

A woman with her hair in a ponytail, wearing a white lab coat and safety glasses, is looking through the eyepiece of a large, modern microscope. The microscope is white and black, with a camera attached to the top. The background is a laboratory setting with various equipment. The entire image has a pinkish-red tint.

**RI.
SE**

Annual Report and Sustainability Report 2022



RISE to launch in early 2023 a National Center for Sustainable Plastics. The picture shows solvolys, a method for chemical plastic recycling.

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A WORD FROM THE CEO

“We should be the best partner”

In an era in which major challenges are on our doorstep, RISE can contribute both cutting-edge expertise and a systems perspective. And can help create collaborations that promote a sustainable transition.

This past year, we have all been affected by a deteriorating security policy situation characterised by war, economic turmoil and supply chain problems. When Russia invaded Ukraine, we terminated all Russian and Belarusian collaboration and appointed an assessment team so that we could swiftly take further action. At the same time, we launched a training programme at our Cyber Range testbed for key people working with cybersecurity in Swedish organisations.

Together with our AWITAR and AstaZero testbeds, Cyber Range is part of our new test cluster in cybersecurity for the automotive industry that we started in 2022. Cyber Test Lab Automotive is a unique combination of cutting-edge expertise and environments that will help the automotive industry, which is in the midst of developing the next generation of connected and self-driving vehicles, to protect its products from digital intrusions and cybercrime.

Testbeds can play a crucial role in accelerating the digitalisation of society. We're therefore proud to be significantly involved in both Sweden's new digital innovation hubs and in the EU's investment in environments where technology providers can test their AI solutions.

In 2022, we took major steps in expanding our testing and demo capabilities in several areas. Among other things, we expanded our testbed for electromo-

bility, started a new centre for additive manufacturing, and broke ground on our major bioeconomy initiative. And in Borås, the construction of our new facility for testing battery safety is advancing apace.

RISE IS A RESOURCE for Sweden's total defence. This entails certification and quality assurance tasks, as well as using our overview of Sweden's industries and supporting the transition that may become necessary when global value chains are affected by unexpected crises. RISE can help to develop strategies that leave the industry better prepared. Examples of this are the two reports we produced in collaboration with Teknikföretagen (the Association of Swedish Engineering Industries) in 2022. The analysis of Sweden's role in the semiconductor industry (with strategy proposals) and the report highlighting challenges and opportunities for Sweden's digitalisation both had a major impact.

RISE should be a good partner for companies ready to realise a new idea, but also for the public sector. Our collaboration with the City of Malmö in their climate work, or with Skellefteå Municipality in their talent management, shows how our breadth of expertise can really be useful. It is in collaboration that we can solve the challenges of our time.

On that note, as 2022 draws to a close, I would like to thank all our customers, partners and employees for a great collaboration this year!



Pia Sandvik
CEO



PIA SANDVIK

Title: CEO

Years at RISE: 7

Background: MSc, PhD and Docent in Quality Control Technology. Former CEO at Länsförsäkringar Jämtland and Vice-Chancellor at Luleå University of Technology.



RISE becomes full owner of AstaZero
 RISE acquires Chalmers' share of AstaZero and thus becomes the sole owner of the world's first full-scale independent test environment for future road safety. The facility is important for the development of autonomous and connected vehicles.

RISE launches Cyber Test Lab Automotive
 With more and more connected vehicles, the risk of cyberattacks increases. By bringing together researchers and experts around the Cyber Range, AWITAR and AstaZero testbeds, RISE establishes Europe's most advanced cybersecurity test cluster for the automotive industry.



RISE wins an innovation competition
 This year's edition of Vinnova's Vinter competition focused on care and health data associated with Type 1 diabetes. RISE won the Infrastructure category with the Encrypted Health AI solution, which is based on privacy-preserving technology.



A royal visit to RISE's maritime environment
 H.R.H. Crown Prince Haakon, H.R.H. Crown Princess Victoria, and H.R.H. Prince Daniel visited RISE to learn about sustainable maritime solutions of the future. The royal visitors received a demonstration of the experiments with sailing vessels at the Maritime Dynamics Laboratory.

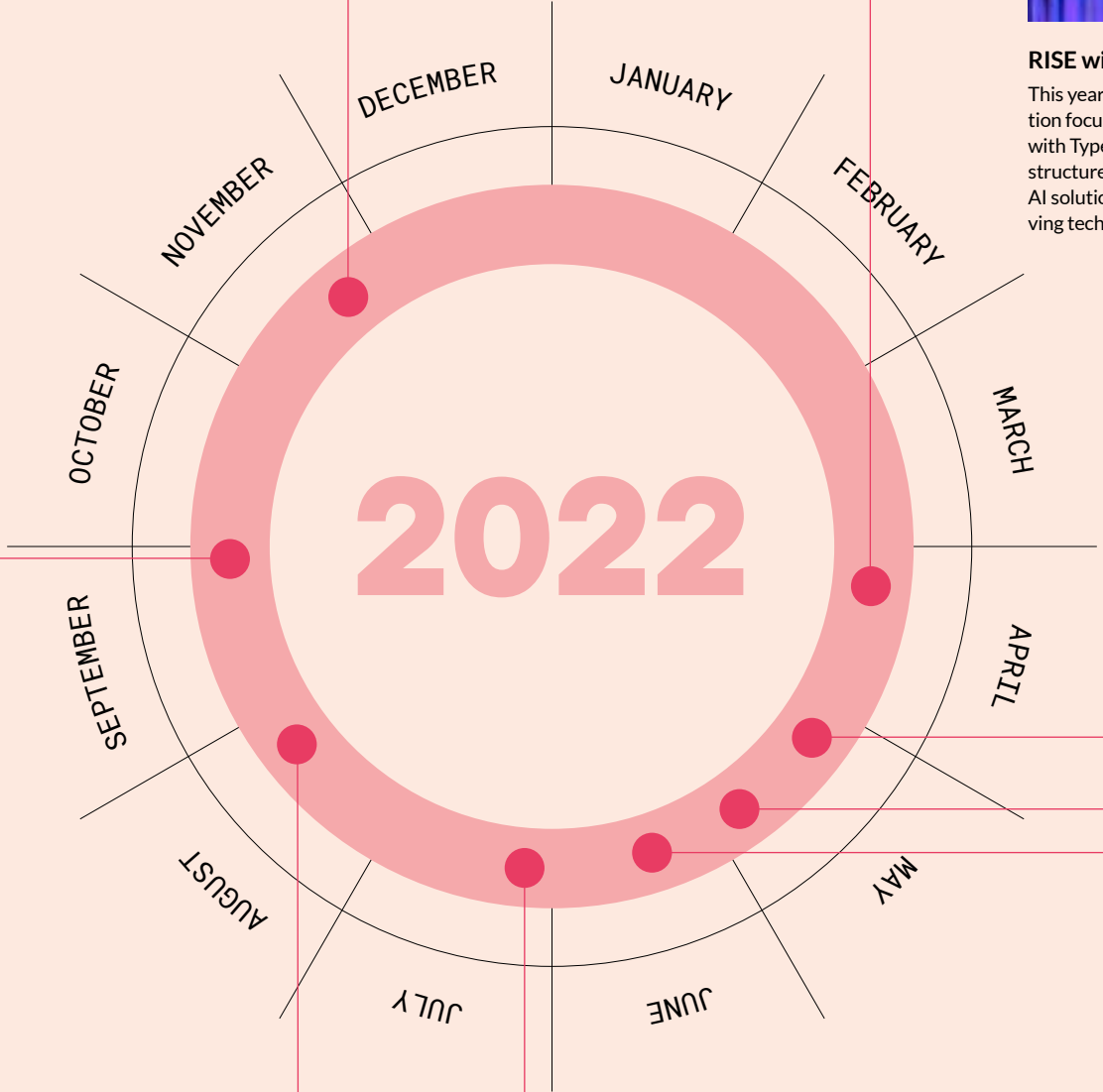
Joining forces in additive manufacturing
 RISE's new Application Center for Additive Manufacturing will drive development in Swedish industry by offering cutting-edge equipment and expertise, especially for small and medium-sized companies, that allow them to compete at an international level.



Breaking ground for bioeconomy
 RISE's major biorefinery investment, which aims to accelerate the commercialisation of bioeconomic technologies, products and services, gets underway at a groundbreaking ceremony in Örnsköldsvik. A new pilot hall will be completed in 2023.

MECM becomes part of RISE
 The French company MECM (Material Engineering & Corrosion Management) is integrated into RISE's subsidiary French Corrosion Institute. The acquisition strengthens the corrosion offering with a stronger industrial experience.

Collaboration with Stockholm University
 Stockholm University and RISE sign a new framework agreement for collaboration in education, research and societal development. The goal is to meet long-term societal challenges together.



THE YEAR IN BRIEF

Joining forces for innovation

In 2022, we established several testbeds, developed new offerings, and launched strategic collaborations that enhance our ability to support both businesses and the public sector.

ABOUT RISE

New solutions for a sustainable future

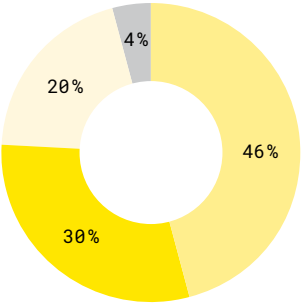
Through a sustainable transition founded on science, Swedish business and the public sector can be at the forefront of progress. To achieve this, an independent research institute such as RISE is needed.

In an era of great challenges such as climate change, supply shortages and security risks, there is also hope. A common ambition to work for a better world drives us. Sustainability is in our DNA and permeates everything we do. Whether it's helping companies with research-based knowledge that contributes to development and competitiveness, developing innovations, providing the relevant knowledge, or contributing to public sector renewal.

RISE HAS almost 3,100 employees. Through a science-based approach, we help our customers make the transition in order to meet challenges and increase their competitiveness. Our offerings are based on our cutting-edge expertise, often in combination with our unique testbeds and demonstration environments. With our broad and combined expertise, we can also apply a systems perspective to sustainability issues.

As an independent research institute with core state funding, we can play a unique and proactive role. When we see a need for transition, we do not wait to receive an order. Instead, we bring together the necessary operators and get to work. Within the framework of our strategic investments, we therefore work with everything from climate issues and digitalisation to increased resilience.

RISE is equipped for the future and ready to take greater overall responsibility in areas where society must collectively transition. We are well-acquainted with Swedish industry, we are accustomed to change processes, and we often have the deepest technical knowledge available. Our mission unites our various roles, assignments, and perspectives in a larger task: to work with our customers and partners to develop competitive solutions and favourable conditions that advance sustainable development. and achieve real results. •



Fördelning av nettoomsättningen (Mkr)	
Trade and industry	1,831
Public funding bodies	1,179
Government grants	812
EU funds	171

Our offer

Transition management

- Future analysis
- Strategic roadmaps
- Policy development

Applied research and development

- Research partnerships
- Management and coordination of research programmes
- Testbeds and demonstration environments
- Industrial processes and upscaling
- Problem solving and expert support
- Innovation management

Testing, certification and calibration

- Testing
- Inspection
- Certification
- Calibration

Lifelong learning

- Skills transition
- Training

Read more about our offer at ri.se/en/about-rise

RISE is an independent, state-owned owned research institute. Our mission is to promote sustainable growth in Sweden by strengthening the competitiveness and renewal of the business sector and contributing to the innovative development of society.

RISE offers extensive testing activities in test and demo environments and demo environments similar to those in industrial production.

MISSION AND OBJECTIVES

We work to promote sustainable growth in Sweden

Our mission describes what we do and what role we will play in society. It is the basis for our existence and the framework for everything we do.

RISE is one of the state-owned companies with a specifically decided social mission. This means that the Swedish Parliament (Riksdag) has decided that these companies, fully or partially, must generate other effects than direct profits to the Treasury. Within RISE, profits go to the development of our work to provide the best possible support, to business and society. Our mission is to strive for sustainable growth in Sweden by increasing the competitiveness and capacity for renewal of Swedish industry, as well as by promoting the innovative development of society as a whole. Our mission is specified in the owner directives and in the various objectives we receive from our owner and Board of Directors. Among other things, they emphasise the importance of supporting innovative development in small and medium-sized companies and running test and demonstration facilities of high relevance to the business community. These facilities are important for supporting SMEs.

In 2022, we inaugurated our Application Center for Additive Manufacturing (3D printing) in Mölndal, where companies gain access to both expertise and equipment to advance their development towards more resource-efficient manufacturing. RISE also plays a significant role in the digital innovation hubs initiated by the EU to accelerate digitalisation in business and the public sector, as well as the so-called Test and Experimentation Facilities (TEF) that aim to promote the implementation of AI technology in the market. The green transition is driving both electrification and the development of alternative raw materials. In these areas, RISE is making major national investments in test and demonstration environments, such as a battery safety facility and a centre for scaling up bioeconomy products and processes. With these major investments, which will be completed in 2023, Swedish industry can assert a leading position in green technology. ●

1 of 43
RISE is one of 43 companies that is fully or partly owned by the Swedish state.



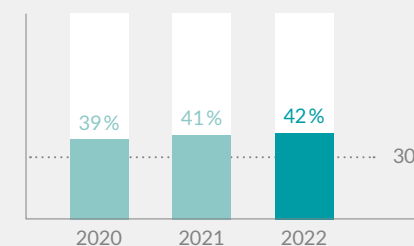
Read more about RISE and how we work for sustainable development at ri.se/en/about-rise.

“RISE’s overarching goal is to be internationally competitive and facilitate sustainable growth in Sweden by strengthening competitiveness and innovation in industry as well as to promote innovation and ability in the public sector to contribute to solutions to societal challenges in collaboration with industry.”

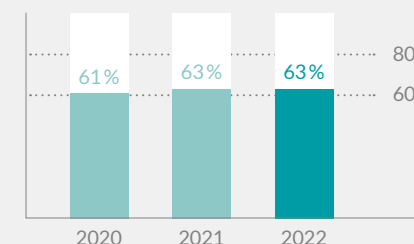
Extract from the Research Bill 2020/21:60 Research, freedom, future - knowledge and innovation for Sweden.

Objectives in brief

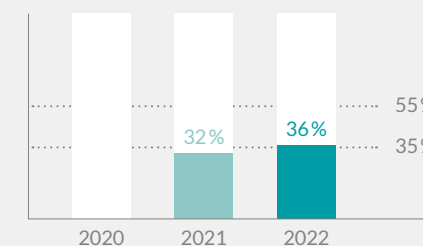
Mission objectives are set by the Government Offices of Sweden to measure how well RISE succeeds in realising its social mission, such as supporting small and medium-sized enterprises.



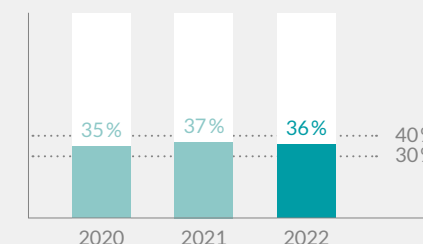
Competitively acquired research funding
Turnover from competitively acquired research funding within RISE shall amount to at least 30 percent (in relation to total sales, excluding strategic competence funding).



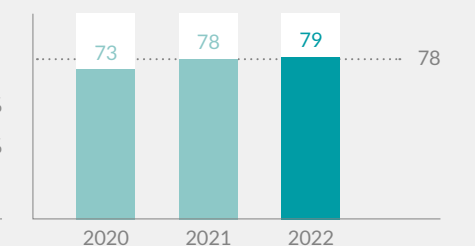
Testbeds and demonstration facilities
The occupancy rate at RISE testbeds and demonstration facilities shall be in the range of 60-80 percent.



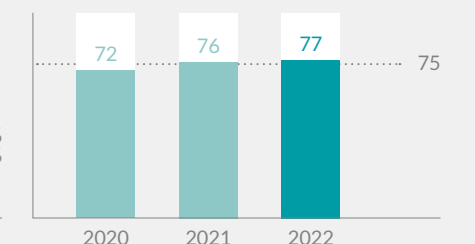
Interdisciplinary projects
Turnover from projects with interdisciplinary involvement should be in the range of 35-55 percent in relation to total turnover from RISE's project portfolio. Started measuring in 2021.



Small and mid-size enterprises
Business revenues from SMEs should be in the range of 30-40 percent in relation to total business revenues.



Innovation partner capacity
In RISE's customer survey, the "Innovation partner capacity" index should achieve at least 78.



Customer Satisfaction Index
In RISE's customer survey, the "Satisfied customer" index should achieve at least 75

What is necessary to remain relevant

RISE's strategy is based on the needs that exist in the world around us and the expectations that business and the public sector have of us.

The strategy is a tool for driving growth and helps us accelerate the transition to a sustainable society. We have decided on these strategic investments in collaboration with our customers, as a means of predicting future needs. They are also aligned with the prioritised societal challenges of the Swedish Government Research Bill. Timo van't Hoff, Head of Business Development and External Relations at RISE, says:

"The competitiveness of the business community and the transformation of the public sector are central to our mission. When we adopted our growth strategy for 2022–2026 a year ago, we could above all see five overarching areas where the need is greatest and where RISE can best create value for our customers and partners. These are climate and the environment, health and welfare, digitalisation, skills supply and working life, and a strong, democratic society. Over the past year, we have seen how changes in the world around us have led to completely new challenges for both business and the public sector. One area that has attracted an increasing amount of our focus is total defence, where we are now making specific investments and getting involved in various contexts. It will become more and more important in the future."

Can you point to some examples where events in the world around us have made an especially big impact?

