, of which the performance obligations that were unsatisfied or partially unsatisfied amounted to EUR 171.9 (153.5) million and the amount related to lease income was EUR 0.6 (1.1) million. Of the performance obligations that were unsatisfied or partially unsatisfied EUR 127.1 (125.8) million is estimated to be recognized as revenue in 2024 and EUR 44.8 (27.8) million is estimated to be recognized later. The whole order book related to lease agreements is estimated to be recognized as revenue in 2024.From the beginning of 2023 subscription sales is no longer included in the order book. Comparative information 2022 has been changed accordingly.

4. OTHER OPERATING INCOME AND EXPENSES

Other operating income

EUR million	2023	2022
Indemnities	0.6	0.0
Gain on the disposal of tangible assets	0.2	0.0
Other	0.1	0.2
Total	**0.9**	**0.3**

Other operating expenses

EUR million	2023	2022
Loss on the disposal of tangible assets	-	0.0
Total	**0.0**	**0.0**
Other operating income and expenses, net	**0.9**	**0.3**

5. PERSONNEL EXPENSES AND NUMBER OF EMPLOYEES

Personnel expenses

EUR million	2023	2022
Salaries	171.3	154.3
Share-based payments	3.4	4.0
Social costs	14.9	13.0
Pensions		
Defined benefit plans	0.3	0.1
Defined contribution plans	21.0	19.0
Total	**210.9**	**190.4**

Personnel expenses by function

EUR million	2023	2022
Procurement and production	60.2	52.0
Sales, marketing and administration	88.0	82.0
Research and development	62.6	56.5
Total	**210.9**	**190.4**

Employees, average by business area

Persons	2023	2022
Industrial Measurements	606	548
Weather and Environment	870	821
Other operations	851	772
Total	**2,327**	**2,141**

Employees, average by geographical area

Persons	2023	2022
Americas	364	332
APAC	171	168
EMEA (excluding Finland)	252	240
Finland	1,540	1,401
Total	**2,327**	**2,141**

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. 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.

Defined benefit plans

The defined benefit plans are in the parent company. The additional pension coverage of parent company employees 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	2023	2022
Fair value of funded obligations	3.4	3.9
Fair value of assets	-2.7	-2.9
Net liability in the statement of financial position at Dec 31	**0.8**	**1.0**

Post-employment benefits totaled EUR 2.3 (2.7) million in the balance sheet as of December 31, 2023. The amount includes the defined benefit plan recognized in the parent company amounting to EUR 0.8 (1.0) million and pension obligations recognized in other group companies amounting to EUR 1.5 (1.8) million.

Amounts recognized in the statement of income and the statement of other comprehensive income

EUR million	2023	2022
Current service cost	-	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
Total recognized in the statement of income and the statement of other comprehensive income	**0.0**	**0.3**

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	2023	2022
Changes in the present value of obligation		
Present value of obligation Jan 1	3.9	4.6
Current service cost	-	0.0
Interest cost	0.1	0.0
Remeasurements		
Actuarial gain (-) / loss (+) arising from changes in financial assumptions	-0.2	-0.7
Experience adjustment	-0.1	0.3
Benefits paid	-0.3	-0.4
Present value of obligation Dec 31	**3.4**	**3.9**

Changes in the fair value of plan assets

EUR million	2023	2022
Fair value of plan assets Jan 1	2.9	3.8
Interest income on assets	0.1	0.0
Remeasurements		
Net return on plan assets	-0.3	-0.6
Benefits paid	-0.3	-0.4
Contributions	0.3	0.1
Fair value of plan assets Dec 31	**2.7**	**2.9**

Changes of liabilities presented in the statement of financial position

EUR million	2023	2022
Liabilities Jan 1	1.0	0.8
Expense (+) / income (-) recognized in statement of income	0.0	0.0
Total recognized in other comprehensive income	0.0	0.3
Contributions paid	-0.3	-0.1
Liabilities Dec 31	**0.8**	**1.0**

Actuarial assumptions used

	2023	2022
Discount rate, %	3.60	3.16
Rate of salary increase, %	3.25	3.51
Rate of inflation, %	2.29	2.55
Annual adjustments to pensions, %	2.53	2.79

Sensitivity of the net liability changes in the principal assumptions

Assumption	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	0.25%	2.01% decrease	2.09% increase
Salary increase rate	0.25%	0.00% increase	0.00% decrease
Pension increase rate	0.25%	9.48% increase	9.29% decrease

Assumption	Increase by one year	Decrease by one year
Life expectancy at birth	4.78% increase	4.56% 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. The related payment is net amount in shares after taxes have been deducted from the amount paid in shares. Share-based incentive plan including a net settlement feature, is treated in its entirety as an equity-settled share-based payment transaction.

Equity-settled share-based payment transactions are measured at fair value at the grant date, and those are not remeasured. Fair value of the grant date is recognized as costs in the statement of income and as additions to equity during the vesting period.

Other than market conditions are not taken into account when estimating the fair value at the grant date. Instead, other than market conditions are taken into account by adjusting the expensed number of equity instruments that are expected to vest. In terms of other than market conditions, cost is measured corresponding to the value of share (Vaisala's series A) closing price on the grant of the share-based incentive plan less expected dividends. Satisfaction of these conditions are estimated at each reporting date and updated whenever changes occur. The effect of changes is recognized in the statement of income.

Market conditions are taken into account when estimating the fair value of the equity-settled share-based payment transaction at the grant date. Expense is recognized irrespective of whether that market condition is satisfied, if service condition and other than market conditions are satisfied. In terms of market conditions (total shareholder return, TSR) a model based the probability-weighted values (Monte Carlo simulation) is used to estimate the fair value at the grant date.

Share-based incentive plans

Share-based incentive plans are targeted to the Group key employees. 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. Vaisala's Board of Directors requires that the President and CEO and each member of the Management Group retains his/her ownership of shares received under this plan until the value of his/her ownership in Vaisala corresponds to at least his/her annual gross base salary.

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. A total expense of this plan of EUR 4.0 million was recorded for 2019-2022.

On February 12, 2020, the Board of Directors resolved for a performance share-based incentive plan 2020–2022. On March 3, 2023 the reward corresponding to 145,022 series A shares, 83% of the maximum, was paid to 43 key employees. 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 45 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 to the vesting period. On September 29, 2023, the reward corresponding to 1,000 series A shares was paid to a person participating in the restricted share unit plan 2022-2026 under the terms and conditions of the plan.

On February 15, 2023, the Board of Directors resolved for a performance share-based incentive plan 2023–2025 for approximately 60 key employees. The reward will be paid in spring 2026. The maximum amount of this plan originally corresponded to 222,100 series A shares. The expenses of this plan are accrued from May 2023 to March 2026. Closing price of Vaisala's series A share was EUR 38.15 on the grant date of the incentive plan.

In 2023, expenses related to share-based incentive plans totaled EUR 3.4 (4.0) 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 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. 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 as it is not possible to distinguish the research phase of an internal project that aims to create an asset from its development phase. In addition, there is significant uncertainty in the amount and timing of future returns from the new products before the products enter the market.

The statement of income includes research and development costs of EUR 67.7 (62.4) million in 2023.

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.

Financial income

EUR million	2023	2022
Interest income	1.7	0.2
Other financial income	0.0	0.0
Gains arising from changes in fair values of derivative financial contracts	3.2	2.6
Foreign exchange gains	3.3	4.8
Total	**8.2**	**7.7**

Financial expenses

EUR million	2023	2022
Interest expenses	2.2	0.7
Interest expenses on lease liabilities	0.4	0.3
Other financial expenses	0.5	0.4
Losses arising from changes in fair values of derivative financial contracts	2.4	3.8
Foreign exchange losses	6.3	5.5
Total	**11.9**	**10.8**
Financial income and expenses, net	**-3.7**	**-3.1**

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.

Vaisala has adopted the IAS12 amendment in relation to deferred tax related to assets and liabilities arising from a single transaction with the effect of initial application recognized as of January 1, 2022. Under the amendment, an entity does not apply the initial recognition exemption for transactions that give rise to equal taxable and deductible temporary differences. The impact of the amendment is presented in New and amended IFRS Accounting standards that are effective for the year 2023.

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 c) available tax planning opportunities.

Income taxes

EUR million	2023	2022
Tax based on taxable income for the financial year	14.7	14.2
Taxes from previous financial years	-0.1	1.7
Change in deferred tax assets and liabilities	-0.4	-1.5
Total	**14.2**	**14.5**

Reconciliation statement between the statement of income tax item and taxes calculated at the tax rate of the group country of domicile

EUR million	2023	2022
Result before taxes	63.1	59.6
Taxes calculated at the Finnish tax rate	12.6	11.9
Effect of foreign subsidiaries' tax rates	2.2	2.1
Non-deductible expenses	1.0	1.2
Tax free income and tax incentives	-1.3	-0.9
Taxes from previous financial years	-0.1	1.7
Other direct taxes	-0.1	0.0
Reassessment of deferred tax assets	-	0.0
Other	-	-1.5
Total	**14.2**	**14.5**
Effective tax rate	**22.5%**	**24.4%**

Vaisala has not any carry forward tax losses for which deferred tax assets have not been recognized as of December 31, 2023 and December 31, 2022.