"The geopolitical situation in particular points to a number of weaknesses in our society, ranging from



Timo van't Hoff
Chief Business Development Officer, RISE

infrastructures to supply chains and the dependencies that exist within them. One example is the semiconductor value chain. Production capacity is limited and concentrated in a few countries in Asia. At the same time, most of the things we use contain a semiconductor. So when, due to of increased demand and the impact of the pandemic not enough semiconductors were available it meant production stops and increased costs. Semiconductors are also important components in equipment for automation and the green transition. The robustness of a value chain can boil down to those sorts of simple factors. The same applies to the food industry. We need to have a good idea of how to manage our food supply safely. Here we're talking about things like food from the sea and various alternatives to meat."

What support can RISE offer in this regard?

"RISE's role can be to design strategic roadmaps, for example. We can get various stakeholders in the same room to discuss alternative materials, production capacity and circular currents. This can be a solution to problems in a value chain. It is about creating awareness but also about developing solutions."

You mentioned the green transition. Can you talk about a few of RISE's ventures in that area?

"We have a strong focus on climate and the environment, where we all need to contribute to the goals of Agenda 2030 and help Sweden become the world's first fossil-free welfare country. Increased electrification is a way to become less dependent

5

Societal challenges

RISE's strategic initiatives 2022–2026 focus on benefits for business and the public sector related to five societal challenges.

Climate and the environment

Investments in biodiversity, climate-adapted community building, circular and bio-based economy, and sustainable food systems.

Health and welfare

More focus on preventive efforts. Overcoming today's challenges will demand individualised, digitalised, egalitarian and nearby care.

Digitalisation

The digital transition is a key enabler of innovation and demands the safe and ethical application of digital services.

Talent management and working life

A steady supply of workers with the right expertise is a prerequisite for high quality, continued growth, and development throughout the country, as well as for a high rate of growth.

A strong, democratic society

Challenges such as cyberattacks and the effects of natural events increase the need for knowledge about how we can create and maintain safe societies.

Read more about how we are working on challenges on the following 10 pages.



RISE's testbed for sustainable composite manufacturing in Piteå has played a key role in the collaboration with PaperShell.

CLIMATE AND ENVIRONMENT

A fast track from idea to industrialisation

A number of fossil fuel-based materials may soon be replaced by a new biomaterial developed by PaperShell in collaboration with RISE. The product is an excellent example of how to quickly take an innovation all the way from idea to market.

To overcome the climate challenges the world is facing, we need new solutions – and we need them quickly. This means that innovation processes must be sped up and innovations must be provided with better opportunities to make it all the way from the idea stage to the market. The start-up PaperShell is one company that has managed to do this rapidly, with help from RISE. PaperShell has developed a bio-based material from cellulose, a substance found in both trees and plants. The material is as strong as many fibre composites and as weather-resistant as some plastics. Through various compression moulding methods, components can be customised and then used in vehicles, furniture, and sports equipment, for example. “As a start-up, we were in major need of both knowledge and equipment,” says **Anders Breitholtz**, CEO and founder of PaperShell. “So, it’s been invaluable to be able to utilise RISE’s expertise and accumulated

knowledge about fibres, toolmaking, and much more, as well as their equipment, which we could not have afforded to buy ourselves.”

After more than two decades of experience as a technology scout with a focus on materials and manufacturing techniques, it was natural for him to take the leap into developing materials that are able to address the major environmental challenges we face.

BREITHOLTZ AND CO-FOUNDER Mathieu Gustafsson began work on the new material in 2018. The results of early tests far exceeded expectations. Among other things, they discovered that it was possible to produce shapes that neither paper nor wood could achieve. A natural flame retardant in the material means that it does not burn. And despite the fact that natural fibre usually absorbs a lot of water, the new material absorbed minimal water.

“After making our first moulded piece, we ran it in the dishwasher 30 times,” says Breitholtz. “When we



Anders Breitholtz
CEO, PaperShell



Daniel Berglund
Enhetschef Komposit-tillverkning, RISE



Sustainable composite manufacturing

At RISE's testbed for sustainable composite manufacturing, companies can test, develop and demonstrate sustainable materials, technologies and manufacturing processes.

Complete testbed

The testbed includes the entire chain, from raw materials to fiber winding, SMC / pre-preg (investment is planned), pressing and forming, trimming and quality control.

Accelerating industrialisation

provides valuable input and data for a simulation-driven design process, which is the key to implementing sustainable composites in the industry.

Development process

We offer all stages of the development process. Depending on the problem and technical maturity, the necessary resources are utilised for the best results.

3

Climate initiatives

The Green Transition Leap guides companies

CLIMATE TRANSITION Sweden's companies are crucial for positive, sustainable development. Omställningslyftet (the Green Transition Leap) is a national initiative that will facilitate business-driven climate transitions for small and medium-sized companies through needs analyses, coaching and start-up programmes.

Fossil-free shipping through wind propulsion

SHIPPING A very interesting way to achieve fossil-free shipping is to use wind as the primary source of energy. In the Oceanbird initiative, RISE is collaborating with Wallenius Marine/Alfawall Oceanbird to develop wind-driven shipping.



Energiklivet implements the electrification strategy

ELECTRIFICATION Access to more competitive and fossil-free electricity is crucial for Sweden to become the world's first fossil-free welfare state. Energiklivet is a RISE initiative that aims to create a programme for innovation, demonstration and skills supply that will fuel the implementation of the new national electrification strategy.



Read more about how we work towards a sustainable transition at ri.se/en/about-rise

"Upscaling is a central part"

Anders Breitholtz,
CEO, PaperShell



weighed it afterwards, I couldn't detect any weight difference on my scale at home. That's when I really got interested."

The unique qualities of the material meant that the entrepreneurs quickly obtained the support of several well-known financiers and big names in the industry.

RISE'S ROLE IN THE PROJECT has been to contribute expertise and equipment and to serve as the company's development department.

"It's been a very exciting and eventful project. We've had continuous weekly meetings worked tirelessly to press, test, and analyse various aspects of the material," says Kenneth Strand, a researcher and project manager at RISE. "With the results we achieved together, PaperShell has been able to build up their business and we've had the opportunity to do one of our most important jobs – helping Swedish industry."

Daniel Berglund, Unit Manager at RISE, adds:

At RISE we have experience helping companies from an idea for a new product, process or material, to verifying product properties or the cycle times of the intended process. In our testbed for sustainable composite manufacturing, we can evaluate manufacturing processes in the same conditions as the intended production process, which allows process parameters to be optimised, tools to be fine-tuned, and prototypes to be manufactured before the customer starts its own production. This minimises the risk to the customer when purchasing new production equipment or developing new products."

In addition to the development of the material itself, RISE has supported PaperShell with the planning of a factory that can easily be converted to manufacture components for a number of industries.

"Right now, we're in full swing with the work on the new factory, where we'll be able to produce up to 700,000 components a year. The facility will operate as a factory but will also serve as an industrialisation pilot for larger factories in the future," explains Anders Breitholtz. He concludes:

"There's no point in verifying the material together with the customer if you don't simultaneously secure the capacity needed in, say, the automotive industry or the construction and electronics industry. This means that the scale-up is a central part of these collaborations." ●

PaperShell in brief

The company was founded in 2021 and aims to offer bio-based, high-tech, long-lasting and load-bearing components. The company has a pilot plant in Tibro, and in 2023 it will inaugurate a factory with the capacity to produce 700,000 components a year.

A STRONG DEMOCRATIC SOCIETY

Collaboration strengthens cyber defence

Hybrid threats such as smear campaigns and cyberattacks can cause great harm to businesses. But there are effective ways to reduce the risk



Björn Palmertz
Co-ordinator, Center for Cybersecurity at RISE

The disruption of essential transportation, smear campaigns on social media that cause people to lose confidence in their elected officials, knocking out power to a substation, frightening people and depriving them of heat in their homes — these are just a few examples of the myriad of attacks that fall under the umbrella concept of a "hybrid threat".

"When you make an attack out in the open but instead do it through all those small, varied and difficult-to-identify attacks on authorities, businesses and other organisations, it becomes very difficult to realise what's going on. The only way to see the big picture and understand what is happening is to improve your knowledge and collaborate," says **Björn Palmertz** of Center for Cybersecurity at RISE.

YET RESILIENCE MUST also be established between different authorities, businesses or other organisations, and this is best accomplished through collaboration.

"It is in the gaps between areas of responsibility that it is easiest to penetrate, and through collaboration we can close those gaps."

There can sometimes be a tendency to keep quiet about attacks when they are detected, but Björn Palmertz believes that this can play into the hands of the perpetrators.

"If, for example, several companies transporting food are hit by cyberattacks or experience other critical disruptions, but no one says anything, then on the national level it'll be understood far too late that a widespread attack on society is underway, and that will prevent timely countermeasures."

"Hybrid threats span a vast range of activities, and the special thing about RISE is that we do, too. We have experts in everything from technology and infrastructure to behavioural science, and work with both the private and public sectors, nationally and internationally. We also have our Cyber Range testbed, where we train boards, management teams and developers in cybersecurity," says Björn Palmertz. ●



Videos about cybersecurity

Scan the QR code to learn about multi-area security.



DIGITALISATION

Silicon carbide drives the energy revolution

Next generation of silicon carbide semiconductors, which can save up to 20 percent of the battery life of an electric car, are manufactured in Kista.

Semiconductors are found in almost all electronics, from refrigerators to cars. Silicon is the most common semiconductor material. The energy conversion in an electric car requires over two thousand silicon chips. As more features, such as self-driving capabilities, are introduced in cars, even more chips made from more energy-efficient materials will be needed. The next generation of silicon carbide semiconductors save more energy and contain more transistors.

The Swedish part of the electronics group Coherent, II-VI Kista, is one of the actors driving this development. The company was founded in 2011 by four employees from Acreo, which is now now part of RISE, and since 2020 it has been owned by the American company Coherent. Today, it primarily manufactures silicon carbide wafers, a key technology in many power electronics applications.

II-VI Kista was ahead of the game in creating larger epitaxial wafers and went from making 100-millimetre discs to 150-millimetre ones. This yielded twice as many components per disc, and the company gained an advantageous position in the market. Collaborations with major component manufacturers such as ABB were initiated.

"We had come as far as we could with material manufacturing, and in 2015 we started developing silicon carbide components on our epitaxial wafers," recalls CEO and co-founder **Christian Vieider**. "Not only must these components be efficient and minimise energy loss in their conversion of current, but they also must be reliable and robust."

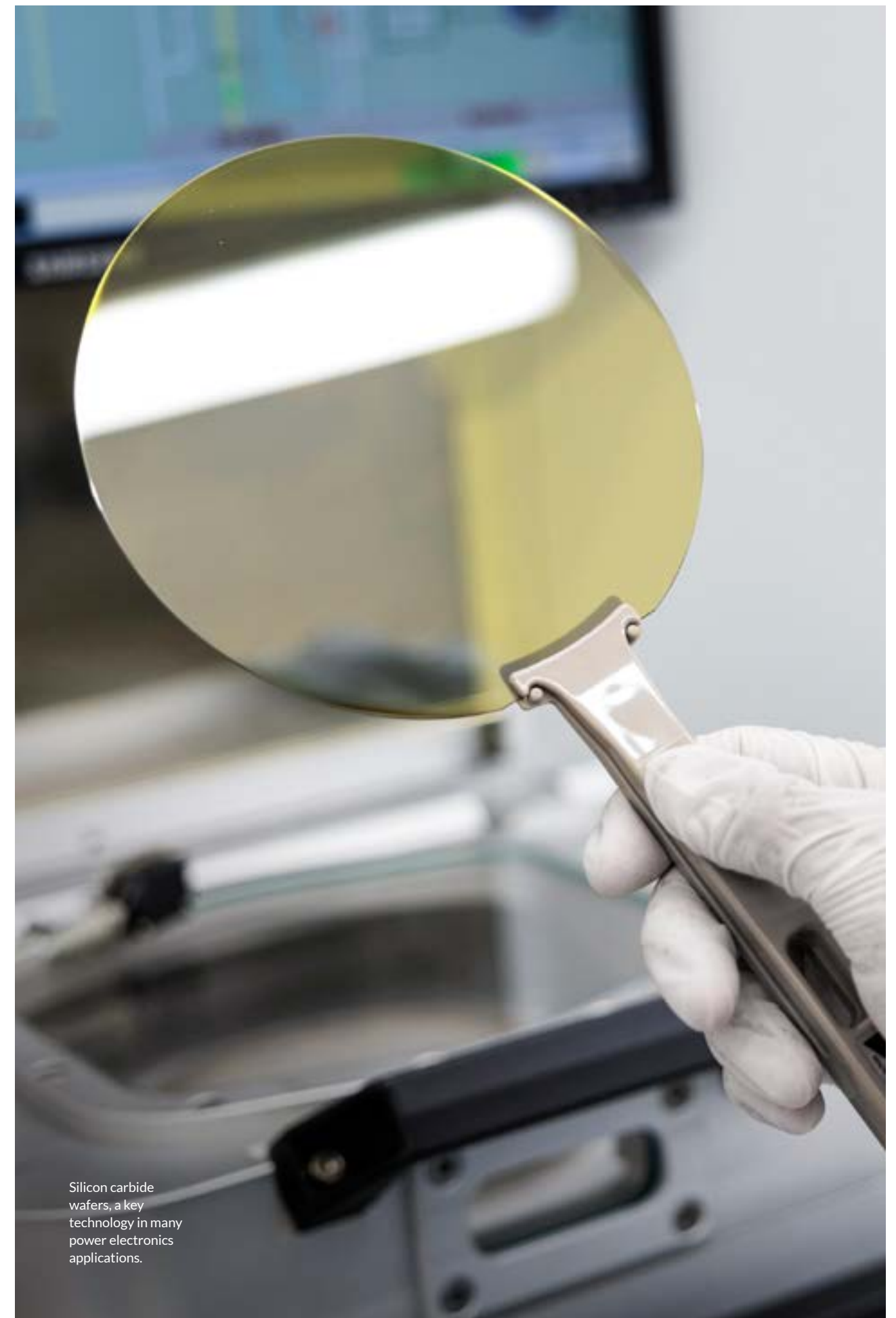
SOCIETY'S TRANSITION from fossil fuels to electricity is expected to create a sharp increase in electricity use. This is reflected in the Swedish Energy Agency's forecasts, which indicate that electricity use will double by



Christian Vieider
CEO, II-VI Kista

Sweden in the semiconductor world

Scan the QR code to download the report which analyses the global semiconductor shortage. The report also describes the semiconductor ecosystem in Sweden and internationally, what role Sweden should play in the field, and how Sweden and Swedish companies should act in terms of industrial alliances.



Silicon carbide wafers, a key technology in many power electronics applications.



2050. But to achieve a fossil-free society, energy must also be used efficiently, which is why Sweden aims to improve the efficiency of its energy use by 50 percent by 2030.

“The ongoing electrification of society will mean new demands on what power electronics must be able to handle,” says Christian. “We are facing an enormous challenge in the energy revolution that is underway. If Sweden is to increase its electricity production, this type of component will be needed to convert the current.”

The conversion of electricity leads to losses of up to ten percent. For example, this means that by the time the power from an electrical outlet reaches an electric car, about ten percent of the energy has disappeared. But components built with the new generation of semiconductor materials are more energy efficient.

“With silicon carbide, you save power and take away about two-thirds of the energy loss compared to silicon chips,” continues Christian. “This means, for example, that you can drive your electric car for ten to twenty percent longer, or save that much of your battery use. This makes our technology very attractive to the electric car market.”

Coherent currently has 22 employees in Kista who work with silicon carbide power components and epitaxy production, as part of the company’s development department. They work side by side with RISE researchers at the Electrum Laboratory, a test bed for nano- and semiconductor technology run by RISE in close collaboration with KTH Royal Institute of Technology.

IN THE SPACIOUS CLEAN ROOM of the Electrum Laboratory stands equipment used to grow the epitaxial

“It’s very important for Europe to become independent in its semiconductor manufacturing.”

Christian Vieider,
CEO, II-VI Kista

layer of semiconductor wafers and process components. The international standard ensures high quality for the industrial production of semiconductor materials. One floor above the cleanroom is the power electronics laboratory run by RISE. Here, Coherent tests its prototypes and is supported by experts from RISE in the testing and electrical characterisation of its power electronic components.

“We offer expertise throughout the entire chain, from the manufacturing and characterisation of components to reliability tests, simulations and material analysis,” says Klas Brinkfeldt, Head of Unit at RISE. “We’re the only ones in Sweden who can offer a complete package and thus help with the development of the next generation of power electronics systems.”

RISE’s long-term development of wafer manufacturing and failure analysis is now picking up even more speed, thanks to an extended collaboration agreement with Coherent. ●

More digitalisation projects are underway



Accurate positioning for autonomous systems

TRANSPORTATION The DINBAS project is an industry-driven consortium focused on precise and reliable positioning for autonomous systems, which will be crucial for the development of flexible, scalable and secure airports with optimised and seamless flows.



Virtual sheep fences being tested

AGRICULTURE Virtual fencing can make lamb production more sustainable and competitive. It enables overgrown and hard-to-reach areas to be used as grazing land, thus increasing biodiversity and making the landscape more attractive for outdoor recreation. The technology is now being tested on Gotland.



Ethical and secure data handling

CERTIFICATION In line with the digital transition, regulations must be adapted to ensure the ethical and safe integration of technology. In the Sjyst data! project, RISE is collaborating with partners to develop a certification that indicates which data-driven services achieve good integrity.

TALENT MANAGEMENT AND WORKING LIFE

New expertise changed the perspective

A new way of thinking, taking on challenges and learning lessons. This is the result of Skellefteå Municipality’s participation in the Academy for Lifelong Learning.

It’s like a crisis, but just the opposite. More municipalities will experience it, but we’re the first.” This is how Municipal Manager **Kristina Sundin Jonsson**

describes the tasks she faces together with her colleagues in Skellefteå. With the establishment of the Northvolt battery factory and all that it entails, the municipality is expected to grow by 25 to 30 percent – within this decade.

“In one way, we were prepared. In 2015, we adopted a development strategy with a growth objective. We needed to turn around the negative trend Skellefteå had seen for several years as a result of people leaving the municipality and other demographic challenges. The work on the growth strategy focussed on bringing together and highlighting our strengths. There’s a strong entrepreneurial culture in Skellefteå, and we have access to green energy. Our efforts gave us newfound confidence, and we began to turn outwards, to share this new story about ourselves. We wanted to show the rest of the world what we had to offer, rather than the other way around. Following Northvolt’s establishment, the turnaround was explosively fast. We call it an extraordinary social transformation, because the changes affect just about everything. We need to do our part, but there are also things we can’t control and things we need to learn.”

THIS IS ONE of the many reasons why Jonsson and her management team are involved in the Academy for Life-long Learning, driven by RISE in collaboration



Kristina Sundin Jonsson
Municipal Manager, Skellefteå Municipality

with partners from the business world.

“I can see how our participation in the pilot course at the Academy for Lifelong Learning changed our way of working and, above all else, the mindset employed by our leaders. We no longer think in terms of managing a business; instead the focus is on constantly learning new things, gathering completely different perspectives, looking outwards. You need different skill sets and perspectives to resolve complex

problems. If someone in the organisation sees information that can benefit everyone, we share it with one another immediately. We learn and decide how to act together. To do something nobody has done before, you have to take a different approach.”

Sundin Jonsson explains how both the challenge and the Academy have helped her realise that no man is an island. Instead, everyone must work together to solve problems that are so complex that no single stakeholder can solve them alone.

“That idea is the cornerstone of the Academy for Lifelong Learning – no one can do everything, and together we can achieve more. For us, this is critical when, for example, we have to build attractive places to live at a faster rate than anyone has done before, customise training programmes for a company that needs a ton of workers in a short space of time, or win investments in infrastructure. On this journey, we won’t be able to do everything right the first time around. Instead, we’ll have to rely on trial and error. But that’s also part of the learning process,” concludes Sundin Jonsson. ●

The Academy for Lifelong Learning

Climate change, digitalisation, globalisation and a changing demographic require new skill sets and place new demands on the decision-makers driving the development of public sector in Sweden. The Academy for Lifelong Learning focuses on the needs of the public sector.

HEALTH AND WELFARE

Groundbreaking cancer treatment



The new technology makes the procedure for treating bladder cancer simpler, safer, and less painful.

Within a few years, the procedure to treat bladder cancer may well be safer, faster and less painful. The Swedish company Multi4 has developed a revolutionary technology.

Bladder cancer affects more than half a million people every year, making it one of the most common forms of cancer in the world. Treatment is both complicated and costly and requires the patient to remain in the hospital for days after an operation. It is now hoped that a new technology developed by a Swedish urologist and surgeon in her own company, Multi4, will make the procedure simpler, safer, and less painful.

"What we're developing now is a multi-tool, so that a single instrument can be used to treat superficial bladder cancer," says company CEO **Miden Melle-Hannah**. "The tool should only need to be inserted once, after which the procedure is carried out using automated and electrified technology. The urologist presses a button and the cancerous tissue is removed bit by bit, then transported out through the instrument itself into a special container. This will be a completely new way to perform a cancer procedure quickly and easily, with a single instrument," says the CEO, who hopes the new procedure can be used at Swedish hospitals within a few years.

Understandably, the path from idea to clinical use is neither easy nor fast. Many different studies must

be carried out before human trials can be conducted. The hope is that as many problems as possible can be detected and averted along the way.

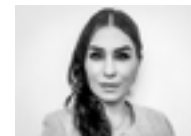
"Multi4 initially contacted RISE because they knew we could help with functional evaluation," says Joakim Håkansson, an associate professor of Biomedicine who works as a researcher and project manager at RISE. "This is often the case; someone knows or has heard that RISE is familiar with part of the process and they get in touch with us. But soon after our initial contact, we realised we could become closer partners throughout the work, from prototype to a product on the market."

"I got in touch with RISE through our contact at Sahlgrenska Hospital," says Miden Melle-Hannah. "Before that, I didn't know all that much about RISE, but I'm very pleased with the collaboration. At RISE, I encountered a competent team. The regulations for putting a new medical device on the market are very extensive and include many requirements. That's why it's been great to have RISE as a partner." As part of the collaboration, the RISE and Multi4 applied for and were granted research funding from Vinnova and Eurostar, which is clearly a boon to their progress.

"We have a clear division of work between Multi4,

Multi4 in brief

Multi4 is a revolutionary and award-winning innovation for cancer diagnosis and treatment, especially well-suited to bladder cancer. The patented technology is generic, and in the future it can be used to treat esophageal, stomach, and intestinal cancers.



Miden Melle-Hannah
CEO, Multi4



Joakim Håkansson
Researcher, Biomedicine, RISE

Sahlgrenska and RISE in terms of how we drive the processes forward, and it's important to engage in close dialogue so that any bottlenecks and challenges that come up along the way can be overcome quickly and efficiently," says Håkansson.

There is clearly huge potential for improvements to the current approach to care. Today, the procedure necessitates the involvement of many healthcare professionals during the operation, which is usually several hours long. The new instrument will enable the procedure to be carried out in around half an hour by a single urologist who can perform all the steps. Patients can be given a local anaesthetic and go home the same day.

"We definitely see that our instrument could have many other uses. The vacuum technology we use to quickly take multiple tissue samples for diagnostics could be used for other cancers. With such potential for development, I believe the collaboration with RISE and Sahlgrenska can continue," says Melle-Hannah.

"I know that many in the industry are not aware that RISE can take overall responsibility as a partner in medical technology development," says Håkansson. "This is particularly important today, as the regulations in this field are being expanded and many companies need to conduct new tests and biological evaluations. We hope to be able to help more Swedish companies, especially smaller and growing companies that may not have regulatory expertise, a contact network, or their own labs and test facilities." ●

Support for development and innovation



RISE offers guidance from idea to safe product

DRUG DEVELOPMENT A well-structured drug development process provides greater knowledge and reduces the risk of failure, both in terms of substance and effect. RISE has expertise and infrastructure for drug development and offers help with everything from basic research to support in the manufacturing process.



RISE starts a company for the certification of medical devices

CERTIFICATION The new subsidiary RISE Medical Notified Body will offer certification according to new European legislation, thus helping to ensure that the medical devices needed in healthcare are available on the market. The company is independent of RISE and will be one of two notified bodies for the certification of medical devices in Sweden.



Read more about RISE and how we work with health and welfare at ri.se/en/about-rise

Sustainability Report

This Sustainability Report, which also includes our statutory sustainability statement, has been prepared in accordance with the Global Reporting Initiative (GRI), New GRI 2021, and covers pages 26-49 and 70-72. The Report has been adapted to TCFD (Task Force on Climate-Related Financial Disclosures) to describe how we strategically address climate-related risks and opportunities.

RISE AB's latest Sustainability Report, published on 31 March 2022, was also based on the GRI guidelines. In cases where changes have occurred in the data compared to previous years, it is commented on directly in connection with the relevant table or graph. The report for 2016 was the RISE Group's first consolidated sustainability report.

"We are a pilot for change"

The countdown to 2030 has begun. Now everyone must do their part to achieve the 1.5-degree target. RISE sharpens its goals with this in mind.

At the COP27 climate summit in Sharm el-Sheikh, Egypt in November, world leaders came together to agree on measures to reduce global warming and meet the 2030 climate targets. Fredrik Aldaeus, Sustainability and Quality Manager at RISE, says that national agreements are not enough; everyone must now do what they can to achieve the 1.5 degree target.

"No one is too small to contribute. RISE can help companies and others with new sustainable solutions that reduce emissions, but we also need to do our own job. As a research institute, we can lead by example and show that change is possible, as a You could say that we are a pilot for change."

"The most important thing here and now for an environmentally sustainable business is reduced carbon dioxide emissions. We are also looking at reducing hazardous waste as part of our environmental management as well as replacing chemicals with more environmentally friendly ones. These are challenges that we help our customers with, such as the Swedish Centre for Chemical Substitution, but we must also look at our own operations."

TO RAISE THE LEVEL OF AMBITION in 2022, RISE signed a commitment letter with the

Science Based Targets Initiative, SBTi. Work is now in full swing on a list of measures with ambitious targets to almost halve emissions.

"Sustainability is part of customer value. We need sustainable operations to deliver quality services to our customers."

Fredrik Aldaeus,
Vice President Sustainability and Quality, RISE

"We look at three things – travel, premises and purchasing – and it's important to think about the whole system. It is difficult to reduce carbon emissions in a knowledge-based company, so where can we save? Even if we co-locate more activities, we will not halve the energy consumption in our premises. So we need to reduce more emissions from travel."

According to Fredrik, the revised goals also mean that travel to and from work will be included, not just business trips.

This is something that can affect the issue of premises.

"It may be tempting to locate workplaces where the cost of premises and energy consumption is low, but if it means everyone has to drive to work, we are not reducing overall emissions."

RISE'S GOALS FOR SUSTAINABLE value creation focus on both these direct effects of our operations and the potential we create for increased sustainability in society through our offering.

"If you want to be a sustainable company, it is important to look at all three aspects of sustainability. Our goal card balances these in a good way."

"The goals are connected. If we have committed employees, we get satisfied customers, which contributes to economically sustainable operations that advise us to run a socially and environmentally sustainable business and then we get committed employees, and on it goes."

It is only natural that Fredrik's role involves both sustainability and quality.

"Quality is part of customer value and the fact that what you deliver is sustainable is part of the quality of a service. Meanwhile, we need sustainable operations to maintain quality in the long run. And we must be organised to work systematically on reducing our environmental impact. So quality and sustainability go hand in hand, you need both. ●



FREDRIK ALDAEUS

Title: Vice President Sustainability and Quality

Years at RISE: 15

Background: PhD in Analytical Chemistry
Certified Project Manager (IPMA)



A Higher Purpose

At RISE, the UN's Sustainable Development Goals serve as the guiding star for all of the work we do, and the vision for what we want to achieve together with our customers and partners.

RISE's strategy is based on sustainability. We are driven by a higher purpose, to contribute to a sustainable future and solutions to society's challenges.

Our main contribution to sustainability is our offer to business and the public sector. It spans many areas, industries and sectors. With knowledge, equipment and experience, we contribute to our customers' competitiveness, sustainability, resilience and increase their ability to adapt and innovate. We call it sustainable transition and competitiveness based on science.

THE UN SUSTAINABLE DEVELOPMENT GOALS set the overall direction for a sustainable future by 2030. At RISE, these goals serve as the guiding star for what we want to achieve together with our customers and partners. One way for us to visualise our long-term contribution to a sustainable society is to evaluate

all our activities against these goals. We do this by monitoring each project and assignment in terms of its contribution and the goal(s) it supports. These sustainability declarations are a quality stamp that helps us in our own improvement work and provides security for customers and partners that the business contributes to increased sustainability.

OUR BUSINESS CONTRIBUTES to five of the SDGs in particular, but we work for and influence all 17 to varying degrees.

The goals where we have identified our main contributions are Goal 3 (Good health and well-being), Goal 7 (Affordable and clean energy), Goal 9 (Sustainable industry, innovation and infrastructure), Goal 11 (Sustainable cities and communities), and Goal 12 (Responsible consumption and production). The next page presents samples from our activities related to these goals. ●

Examples of how we contribute to the UN goals

3 GOOD HEALTH AND WELL-BEING



Research for more stable vaccines

DRUGS Today, mRNA drugs, such as vaccines, require freezers capable of reaching -80°C for large-scale management and distribution. RISE is leading a project that will develop production processes for the manufacture of vaccines that are stable at higher temperatures.

7 AFFORDABLE AND CLEAN ENERGY



Paper battery can store energy in buildings

ENERGY STORAGE Today, there are no effective methods for storing renewable energy on a large scale. In the Digital Cellulose Center, RISE researchers are working to develop circular electronic solutions that can store electricity from renewable sources.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Swedish textile fibre for the global market

INNOVATION PARTNER A completely new cellulose-based textile fibre so durable and cheap that it can reduce the textile industry's carbon footprint. That's what Tree to Textile succeeded in developing. RISE has been involved throughout the journey – from idea to demo facility.

11 SUSTAINABLE CITIES AND COMMUNITIES



Equal public spaces and cities

CERTIFICATION Together with Tengbom, the City of Helsingborg and the Raoul Wallenberg Institute for Human Rights, RISE has developed the certification system JämtJämlikt, a framework for working systematically and preventively with all grounds for discrimination.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Alternatives to hazardous chemicals

CHEMICAL USE Per- and poly-fluorinated substances (PFAS) used in, for example, firefighting foam and ski wax are associated with major environmental and health effects. POPFREE is an interdisciplinary collaboration to find and promote alternative solutions to PFAS.



Would you like to learn more?

Read about RISE and how we work with the global sustainability goals at ri.se/en/about-rise

Seven strategic goals for sustainable value creation

RISE is a purpose-driven organisation. This is why our goals specify both the direct impact of our own activities and the indirect impact of new solutions that contribute to greater sustainability in business and society. Our Higher Purpose.



A sustainable future



Societal challenges

BENEFIT TO SOCIETY	
<p>What we want to show with the goal:</p> <p>We have contributed to Agenda 2030.</p> <p>How we work with the goal:</p> <p>We develop our methods for follow-up of projects and assignments based on how they contribute to the goals of Agenda 2030. In the follow-up, we consider both positive and negative contributions at sub-goal level.</p> <p>Goals for 2023:</p> <p>Net positive contribution to the SDGs: $X_1 - X_2$ %</p>	<p>What we want to show with the goal:</p> <p>We have contributed to changes that meet society's challenges.</p> <p>How we work with the goal:</p> <p>To ensure that both our research and that of others is put to good use, we monitor our transition grant annually by weighing up a number of indicators that measure transition capacity at both project and organisational level.</p> <p>Goals for 2023:</p> <p>Transition grants > (value 2022)</p>



Satisfied customers



Economically sustainable operations



Committed employees



Socially sustainable operations



Environmentally sustainable operations

RESULTS				
<p>What we want to show with the goal:</p> <p>We meet and exceed our customers' expectations through value-creating solutions.</p> <p>What we do to achieve the goal:</p> <p>We create value by basing our offers and deliveries on customer needs and problems. We combine different competencies and utilize the entire breadth of RISE for solutions to business and society's challenges.</p> <p>Key results in 2022:</p> <p>Customer Satisfaction Index (CSI) >75 Outcome: 77</p>	<p>What we want to show with the goal:</p> <p>We have a healthy financial situation that favours a long-term approach.</p> <p>What we do to achieve the goal:</p> <p>We work with relevant offers and competences, market prices, needs-based business models and a healthy portfolio mix. We nurture long-term customer relationships and invest in and maintain the right technology infrastructure.</p> <p>Key results in 2022:</p> <p>Operating margin > 3 % Outcome: 0.6%</p>	<p>What we want to show with the goal:</p> <p>We and our future employees are proud and motivated.</p> <p>What we do to achieve the goal:</p> <p>We have inspiring and attractive work and meeting places and a culture that enables continuous learning and development. Our leadership is purpose-driven and enabling, and we have relevant targets and metrics with motivating incentives.</p> <p>Key results in 2022:</p> <p>Commitment Index > 68 Outcome: 67</p>	<p>What we want to show with the goal:</p> <p>We have healthy and safe operations that promote diversity and equality.</p> <p>What we do to achieve the goal:</p> <p>We constantly strive to be an open and inclusive workplace where everyone has an optimal opportunity to do a good job, regardless of their role, and where experiences and backgrounds are valued. All forms of discrimination are counteracted.</p> <p>Key results in 2022:</p> <p>Work environment Index > 68 Outcome: 67</p>	<p>What we want to show with the goal:</p> <p>We take responsibility for the environmental and climate impact of our operations.</p> <p>What we do to achieve the goal:</p> <p>By joining the Science Based Target initiative, we know our long-term emissions target. We realise emission reductions through action plans focusing on purchased energy, travel, waste minimisation and sustainable procurement, among other things.</p> <p>Key results in 2022:</p> <p>Carbon dioxide emissions < 6 095 tCO₂e Outcome: 4 441 tCO₂e</p>

“RISE is extremely committed, easy to work with and has an extensive network.”

Frida Sporre,
Swedish Board of Agriculture

Annual review ensures the right focus

For a business like RISE, which is driven by the needs and expectations of the outside world, dialogue with stakeholders is crucial.

Since 2016, RISE has had a research council to safeguard the industry's involvement and influence on our research focus and strategy. RISE has many stakeholder groups that monitor and take an interest in our operations. Stakeholders can be affected by or have an impact on RISE's business. This is because of the breadth of our operations and the fact that we are a State-owned company with a public mission. We use several forums to conduct a dialogue to ensure a positive and fruitful exchange with our stakeholder groups and to ensure that we address the right perspectives and issues in our long-term work. We conducted a simplified materiality analysis in 2021. The materiality analysis was conducted taking into

account the priorities of employees, customers and financiers in terms of material sustainability aspects through benchmarking and an online survey. **BASED ON** our identified material aspects, we conducted an analysis in 2022 to identify the actual and potential impacts of our operations on the economy, the environment and people. The focus has been to assess the risk of negative effects, to raise awareness and ensure avoidance/remediation of these. The chart on the right and on page 42 present the areas we have identified as material. The aspects where we have identified the greatest potential risk of negative impact have been prioritised and reported on throughout the sustainability report. ●

Dialogue with stakeholders

Trade organisations	Customer groups	Employees	Public funding bodies	Board of Directors	Owner
All of them highlight the area of sustainability as important for their business area.	Basis for materiality analysis and follow-up of the perception of our sustainability work over time.	Input to the development of RISE's strategy and materiality analysis.	Basis for our prioritisation of the Sustainable Development Goals. Input to materiality analysis.	Prioritization of RISE's key stakeholders, input and decisions on RISE's strategy.	Input to the development of RISE's strategy and materiality analysis.