Deferred taxes in the statement of financial position

EUR million	2023	2022
Deferred tax assets	7.8	9.5
Deferred tax liabilities	-2.9	-4.3
Total	**4.9**	**5.2**

Gross change in deferred taxes recognized in the statement of financial position

EUR million	2023	2022
Deferred taxes Jan 1	5.2	2.5
Items recognized in the statement of income	0.4	1.2
Effect of business combinations	0.0	2.1
Translation differences	-0.2	0.1
Items recognized in the statement of comprehensive income	-0.5	-0.7
Deferred taxes Dec 31	**4.9**	**5.2**

Changes in deferred taxes during 2023

EUR million	Jan 1, 2023	Recognized in the statement of income	Translation differences	Recognized in the statement of comprehensive income	Effect of business combinations	Dec 31, 2023
Deferred tax assets						
Internal margin of inventories, intangible assets and property, plant and equipment	1.7	-	-0.4	-0.1	-	1.3
Employee benefits and share-based payments	3.0	0.9	-0.8	0.1	-0.5	2.7
Unused tax losses	2.0	-	-0.5	0.0	-	1.5
Timing difference of amortization on intangible assets and depreciation on property, plant and equipment	2.7	0.9	0.4	0.0	-	4.0
Other temporary timing differences	4.4	-1.8	0.4	-0.4	-	2.5
Netted against deferred tax liabilities	-4.2	-	-	-	-	-4.2
Total	**9.5**	**0.0**	**-0.9**	**-0.3**	**-0.5**	**7.8**
Deferred tax liabilities						
Timing difference of amortization on intangible assets and depreciation on property, plant and equipment	8.2	-	1.5	0.0	-	6.6
Other	0.3	-	-0.2	0.0	-	0.4
Netted against deferred tax assets	-4.2	-	-	-	-	-4.2
Total	**4.3**	**0.0**	**1.3**	**0.0**	**0.0**	**2.9**
Deferred tax assets, net	**5.2**	**0.0**	**0.4**	**-0.3**	**-0.5**	**4.9**

Changes in deferred taxes during 2022

EUR million	Jan 1, 2022	Reclassification	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**	**0.0**	**-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**	**0.0**	**-2.4**	**0.0**	**0.0**	**0.0**	**4.3**
Deferred tax assets, net	**2.5**	**0.0**	**1.5**	**-0.2**	**-0.7**	**2.1**	**5.2**

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

	2023	2022
Result attributable to the shareholders of the parent company, EUR million	48.9	45.0
Weighted average number of shares outstanding, 1,000 pcs	36,259	36,207
Effect of share-based incentive plans, 1,000 pcs	120	160
Weighted average diluted number of shares, 1,000 pcs	36,379	36,367
Earnings per share, EUR	1.35	1.24
Diluted earnings per share, EUR	1.35	1.24

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	2023	2022
Trade receivables*	70.2	88.1
Advances paid	1.0	1.3
Value-added tax receivables	4.0	3.3
Other receivables**	2.1	2.2
Derivative financial contracts	0.4	0.9
Other prepaid expenses and accrued income**	7.8	5.7
Total	**85.5**	**101.7**

*) In 2023, trade receivables included EUR 0.3 (0.6) million lease receivables.

**) Other receivables and other prepaid expenses and accrued income include mainly grant related receivables as well as purchases and expenses related accruals

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, 2023

EUR million	Trade receivables, gross amount	Credit loss allowance	Trade receivables, net amount
Current	49.8	0.2	49.6
Due less than 90 days	18.4	0.1	18.4
Due 91-180 days	1.0	0.1	0.8
Due over 180 days	1.1	0.4	0.7
Credit loss allowance other than those based on age analysis	1.1	0.4	0.7
Total	**71.3**	**1.2**	**70.2**

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**

Reconciliation of credit loss allowance of trade receivables

EUR million	2023	2022
Opening balance for credit loss allowance on Jan 1	2.0	1.5
Change in credit loss allowance recognized in profit or loss during the financial year, net	0.2	0.6
Receivables recognized as final credit losses during the financial year due to uncollectability	-1.0	-0.2
Exchange rate differences	0.0	0.0
Total	**1.2**	**2.0**

Credit losses and related reversals arising from trade receivables recognized for the financial year amounted to EUR -0.2 (-0.6) million.

Trade receivables by currency

EUR million	2023	2022
EUR	31.3	34.7
USD	21.7	30.1
GBP	3.5	5.1
JPY	6.0	5.0
AUD	0.9	0.9
CNY	3.4	6.5
CAD	3.0	2.3
PLN	0.0	2.8
Others	0.4	0.8
Total	**70.2**	**88.1**

13. INVENTORIES

Accounting principles
Inventories are stated at the lower of costs incurred on procurement and conversion on standard cost basis (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	2023	2022
Materials, supplies and finished goods	58.8	61.6
Total	**58.8**	**61.6**

The cost of inventories recognized in the statement of income as an expense corresponding to net sales was EUR 151.6 (143.6) million.

Write-offs and excess and obsolescence allowances for slow moving and obsolete inventory recognized during the financial year amounted to EUR 1.1 (1.6) million.

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	2023	2022
Trade payables	13.8	25.2
Personnel cost accruals	39.4	36.4
Derivative financial contracts	0.4	0.5
Other accrued expenses and deferred income*	7.6	6.0
Other current liabilities*	5.4	5.9
Total	**66.5**	**74.0**

*) Other current liabilities and other accrued expenses and deferred income include mainly personnel expenses related liabilities, value added tax liabilities, accrued interests as well as purchases and expenses related accruals.

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.

Non-current provisions

EUR million	2023	2022
Provisions Jan 1	0.3	0.3
Increase in provisions	0.1	0.1
Used provisions	-	-0.1
Provisions Dec 31	**0.4**	**0.3**

Current provisions

EUR million	2023	2022
Provisions Jan 1	2.7	2.0
Increase in provisions	0.1	0.7
Used provisions	-0.2	-
Provisions Dec 31	**2.5**	**2.7**

In 2023 and 2022 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.

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	3–10 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.

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, 2023	46.6	42.3	16.8	28.2	0.4	134.2
Translation difference	-0.7	-0.2		-0.3	0.0	-1.2
Increases		0.2		0.3	0.2	0.7
Decreases		-0.1		-0.6		-0.6
Transfers between items				0.1	-0.1	-0.0
Acquisition cost Dec 31, 2023	**45.9**	**42.2**	**16.8**	**27.8**	**0.4**	**133.0**
Accumulated amortization and impairment Jan 1, 2023		23.6	12.3	27.1		62.9
Translation difference		-0.0		-0.2		-0.3
Accumulated amortization of decreases and transfers		-0.1		-0.6		-0.6
Amortization for the financial year		6.1	2.0	0.5		8.6
Impairment for the financial year		-0.0		0.0		0.0
Accumulated amortization and impairment Dec 31, 2023		**29.5**	**14.3**	**26.8**		**70.6**
Carrying amount Dec 31, 2023	**45.9**	**12.7**	**2.5**	**1.0**	**0.4**	**62.5**

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**	**134.3**
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**

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 161 (203) million. Weather and Environment business area sales are expected to grow in average 6 (4)% next three years. Terminal growth rate is 2 (2)% and Weighted Average Cost of Capital is 12.2 (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.