Results from RISE's materiality analysis

Influence on external stakeholders' decisions

- Active anti-corruption efforts.

Our highest priority focus areas

- Continuous development of our employees' skills.
- Good business and research ethics.*
- Not distorting competition with our special status as a state-owned company.
- Imposing sustainability requirements on our suppliers.*

- Maintaining healthy long-term finances.*
- Minimising our CO₂ emissions.*
- Applying circular resource management in our own operations.
- Using water resource-efficiently and reducing hazardous waste (incl. chemicals).
- Using energy sustainably and efficiently.

- Maintaining a safe, healthy work environment.*
- Actively promoting diversity and inclusion.*

Influence on economically, environmentally and socially sustainable societal development

The aspects marked with "*" are the areas where we have identified the greatest potential risk of negative impact. In cases where the aspects included a risk of negative impact on human rights, severity has been prioritized over probability.

ENVIRONMENTAL SUSTAINABILITY

New sharpened climate ambitions

RISE's climate goals are in line with science and with the Paris Agreement's ambition of a maximum of 1.5 degrees of warming.

The new target structure established by RISE's Board of Directors in 2022 includes new climate ambitions in line with the Paris Agreement. If we are to stay below 1.5 degrees of warming, the world has a limited budget of carbon dioxide left to emit. The world's companies have great potential to contribute to the emission reductions required for us to achieve the ambition of the Paris Agreement.

To ensure that our climate targets are in line with science, RISE has joined the Science Based Targets Initiative (SBTi) by signing a commitment in 2022. SBTi clarifies how much and how fast an individual company must reduce its emissions to be in line with the emission reductions required by the Paris Agreement, in order to be deemed as having contributed its share to what science says is necessary to limit global warming to a certain level.

RISE'S COMMITMENT MEANS that we have sharpened our climate ambitions compared to our previous emissions target, which included reducing our emissions in selected emission categories by 2025 and finally compensating residual emissions. We are now expanding the scope and including total emissions according to the Greenhouse Gas protocol's Scope 1, 2 and 3 in our emissions target. We are also adjusting the target year from 2025 to 2030 to be in line with SBTi's guidelines.

In the coming year, we will focus on calculating our emissions in accordance with the expanded scope, where we will look in particular at our supply chain emissions. We will also calculate our specific reduction target according to SBTi. Our ambition is to be able to report on

RISE's emissions according to the expanded scope and the reduction target for 2030 according to SBTi in next year's sustainability report.

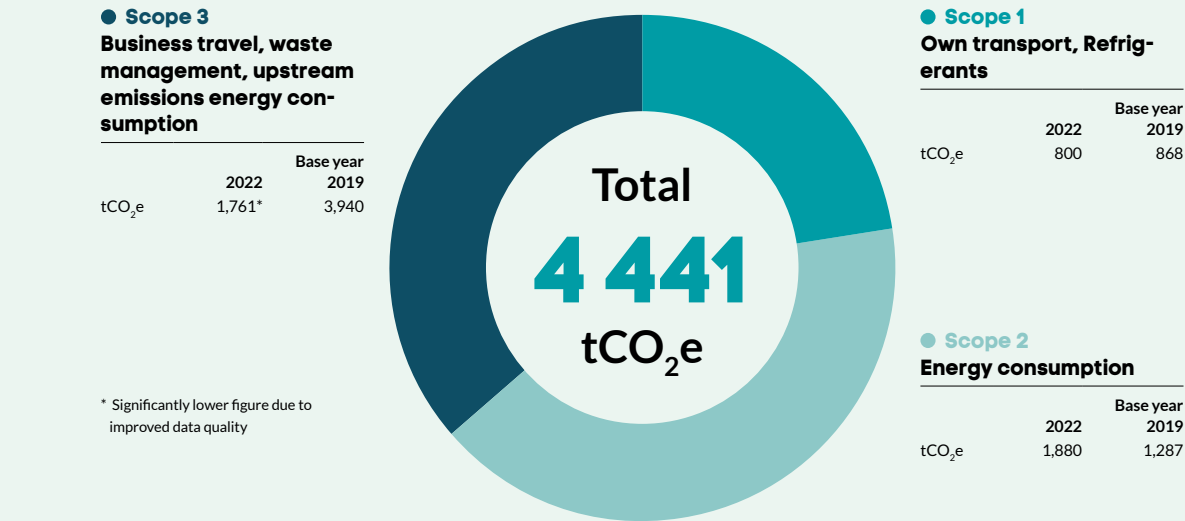
THE 2022 OUTCOME SHOWS THAT, AFTER TWO YEARS OF THE PANDEMIC, operations begin to return to normal and emissions increase to be in line with pre-pandemic levels. Mainly emissions linked to travel are increasing. Electricity consumption for our operations in France and Norway has been estimated and included in our reported figures for the first time. This means that we are also increasing our emissions in Scope 2. Overall, however, this year's emissions are at a lower level than in 2019, which means that we are staying within our set ambitions. ●

System innovation helps Malmö become climate neutral

THE SUSTAINABLE CITY of Malmö wants to be at the forefront of reduced greenhouse gas emissions and is now implementing an investment in system innovation as a step to become climate neutral by 2030. To speed up the transition, Malmö has decided to think new, focusing on developing agile working methods and roadmaps for prioritized areas. Implementing system innovation at this scale requires coordination and support. In the project Climate Neutral Malmö 2.0, the city has initiated collaboration with RISE, which contributes, among other things, knowledge support and process management.

ENVIRONMENT

Focus on emissions



Travel	2022		2021		2020	
	Distance (km)	CO ₂ e (tonnes)	Distance (km)	CO ₂ e (tonnes)	Distance (km)	CO ₂ e (tonnes)
Rental car	938,855	126	629,425	82	561,200	75
Private car for business	1,173,162	164	841,485	123	972,360	156
Electric car pool	42,448	0*	40,156	0*	19,566	0*
Company cars	2,367,661	404	2,295,409	432		
TOTAL	4,522,126	694	3,806,475	637	1,553,126	231

* CO₂e emissions refer to operation only, the electricity used to charge the cars is renewable from origin-labelled hydropower.

Hazardous waste by year*	2022	2021	2020
Weight (tonnes)	108	103	232

* No hazardous waste has been imported or exported.

Energy consumption (kWh)	2022	2021	2020
District heating	23,164,513*	17,985,800	13,386,200
Electricity	34,378,815*	32,743,567	31,593,878
District cooling	2,149,000	2,165,000**	1,120,500
TOTAL	59,692,328	52,894,367**	46,100,578
District heating (kWh/m²)	123	100	79
Electricity (kWh/m²)	182	182	187

* Increase due to changed calculation methodology where previously unknown consumption is now estimated and included.

** Values corrected compared to the 2021 report, because of error in reported figures.

Trend development – Air and rail travel						
Year	Number of employees	Number of journeys		Number of journeys per employee		CO ₂ e (tonnes)
		Flight	Train	Flight	Train	
2022	3,094	8,281	16,813	3	5	1,600*
2021	2,782	1,911	3,544	1	1	306*
2020	2,840	2,783	4,762	1	2	404*

*RISE does not take high-altitude effects into account when calculating emissions.

** The difference in reported emissions is due to the fact that we have switched to supplier-specific data for our trips. Previously, a general emission factor was used.



Would you like to learn more?
Read about RISE and how we work with environmental sustainability at ri.se/en/about-rise

ECONOMIC SUSTAINABILITY

Shared responsibility for sustainability

RISE's Group-wide Code of Conduct ensures responsible business and that internationally recognized principles such as human rights are followed.

The Code of Conduct addresses, among other things, labour and working conditions, diversity and inclusion, and responsibilities around competition law. It is based on our values and helps us to build consensus and understanding of how to act in different situations.

As RISE employees, we all have a personal as well as a shared responsibility to follow this Code and make it a core part of our corporate culture. It ensures that we take responsibility for the suppliers we work with and that we follow the UN Guiding Principles on Business and Human Rights, Labour, Environment and Anti-Bribery and Corruption in all our activities.

TRAINING IN THE CODE OF CONDUCT is mandatory for everyone employed at RISE and the document produced specifically for suppliers is always included in procurements and the conclusion of framework agreements.

We have linked a whistleblower service to the Code of Conduct to report serious risks and irregularities. The service is managed by an external party and can be accessed from both the intranet and the external website ri.se. The whistleblower function handled six cases in

2022 concerning, for example, business and work environment. All matters have been communicated to the RISE Board, answered and investigated.

IN ADDITION TO POLICIES and guidelines, RISE has an Ethics Council. The purpose of the Council is to provide support to employees, protect the brand, ensure that we fulfil the owner's requirements and expectations, and that we comply with our own ethical policies and ambitions.

Complaints from customers and stakeholders are handled according to a documented process for receiving, evaluating and making decisions on complaints. The process is designed to meet the requirements for accreditation and is described in the internal managementsystem and on ri.se. Analysis and follow-up of complaints received as well as efficiency in the process are made on a regular basis and in management review as well as in internal and external audits. No significant cases of non-compliance with laws and regulations occurred during the reporting period. Two sanctions for non-essential cases of non-compliance with laws and regulations have been issued linked to the use and control of pressurized devices. ●

A governance framework for the business

POLICIES Our policies define the overarching framework for our operations. Each year, they are reviewed and changes are proposed if necessary. The Board then makes decisions on the adoption of the most central policies. Other policies are adopted by Group management. In addition to policies, a number of guidelines are available in RISE's management system for operations. No new policies and guidelines were formulated in 2022 in the area of sustainability. The adopted policy documents have been examined and continue to apply.

Scan the QR code to view our policy documents on ri.se.



FINANCE

Financial balance

Relevant indicators of economic impact	Comments	2022 (kSEK)	2021 (kSEK)
a) Revenue	Total sales reported in the Annual Report	3,993,498	3,617,553
	Financial revenue in the Annual Report	70,246	7,726
Total direct economic value generated		4,063,744	3,625,279
b) Operating expenses	Other external expenses in the Annual Report excl. social investments f) see below and excl. penalty fees to public authorities e)	1,042,271	877,951
	The value of investments made during the year which are not categorised as strategic, i.e. normal instruments, machinery, equipment, etc	874,213	523,995
c) Employee salaries and benefits	Personnel costs in the Annual Report according to Note 11	2,593,357	2,423,084
d) Payments to investors	Interest expenses in the Annual Report according to Note 12	16,076	18,393
	From the cash flow statement	27,667	27,667
e) Payments to public authorities	Tax on profit for the year in the Annual Report according to Note 14	13,754	9,169
	Fines and similar charges paid to public authorities	0	0
f) Social investments	Voluntary contributions to charitable organisations via the Sustainability Fund	90	7
Total economic value distributed		4,566,445	3,883,266
Remaining economic value	Directly generated – Distributed	-503,684	-254,987

* Strategic investments may refer to e.g. new operations in the form of a subsidiary or line of business.

Financial assistance received from Government	2022 (kSEK)	2021 (kSEK)
Strategic competence funds	811,883	826,522
Funds public authorities	1,179,098	953,806
EU	171,172	186,286
Funds metrology Vinnova	29,700	29,200

Examples of organizations that RISE is a member of to accelerate sustainable transition in collaboration with other actors		
Swedish	<ul style="list-style-type: none">Fossil Free Sweden (initiative bringing together Swedish actors with the ambition to make Sweden one of the first fossil-free welfare countries in the world)SwedenBio (industry organization for life science in Sweden)Cradlenet (Swedish Circular Network)MIS (Environmental and Sustainability Auditors in Sweden)	
International	<ul style="list-style-type: none">EARTO (European Association of Research and Technology Organisations)Water Europe (Network promoting water-related innovation and implementation of EU research and innovation policies)EERA (European Energy Research Alliance)ENBRI (European Network of Construction Research Institutes)ARPA (European Automotive Research Partner Association)	



Would you like to learn more?
Read about RISE and how we work with financial sustainability at ri.se/en/about-ri-se

SOCIAL SUSTAINABILITY

Safe and secure working environment

RISE conducts systematic work environment management where risk management is at the centre and the health and safety of employees is given priority.

Both the Code of Conduct and the Health and Safety Policy clearly state that we put the health and safety of our employees first. Every employee has a mandate to stop or interrupt dangerous work or behaviour. We also do not accept that employees suffer reprisals for raising any misconduct.

IN 2022, WE HAVE CONTINUED our work to optimize our work environment management and introduced Group-wide working methods and procedures instead of previous local variants. This allows us to more easily monitor and ensure compliance with laws, regulations, standards and rules relevant to our business. We have also continued to build up our management system in line with ISO 45001. Everyone who works at RISE has access to the management system via our intranet.

We work in accordance with Swedish work environment legislation, which requires employers in Sweden to conduct systematic work environment management as a natural part of their ongoing operations. The aim is to identify and prevent risks of ill health and accidents, and to promote

aspects that lead to a good working environment and good health at work. In order to secure the working environment for our employees when working at the customer's premises,, this issue is a requirements and is dealt with in dialogue and coordination with the customer.

RISK MANAGEMENT IS AT THE HEART OF our systematic work environment management. This means that we map, identify, risk assess, remedy, develop action plans and follow up on risks in the organisation. The risk surveys and assessments carried out in the organisation should cover all aspects of the work environment, including physical, organisational and social.

Incidents in the work environment area are handled in accordance with established procedures for risk assessment of the work environment. Corrective actions are based on the principle of prioritisation of actions, i.e. a five-step action ladder in accordance with ISO 45001. In 2022, an incident was reported that, according to the investigation, was not considered to be a discrimination case.



Sustainable purchasing

100%

Environmental and quality management

All procured suppliers in 2022 have been assessed against environmental and quality management criteria for suppliers.

100%

Code of Conduct

All procured suppliers in 2022 have been assessed against a Code of Conduct for suppliers.



Supply chain

RISE has a broad and complex supply chain.

SOCIAL

RISE's personnel in figures

New employees and personnel turnover 2022	Women	Men	Total	Age <30	Age 30-50	Age >50
Total number of new employees	227	303	530	116	319	95
Employee turnover	140	244	384	54	223	107

Employees	Women	Men	Total	Age <30	Age 30-50	Age >50
Number of employees	1,248	1,846	3,094	209	1,775	1,110
Number of managers	99	135	234	0	141	93
Number of employees	1,149	1,711	2,860	209	1,634	1,017
Board of Directors	4	4	8	0	1	8
Board of Directors (incl. employee repr.)	7	7	14	0	4	10
Management KL (number of people in management team, excl. CEO)	3	5	8	0	4	4

Average salary	Women	Men
Average salary, employees	44,924	45,304
Average salary, managers	74,067	71,573

Employment rate	Full time	Part time	Total
Women	1,142	106	1,248
Men	1,710	136	1,846
All	2,852	242	3,094

Form of employment*	Temporary	Permanent	Total
Women	99	1,149	1,248
Men	129	1,717	1,846
All	228	2,866	3,094

*Permanent refers to both permanent and probationary employees. Temporary refers to other forms of employment.

Absence due to illness	%
Short-term absence	2.02
Long-term absence	1.78
Total absence due to illness 2022	3.8

Work-related injuries	Number/Type
Number of fatalities due to work	0
Number of serious accidents at work (not fatal)	0
Number of accidents resulting in personal injury	3
Primary types of injuries	Sprain, sprain, stretch/crush, pinch or other soft tissue injury of hand, wrist, finger.

Work-related illness	Number/Type
Number of fatalities due to work-related illness	0
Number of cases of reported work-related illness	46
Primary causes of work-related illness	Stress-related illness

*Here, we list the number of ongoing long-term sickness absences (full and part time) for 2022 that are fully and/or partly work-related. The definition of long term is absence from day 15 and longer.



The information on this page applies to RISE employees in Sweden where our main operations are located.



Would you like to learn more?
Read about RISE and how we work with social sustainability at ri.se/en/about-rise



ANNETTE ANJOU
Director of Human Resources

Hello there Annette Anjou!

What has been done during the year to create a safer, more secure and healthier working environment?

- In addition to our continuous improvement work through employee surveys, we have reinforced the team that works with our physical work environment. The systematic work environment management and safety at our workplaces are and will continue to be in focus.

Can you give examples of activities to increase employee commitment?

- We focus on three main areas in particular. First, we talk about where we are heading and why. We need to be clearer about our direction and flesh out our strategy.

The second area we focus on is how we can secure a reasonable workload. For example, we investigate how we can reduce the administrative burden for managers and project managers.

Our third focus area is on leadership. Our leadership is purpose-driven and enabling, and we are currently procuring training programmes to ensure continuous development.

What makes RISE an attractive employer?

- The mission to strengthen Sweden's competitiveness and to be Sweden's innovation partner makes us a completely unique workplace. Also the diversity of the expertise we have in widely different areas. Our employees contribute to a more sustainable future. ●



Accidents, incidents and risk observations are followed up in collaboration forums. Collaboration with employee representatives is statutory in Sweden and we have work environment committees at local and central level that follow up our systematic work environment management. The committees are bipartite and meet with a fixed agenda four times a year.

Health and safety issues are also followed up in our workplace meetings, employee surveys and employee development talks. An open dialogue about shortcomings, good examples and future opportunities is important as it creates the basis for learning and continuous improvement throughout the organisation.

RISE has a group-wide agreement for occupational health care that covers all operations and various locations. The occupational health service is an independent expert resource and a strategic and proactive partner to RISE that assists our organisation with various services ranging from health promotion, prevention and rehabilitation.

The collaboration is actively and systematically followed up together with designated persons at RISE and the supplier, and internal follow-up of the collaboration takes place in various internal forums, such as the work environment committee.

TRAINING, RESPONSIBILITIES and procedures ensure that everyone knows what is expected and that we are working appropriately. Through our solid training package, we can continuously create conditions for our employees to obtain, maintain and develop competence in work environment issues. In addition to the compulsory training required, a number of voluntary courses are offered on various aspects of health and safety at work.

In 2022, we have broadened and developed RISE's range of work environment training programmes for managers, employees and work environment representatives. This year's focus has been on creating a group-wide range of basic fire protection training programmes. We view this training as an important part of RISE's systematic work to create a safe and secure workplace. ●

An attractive workplace for everyone

RISE's approximately 3 100 employees are experts in very different fields who come together to address societal and business challenges and share a common desire to work for a better world for future generations. This makes RISE an inspiring and attractive environment where employees are given space to develop and contribute to the innovations of the future.

Nevertheless, a good working life at RISE is also about attractive employment conditions. At RISE, collective agreements cover all employees and flexible benefits are designed to suit each individual employee and their life situation.

RISE'S FULL-TIME EMPLOYEES receive SEK 10,000 per year to be spent on benefits of their choice. Of this amount, SEK 4,000 is earmarked for wellness activities. Additionally, RISE has a remote work pot where full-time

employees receive SEK 7,500 to be used to create a more ergonomically sustainable workplace at home. This can be, for example, a desk, office chair or an external monitor for the work computer.

Each year, RISE sets aside SEK 400,000 in the Together Fund, which allows employees to request funds for social activities outside working hours. The purpose of the fund is to promote collaboration and the physical and mental well-being of employees. RISE is a large employer that provides work for more people than those employed by the Group. Consultants with a workplace at RISE can also participate in these joint activities. In 2022, 352 people worked on a consultancy basis at RISE, the reported number refers to head count as of 31 December 2022.

The sustainability fund is another initiative that gives employees the opportunity to apply for funding to run or get involved in an initiative with a clear sustainability link but which is outside the scope of work. ●

Hello colleagues!

RISE's mission is to create new solutions for a sustainable future. How does this affect your work?



METKEL YEBIYO
Researcher,
Heat Pump Technology

"It is inspiring and engaging to be part of making it possible to achieve a secure, energy- and cost-effective and climate-neutral energy system."



ZOZAN TUNC
Researcher, Chemical
Process Development

"It is extremely instructive and stimulating to work closely with industry with solutions to real problems, such as challenges that arise when scaling up a process."



ANN-SOFIE DÄLDEHÖG
Business Developer,
norm-creative innovation

"Norm criticism increases innovation. My task is often to ask difficult questions so that we can be on our toes and not get stuck in old norms and beliefs."

Key areas of sustainability

Area/aspect	Significance for RISE	Management	Follow-up	GRI standard
Minimising our CO ² emissions	RISE's operations generate carbon dioxide emissions both directly through our activities, and indirectly through our purchases. We need to act to minimise these.	Several of our policy documents and guidelines support the reduction of CO ² emissions. These include our Travel Guidelines, Sustainability Policy, Purchasing Policy, Environmental Policy and Company Car Guidelines. RISE has also adopted an ambitious environmental target and joined SBTi to ensure that our ambitions to reduce climate emissions are in line with science and the Paris Agreement.	RISE monitors its climate impact according to the Greenhouse Gas Protocol and publicly reports it in its annual sustainability report.	GRI 305: EMISSIONS
Using energy sustainably and efficiently	Part of the climate impact from RISE's operations comes from our energy use. For this reason, it is important to reduce our energy use and purchase sustainable energy.	We are reviewing our energy use and energy purchases. When carrying out new construction or renovation work, RISE always chooses providers that use energy-efficient solutions. Alternative energy sources (solar cells, geothermal heat) are used wherever possible.	RISE continuously monitors and reports its energy consumption.	GRI 302: ENERGY
Maintaining a safe and healthy work environment	Our employees are our most important resource, and a good work environment creates favourable conditions for health, commitment, motivation and innovation.	We have governing and supporting documentation in our management system, and we conduct systematic health and safety management efforts. Our various governing documents and procedures cover different aspects of the work environment.	Systematic health and safety management is monitored via labour market party collaboration forums at local and central level.	GRI 403: OCCUPATIONAL HEALTH AND SAFETY
Applying circular resource management in our own operations	Being more efficient in our resource use is a highly prioritised area in RISE. A large part of our indirect climate impact comes from our use of resources.	Our Environmental Policy guides our efforts to reduce our resource use. In our choice of products, for instance in connection with purchasing, we strive to make smart choices that enable circular material handling.	To improve the quantification of material management and its climate impact, during the year we have focused, among other things, on improving the monitoring of the Group's generated waste.	GRI 301: MATERIALS
Using water resource-efficiently and reducing hazardous waste (incl. chemicals).	RISE has a business where waste, including hazardous waste, is generated, and where water and chemicals are handled.	The area is managed through chemical guidelines, the KLARA chemical management system and waste management procedures. We separate waste and hazardous waste, and replace hazardous chemicals with less hazardous ones (substitution).	Statistics from municipal waste companies and the chemical management system are used for monitoring.	GRI 303: WATER AND EFFLUENTS
Imposing sustainability requirements on our suppliers	We have extensive opportunities to influence environmental and social sustainability through our purchases.	We control our purchases with the help of our Environmental Policy, Purchasing Policy and Supplier Code of Conduct. Our sustainability requirements for all types of purchasing are governed by our developed requirements model.	Number of procurements where requirements are set, monitored and reported. We also monitor our contracts and check that the requirements in them are complied with.	GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMENT, GRI 414: SUPPLIER SOCIAL ASSESSMENT
Maintaining healthy long-term finances	Having balanced finances is a prerequisite for conducting sustainable operations.	Through our processes for operational management and financial planning (operational planning, budgeting and forecasting), combined with follow-up and analysis processes, we control and monitor our financial development to ensure healthy long-term finances.	The financial position of our projects is continuously evaluated and our overall financial development is reported, evaluated and monitored on a monthly basis at multiple organisational levels.	GRI 201: ECONOMIC PERFORMANCE
Actively promoting diversity and inclusion	People's differences, experiences and unique circumstances form a creative, dynamic and innovative environment in which both our people and our organisation can grow.	RISE has Group-wide governing and support documentation that deals with issues concerning diversity and inclusion. In addition, we carry out Group-wide work environment surveys twice a year. Among other things, we check how people experience our diversity and inclusion efforts.	The issue is followed up in multi-stakeholder cooperation forums at local and central level.	GRI 405: DIVERSITY AND EQUAL OPPORTUNITY
Continuous development of our employees' skills	Continuous development and training is needed in order to maintain and build relevant expertise in RISE.	RISE has a process and methodology for carrying out regular performance and development dialogues between employees and managers ('PEP talks').	Implementation of 'PEP talks'.	GRI 404: TRAINING AND EDUCATION
Operates an active anti-corruption programme	RISE has a zero-tolerance approach towards all forms of corruption.	The Group has an established Code of Conduct which, together with our Ethics Policy, provides guidelines on anti-corruption compliance.	We monitor and report the number of whistleblowing cases annually.	GRI 205: ANTI-CORRUPTION
Good business and research ethics	Our customers expect us to act with a high degree of integrity and impartiality.	The Group has an established Code of Conduct which, together with our Ethics Policy, provides guidelines on ethical conduct.	We monitor and report the number of whistleblowing cases annually.	GRI 205: ANTI-CORRUPTION
Not engaging in anti-competitive practices due to our position as a State-owned company	As a major recipient of public funding, we must ensure that the funding is used in compliance with laws on competition and State funding.	The Group has an established Code of Conduct which, together with our Public Funding Policy and procedures for managing State strategic competence funds, provides guidelines on avoiding anti-competitive practices.	The Company annually presents an open report in accordance with the Insight into Certain Financial Links and Related Matters Act (2005:590). The Company's auditors examine and verify that this report has been carried out in compliance with the aforementioned Act.	GRI 206: ANTI-COMPETITIVE BEHAVIOUR

TCFD

In line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), we have started to identify potential short-, medium- and long-term climate-related financial risks and opportunities in our area of activity. The table below shows our current status in regard to the TCFD recommendations by reporting category.

TCFD recommendations	RISE current situation
Governance	
Describe the board's review of climate-related risks and opportunities	Climate-related financial opportunities are integrated into the Board's work due to the fact that RISE's primary purpose is to contribute to sustainable societal development. Through research and innovation projects, RISE supports companies in achieving transformation in this area. The Board is currently considered to have limited insight into climate-related risks with a financial impact. The management's annual risk review is communicated to the Board, but a direct link to climate-related risks is lacking. The sustainability and environmental policy adopted by the Board of Directors does not include climate-related risks.
Describe management's role in assessing and managing climate-related risks and opportunities	<p>The management is responsible for the annual overall risk analysis. The process is led by the CFO with support from the Sustainability and Quality Manager. Division managers are responsible for risks and risk management at division level.</p> <p>Currently, tools are in place to collect information on risks and opportunities in the divisions and communicate them to group management, however the current risks collected are not considered to include climate-related risks. At present, a systematic business intelligence analysis is carried out, and it is deemed that this analysis can be refined to include climate-related risks. Climate-related financial opportunities are integrated into the management and divisions on the basis that RISE's primary purpose is to contribute to sustainable development in society. Through research and innovation projects, RISE supports companies in achieving transformation in this area.</p>
Strategy	
Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term	<p>Climate-related risks and opportunities in the short, medium and long term have been discussed internally at RISE. The main climate-related risks and opportunities have been identified.</p> <p>The Group's climate-related opportunities primarily regard the work conducted by the Group through its projects and research to find solutions to climate-related societal challenges. Through its strong internal expertise in this area, RISE has an opportunity to strengthen its presence in existing markets and partnerships, and to establish new ones. RISE's own internal transformation is favoured by its internal expertise, which can be used to develop RISE's own operations.</p> <p>The climate-related financial risks are primarily transition-related risks and physical risks. A transition-related risk might be, for example, the political regulation of a raw material used for a research project, which could result in an unexpected cost rise. A physical risk might be the installation of a testbed that could be affected by extreme weather conditions in the longer term, resulting in costs for the project for relocation or repairs.</p>
Describe the impact of climate-related risks and opportunities on your organisation's operations, strategy and financial planning	In RISE's own property portfolio, climate-related risks are partly integrated into the strategy and financial planning. RISE's Climate Challengers are included in the financial planning, and extra resources have been allocated for this work. Climate-related risks and opportunities have recently been included in the CFO's area of responsibility.
Describe the organisation's strategic resilience, taking into account different climate-related scenarios, including a scenario of 2 degrees or less	A scenario analysis has not yet been carried out.
Risk management	
Describe your organisation's processes for identifying and assessing climate-related risks	An annual risk process is carried out at management level to identify and assess the organisation's risks. A general analysis model based on probability and impact is used. The process includes specific identification and assessment of climate-related risks. During the year, rainfall mapping was carried out for one of our sites.
Describe the organisation's processes for managing climate-related risks	Risks are currently managed via the Policy Document. Internal cooperation and improved system support are considered to be the next step in improving the organisation's processes for managing climate-related risks.
Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management	Identification, assessment and management of climate-related risks with economic impact are not integrated into RISE's ordinary risk processes.
Metrics and targets	
Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process	The organisation's progress in meeting climate and sustainability targets is reported via KPIs and reporting indicators, such as: tonnes of CO ² emissions per year, energy use, CO ² emissions from travel, and reduced emissions through purchase of reused furniture and materials. RISE also measures the proportion of the Group's turnover that has been generated as a direct result of sustainability work, as well as the proportion of sustainability-declared customer assignments in relation to total customer assignments.
Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	According to the Greenhouse Gas Protocol (GHG) standard, RISE discloses emissions of climate-impacting emissions included in Scope 1, Scope 2, and parts of Scope 3. Read more on page 32.
Describe the targets the organisation uses to manage climate-related risks and opportunities and progress towards targets	RISE has a central goal to be a climate-neutral organisation by 2025. Based on areas of the business, RISE has therefore set a target to reduce electricity consumption by 2% by 2022, an organisation-wide climate-neutral electricity agreement by 2023, the proportion of recycled materials in properties to increase every year by 2025, and reduced emissions from purchases by 15% by 2025.

A first step towards the EU Taxonomy Regulation

RISE operates in several of the sectors covered by the EU Taxonomy Regulation. Our offer of both expertise and infrastructure supports businesses and the public sector to accelerate the transition to a sustainable society.

During the year, RISE carried out an initial survey of the organisation's economic activities as a first step in determining the proportion of our business compliant with the Taxonomy Regulation. Our reporting this year is not complete in accordance with the taxonomy but aims to prepare for future reporting under the EU Taxonomy Regulation.

The activity definitions listed in the taxonomy has formed the basis for the survey. The Sustainability and Quality function has been responsible for coordinating the survey of the operations and the divisional

heads of department have contributed their expertise on the Group's offering in a qualitative survey.

The mapping shows that the largest number of taxonomy-defined economic activities at RISE are in the Education and Highly Specialised Scientific and Technical Activities sectors. The most prevalent activities relate to research development and innovation close to the market, training and data-driven solutions for greenhouse gas emission reductions. The threshold for a particular activity to be considered highly prevalent is based on its occurrence in half or more of our services.

In the coming year, we will continue to develop our processes to enable us to monitor our activities according to the EU taxonomy to an even greater extent.

Sector	Activity	Occurrence
Training	Training	To a large extent
Highly specialised scientific and technical activities	Research, development and innovation close to the market	To a large extent
	Research, development and innovation for direct carbon capture	To some extent
	Professional services related to the energy performance of buildings	To some extent
	Technical consultancy and similar for climate adaptation	To some extent
Information and communication	Data-driven greenhouse gas emission reduction solutions	To a large extent
	Computer programming, computer consultancy and the like	To some extent
Transports	Rail transport infrastructure	To some extent
	Infrastructure enabling road transport and public transport	To some extent
	Maritime infrastructure	To some extent



In 2022, RISE started the Application Centre for Additive Manufacturing in Mölndal together with industry and academia.

GRI Index

Notification of use	RISE Research Institutes of Sweden has reported according to GRI guidelines for the period 1 January 2022 to 31 December 2022
Use GRI 1	GRI 1: Foundation 2021
Applicable GRI Sector Standards	Not applicable

GRI standard/ Other source	Reporting		Place	Omission		GRI Sector-Specific Standard Ref. No
				Omitted / Omitted requirements	Cause	
General reporting						
GRI 2:	2-1	Organisational data	66			
General reporting 2021	2-2	Entities included in the organisation's sustainability reporting	48			
	2-3	Reporting period, frequency and contact details	48			
	2-4	Adjusted information	25			
	2-5	External verification	49			
	2-6	Activities, value chain and other business relationships	7–8			
	2-7	Employees	39			
	2-8	Non-employee workers	41			
	2-9	Governance structure and composition	54–57			
	2-10	Nomination and election of top management	55–56			
	2-11	Chair of the highest decision-making body	56			
	2-12	The role of the highest decision-making body in monitoring impacts	59			
	2-13	Delegation of responsibility for impact management	59			
	2-14	The role of the highest decision-making body in sustainability reporting	59			
	2-15	Conflicts of interest	60			
	2-16	Communication of important issues	59, 36			
	2-17	Total knowledge of the highest decision-making body	56			
	2-18	Evaluation of the work of the highest decision-making body	60			
	2-19	Remuneration policies	60–61			
	2-20	Process for setting remuneration	60–61			
	2-21	Annual total replacement rate	61			
	2-22	Explanation of sustainable development strategy	53			
	2-23	Policy commitments	36			
	2-24	Incorporated policy commitments	36			
	2-25	Negative impact reduction processes	36			
	2-26	Mechanisms for asking for advice and raising concerns	36			
	2-27	Compliance with laws and regulations	36			
	2-28	Membership of organisations	37			
	2-29	Approach to stakeholder engagement	32			
	2-30	Collective bargaining agreements	41			
Key areas						
GRI 3: Key areas in 2021	3-1	Process for identifying key areas	32, 33			
	3-2	List of key areas	42			
Financial results						
GRI 3: Key areas in 2021	3-3	Addressing key areas	42			
GRI 201: Financial results 2016	201-1	Direct economic value generated and distributed	37			
	201-4	State financial support	37			

GRI standard/ Other source	Reporting	Place	Omission		GRI Sector-specific standard Ref. No
			Omitted /	Omitted	
Energy					
GRI 3: Key areas in 2021	3-3	Addressing key areas			
GRI 201: Energy 2016	302-1	Energy consumption within the organisation		35	
Leaks					
GRI 3: Key areas in 2021	3-3	Addressing key areas			
GRI 305: Emissions 2016	305-1	Direct greenhouse gas (GHG) emissions (Scope 1)		35	
	305-2	Indirect greenhouse gas emissions (Scope 2)		35	
	305-3	Other indirect greenhouse gas emissions (Scope 3)		35	
Waste					
GRI 3: Key areas in 2021	3-3	Addressing key areas			
	306-3	Waste generated		35	
Environmental assessment of suppliers					
GRI 3: Key areas in 2021	3-3	Addressing key areas			
GRI 308: Environmental assessment of suppliers 2016	308-1	New suppliers that were screened using environmental criteria		38	
Personnel					
GRI 3: Key areas in 2021	3-3	Addressing key areas			
GRI 401: Personnel 2016	401-1	New employees and personnel turnover		39	
Work environment					
GRI 3: Key areas in 2021	3-3	Addressing key areas			
GRI 403: Work environment 2018	403-1	Work environment management system		38	
	403-2	Identification and assessment of risks and investigation of incidents		38	
	403-3	Promoting employee health		38	
	403-4	Employee participation and consultation and communication with employees on work environment issues		38, 40	
	403-5	Employee training in work environment		40	
	403-6	Promoting employee health		38, 40	
	403-7	Prevention and minimisation of work environment problems with a direct link to business relationships		38	
	403-9	Work-related injuries		39	
	403-10	Work-related illness		39	
Diversity and equal opportunities					
GRI 3: Key areas in 2021	3-3	Addressing key areas			
GRI 405: Diversity and equal opportunities 2016	405-1	Diversity in decision-making bodies and among employees		39	
	405-2	Difference in basic earnings between women and men		39	
Non-discrimination					
GRI 3: Key areas in 2021	3-3	Addressing key areas			
GRI 406: Non-discrimination 2016	406-1	Cases of discrimination and corrective action taken		38	
Social assessment of suppliers					
GRI 3: Key areas in 2021	3-3	Addressing key areas			
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria		38	

About the report

Reporting takes place on an annual basis, for the full calendar year. The starting point for the content of this report is RISE's own assessment of which parts of the operations have the most substantial impact on society, the economy and the environment. This report does not includefor example, exhaustive details on operations conducted abroad. Such details refer to, for example, the reporting of waste, travel and employee data.