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, 2023	4.8	99.2	85.0	2.0	0.1	8.7	199.7
Translation difference	-0.1	-0.8	-0.7			-0.0	-1.5
Increases		2.0	6.3	0.4		4.5	13.2
Decreases		0.8	-5.2	-0.3			-4.8
Transfers between items		0.3	5.2			-5.7	-0.2
Acquisition cost Dec 31, 2023	**4.7**	**101.4**	**90.6**	**2.0**	**0.1**	**7.5**	**206.3**
Accumulated depreciation and impairment Jan 1, 2023		47.2	56.4	0.1			103.7
Translation difference		-0.3	-0.6	0.0			-0.9
Accumulated depreciation of decreases and transfers		0.8	-5.1	0.0			-4.4
Depreciation for the financial year		4.3	8.1				12.5
Impairment for the financial year		0.0	0.1	0.3			0.4
Accumulated depreciation and impairment Dec 31, 2023		**52.0**	**58.8**	**0.5**			**111.4**
Carrying amount Dec 31, 2023	**4.7**	**49.4**	**31.7**	**1.6**	**0.1**	**7.5**	**95.0**

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**			**103.7**
Carrying amount Dec 31, 2022	**4.8**	**51.9**	**28.7**	**1.8**	**0.1**	**8.7**	**96.0**

Depreciation, amortization and impairment by function

EUR million	2023	2022
Procurement and production	5.0	4.6
Sales, marketing and administration	15.0	14.7
Research and development	1.5	1.5
Total	**21.5**	**20.7**

Depreciation, amortization and impairment by asset group 2023

EUR million	Depreciation and amortization	Impairment	Total
Technology-based intangible assets	6.1		6.1
Customer related intangible assets	2.0		2.0
Other intangible assets	0.5	0.0	0.5
Buildings and structures	4.3	0.0	4.4
Machinery and equipment	8.1	0.1	8.2
Leased assets		0.3	0.3
Total	**21.0**	**0.4**	**21.5**

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**

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.

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	2023	2022
Land and waters	1.3	1.3
Buildings and structures	11.4	10.1
Machinery and equipment	0.5	0.5
Total	**13.1**	**11.9**

Additions to the right-of-use assets during the financial year 2023 were EUR 4.5 (3.9) million.

Interest-bearing lease liabilities

EUR million	2023	2022
Non-current	9.3	8.3
Current	2.8	2.7
Total	**12.1**	**10.9**

Maturity of lease liabilities is presented in note 21, Financial assets and liabilities. Cash outflow for lease contracts not commenced on December 31, 2023 are presented in note 24. Contingent liabilities and pledges given.

Amounts recognized in the statement of income related to leases

Depreciation of right-of-use assets

EUR million	2023	2022
Buildings and structures	2.7	2.5
Machinery and equipment	0.3	0.4
Total	**3.1**	**2.9**

Write-downs of right-of-use assets

EUR million	2023	2022
Buildings and structures	0.0	0.1
Total	**0.0**	**0.1**

Other items recognized in the statement of income

EUR million	2023	2022
Interest expense on lease liabilities	0.4	0.3

The total cash outflow for leases in 2023 was EUR 3.5 (3.2) million.

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 2023 was EUR 1.8 (1.7) million.

At the end of the financial year 2023 the undiscounted lease payments to be received were EUR 0.7 (1.2) million and will be received during the financial year 2024.

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. Series A shares are listed on the Nasdaq Helsinki Ltd. 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, 2023 and 2022, the fully paid and registered share capital of Vaisala Corporation amounted to EUR 7,660,807.86.

Share capital and reserves

EUR million	Number of shares 1,000	Share capital	Other reserves	Treasury shares	Total
Dec 31, 2021	**36,101**	**7.7**	**7.0**	**-4.6**	**10.0**
Share-based payments	127		-3.4	1.4	2.9
Translation difference			-0.0		-0.0
Dec 31, 2022	**36,228**	**7.7**	**3.5**	**-3.3**	**8.0**
Share-based payments	73		-1.2	1.2	-0.1
Purchase of treasury shares	-50			-2.1	-2.1
Translation differences			0.0		0.0
Dec 31, 2023	**36,251**	**7.7**	**2.3**	**-4.2**	**5.8**
Own shares held by the company	185				
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, 2023 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, 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**
Distribution of treasury shares to key employees	-73,011	-1.2
Purchase of treasury shares	50,000	2.1
Treasury shares Dec 31, 2023	**185,476**	**4.2**

In 2023, Vaisala purchased treasury shares totaling 50,000 shares. The purchase price was EUR 2.1 million. On December 31, 2023 the company held 185,476 (208,487) series A shares representing 0.5% (0.6) of the total number of shares and 0.1% (0.1) of the voting rights. The consideration paid for the shares held by the company was EUR 4.2 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 2022 a dividend of EUR 0.72 per share was paid, totaling EUR 26.1 million.

The Board of Directors proposes to the Annual General Meeting to be held on March 26, 2024 that a dividend of EUR 0.75 per share be paid for the financial year 2023, representing a total dividend of EUR 27.2 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 2023, 43% of the group's sales was in EUR, 34% in USD, 11% in CNY, 5% in JPY and 4% 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 Accounting Standards and changes in fair value are recognized in the statement of income. Accounting principles and content related to derivative financial contracts are presented in the note 21. Financial assets and liabilities.

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 -3.3 (2.4) 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 0.0 (0.2) 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

	2023			2022	
EUR million	Net position	Sensitivity	EUR million	Net position	Sensitivity
USD	-2.3	+/- 0.2	USD	-10.2	+/- 1.0
CNY	2.2	+/- 0.2	CNY	4.7	+/- 0.4
GBP	-1.5	+/- 0.1	GBP	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 and/or cash and cash equivalents. At the end of the financial year 2023 Vaisala's interest-bearing liabilities and loans totaled EUR 62.1 (63.4) million, of which EUR 50.0 (40.1) million were at floating rates. EUR 12.1 (10.9) million of interest-bearing liabilities and loans related to lease liabilities.

In addition, interest paid on cash and cash equivalents is tied to floating rate.

Vaisala was not exposed to material interest rate risk due to negative net debt EUR -28.2 (7.9) million. An interest rate increase of one percentage point would have a positive impact on net result of EUR 0.4 (0.0) million on the following year's net interest income and expenses, assuming that group's floating rate liabilities and cash and cash equivalents do not change. The calculation has taken into account liabilities with floating rates as well as cash and cash equivalents converted into euros. Foreign exchange derivatives are not taken into account in the calculation. Interest income and expenses are presented in the note 9. Financial income and expenses.

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, 2023 Vaisala's cash and cash equivalents amounted to EUR 90.3 (55.5) million. Vaisala has a EUR 50.0 million unsecured term loan which was signed on March 31, 2023. The term loan matures in 2026. This term loan is for general corporate and working capital purposes and refinancing the previous the term loan of EUR 40 million. The loan was fully utilized on April 5, 2023, and EUR 40 million loan was repaid. The loan has a financial covenant (gearing) tested semi-annually and on December 31, 2023, Vaisala was in compliance with the covenant.

In addition, Vaisala has a domestic commercial paper program amounting to EUR 150 million. Vaisala had not issued any domestic commercial papers on December 31, 2023 (Dec 31, 2022: EUR 12.5 million).

On October 5, 2023, Vaisala signed a EUR 50 million three-year unsecured revolving credit facility with two one-year extension options. The facility agreement includes a financial covenant based on gearing, which is tested semi-annually and on December 31, 2023, Vaisala was in compliance with the covenant. The revolving credit facility is to be used for general corporate and working capital purposes and the arrangement replaced undrawn EUR 50 million facility signed in October 2018. The revolving credit facility was undrawn on December 31, 2023, as year before at the end of 2022.

Consequently, Vaisala had interest-bearing liabilities totaling EUR 62.1 (63.4) million on December 31, 2023. Vaisala has no loans that would mature after five years or more.

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 90.3 (55.5) million and the nominal value of derivative financial instruments to EUR 43.7 (38.3) 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 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 -0.2 (-0.6) 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. Trade receivables including expected credit losses are presented in the note 12. Trade receivables and other receivables. Accounting principles related to trade receivables are presented in the note 21. Financial assets and liabilities.

20. NON-CURRENT RECEIVABLES

EUR million	2023 carrying amounts	Fair values	2022 carrying amounts	Fair values
Non-current deposits	1.0	1.0	0.8	0.8
Other non-current receivables	0.2	0.2	0.2	0.2
Total	**1.2**	**1.2**	**1.0**	**1.0**

21. FINANCIAL ASSETS AND LIABILITIES

§ Accounting principles

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.

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 2022 or 2023.

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, 2023

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		1.2	1.2	1.2	20
Trade receivables and forward contracts	0.4	70.2	70.2	70.2	12
Cash and cash equivalents		90.3	90.3	90.3	23
Total	**0.4**	**161.8**	**161.8**	**161.8**	
Financial liabilities					
Interest-bearing non-current loans from financial institutions		50.0	50.0	50.0	21
Interest-bearing non-current lease liabilities		9.3	9.3	9.3	17
Other non-current liabilities		4.2	4.2	4.2	21
Interest-bearing current lease liabilities		2.8	2.8	2.8	17
Interest-bearing current liabilities		0.0	0.0	0.0	21
Trade payables and forward contracts	0.4	13.8	13.8	13.8	14
Total	**0.4**	**80.1**	**80.1**	**80.1**	

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 forward contracts	0.9	88.1	88.1	88.1	12
Cash and cash equivalents		55.5	55.5	55.5	23
Total	**1.0**	**144.6**	**144.6**	**144.6**	
Financial liabilities					
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 forward contracts	0.5	25.2	25.2	25.2	14
Total	**0.5**	**90.8**	**90.8**	**90.8**	

Vaisala has a EUR 50.0 million unsecured term loan which was signed on March 31, 2023. The loan matures in 2026, and has a financial covenant (gearing), which is tested semi-annually. On December 31, 2023, Vaisala was in compliance with the covenant. This term loan is used for general corporate and working capital purposes and it was used to refinance the previous term loan of EUR 40.0 million.