Our operations in Norway and France are included in the reported information regarding energy consumption. The RISE Group is principally active in Sweden and primarily provides services. There are also a few locations in Norway, Belgium and France. RISE currently operates at about 90 addresses. A few of these are only individual office spaces leased within, for example, a Science Park.

SSPA'S ACTIVITIES ARE NOT INCLUDED IN THE KEY PERFORMANCE INDICATORS reported in this year's Sustainability Report. Since 2021, SSPA (originally Statens Skeppsprovingsanstalt) has been a wholly owned subsidiary of the RISE Group with 90 employees and an annual turnover of just over SEK 100

million. On 1 January 2023, SSPA will be transferred to the parent company and will be fully integrated into RISE's maritime operations. For the financial year 2022, the subsidiary is only recognised for financial reporting purposes, see Consolidated Accounts on page 73.

THE FOCUS DURING THE YEAR has been to streamline the collection of information for the Sustainability Report and increase the quality of data. As part of this, we have digitized the process.

Further improvements to work on are primarily about data gaps regarding the premises where RISE is a tenant. These deficiencies result in some uncertainty in the figures reported, as estimates are sometimes used. To compensate for these uncertainties, we have chosen a conservative approach when estimating consumption and emissions.

To achieve improved transparency and credibility, RISE has elected to have the Sustainability Report externally reviewed by the auditing firm KPMG.

Florina Choomchan
Contact person

Board of Directors' assurance

We confirm, to the best of our knowledge, that the Sustainability Report has been prepared in accordance with the guidelines of the GRI Global Reporting Initiatives, that the statutory sustainability statement meets applicable requirements, that the disclosures presented provide a true and fair view of the factual circumstances, and that no matters of material signif-

icance have been omitted which could affect the view of the Company created by the Sustainability Report.

Gothenburg, 29 March 2023
The Board of Directors of RISE Research Institutes of Sweden AB

Audit Report

To RISE Research Institutes of Sweden AB, Corporate Identity Number 556464-6874

Introduction

We have been engaged by the Board of Directors of RISE Research Institutes of Sweden AB (RISE) to conduct a limited assurance review of the content of RISE's Sustainability Report 2022. The Company has defined the Sustainability Report, which also includes the statutory sustainability statement, on page 25 of this document.

Responsibilities of the Board of Directors and the CEO

The Board of Directors and the Managing Director are responsible for preparing the sustainability report including the statutory sustainability statement in accordance with applicable criteria and the Swedish Annual Accounts Act. The criteria are presented on page 25 of the Sustainability Report, and comprise the parts of the Sustainability Reporting Guidelines published by the Global Reporting Initiative (GRI) which are applicable to the Sustainability Report, as well as the accounting and valuation principles that the Company has developed. This responsibility also includes such internal control as is deemed necessary for the preparation of a Sustainability Report that is free from material misstatements, whether due to fraud or error.

Auditor's responsibilities

Our responsibility is to express a conclusion on the Sustainability Report based on the limited assurance procedures we have performed and to express an opinion on the statutory sustainability statement. Our assignment is limited to the historical information that is reported and accordingly does not include future-oriented information.

We conducted our limited assurance review in accordance with ISAE 3000 Assurance Engagements Other than Audits and Reviews of Historical Financial Information (revised). A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the sustainability report, and applying analytical and other review procedures. Our examination of the statutory sustainability statement has been conducted in accordance with FAR's auditing standard RevR 12 The auditor's opinion regarding the statutory sustainability statement. A limited assurance engagement and a review according to RevR 12 have a different focus and a significantly smaller scope compared to the focus and

scope of an audit according to International Standards on Auditing and other good auditing practice.

The auditing company applies ISQC1 (the International Standard on Quality Control) and thus has an all-round system for quality control that includes documented guidelines and procedures for compliance with professional ethical requirements, standards for professional practice and the applicable requirements in laws and other regulations. We are independent of RISE in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

The procedures performed in a limited assurance engagement and an examination in accordance with RevR 12 do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, the conclusion based on our limited assurance engagement and examination in accordance with RevR 12 does not comprise the same level of assurance as a conclusion based on an audit.

Our examination of the Sustainability Report is based on the criteria defined by the Board of Directors and CEO, as defined above. We consider these criteria suitable for the preparation of the Sustainability Report.

We believe that the evidence we have obtained in our limited assurance engagement is sufficient and appropriate to provide a basis for our conclusion below.

Opinions

Based on the limited assurance engagement we have performed, nothing has come to our attention that causes us to believe that the Sustainability Report is not prepared, in all material respects, in accordance with the above criteria defined by the Board of Directors and the CEO.

A statutory sustainability statement has been prepared.

Stockholm, 29 March 2023
KPMG AB

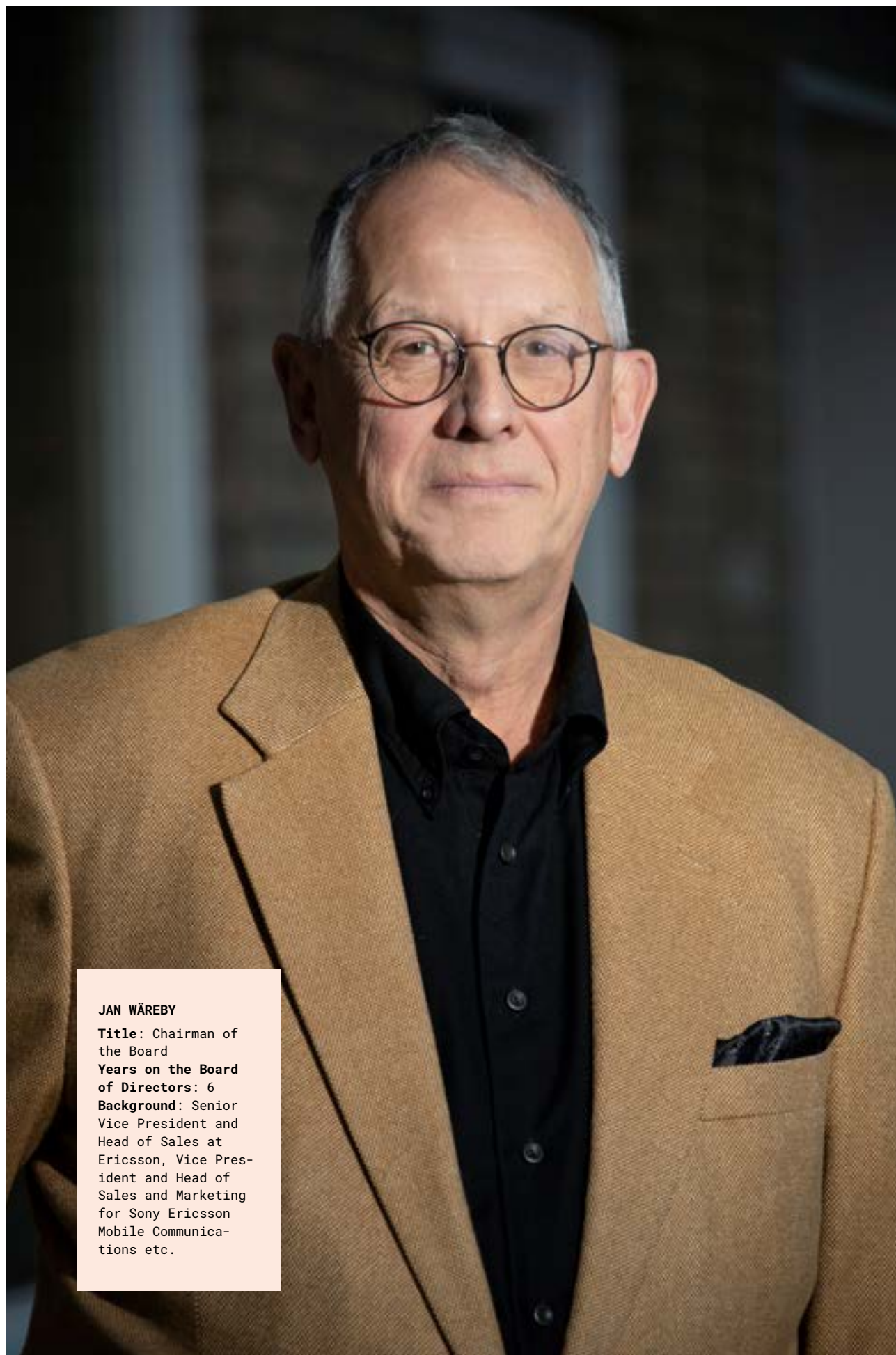
Ingrid Hornberg Román	Torbjörn Westman
Authorised Public Accountant	Specialist
Member of FAR	

Corporate Governance Report

Raman microscopy can be used to locate and measure the distribution of chemical components in a matrix.

RISE Research Institutes of Sweden AB (RISE AB) is wholly owned by the Swedish State. Every year, the Company prepares a Corporate Governance Report that is approved by RISE's Board of Directors.

The State's corporate governance has the aim of the State-owned companies acting exemplarily in the area of sustainable business by balancing and combining a financially, socially and environmentally sustainable development.


JAN WÄREBY

Title: Chairman of the Board

Years on the Board of Directors: 6

Background: Senior Vice President and Head of Sales at Ericsson, Vice President and Head of Sales and Marketing for Sony Ericsson Mobile Communications etc.

JAN WÄREBY, CHAIRMAN OF THE BOARD:

"A powerful and comprehensive innovation partner"

Rhis ISE was formed to create an internationally competitive institute with a good capacity to develop and rapidly adapt its activities to the new needs of industry and society. Since the start in 2016, several steps have been taken on the journey towards a strong and comprehensive institute.

How has RISE developed in this respect over the past year?

- In 2022, RISE became the sole owner of the testbed AstaZero. The acquisition of Chalmers University of Technology's share facilitates collaboration with other testbeds within RISE, thereby supporting the industry. An example of this is the new automotive cyber security test cluster involving researchers and experts from different facilities. Similarly, we see how our expertise and offering in the maritime area is strengthened with the integration of SSPA (originally Statens Skeppsprovsningsanstalt) into RISE.

Why is a strong institute good for sustainable development?

- As society's challenges become increasingly complex, there is a need for a strong innovation partner that can provide collective support and multiple perspectives. The deteriorating security situation over the past year certainly shows how RISE can contribute to Sweden's total defence and security of supply, for example through expertise in cyber security. RISE works in an interdisciplinary and needs-driven manner and can bring together expertise, infrastructure and actors with different perspectives to create

solutions that contribute to sustainable growth, the achievement of the UN's global goals and making Sweden a leading innovation country. The higher purpose, to work for a sustainable world, also makes us an exciting and attractive employer.

How do you ensure that the business creates value?

- We continuously reassess our investments and anticipate the future needs of the business community. We do so by being flexible and reallocating resources to maximise long-term benefits. We have dedicated support from the Research Council, which consists of 22 senior representatives from industry and the public sector. RISE's growth strategy is also fully in line with the prioritised societal challenges described in the Swedish Research Bill.

What have been the key issues for the Board of Directors during the year?

- Investments for the future, including the construction of SEEL, the safety lab and our biorefinery testbeds, are in progress and we look forward to the opening of all of them in 2023. RISE has a central role in Sweden's green transition, not least in the automotive industry, where electrification is closest. In short, we deliver on our mission to strengthen the industry's competitiveness. This is also evident in the finances. We continue to improve our margin and are recovering well after a few tough years with the pandemic. Much thanks to RISE's collective expertise and our fantastic employees, 19 of whom are ranked on the list of the world's top two percent of researchers. ●

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Deviations from the Code

Rule 2 on nomination of Board members and auditors

The stipulations of the Code are primarily intended for public companies with a wide ownership base. RISE AB deviates from the Code as its nomination process complies with the directives stated in the State Ownership Policy. See the 'Board nomination process' section below.

Mission

RISE AB's mission is set out in the research and innovation bills presented by the Government that were passed by the Swedish Parliament. The bill presented by the Government and adopted by the Riksdag in April 2021 states that the overarching goal for the institutes gathered under the RISE umbrella is to be internationally competitive and facilitate sustainable growth in Sweden by strengthening competitiveness and innovation in industry, as well as to promote innovation and ability in the public sector to contribute to solutions to societal challenges in collaboration with industry."

It also states that the new, consolidated RISE is a significant resource in the Swedish innovation system, both nationally and regionally. With RISE's collective cutting-edge expertise and more than 130 open test and demonstration environments, there are excellent conditions for initiating industry-wide, international and cross-sectoral research and innovation projects that involve cross-fertilisation of expertise from different areas and the development of new value chains.

No distribution of profits from the Company to shareholders is set to take place, and RISE AB belongs to the group of State-owned companies whose mission in society is specifically designated by Parliament.

The owner instructions adopted at the general meeting on 28 April 2021 set out the Company's

Annual General Meeting

In addition to the relevant rules in the Companies Act and the Code, the following principles apply to general meetings of shareholders in State-owned companies pursuant to the State Ownership Policy. These principles state that the annual general meeting is to be held no later than four months after the closing date. According to RISE's Articles of Association, notice of the meeting is to be provided via letter to shareholders and through an announcement in the Swedish National Gazette and on the Company's website, www.ri.se.

Information regarding the provision of notice is to be announced in Dagens Industri.

Members of Parliament are entitled to attend general meetings of shareholders and, when doing so, to pose questions. Notification of the time and place of the general meeting shall be sent by letter to the Central Bureau of Parliament in connection with the issue of the notice of the meeting. The general public should also be invited to attend general meetings of shareholders in State-owned companies. The 2023 AGM is planned to take place on 25 April.

Nomination process and composition of the Board of Directors

The Board nomination process is coordinated by the Ministry of Enterprise and Innovation and replaces the usual nomination committee (deviation from the Code, see above). The nomination process in its

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Board of Directors

The Board of Directors is elected at the meeting for a mandate period of one year. At the annual general meeting of RISE Research Institutes of Sweden AB on 21 April 2022, eight AGM-elected Board members were appointed, four women and four men. The Board of Directors includes three ordinary employee representatives with three deputies. The CEO is not a member of the Board of Directors.

Members of the Board of Directors elected at the annual general meeting of shareholders:



Jan Wäreby
(born 1956)
Chair of the Board since January 2017, Chair of the Remuneration Committee, member of the Audit Committee.
Formerly Senior Vice President and Head of Group Function Sales at Ericsson, prior to that Senior Vice President and Head of Business Unit Multimedia and Vice President and Head of Sales and Marketing at Sony Ericsson Mobile Communications. Board member of Exportkreditnämnden (EKN), Tobii AB, Kebni AB, Defentry AB, Agapi Boating AB and Wineally AB. Degree of Master of Science from Chalmers University of Technology.



Hanna Lagercrantz
(born 1970)
Board member since 2018, member of the Audit Committee.
Permanent Secretary, Ministry of Finance. Previously Corporate Finance at S.G. Warburg, UBS, Brunswick-Warburg. Share Analyst and Investor Relations at SEB. Other board assignments include Board member of Almi AB and AB Svensk Exportkredit. MBA, M. Science, Stockholm School of Economics, M. Phil. in Economics, Cambridge University, UK.



Anna-Karin Stenberg
(born 1956)
Board member since 2015, Chair of the Audit Committee.
Senior Vice President Business Area Markets, Vattenfall, Business Area Controller Vattenfall BA Markets, Vice President Head of Corporate Control, Tella Company AB. Former CFO Praktikertjänst AB, CFO Vattenfall Nordic, Business Area Controller Atlas Copco and Head of Global Shared Services, Business Controller ABB (Corporate Research). Master of Business Administration specialising in international economics, Linköping University.



Pernilla Jonsson
(born 1972)
Board member since 2022.
Head of Ericsson Consumer & Industry Lab. Board member of the research program WASP-HS, Wallenberg AI, Autonomous Systems and Software Program – Humanities and Society, and member of the Digital Future's Societal Committee at KTH. Formed several advisory boards and innovation advisory boards. MSc Business and PhD Business, consumer science, University of Gothenburg School of Business, Economics and Law.



Mikael Hannus
(born 1968)
Board member since 2022, member of the Remuneration Committee.
Senior Vice President Group Innovation and R&D Stora Enso and Scientific Secretary Marcus Wallenberg Prize. Member of the Swedish Academy of Engineering Science in Finland. Formerly Vice President Group R&D, Vice President Biorefinery & Bioenergy and Vice President Energy Stora Enso. Other board assignments: Member of the Board of Swetree Technologies AB, Chairman of Tresearch, former Chairman of Innventia AB. Master of Science in Process Engineering, Åbo Akademi University and eMBA, Stockholm School of Economics.



Klas Bendrik
(born 1969)
Board member since 2018, member of the Audit Committee.
Chief Digital Transformation Officer in DNV GL, Former Vice President and Executive Partner, Gartner. Previous Senior Vice President and Group CIO Volvo Car Group AB, director of Volvo Cars, independent director of CAB AB since 2012. Previous positions include Mölnlycke Health Care, Accenture and ASSA ABLOY in the field of Innovation, IT and Digitalisation. Bachelor of Science from the Gothenburg School of Business, Economics and Law at the University of Gothenburg, and the Swedish Naval Academy (Reserve officer, Captain).



Cristina Petrescu
(born 1968)
Board member since 2022.
CEO Healthcare, Seniors and Education Sodexo Sverige. Head of Digital and Innovation, Sodexo Continental Europe. Previously Executive Vice President Healthcare, Welfare and Education at Tieto, before that Vice President Energy Utilities at Tieto and Vice President R&D at Tieto Sweden. Chairman of the Board of Softronic AB. Bachelor of Science in Computer Science, Computer Engineer from Karlstad University. Has also studied Space Technology at Umeå University in Kiruna and Nuclear Physics, Bucharest University, Romania.



Torbjörn Holmström
(born 1955)
Board member since 2017, member of the Remuneration Committee.
Senior Advisor (R&D) to the CEO, Volvo Group. Previously Executive Vice President Volvo Group Trucks Technology and CTO, Volvo Group. Board member of several Volvo companies, formerly Board member of Deutz AG, Vice Chair of Chalmers University of Technology since 2013 and Chair since 2020, Chair of Volvo Research and Educational Foundation since 2017, Board member of Gasum OY. Master of Science Mechanical Engineering, Chalmers University of Technology.



Ulf Nordberg
(born 1959)
Board member since 2018, member of the Audit Committee.
Former board member of JTI AB and SP AB (alternate) which then became Research Institutes of Sweden. Senior project manager in Circular Technology, Division of Bioeconomy and Health. Board member and Deputy Chair of SACO RISE. Master of Science, Civil Engineering, Luleå University of Technology.



Magnus Hillergren
(born 1974)
Board member since 2018.
Research engineer in Paper Manufacturing Processes, Bioeconomy and Health Division. Active in the local Unionen trade union club.



Johan Berglund
(born 1978)
Board member since 2018, member of the Remuneration Committee.
Research scientist and project manager in manufacturing processes, Materials and Production Division. MSc in Industrial Engineering and Management, Luleå University of Technology. PhD, Manufacturing Technology, Chalmers University of Technology.



Helena Björk
(born 1976)
Board member since 2021.
Project manager in Measurement Technology, Safety and Transport Division. BSc in Engineering; Product and Process Design from University of Borås. Production cluster coordinator Geometry and Quality. Member of production committee of Produktion2030. Health and safety representative at RISE in Borås.



Marie Sjölander
(born 1965)
Board member since 2021.
Senior research scientist and project manager in digital health, Digital Systems Division. PhD in psychology, Stockholm University.



Yvonne Nordin
(born 1969)
Board member since 2022.
Senior project manager at RISE Processum. Bachelor of Science in Environmental Engineering, Mid Sweden University. Single courses in project management, biogas technology, quality development and environmental auditing. Workplace representative (APO-F) for Unionen at Processum.

Group management



From left: Pernilla Walkenström, Magnus Hallberg, Robert Casselbrant, Paul Halle Zahl Pedersen, Marco Lucisano, Timo van't Hoff, Annette Anjou, Charlotte Karlsson, Pia Sandvik.

Charlotte Karlsson
(born 1962)
Head of Division – Digital Systems

Former Vice President at Ericsson AB with multiple roles in product and market introduction, site manager in Hungary, customer relations manager in the USA. Previous management positions at NFC and SAAB as well as lecturer and director of studies at Linköping University. Licentiate degree from Linköping University in the field of statistics.

Pia Sandvik
(born 1964)
CEO

Former CEO at Länsförsäkringar Jämtland, President at Luleå University of Technology. MSc in Mechanical Engineering, Linköping University, PhD and Associate Professor in Quality Engineering. Chairman of KTH, board member of EIT, Prevas AB and Almi AB and member of IVA department XI Education and research.

Pernilla Walkenström
(born 1969)
Head of Division – Materials and Production

Former deputy CEO and Head of Department at Swerea IVF, various management positions at IFP Research AB and Swerea IVF AB, researcher at IFP Research AB and adjunct professor at the Swedish School of Textiles, University of Borås, PhD and Associate Professor at Chalmers University of Technology.

Annette Anjou
(born 1975)
Director of Human Resources

Previously Vice President Global Human Resources at Sobi and has held senior positions in HR at Telia and NCC, among others. Master's degree in International Business Administration from Lund University and a Licentiate degree in Business Administration in Strategy, Governance and Competitiveness from Linköping University.

Magnus Hallberg
(born 1974)
Head of Division – Bioeconomy and Health

Previous roles in the Company include CEO of RISE Processum and, most recently, Head of the Biorefinery and Energy department. MSc in Biotechnology and PhD in Medicinal Chemistry. Former researcher at Umeå University and Imperial College.

Robert Casselbrant
(born 1967)
Chief Financial Officer

Former CFO and Senior Vice President at Göteborg Energi, Head of Business Control Broadband Sweden, TeliaSonera and Chairman of the Board of GothNet AB and Board member of Skövde Biogas, Ale Energi and Netwest AB. MBA and MSc from the Gothenburg School of Economics and the Swedish Naval War College.

Marco Lucisano
(born 1973)
Head of Division – Built Environment

Has worked in the institute sector since 2003 and comes most recently from a position as Head of Division Bioeconomy and Health at RISE. Master of Science in Chemical Engineering and received his PhD in 2002 with the thesis "On Heat and Paper: From Hot Pressing to Impulse Technology" at the KTH Royal Institute of Technology.

Timo van't Hoff
(born 1971)
Chief Business Development Officer

Former Chief Product Officer HMS Networks, President of Volvo Car Retail Solutions. MSc in Technology Management, Chalmers University of Technology, and BSc in Vehicle Engineering, HTS Autotechniek in the Netherlands. Board member at Unimer Plast & Gummi AB.

Paul Halle Zahl Pedersen
(born 1973)
Head of Division – Safety and Transport

Former director of RISE Fire Research AS and has held positions in the oil and gas industry at Statoil and Talisman Energy, among others. Mechanical Engineer, BSc from Oslo Ingeniør Høyskole and Marine Technologist, MSc with specialization in Operational Engineering from NTNU in Trondheim.

Formal work plan

The Board of Directors is to manage the affairs of the Company in the interests of the Company and its owners.

In addition to applicable laws and recommendations, the work of the Board of Directors is governed by the formal work plan for the Board of Directors. The formal work plan is reviewed on an annual basis and adopted by means of a Board resolution.

The formal work plan regulates the division of responsibilities between the owner and the Board of Directors, between the Board of Directors and the CEO, and the form of Board work, the number of meetings, authorised signatories, authorisation hierarchy and information pertaining to the Board Committees.

Ordinary Board meetings shall be held according to the preliminary programme referred to in the formal work plan. This plan states the periods during which meetings are to be held, as well as the matters to be addressed at each respective meeting, such as the annual financial statements, interim financial statements, strategy issues, allocation principles for strategic competence funds, operational plan and budget, as well as the overview and appointment of members of RISE's Research Council.

Other issues to be addressed annually by the Board are HR issues and the review of policy documents adopted by the Board. According to the formal work plan, at least one ordinary Board meeting should be held at one of RISE's operational facilities and be combined with a

visit to this facility.

The Board receives regular updates on operations through monthly reports from the CEO.

Before each calendar year, the Board is required to establish a preliminary programme indicating the dates and locations of meetings. An initial meeting is held after the annual general meeting at which resolutions are passed on authorised signatories, the formal work plan for the Board of Directors, the terms of reference to the CEO, authorisation instructions and a plan for ordinary Board meetings during the year.

The Board of Directors is to propose to the annual general meeting guidelines for remuneration and other terms of employment for the CEO and senior executives. Any significant engagements held by the CEO outside the Company are subject to the approval of the Board of Directors. The CEO is responsible for ensuring that the Board of Directors is notified of any such engagements.

Work of the Board of Directors

The Board of Directors convened twelve (12) times during the year. Of these, seven have been held digitally and the others to some extent as hybrid meetings. In accordance with the formal work plan for the Board of Directors, members are provided with printed supporting material concerning the matters to be addressed prior to every Board meeting. Executives within RISE AB participate in Board meetings to report on specific points and as secretary.

The work of the Board of Directors during 2022 consisted, among other things, of:

- Long-term strategy
- Sustainability work
- External environment analysis
- Sales strategy
- Test and Demo
- Communication strategy
- Brand strategy
- Risk analysis
- Organisational development
- Acquisitions and investments

<ul style="list-style-type: none">• Review of terms of employment for senior executives• Yearly report to the owner• Owner directives• Report on board of directors/ CEO evaluation	<ul style="list-style-type: none">• Annual General Meeting• Constitutive meeting• Strategy, operational targets including CSR goals• Policies	<ul style="list-style-type: none">• HR issues• Sustainability goals• Compliance	<ul style="list-style-type: none">• Budget• Operational plan• Risk analysis• Evaluation of Board work• Research Council• GDPR• Digitization work
Q1	Q2	Q3	Q4
↓	↓	↓	↓
Year-End Report Annual Report	Annual General Meeting Interim Report Q1	Interim Report Q2	Interim Report Q3

Prevention of conflict of interest

All board members have been informed of the dis-qualification rules in the Companies Act. They do not participate in the handling of matters where there is a risk of conflict of interest, which is also recorded in the minutes of the Board. All board members are listed on the company’s official website, along with their other engagements and employments. Board members are also reminded at each Board meeting of their obligation to ensure that the information is up-to-date and accurate.

All members must also report in writing each year any non-market transactions between themselves and the company or related parties and the company, or alternatively certify that no such transactions have taken place. Related parties refer to both controlled companies and related family members.

Evaluation of the work of the Board of Directors and CEO

A regular and systematic evaluation forms the foundation for the assessment of the performance of the Board of Directors and CEO, and for the continued development of their work. On the initiative of the Chair an evaluation is undertaken each year of the work of the Board of Directors and CEO, enlisting assistance from external specialists if this is deemed necessary.

The evaluation for 2022 has been carried out using an external tool to gather the views of the Board, and the Chair has then been responsible for feedback and discussion in the full Board. The evaluation focuses on whether the Board of Directors concentrate on the most pertinent matters, and in the right manner, as well as on relationships, forms of work and competence. The evaluation aims to enhance the Board of Directors’ forms of work and efficiency. The compiled results of the Board evaluation is reported to the Swedish Government Offices. The results have been reported to the Board of Directors and communicated to the CEO.

Audit Committee

In order to improve and enhance the efficiency of work concerning risk assessments, internal control, external reporting and auditing, the Board of Directors has established an Audit Committee. The Committee assists the Board of Directors in assuring the quality of the financial reporting.

The Audit Committee is a preparatory body whose proposals are submitted to the Board of Directors. The duties of the Audit Committee are detailed in the formal work plan for the Board of Directors. The tasks include an annual review of RISE’s internal audit function.

The Audit Committee convened seven times during the year. Information from the Committee meetings is presented to the Board of Directors at the following Board meeting and the minutes are provided to all Board members. The members of the Committee are presented in the table on the next page.

Remuneration Committee

A Remuneration Committee is responsible for preparing matters concerning guidelines for remuneration and other terms of employment for the CEO and other executives, as well as matters concerning the general level of remuneration for senior executives. The so-called grandfather principle applies when appointing senior executives, i.e. the CEO consults with the chairman of the Remuneration Committee/ Board of Directors.

The Remuneration Committee convened four times during the year. Information from the Committee’s meetings is provided to the Board at the following Board meeting and minutes are circulated to all Board members. The members of the Committee are presented in the table on the next page.

Research Council

The RISE External Research Council consists of 22 members, specially selected to represent RISE stakeholders from industry, academia and the public sector. The chair is Malin Persson, a board member of several companies. The Research Council’s responsibility and main tasks are to guide the Board in the establishment of cross-functional investment projects, in the allocation of investment funds, and in strategic issues concerning the direction of research and issues prioritised by industry. In addition, the Research Council shall provide advice and support on contemporary research matters. The Research Council was established in 2017 by the Board of Directors.

Changes in Group management

During the year, Annette Anjou took over as HR Director and a new member of Group Management after the departure of Johanna Flanke.

After the closing date, Eva Harström, Chief Digital Officer, has been appointed as a member of Group Management. Digital development and IT is a new group-wide function from 1 February 2023.

External auditors

The auditors are assigned to review RISE’s financial statements, accounting records and consolidated financial statements, as well as the management of the Company by the Board of Directors and CEO, on behalf of the shareholders. The Auditor-in-Charge also submits an auditor’s report to the annual general meeting. According to the Articles of Association, RISE AB is to engage one or two authorised public accountants, with or without alternate auditors, or a registered audit company to perform the audit activities on behalf of the shareholders. The annual general meeting for 2022 elected KPMG as the Company’s auditor for a period of one year, ending in conjunction with the conclusion of the annual general meeting 2023, with Ingrid Hornberg Román as Auditor-in-Charge. Ingrid Hornberg Román, MBA, is an Authorised Public Accountant and Partner in KPMG.

Attendance and Board fees

Remuneration to the Board of Directors as resolved by the 2022 annual general meeting is SEK 375,000 per year to the Chair and SEK 186,000 per year to other members. The Chair of the Audit Committee is paid a fee of SEK 36,000 per year and SEK 24,000 per year is paid to other members. No fees are payable to the

members of the Remuneration Committee. No fees are payable to employees of the Swedish Government Offices or to employee representatives. Attendance at Board and Committee meetings is presented in the table below.

The tables below monitor the Board fees and meeting attendance for the highest decision-making Board in the Group for RISE AB.

Directors' fees and meeting attendance 2022

Board of Directors	Function in the Board of Directors	Attendance	Fee
Jan Wäreby	Chair	12/12	372,500
Anna-Karin Stenberg	Member	10/12	185,000
Cristina Petrescu	Member	7/8	139,500
Elena Fersman	Member	3/3	45,500
Fredrik Winberg	Member	3/3	45,500
Hanna Lagercrantz ¹⁾	Member	12/12	-
Klas Bendrik	Member	10/12	185,000
Pernilla Jonsson	Member	6/8	139,500
Mikael Hannus	Member	7/8	139,500
Sven Wird	Member	3/3	45,500
Torbjörn Holmström	Member	11/12	185,000
Johan Berglund ¹⁾	Employee Representative	12/12	-
Linda Ikatti ¹⁾	Employee Representative	7/7	-
Magnus Hillergren ¹⁾	Employee Representative	11/12	-
Ulf Nordberg ¹⁾	Employee Representative	12/12	-
Helena Björk ¹⁾	Employee Representative, Alternate	11/12	-
Marie Sjölander ¹⁾	Employee Representative, Alternate	9/12	-
Yvonne Nordin ¹⁾	Employee Representative, Alternate	4/4	-
TOTAL			1,482,500

Committee	Audit Committee, function	Attendance	Fee	Remuneration Committee, function	Attendance	Fee ²⁾
Jan Wäreby	Member	6/7	23,500	Chair	4/4	-
Anna-Karin Stenberg	Chair	7/7	35,250			
Klas Bendrik	Member	6/7	23,500			
Hanna Lagercrantz ¹⁾	Member	6/7	-			
Ulf Nordberg ¹⁾	Employee Representative	6/7	-			
Sven Wird ²⁾				Member	2/4	-
Mikael Hannus ²⁾				Member	2/4	-
Torbjörn Holmström ²⁾				Member	4/4	-
Johan Berglund ²⁾				Employee Representative	3/4	-
TOTAL			82,250			-

¹⁾ No fees are payable to employees of the Swedish Government Offices or to employee representatives.
²⁾ No fees are payable to members of the Remuneration Committee.

Internal control and risk management regarding the financial statements for the financial year 2022

The Board of Directors' responsibilities for internal control and governance are regulated in the Swedish Companies Act, the Swedish Annual Accounts Act and in the Code.

Board of Directors' report on internal control

The Board of Directors' report on internal control for 2022 in the Corporate Governance Report describes the manner in which internal control is organised at the Parent Company level and in the Group. The internal control procedures for the Board of Directors are comprised of the management system with organisation, decision-making channels, powers and responsibilities, which are reported in the governing documents for the Company and/or in the subsidiaries included in the Group. Active work with corporate governance is a part of the Board of Directors' control function. The most important parts of the control environment with regard to financial reporting are addressed in governing documents/policies and processes regarding accounting and financial reporting. These governing documents are regularly updated to ensure that all amendments to laws and accounting standards, e.g. IFRS, are applied within the Group. The Government Grant Policy not only applies to the RISE Group, but also to the associate Swerim.

Risk assessment

The RISE Group is exposed to both internal and external risks. One prerequisite to facilitate the assessment of these risks is that set goals have been determined. Risk assessment essentially entails identifying and analysing the risk of not achieving the set goals. During the year, RISE carried out a sweeping risk analysis of every part of the operations, which also included identification of activities to manage the risks. The risk analysis is updated and approved quarterly by the Audit Committee and the Board of Directors.