In addition, Vaisala has a domestic commercial paper program amounting to EUR 150 million. Vaisala had not issued any domestic commercial papers on December 31, 2023 (Dec 31, 2022: EUR 12.5 million). On October 5, 2023, Vaisala signed a EUR 50 million three-year unsecured revolving credit facility with two one-year extension options. The facility agreement includes a financial covenant based on gearing, which is tested semi-annually and on December 31, 2023, Vaisala was in compliance with the covenant. The revolving credit facility is to be used for general corporate and working capital purposes and the arrangement replaced undrawn EUR 50 million facility signed in October 2018. The revolving credit facility was undrawn on December 31, 2023, as year before at the end of 2022.

On December 31, 2023, Vaisala had interest bearing liabilities totaling EUR 62.1 (63.4) million. Group has no loans that would mature after five years or more.

Maturity of interest-bearing liabilities 2023

EUR million	2024	2025–2028	2029–2033	2034
Loans from financial institutions		50.0		
Revolving credit facility				
Other interest-bearing loans	0.0			
Lease liabilities	3.1	7.2	3.1	
Total	**3.2**	**57.2**	**3.1**	**0.0**

Maturity of interest-bearing liabilities 2022

EUR million	2023	2024–2027	2028–2032	2033
Loans from financial institutions	40.0			
Revolving credit facility				
Other interest-bearing loans	12.5			
Lease liabilities	3.0	5.6	2.4	1.4
Total	**55.5**	**5.6**	**2.4**	**1.4**

Derivative financial contracts

EUR million	2023	2022
Nominal value of derivative financial contracts made to hedge against exchange rate risk		
Foreign exchange forward contracts	43.7	38.3
Nominal value, total	**43.7**	**38.3**

Nominal value of derivative financial contracts in currencies

	2023		2022	
	Currency million	EUR million	Currency million	EUR million
USD	22.0	20.0	27.0	25.1
CNH	60.0	7.7	30.0	4.2
JPY	750.0	4.7	350.0	2.5
PLN	-	-	9.0	1.9
SEK	27.5	2.3	25.0	2.4
CAD	7.2	5.0	3.0	2.2
GBP	3.5	4.0	-	-
Total		**43.7**		**38.3**

Maturity of derivative financial contracts

EUR million	2023	2022
Less than 90 days	37.1	11.7
Over 90 days and less than 120 days	2.0	5.4
Over 120 days and less than 180 days	4.5	9.5
Over 180 days and less than 365 days	-	10.6
Over 365 days and less than 545 days	-	1.1
Total	**43.7**	**38.3**

Fair value of derivative financial contracts made to hedge against exchange rate risk

EUR million	2023	2022
Fair values of derivative financial contracts, assets	0.4	1.0
Fair values of derivative financial contracts, liabilities	0.4	0.5

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, 2022	Cash flow effect	Non-cash changes	Dec 31, 2023
Loans from financial institutions	40.0	10.0		50.0
Credit facility	0.0			0.0
Lease liabilities	10.9	-3.1	4.3	12.0
Other interest-bearing liabilities	12.6	-12.5		0.0
Exchange rate differences	0.0	0.0		0.0
Total	**63.4**	**-5.6**	**4.3**	**62.1**

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	0.0			0.0
Lease liabilities	10.1	-2.9	3.7	10.9
Other interest-bearing liabilities	0.1	12.5		12.6
Exchange rate differences	0.0	0.0		
Total	**50.2**	**9.6**	**3.7**	**63.4**

Specification of other adjustments in the cash flow from operating activities

EUR million	2023	2022
Change in bad debt provision	-0.8	0.5
Change in excess and obsolete provision in inventory	-0.5	-0.3
Change in provisions	-0.3	0.7
Adjustment related to share-based incentive plans	0.4	-1.4
Other adjustments	0.3	0.7
Total	**-0.9**	**0.3**

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	2023	2022
Cash and cash equivalents	90.3	55.5

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	2023	2022
Bank guarantees issued for obligations	11.0	12.8

Investment commitments
On December 31, 2023, Vaisala had commitments related to intangible and tangible assets for EUR 4 (3) million.

Purchase commitments
On December 31, 2023, Vaisala had purchase commitments totaling EUR 21 (31) million. Additionally, the group had commitments under the purchase agreements totaling a maximum of EUR 31 (32) million, if realized.In addition, on December 31, 2023, Vaisala had committed to lease contracts, the lease period of which had not yet commenced and related future cash outflows totaled to EUR 13 million.

Consolidation

25. BUSINESS COMBINATIONS

There were no business combinations during financial year 2023.

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. 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, AerisWeather'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 AerisWeather's integration platform for third-party data as part of Vaisala's enhanced forecasting and analytics business
- Large scale utilization of AerisWeather'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.

AerisWeather is consolidated as part of Vaisala Group's statement of comprehensive income and statement of financial position as of February 2022.

The amounts of the assets acquired and liabilities recognized, and the cash flow from the acquisition were as follows:

Business combinations

EUR 1,000	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**

A contingent consideration liability relating to prior acquisitions totaling EUR 0.1 (5.6) million was paid in 2023. The group did not have contingent liability related to prior acquisitions at the end of the financial year 2023 (EUR 0.1 million at the end of financial year 2022). In the financial year 2022 and 2023, no contingent consideration liability was recognized as income or expense based on the financial performance after the acquisition and based on the estimated future performance.

26. SUBSIDIARIES

Name	Country	Group ownership %, Dec 31, 2023	Group ownership %, Dec 31, 2022
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	100	99.95
Upwind SAS	France	100	100
SCI Septentrion	France	100	100
K-Patents (Shanghai) Co.,Ltd.	China	0	100
Vaisala Shanghai Sensors Ltd.	China	100	100
Whether or Knot LLC	United States	0	100
Vaisala Korea Co. Ltd	South-Korea	100	100

On December 1, 2023 Whether or Knot LLC was merged into Vaisala Inc. K-Patents (Shanghai) Co., Ltd. Was liquidated in 2023.

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.

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	2023	2022
Non-current assets	2.8	3.2
Current assets	4.4	3.5
Liabilities	2.9	2.8
Net assets	**4.3**	**3.9**
Vaisala's share of net assets	1.5	1.4
Net sales	4.7	4.6
Result for the financial year	0.6	0.5

The information presented in the table is based on the latest available financial information.

Carrying amount of investments in associated company

EUR million	2023	2022
Carrying amount at Jan 1	1.4	1.3
Share of result	0.2	0.2
Dividend received	-0.1	-0.1
Carrying amount at Dec 31	**1.5**	**1.4**

The carrying value of the associated company does not include goodwill.

Transactions with associated company and receivables and liabilities

EUR million	2023	2022
Sales	0.2	0.3
Receivables	0.1	-

Other notes

28. RELATED PARTY TRANSACTIONS

Related parties of Vaisala group are the parent company, subsidiaries, associated company, key management employees of the group (members of Board of Directors, the President and CEO and and Vaisala Leadership Team) and their close members of family and their controlled entities. 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	2023	2022
Salary and bonuses of the President and CEO (payment basis)		
Öistämö Kai		
Salary	526	491
Short term incentives	288	345
Share-based payment	728	169
Statutory pension	134	138
Supplementary pension	122	114
Total	**1,797**	**1,256**

EUR thousand	2023	2022
Remuneration of the members of Vaisala Leadership Team (excl. the President and CEO) (payment basis)		
Salaries	1,935	1,694
Short term incentives	872	839
Share-based payment	2,527	5,041
Statutory pension	462	418
Supplementary pension	360	285
Total	**6,156**	**8,277**

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 2023 (payment basis)

EUR thousand		Annual remuneration	Compensation, Audit Committee	Compensation, People and Sustainability Committee	Compensation, Nomination Committee	Compensation, Strategic Planning Committee	Total
Castrén Petri	Member of the Board	40	7			1	48
Jääskeläinen Antti	Member of the Board	40	6			1	47
Lundström Petra	Member of the Board	40		4	5		49
Rinnevaara Jukka	Member of the Board	40		4			44
Ståhlberg Kaarina	Member of the Board	40	9		5	1	55
Syrjänen Tuomas	Member of the Board	40		5			45
Voipio Raimo	Vice Chair of the Board	40	6		5		51
Voipio Ville	Chair of the Board	55		5	5	1	66
Total		**337**	**27**	**18**	**20**	**4**	**406**

Remuneration of the Board of Directors 2022 (payment basis)

EUR thousand		Annual remuneration	Compensation, Audit Committee	Compensation, Remuneration and Human Resources 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**

The Board established Strategic Planning Committee at the end of the year 2023. Board established Nomination Committee at the end of the year 2022 and the committee commenced its work in the beginning of 2023.
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.

29. AUDITOR'S FEES

Authorized Public Accountants PricewaterhouseCoopers Oy (2023), Deloitte Oy (2022)

EUR million	2023	2022
Audit	0.6	0.5
Tax advice	0.0	0.0
Statements	0.0	0.0
Other fees	0.1	0.1
Total	**0.7**	**0.7**

Other work than audit services given by the principal auditor PricewaterhouseCoopers Oy during the year 2023 were EUR 0.1 million. In 2022, the principal auditor was Deloitte Oy and other work than audit services given by Deloitte Oy were EUR 0.2 million.

30. APPLICATION OF NEW AND REVISED IFRS ACCOUNTING STANDARDS AND INTERPRETATIONS IN ISSUE BUT NOT YET EFFECTIVE

IASB published the following new or revised IFRS Accounting 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 IFRS Accounting 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 Accounting Standards that have been issued but are not yet effective and had not yet in some cases been adopted by the EU (marked with *):

- Amendments to IAS 1 Presentation of Financial Statements — Classification of Liabilities as Current or Non-current
- Amendments to IFRS 16 Leases — Lease Liability in a Sale and Leaseback
- Amendments to IAS 7 and IFRS 7 – Supplier finance arrangements*
- Amendments to IAS 21 – Lack of exchangeability*

The management expects that the adoption of the standards will have no material impact on the financial statements of the group in future periods.

Amendments to IAS 1 Presentation of Financial Statements — Classification of Liabilities as Current or Non-current

The IASB has issued amendments to IAS 1 in January 2020 and in February 2022.

According to IAS 1, to classify a liability as non-current, an entity must have the right to defer settlement of the liability for at least twelve months after the reporting period. The amendments clarify that:

- covenants of loan arrangements which an entity must comply with only after the reporting date do not affect the classification of a liability as current or non-current at the reporting date. However, those covenants that an entity is required to comply with on or before the reporting date would affect classification as current or non-current, even if the covenant is only assessed after the entity's reporting date.
- the classification of financial liabilities as current or non-current is unaffected by management intention or expectations about whether an entity will exercise its right to defer settlement of a liability or settlement of the liability between the end of the reporting period and the date the financial statements are authorised for issue
- the settlement refers to a transfer to the counterparty that results in the extinguishment of the liability. The transfer could be of cash or other economic resources or the entity's own equity instruments. Terms of a liability that could, at the option of the counterparty, result in its settlement by the transfer of the entity's own equity instruments do not affect its classification as current or non-current if the entity classifies the option as an equity instrument, recognising it separately from the liability as an equity component of a compound financial instrument. The amendment may impact the presentation of convertible instruments.

The amendments introduce additional disclosure requirements on loans which contain covenants including:

a) the carrying amount of the liability
b) information about the covenants, and
c) facts and circumstances, if any, that indicate that the entity may have difficulty complying with the covenants.

The amendments are applied retrospectively for annual periods beginning on or after 1 January 2024, with early application permitted. The adoption of the amendment is not expected to have an impact on the consolidated financial statements in future periods except for the new requirements on notes to the financial statements.

Amendments to IFRS 16 Leases — Lease Liability in a Sale and Leaseback

The IASB has issued narrow-scope amendments to requirements for sale and leaseback transactions in IFRS 16 explaining how an entity accounts for a sale and leaseback after the date of the transaction. The amendments specify that, in measuring the lease liability subsequent to the sale and leaseback, the seller-lessee determines 'lease payments' and 'revised lease payments' in a way that does not result in the seller-lessee recognising any amount of the gain or loss that relates to the right of use that it retains. This could particularly impact sale and leaseback transactions where the lease payments include variable payments that do not depend on an index or a rate.

The amendments are effective for annual reporting periods beginning on or after 1 January 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.

Amendments to IAS 7 and IFRS 7 – Supplier finance arrangements

The IASB has issued new disclosure requirements about supplier financing arrangements ('SFAs'), after feedback to an IFRS Interpretations Committee agenda decision highlighted that the information required by IAS 7 Statement of Cash Flows and IFRS 7 Financial Instruments: Disclosures falls short of meeting user information needs.

The objective of the new disclosures is to provide information about SFAs that enable investors to assess the effects on an entity's liabilities, cash flows and the exposure to liquidity risk.

The new disclosures include information about the following:

a) The terms and conditions of SFAs.
b) The carrying amounts of financial liabilities that are part of SFAs and the line items in which those liabilities are presented.
c) The carrying amount of the financial liabilities in (b) for which suppliers have already received payment from the finance providers.
d) The range of payment due dates for both the financial liabilities that are part of SFAs, and comparable trade payables that are not part of such arrangements.
e) Non-cash changes in the carrying amounts of financial liabilities in (b).
f) Access to SFA facilities and concentration of liquidity risk with finance providers.

The IASB has provided transitional relief by not requiring comparative information in the first year, and also not requiring disclosure of specified opening balances. The amendments are effective for annual reporting periods beginning on or after 1 January 2024. The application of this amendment may have an impact on the group's consolidated financial statements in future periods should such transactions arise.

Amendments to IAS 21 – Lack of exchangeability

An entity is impacted by the amendments when it has a transaction or an operation in a foreign currency that is not exchangeable into another currency at a measurement date for a specified purpose.
A currency is exchangeable when there is an ability to obtain the other currency (with a normal administrative delay), and the transaction would take place through a market or exchange mechanism that creates enforceable rights and obligations.

The amendments are effective for annual reporting periods beginning on or after 1 January 2025. The application of this amendment may have an impact on the group's consolidated financial statements in future periods should such transactions or operations arise.

Parent company financial statements*)

Parent company income statement

EUR	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Net sales	2	358,816,418.42	343,315,466.88
Cost of production and procurement	4, 5	-175,099,149.56	-174,206,561.33
Gross profit		**183,717,268.86**	**169,108,905.55**
Cost of sales and marketing	4, 5	-40,569,570.87	-40,087,775.66
Cost of administration			
Research and development costs	4, 5	-53,177,534.57	-49,867,740.47
Other administrative costs	4, 5	-62,284,027.12	-55,686,503.70
Other operating income and expenses	3	643,267.15	72,112.36
Operating result		**28,329,403.45**	**23,538,998.08**
Financial income	6	41,182,318.36	20,041,848.32
Financial expenses	6	-12,318,687.27	-9,765,341.32
Result before appropriations and taxes		**57,193,034.54**	**33,815,505.08**
Appropriations			
Change in depreciation difference		-637,251.79	-834,605.39
Result before taxes		**56,555,782.75**	**32,980,899.69**
Direct taxes	7	-4,927,291.49	-6,014,958.21
Result for the financial year		**51,628,491.26**	**26,965,941.48**

*) The parent company financial statements are prepared in accordance with the principles of Finnish Accounting Standards (FAS).

Parent company balance sheet

EUR	Note	Dec 31, 2023	Dec 31, 2022
Assets			
Non-current assets			
Intangible assets	8		
Goodwill		13,228.48	33,071.17
Intangible rights		11,530,686.79	12,787,059.77
Other intangible assets		5,236,779.94	8,667,011.16
Advance payments and intangible assets in progress		352,534.91	339,779.44
Total intangible assets		**17,133,230.12**	**21,826,921.54**
Property, plant and equipment	8		
Land and waters		2,904,868.22	2,904,868.22
Buildings		41,048,425.61	42,536,262.57
Machinery and equipment		26,575,672.14	23,742,698.09
Other tangible assets		74,417.51	74,417.51
Advance payments and construction in progress		6,429,008.49	7,921,239.84
Total property, plant and equipment		**77,032,391.97**	**77,179,486.23**
Investments	8		
Holdings in group undertakings		74,526,706.17	74,650,890.57
Other shares and holdings		101,000.00	101,000.00
Total investments		**74,627,706.17**	**74,751,890.57**
Total non-current assets		**168,793,328.26**	**173,758,298.34**

EUR	Note	Dec 31, 2023	Dec 31, 2022
Current assets			
Non-current receivables			
Other receivables		114,423.60	143,369.22
Total long-term receivables		**114,423.60**	**143,369.22**
Inventories			
Materials, consumables and finished goods		42,979,758.91	44,788,097.25
Total inventories		**42,979,758.91**	**44,788,097.25**
Current receivables			
Trade receivables	17	59,753,588.05	59,989,414.71
Other receivables	9, 17	4,099,303.22	5,300,801.72
Prepaid expenses and accrued income	10, 17	22,260,326.03	18,869,190.54
Total current receivables		**86,113,217.30**	**84,159,406.97**
Cash and cash equivalents		66,172,382.95	37,534,733.55
Total current assets		**195,379,782.76**	**166,625,606.99**
Total assets		**364,173,111.02**	**340,383,905.33**

Parent company balance sheet

EUR	Note	Dec 31, 2023	Dec 31, 2022
Shareholders' equity and liabilities			
Shareholders' equity	13		
Share capital		7,660,807.86	7,660,807.86
Fund of invested non-restricted equity		422,031.15	422,034.34
Retained earnings		137,839,656.64	138,155,966.18
Result for the financial year		51,628,491.26	26,965,941.48
Total shareholders' equity		**197,550,986.91**	**173,204,749.86**
Appropriations			
Depreciation difference		4,458,087.01	3,820,835.22

EUR	Note	Dec 31, 2023	Dec 31, 2022
Liabilities			
Non-current			
Loans from financial institutions	15	50,000,000.00	-
Accrued expenses and deferred income	16	3 803 126.12	3 166 494.16
Other non-current liabilities	14	893.00	893.00
Non-current liabilities total		**53 804 019.12**	**3 167 387.16**
Current			
Advances received		1,388,253.03	2,191,679.39
Trade payables	17	12,991,736.55	22,847,352.95
Loans from financial institutions	15	-	40,000,000.00
Other current loans	17	40,914,549.80	44,378,233.23
Other current liabilities	14	1,983,002.78	2,688,754.88
Provisions	12	1,475,484.63	1,630,503.51
Accrued expenses and deferred income	16, 17	49 606 991.19	46 454 409.13
Current liabilities total		**108 360 017.98**	**160 190 933.09**
Total liabilities		**166,622,124.11**	**167,179,155.47**
Total shareholders' equity and liabilities		**364,173,111.02**	**340,383,905.33**

Parent company cash flow statement

EUR thousand	Note	Jan 1– Dec 31, 2023	Jan 1–Dec 31, 2022
Result for the financial period		51,628	26,966
Depreciation, amortization and impairment	5	14,316	13,603
Financial income and expenses	6	-28,864	-10,277
Gains and losses on sale of intangible assets and property, plant and equipment	3	-	-27
Depreciation difference		637	835
Income taxes	7	4,927	6,015
Other adjustments		226	-207
Inventories, increase (-) / decrease (+)		1,810	-9,231
Non-interest bearing receivables, increase (-) / decrease (+)		-2,260	-13,543
Non-interest bearing liabilities, increase (+) / decrease (-)		-7,328	-5,413
Changes in working capital		-7,778	-28,187
Financial items received	6	1,667	250
Financial items paid	6	-5,518	-4,990
Dividend received from business operations	6	33,555	12,994
Income taxes paid	7	-4,630	-5,460
Cash flow from operating activities		**60,167**	**11,516**

EUR thousand	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Cash flow from investing activities			
Investments in shares	8	-	-171
Investments in intangible assets	8	-640	-13,693
Investments in property, plant and equipment	8	-9,167	-9,761
Divestments	8	-	98
Loans granted	17	-	-4,456
Repayments on loan receivables	17	-	4,885
Cash flow from investing activities		**-9,807**	**-23,098**
Cash flow from financing activities			
Proceeds from short-term borrowings	14	107,383	114,888
Repayment of short-term borrowings	14	-100,877	-105,770
Dividend paid	13	-26,105	-24,635
Purchase of treasury shares	13	-2,123	-
Cash flow from financing activities		**-21,722**	**-15,517**
Change in cash and cash equivalents increase (+) / decrease (-)		**28,638**	**-27,099**
Cash and cash equivalents at Jan 1		37,535	64,634
Change in cash and cash equivalents increase (+) / decrease (-)		28,638	-27,099
Cash and cash equivalents at Dec 31		**66,172**	**37,535**

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, services and subscription sales. Disaggregation of revenue has been changed from the beginning of 2023. Subscription sales, which has been previously included in services, is disclosed as a separate category. Comparative information 2022 has been presented according to new categories. 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 deliveries contains 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 among others maintenance, calibration and repair, modernization and extended warranties. 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.

Subscription sales includes mainly data-based solutions supporting decisions in weather-dependent operations. Revenue is recognized over time.

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.

Share-based payments based on share-based incentive plans are paid as net amount in shares after taxes have been deducted from the amount paid in shares.

Other than market conditions are not taken into account when estimating the fair value at the grant date. Instead, other than market conditions are taken into account by adjusting the expensed number of equity instruments that are expected to vest. In terms of other than market conditions, cost is measured corresponding to the value of share (Vaisala's series A) closing price on the grant of the share-based incentive plan less expected dividends. Satisfaction of these conditions are estimated at each reporting date and updated whenever changes occur. The effect of changes is recognized in the statement of income.

Market conditions are taken into account when estimating the fair value of the equity-settled share-based payment transaction at the grant date. Expense is recognized irrespective of whether that market condition is satisfied, if service condition and other than market conditions are satisfied. In terms of market conditions (total shareholder return, TSR) a model based the probability-weighted values (Monte Carlo simulation) is used to estimate the fair value at the grant date.

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 employees 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. 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	3–10 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 2023 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	2023	2022
Americas	112,246	102,998
of which United States	81,850	75,077
APAC	113,707	114,045
EMEA	132,863	126,273
of which Finland	8,888	8,699
Total	**358,816**	**343,315**

Net sales by business area

EUR thousand	2023	2022
Weather and Environment		
Product sales	67,775	63,008
Project sales	42,129	39,730
Service sales	5 459	4 997
Subscription sales	3 181	2 607
Total	**118,543**	**110,343**
Industrial Measurements		
Product sales	49,631	51,402
Service sales	2,924	2,520
Total	**52,555**	**53,922**
Net sales from subsidiaries	187,717	179,051
Total	**358,816**	**343,315**

Net sales by timing of revenue recognition

EUR thousand	2023	2022
Revenue recognized at a point in time	121,985	117,754
Revenue recognized over time	49,114	46,510
Net sales from subsidiaries	187,717	179,051
Total	**358,816**	**343,315**

Net sales from subsidiaries are mainly recognized at a point in time.

Payment terms
Payment terms vary based on geographical areas. In product, service and subscription sales 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, 2023	Dec 31, 2022
Trade receivables	59,595	59,989
Accrued revenue	14,483	11,684
Advances received	1,388	2,192
Deferred revenue	13 586	12,822

Accrued revenue includes the balance of project, service and subscription sales 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 2023, the parent company recognized EUR 5 (6) million revenue that was included in the deferred revenue balance at the beginning of the period.

On December 31, 2023, the order book amounted to EUR 97.8 (73.4) million. Of the order book, EUR 66.9 (58.3) million is scheduled to be recognized as revenue in 2023 (2022) and EUR 30.9 (15.1) million is scheduled to be recognized later.

3. OTHER OPERATING INCOME AND EXPENSES

Other operating income

EUR thousand	2023	2022
Gains on disposal of assets	-	27
Other operating income		
Indemnities and other	643	46
Total	**643**	**72**

The parent company did not have other operating expenses in 2023 and 2022.

4. PERSONNEL EXPENSES AND NUMBER OF EMPLOYEES

Personnel expenses

EUR thousand	2023	2022
Wages and salaries	108,747	96,537
Pension costs	18,301	15,861
Other personnel costs	3,440	3,050
Total	**130,488**	**115,448**

Employees average

Persons	2023	2022
In Finland	1,540	1,401
Outside Finland	9	10
Total	**1,549**	**1,411**

Employees Dec 31

Persons	2023	2022
In Finland	1,533	1,475
Outside Finland	9	9
Total	**1,542**	**1,484**

Salary and remunerations of the President and CEO (payment basis)

EUR thousand	2023	2022
Öistämö Kai (from Oct 1, 2020 on)		
Salary	526	491
Short term incentives	288	345
Share-based payment	728	169
Statutory pension	134	138
Supplementary pension	122	114
Total	**1 798**	**1 256**

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 2023 (payment basis)

EUR thousand	Annual remuneration	Compensation, Audit Committee	Compensation, People and Sustainability Committee	Compensation, Nomination Committee	Compensation, Strategic Planning Committee	Total
Castrén Petri, Member of the Board	40	7			1	48
Jääskeläinen Antti, Member of the Board	40	6			1	47
Lundström Petra, Member of the Board	40		4	5		49
Rinnevaara Jukka, Member of the Board	40		4			44
Ståhlberg Kaarina, Member of the Board	40	9		5	1	55
Syrjänen Tuomas, Member of the Board	40		5			45
Voipio Raimo, Vice Chair of the Board	40	6		5		51
Voipio Ville, Chair of the Board	55		5	5	1	66
Total	**337**	**27**	**18**	**20**	**4**	**406**

Remuneration of the Board of Directors 2022 (payment basis)

EUR thousand	Annual remuneration	Compensation, Audit Committee	Compensation, Remuneration and Human Resources 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**

The Board established Strategic Planning Committee at the end of the year 2023. Board established Nomination Committee at the end of the year 2022 and the committee commenced its work in the beginning of 2023. 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	2023	2022
Amortization of intangible assets	5,277	5,301
Depreciation of property, plant and equipment	8,985	8,198
Impairment of intangible and tangible assets	54	104
Total	**14,316**	**13,603**

In the financial year 2023 amortization of intangible assets included amortization EUR 3.6 (3.6) million related to merger losses included in other intangible assets.

6. FINANCIAL INCOME AND EXPENSES

EUR thousand	2023	2022
Financial income		
Dividend income		
From group companies	33,555	12,994
Interest income		
From group companies	-	30
From others	1,667	220
Other financial income		
From group companies	-	-
From others	3,158	2,591
Foreign exchange gains and losses	2,803	4,206
Total	**41,182**	**20,042**

EUR thousand	2023	2022
Financial expenses		
Interest expenses		
To group companies	-1,694	-281
To others	-2,166	-707
Other financial expenses		
To group companies	-	-
To others	-2,788	-4,054
Foreign exchange losses	-5,671	-4,723
Total	**-12,319**	**-9,765**

7. DIRECT TAXES

EUR thousand	2023	2022
Taxes from the financial year	4,931	4,279
Taxes from previous years	-4	1,736
Total	**4,927**	**6,015**

8. NON-CURRENT ASSETS AND OTHER LONG-TERM INVESTMENTS

Intangible assets 2023

EUR thousand	Goodwill	Intangible rights	Other intangible assets	Advance payments and intangible assets in progress	Total
Acquisition cost Jan 1, 2023	88	38,481	20,361	340	59,269
Increases		282	207	151	640
Decreases		-535			-535
Transfers between items		91		-139	-48
Acquisition cost Dec 31, 2023	**88**	**38,319**	**20,568**	**353**	**59,327**
Accumulated amortization and write-downs Jan 1, 2023	55	25,693	11,694		37,442
Accumulated amortization of decreases and transfers		-535			-535
Amortization and write-downs for the financial year	20	1,630	3,637		5,286
Accumulated amortization and write-downs Dec 31, 2023	**74**	**26,788**	**15,331**		**42,194**
Carrying value Dec 31, 2023	**13**	**11,531**	**5,236**	**353**	**17,133**

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**

Property, plant and equipment 2023

EUR thousand	Land and waters	Buildings	Machinery and equipment	Other tangible assets	Advance payments and construction in progress	Total
Acquisition cost Jan 1, 2023	2,820	76,678	67,730	74	7,921	155,224
Increases		1,214	4,404		3,512	9,131
Decreases		817	-3,069			-2,252
Transfers between items		339	4,418		-5,005	-248
Acquisition cost Dec 31, 2023	**2,820**	**79,049**	**73,482**	**74**	**6,429**	**161,855**
Accumulated depreciation and write-downs Jan 1, 2023		39,760	43,987			83,747
Accumulated depreciation of decreases and transfers		817	-3,069			-2,252
Depreciation for the financial year		3,032	5,953			8,985
Write-downs		9	36			45
Accumulated depreciation and write-downs Dec 31, 2023		**43,618**	**46,907**			**90,525**
Revaluation	84	5,618				5,702
Carrying value Dec 31, 2023	**2,905**	**41,048**	**26,576**	**74**	**6,429**	**77,032**

On December 31, 2023, the carrying amount of machinery and equipment used in production was EUR 18.9 (15.9) million.

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**

Investments 2023

EUR thousand	Holdings in group undertakings	Other shares and holdings	Total
Acquisition cost Jan 1, 2023	74,651	101	74,752
Decreases	-124		-124
Carrying value Dec 31, 2023	**74,527**	**101**	**74,628**

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**

9. OTHER RECEIVABLES

EUR thousand	2023	2022
Advances paid	327	422
Value added tax receivables	2,132	3,008
Grants	1,621	1,787
Other	20	84
Total	**4,099**	**5,301**

10. DEFERRED ASSETS

EUR thousand	2023	2022
Tax receivables	1,112	1,385
Deferred revenue	14,362	11,684
Derivative financial contracts	417	948
Other deferred assets	6,369	4,853
Total	**22,260**	**18,869**

Derivative financial contracts

EUR million	2023	2022
Nominal value of derivative financial contracts made to hedge against exchange rate risk		
Foreign exchange forward contracts	43,7	38,3
Nominal value, total	**43,7**	**38,3**

Nominal value of derivative financial contracts in currencies	2023		2022	
	Currency million	EUR million	Currency million	EUR million
USD	22.0	20.0	27.0	25.1
CNH	60.0	7.7	30.0	4.2
JPY	750.0	4.7	350.0	2.5
PLN	-	-	9.0	1.9
SEK	27.5	2.3	25.0	2.4
CAD	7.2	5.0	3.0	2.2
GBP	3.5	4.0	-	-
Total		**43.7**		**38.3**

Maturity of derivative financial contracts

EUR million	2023	2022
Less than 90 days	37.1	11.7
Over 90 days and less than 120 days	2.0	5.4
Over 120 days and less than 180 days	4.5	9.5
Over 180 days and less than 365 days	-	10.6
Over 366 days and less than 545 days	-	1.1
Total	**43.7**	**38.3**

Fair value of derivative financial contracts made to hedge against exchange rate risk

EUR million	2023	2022
Fair values of derivative financial contracts, assets	0.4	1.0
Fair values of derivative financial contracts, liabilities	0.4	0.5

11. DEFERRED TAX ASSETS AND LIABILITIES

Deferred tax assets

EUR thousand	2023	2022
Share-based payments	943	1,661
Provisions	295	326
Total	**1,238**	**1,988**

Deferred tax assets and liabilities have not been recognized in the parent company's balance sheet. Deferred tax liabilities arising from revaluation and deprecation difference have not been taken into account. If realized, 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	2023	2022
Provisions Jan 1	-	97
Decreases	-	-97
Provisions Dec 31	**-**	**-**

Current provisions

EUR thousand	2023	2022
Provisions Jan 1	1,631	1,026
Increases	1,475	694
Decreases	-1,631	-90
Provisions Dec 31	**1,475**	**1,631**

The provisions in the financial years 2023 and 2022 include mainly warranty provision 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. Series A shares are listed on the Nasdaq Helsinki Ltd. 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, 2023 and 2022, the fully paid and registered share capital of Vaisala Corporation amounted to EUR 7,660,807.86.

Shareholders' equity

EUR thousand	2023	2022
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	165,122	166,019
Dividend paid	-26,137	-24,635
Distribution of treasury shares	1,191	1,368
Loss on transfer of treasury shares	-213	-2,695
Purchase of treasury shares	-2,123	-
Correcting entry	-	-1,900
Retained earnings Dec 31	**137,840**	**138,156**
Result for the financial year	51,628	26,966
Total equity	**197,551**	**173,205**

Distributable funds

EUR thousand	2023	2022
Retained earnings	137,840	138,156
Result for the financial year	51,628	26,966
Fund of invested non-restricted equity	422	422
Total	**189,890**	**165,544**

From the financial year 2022 a dividend of EUR 0.72 per share was paid, a total of EUR 26.1 million.

The parent company purchased treasury shares totaling 50,000 shares in 2023. The purchase price was EUR 2.1 million. After purchase, the number of treasury shares owned by the company totaled to 185,476 shares.

In the financial year 2023, correcting entry in the depreciation difference related to the financial year 2021 was recognized. Correcting entry was recognized by adjusting retained earnings of the comparison year 2022 and it reduced the amount of equity by EUR 1.9 million.

14. OTHER NON-CURRENT AND CURRENT LIABILITIES

At the end of the financial year, the parent company had no non-current liabilities that will mature after five years.

On December 31, 2023, other current liabilities were EUR 2.0 (2.7) million. They did not include contingent consideration relating to prior acquisitions (December 31, 2022: EUR 0.1 million). A contingent consideration liability totaling EUR 0.1 (5.6) million relating to prior acquisitions was paid in 2023.

15. LOANS FROM FINANCIAL INSTITUTIONS

The parent company has a EUR 50.0 million unsecured term loan which was signed on March 31, 2023. The term loan matures in 2026. This term loan is for general corporate and working capital purposes and refinancing the previous the term loan of EUR 40 million. The loan was fully utilized on April 5, 2023, and EUR 40 million loan was repaid. The loan has a financial covenant (gearing) tested semi-annually and on December 31, 2023, the company was in compliance with the covenant.

In addition, the parent company has a domestic commercial paper program amounting to EUR 150 million. The company had not issued any domestic commercial papers on December 31, 2023 (December 31, 2022: EUR 12.5 million).

On October 5, 2023, the parent company signed a EUR 50 million three-year unsecured revolving credit facility with two one-year extension options. The facility agreement includes a financial covenant based on gearing, which is tested semi-annually and on December 31, 2023, The company was in compliance with the covenant. The revolving credit facility is to be used for general corporate and working capital purposes and the arrangement replaced undrawn EUR 50 million facility signed in October 2018. The revolving credit facility was undrawn on December 31, 2023, as year before at the end of 2022.

Consequently, the company had non-current interest-bearing liabilities totaling EUR 50.0 (52.5) million on December 31, 2023. The company has no loans that would mature after five years or more.

16. NON-CURRENT AND CURRENT ACCRUED EXPENSES AND DEFERRED INCOME

Short-term accrued expenses and deferred income

EUR thousand	2023	2022
Personnel expense accruals	28,516	27,025
Deferred revenue	13,586	12,822
Derivative financial contracts	380	538
Direct tax accruals	25	62
Other accrued expenses and deferred income	7,099	6,008
Total	**49,607**	**46,454**

Notes related to derivative financial contracts are presented in the note to the financial statements 10, Deferred assets.

Non-current accrued expenses and deferred income include personnel expense accruals totaling to EUR 2.4 (3.2) million and deferred revenue EUR 1.4 (-) million.

17. RECEIVABLES AND LIABILITIES FROM OTHER COMPANIES IN VAISALA GROUP

EUR thousand	2023	2022
Reveivables		
Trade receivables	33,967	27,080
Other receivables	-	32
Prepaid expenses and accrued income	2,155	1,850
Total receivables	**36,122**	**28,962**
Liabilities		
Current loans	40,882	31,837
Trade payables	1,682	1,553
Accrued expenses and deferred income	4,723	3,583
Total liabilities	**47,287**	**36,972**

18. CONTINGENT LIABILITIES AND PLEDGES GIVEN

Contingent liabilities and pledges gives

EUR thousand	2023	2022
For own debt or liability		
Bank guarantees issued for obligations	10,297	11,980
For group companies		
Guarantees	522	540
Leasing commitments		
Payable during the following financial year	364	398
Payable later	751	1,095
Total leasing liabilities	**1,115**	**1,493**
Total contingent liabilities and pledges given	**11,934**	**14,013**

Investment commitments

On December 31, 2023, the parent company had commitments related to intangible and tangible assets for EUR 3 (3) million.

Purchase commitments

On December 31, 2023, the parent company had purchase commitments totaling to EUR 16 (25) million.

19. AUDITOR'S FEES

EUR thousand	2023	2022
Audit	444	332
Statements	8	46
Tax advice	-	28
Other fees	105	113
Total	**557**	**520**

Signing of the Board of Directors' report and financial statements

Vantaa, February 13, 2024

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

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 IFRS Accounting Standards 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 to the Audit Committee.

What we have audited

We have audited the financial statements of Vaisala Oyj (business identity code 0124416-2) for the year ended 31 December 2023. The financial statements comprise:
- the consolidated balance sheet, income statement, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, which include material accounting policy information and other explanatory information
- the parent company's balance sheet, income statement, cash flow statement and notes.

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 believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

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.

To the best of our knowledge and belief, the non-audit services that we have provided to the parent company and group companies are in accordance with the applicable law and regulations in Finland and we have not provided non-audit services that are prohibited under Article 5(1) of Regulation (EU) No 537/2014. The non-audit services that we have provided are disclosed in note 29 to the consolidated financial statements.

Our Audit Approach

Overview

- We have applied an overall group materiality of € 4,7 million

- The group audit scope included all significant group companies in Europe, Asia and North America, covering the vast majority of net sales, assets and liabilities.

- Revenue recognition of product and project sales
- Inventory valuation

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain.

Materiality

The scope of our audit was influenced by our application of materiality. An audit is designed to obtain reasonable assurance whether the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They 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.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall group materiality for the consolidated financial statements as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements on the financial statements as a whole.

Overall group materiality	€ 4,7 million
How we determined it	The overall group materiality has been determined based on Vaisala Group's net sales and result before taxes.
Rationale for the materiality benchmark applied	We chose net sales and result before taxes as the materiality benchmarks because, in our view, they represent the volume and profitability of Vaisala's operations, and they are the benchmarks against which the performance of the Group is commonly measured by users of the financial statements.

How we tailored our group audit scope

We have determined our group audit scope to obtain sufficient audit coverage of Vaisala Group's consolidated financial statements. We tailored the scope of our audit, taking into account the structure of the group, the accounting processes and controls, and the industry in which the group operates.

Audits were performed in the group companies which are considered significant either because of their individual financial significance or due to their specific nature. These audits covered the vast majority of net sales, assets and liabilities. We performed mainly analytical procedures in the remaining group companies.

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.

As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Key audit matter	How our audit addressed the key audit matter
Revenue recognition of product and project sales *Note 1, 2 and 3 in the consolidated financial statements. Note 1 and 2 in the financial statements of the parent company.* Vaisala Group's net sales amounted to € 540.4 million. Net sales consist of products, project, service and subscription sales as presented in note 1. Revenue from the sale of products is recognized at a point in time when the control is transferred to the customer. As product sales comprise a high volume of distinct product deliveries under various sales contracts and terms, there is a risk that revenue is recognised in the incorrect period. 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 requires management judgment related to forecasted project revenues and costs throughout the project delivery. Revenue recognition is considered a key audit matter in the audit of the consolidated financial statements and the financial statements of the parent company due to the management judgment related to revenue recognition of product and project sales and due to significance of net sales to the financial statements.	Our audit procedures included, for example, the following: · We obtained an understanding of different revenue streams and related contractual terms used · We assessed the accounting principles over revenue recognition · We obtained an understanding of the revenue recognition process and internal controls that the company uses to monitor the completeness, accuracy and correct timing of revenue recognition · We tested on a sample basis the revenue recognition of product sales whether the revenue is recognized in the correct period · We tested, on a sample basis, project accounting including estimated project revenues, estimated project costs, incurred costs and percentage of completion · We reviewed the project cost estimates prepared by the management and compared actual project outcomes to their related estimates · We evaluated the presentation and disclosures in the financial statements.
Inventory valuation *Note 13 in the consolidated financial statements. Note 1 in the financial statements of the parent company.* Inventory in the Vaisala Group's balance sheet amounted to € 58.8 million. Inventories are stated at the lower of standard cost or net realizable value. Allowance for inventory is recognized for possible excess, obsolescence and decrease in net realizable value below inventory cost. Management estimates and judgment are required in determining the value of the allowance for excess and obsolete inventory. Inventory valuation is considered a key audit matter in the audit of the consolidated financial statements and the financial statements of the parent company due to the management judgment related to inventory valuation and due to significance of inventory to the financial statements	Our audit procedures included, for example, the following: · We obtained an understanding of accounting processes and practices related to inventory valuation · We assessed the accounting principles over inventory valuation · We tested internal controls related to inventory valuation · We tested, on a sample basis, inventory valuation that inventory is valued at the lower of standard costs or net realizable value · We evaluated the allowance for excess and obsolete inventory and tested that the allowance is accounted for in accordance with the company's accounting principles · We reviewed the estimates of demand prepared by the management in determining the value of the allowance for excess and obsolete inventory · We evaluated the presentation and disclosures in the financial statements

There are no significant risks of material misstatement referred to in Article 10(2c) of Regulation (EU) No 537/2014 with respect to the consolidated financial statements or the parent company financial statements.

Responsibilities of the Board of Directors and the President and CEO

for the Financial Statements

The Board of Directors and the President and CEO are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with IFRS Accounting Standards 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 the 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 the President and CEO are responsible for assessing the parent company's and the group's ability to continue as a 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 to cease operations, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about 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 the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these 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 the President and CEO'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 to 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.

Other Reporting Requirements

Appointment
We were first appointed as auditors by the annual general meeting on 28 March 2023.

Other Information
The Board of Directors and the President and CEO are responsible for the other information. The other information comprises the report of the Board of Directors 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 report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion
- the information in the report of the Board of Directors is consistent with the information in the financial statements
- the report of the Board of Directors 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 Companies Act. We support that the members of the Board of Directors and the President and CEO of the parent company should be discharged from liability for the financial period audited by us.

Helsinki 13 February 2024

PricewaterhouseCoopers Oy
Authorised Public Accountants

Niina Vilske
Authorised Public Accountant (KHT)

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