Control activities

Control activities consist of routines and processes ensuring that directives are performed and that set control goals are achieved in the management of material risks and ensuring data security. With the exception of control of compliance with Group policies, control activities primarily take the form of active participation in the Group companies' Boards of Directors. Group management is represented in subsidiaries and associates' through membership in these respective companies' Boards of Directors. The Parent Company's Board of Directors continuously monitors the Company's information security and financial situation and the financial reports for the Company, and consults with the auditors on complex accounting matters.

Information and communication

Good communication helps to create favourable conditions for RISE's strategic efforts and make routine operations more efficient. Everyone at RISE has a communication responsibility and the ability to communicate has a direct impact on RISE's reputation, brand and relationships. At the centre of the group's internal communication is the Employee Portal intranet where things like mandatory training courses are available. RISE's website, www.ri.se, is the hub for the Group's external communication where current company information is reported as well as examples of RISE's contribution to sustainable development in business and society. The Board, through the CEO, is responsible for the adequacy and accuracy of the external financial information. Further information on RISE AB's corporate governance is available from the website.

Follow-up

Compliance with and efficiency in internal controls is followed up continuously by both the Board of Directors and Group management. Follow-up is an integral part of day-to-day operations and is part of management's regular activities. Deficiencies in internal control are to be reported to an individual's immediate superior, with serious flaws reported to the Board of Directors. The Company's economic status and strategy with regard to its financial position is addressed at each Board meeting. The Audit Committee fulfils an important function by ensuring that control activities for material risk areas are in place.

Internal audit

The Company has firmly established governance and internal control systems, which were managed in 2022 by an externally procured party (PwC) that performs an internal audit function in the Group. With the assistance of the Audit Committee, the Board of Directors follows up on the Company's assessment of internal control, by means including contact with the Company's auditors. The Board of Directors' assessment is that the follow-up procedures described above are sufficient to ensure the effectiveness of the internal control. The Board of Directors reassesses every year whether an internal audit function is deemed necessary.

Gothenburg, 29 March 2023
The Board of Directors of RISE Research Institutes of Sweden AB

Auditor statement on Corporate Governance Report

To the general meeting of the shareholders of RISE Research Institutes of Sweden AB, Corporate Identity Number 556464-6874

Assignment and responsibilities

The Board of Directors is responsible for the Corporate Governance Report for the year 2022 and for ensuring that it has been prepared in accordance with the Annual Accounts Act.

Focus and scope of the audit

Our review has been conducted in accordance with FAR's recommendation RevR 16 The auditor's review of the corporate governance report. This means that our examination of the corporate governance statement is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinions.

Conclusion

A corporate governance statement has been prepared. Disclosures in accordance with chapter 6, section 6, paragraph 2, points 2–6 of the Annual Accounts Act and chapter 7, section 31, paragraph 2 of the same Act are consistent with the annual accounts and the consolidated accounts, and comply with the Annual Accounts Act.

Stockholm, 29 March 2023
KPMG AB

Ingrid Hornberg Román
Authorised Public Accountant

Annual Report and Consolidated Financial Statements 2022

The Annual Report comprises

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Administration Report 2022

The Board of Directors and Chief Executive Officer of RISE Research Institutes of Sweden AB (RISE AB) hereby present the annual report and consolidated financial statements for the 2022 financial year. The Company's registered office is located in Gothenburg and its Corporate Identity Number is 556464-6874.

GENERAL INFORMATION REGARDING THE OPERATIONS

RISE AB is wholly-owned by the Swedish State and its mission is to bring together the Swedish institutional sector and to strengthen its role in the innovation system through efficient ownership and work with matters related to structure, efficiency and funding. The research institutes gathered under the RISE AB umbrella shall be internationally competitive and facilitate sustainable growth in Sweden by strengthening competitiveness and innovation in the business community. The purpose of RISE AB's operations is not to generate profits for shareholders.

The RISE Group consists of the Parent Company RISE AB and several wholly owned and part-owned subsidiaries. For ownership interests in subsidiaries and subgroups, see Note 13 - Shares in group companies on page 109.

The research institutes in the RISE Group are commercial, for-profit research and innovation entities, with projects that are primarily competitively won. The State invests strategic competence funds and funds for structural development in the institutes through RISE AB. The purpose is to create value and competitiveness in both small and large companies which, in turn, contribute to growth and support the shift towards sustainable development throughout society.

The RISE Group is a strong research and innovation partner which collaborates in Sweden and internationally with academia, the business community and the public sector.

OVERVIEW OF PERFORMANCE AND FINANCIAL POSITION

Group

Sales and profit in 2022

The Group's net sales for the period January–December amounted to SEK 3,993 (3,618) million, an increase of 10.4 per cent compared to the previous year. Three out of five divisions have experienced positive growth.

Other operating revenue amounted to SEK 12 (21) million. Operating profit amounted to SEK 22m (22), giving an operating margin of 0.6 percent (0.6). A provision of SEK 17 million has been made for furlough support following a decision by the Swedish Agency for Economic and Regional Growth. During the previous year, a revenue item of SEK 15 million attributable to the payment of furlough support was reported. Shares of profit of associated companies amounted to SEK 3 (4) million.

Net financial items for the period amounted to SEK 51 (-16) million. Tax on profit for the period was SEK -18 (-13) million. The

profit for the period amounted to SEK 55 (-7) million.

Liquidity and cash flow

The Group's liquidity is good. As of the closing date, cash and bank balances together with short-term investments amounted to SEK 856 (802) million. Equity amounted to SEK 842 (840) million, with the Group's cash flow amounting to SEK 54 (41) million.

Multi-year review	2022	2021	2020	2019	2018
Net sales, SEK m	3,993	3,618	3,396	3,568	3,066
Operating profit, SEK m	22	22	-137	5	34
Profit after financial items, SEK m	73	6	-159	-4	25
Net profit for the year, SEK m	55	-7	-138	-11	11
Equity, SEK m	842	840	837	983	991
Total assets, SEK m	4,723	4,201	3,807	3,691	3,064
Number of FTEs	3,094	2,897	2,828	2,662	2,236
Equity/assets ratio, %*	17.8	20	22	27	32
Return on equity, %	6.9	-0.8	-16.5	-1.1	1.1
Liquid ratio, %	58	65	68	65	77
Operating margin, %*	0.6	0.6	-4.0	0.1	1.1
Net debt/equity ratio, %*	29.8	17.4	7.4	19.2	-53

The calculation and explanation of key performance indicators is shown under alternative key performance indicators on page 118.
* In 2018 and earlier, IFRS 16 was not applied and the comparative figures have not been restated.

Investments

The Group's total cash flow from investing activities amounted to SEK -916 million (-537), including investments in tangible and intangible fixed assets of SEK -871 million (-519) and SEK -3 million (-5) respectively. Investments in property, plant and equipment primarily relate to investments in SEEL.

Related party transactions

The Swedish State owns 100 per cent of RISE AB. In addition to business transactions, which occurred on market terms between companies in the Group, no transactions with related parties occurred.

Employment

The number of employees is 3,094 (2,897), of which 40 (39) per cent are women.

Dividend Policy

According to the Articles of Association, the purpose of the operations is neither to generate profits for nor to distribute dividends to shareholders.

Parent Company

Parent Company sales amounted to SEK 3,208 (2,553) million, and there was an operating loss of SEK -10 (-11) million. Profit after financial items amounted to SEK -5 (-1) million. Tax on profit for the year was SEK -11 (-2) million. Net profit for the year amounted to SEK -5 (1) million.

As of the closing date, cash, bank balances and short-term investments amounted to SEK 684 (524) million. Cash flow in the Parent Company amounted to SEK 160 (365) million. Equity as at the closing date was SEK 395 (401) million.

OTHER INFORMATION REGARDING THE OPERATIONS

Significant events during the year

- The Application Center for Additive Manufacturing (AM Center) in Gothenburg has been inaugurated.
- Investment with the Swedish Agency for Economic and Regional Growth to support small and medium-sized companies' business creation and competitiveness in the transition.
- Ground was broken for the national investment in bioeconomy in Örnsköldsvik.
- RISE's offering in corrosion is strengthened with the acquisition of MECM (Material Engineering & Corrosion Management).
- RISE becomes the sole owner of AstaZero, the world's first full-scale independent testing and demonstration facility for future road safety.
- Stockholm University and RISE sign a new agreement for collaboration that meets long-term challenges.
- RISE opens Cyber Test Lab Automotive, which will be Europe's most advanced test cluster in cyber security for the automotive industry.

Company definition

RISE's organisation consists of five divisions: Bioeconomy and Health, Digital Systems, Materials and Production, Built Environment, and Safety and Transport. Our multidisciplinary expertise is gathered under six Business and Innovation Areas.

Bioeconomy and Health

The Bioeconomy and Health Division brings together expertise in process technology, pharmaceutical development and design of materials and surfaces. The Division focuses on biorefinery value chains as well as products and processes for agriculture, food and nutrition, pulp, paper and packaging.

Digital Systems

The Digital Systems Division works with electronics, information and communications technology, software development, mobility, system analysis and interaction design. The Division provides solutions for all sectors, especially in areas involving digitalisation.

Materials and Production

The Materials and Production Division specialises in corrosion, chemistry, biology, medical technology and mechanics. The Division operates in product, production and material development for textiles, polymers, composites and metals.

Built Environment

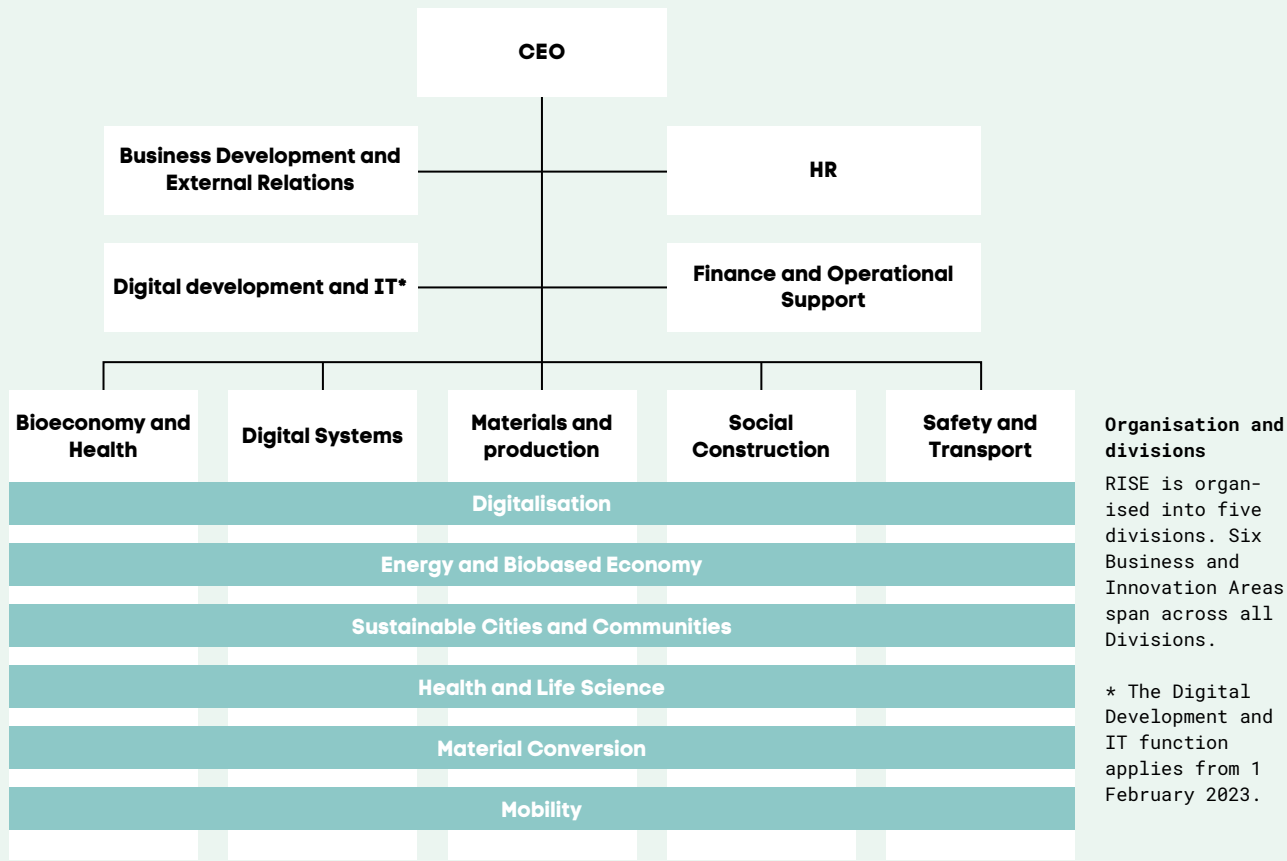
The Built Environment Division brings together expertise in energy, infrastructure, certification, urban development, architecture, construction and real estate as well as innovation management and system transformation to build a sustainable society. The Division works with materials such as wood, cement and concrete.

Safety and Transport

The Safety and Transport Division specialises in reliability, risk and safety in relation to vehicles, the maritime industry, the electrification of transport systems and fires. The Division has expertise in measurement technology, calibration, inspection and verification.

Business and Innovation Areas

In six Business and Innovation Areas, RISE gathers cross-disciplinary expertise to meet the challenges of the future: Digitalisation, Energy and Biobased Economy, Sustainable Cities and Communities, Health and Life Science, Material Transformation, and Mobility. Their aim is to drive strategic development of innovative and interdisciplinary solutions.



External environment analysis

During the process of developing RISE's growth strategy 2022–2026, a major analysis was carried out in which the needs and expectations of the outside world could be summarized in five overarching themes.

The theme **Beyond the silos** is about new interdisciplinary models and organizational forms for governing society. **A complex communication landscape** describes changes in relation to working life and the need for skills transition. **Technology in the service** of people shows how data can be a critical resource for driving transition and improving society. The question of whether we are in **a post-global world** with an increased focus on self-sufficiency, increasing protectionism and economic effort came to the fore as a result of Covid-19. In a race to the top, **the ambition in climate work** is increasing with a focus on green recovery, sustainable finances and sustainable investments.

The external environment analysis 2022 is an in-depth study of previously developed areas. A number of trends have been identified that are considered to have great importance and impact on RISE's operations.

The security situation has worsened in the past year, in particular as a result of Russia's invasion of Ukraine. The cyber threat knows no borders and influence attacks are becoming more common. Countries are shutting down and the focus is on securing value chains and ensuring of their own society functions.

Central to climate development is the energy issue, with an increased need for energy at the same time as carbon dioxide emissions must be reduced. The ongoing electrification places demands on the implementation of new technologies, system

innovations and the development of regulations and permit processes. The transition also brings to the fore the use of resources such as water, forests, air and minerals.

We also see how the availability of critical raw materials and components is a major factor in economic development. Rising inflation, such as higher energy prices, may postpone investments and slow down the pace of transition towards more sustainable products and processes.

The demographic development with refugee flows due to crises and an aging population places demands on both education systems and health and social care. With a growing population, the need for access to sustainably produced food also increases.

When value chains and processes develop and change in one place, needs and challenges are created in others - transition effects occur. The green transition goes hand in hand with the digital transition. Introducing new technology requires, among other things, verification environments, standardization, new certification processes and business models, and skills development.

It is difficult to make sense of how the world will develop. However, it is clear that society's challenges are complex and no one can solve them alone. On the other hand, challenges also include opportunities.

Future prospects

RISE's mission, to strengthen companies' competitiveness and promote sustainable development in the public sector, means that we always work with customer benefit and societal benefit as our impetus.

As new technologies emerge and society faces new challenges, expertise and offerings that are currently important for business and the public sector can quickly become obsolete. With this in mind, we are continuously reassessing our investments and attempting to anticipate the future needs of business and industry. We do this by being flexible and continuously redistributing resources to achieve maximum long-term benefit.

We see a strong underlying demand for our services, and the effects of the pandemic that have impacted RISE's business over the past two years will be negligible going forward. We are continuing to monitor the unstable geopolitical situation and its potential effects on RISE, while constantly adapting to changing needs and conditions in order to remain relevant to our customers and clients.

Investments in strategic skills development

The grant received by RISE from the Swedish State for the full year 2022 amounted to SEK 759 (759) million, in accordance with Budget Bill 2020/21:60, Expenditure Area 24. The Board of RISE allocated part of the grant to RISE Swerim AB. In addition to this grant, special funding was allocated in accordance with the aforementioned bill and the Government's Research and Innovation Bill 2020/21:60 in three areas: 1) Climate (SEK 6 million), 2) Digitalisation (SEK 19 million) and 3) Societal transformation (SEK 63 million). In addition, SEK 150 million was allocated for development and modernisation of testbeds and demonstration environments for biorefineries.

The purpose of allocating these strategic competence funds to the RISE Group is to develop strategic competence and to continue to be an attractive collaboration partner for industry and the public sector in the areas of research and innovation. By meeting the business community's current and future needs and challenges, the institute will actively contribute to strengthening the Swedish business community's international competitiveness and innovation, promote public sector innovation and work for sustainable development in business and society. The purpose of the structural development support is to stimulate continued structural measures and the integration of activities to promote a cohesive and efficient institutional sector.

Equality and diversity

RISE AB works in accordance with the state's ownership policy for gender equality and diversity. In the work on gender equality and diversity issues, great emphasis is placed on responding to the Government's clear ambitions. Of the Group's total number of FTEs, 40 (39) per cent are women, showing that further efforts must be made to achieve a more equal distribution between men and women.

RISE AB's Board of Directors is comprised of 36 (36) per cent women. For more information on the Group's work with equality and diversity, please refer to the Sustainability Report for the Group.

Sustainable development

RISE strives to meet the State's ambitions for structured sustainability work that can be reported and evaluated. The overarching goal of RISE is to promote sustainable growth by strengthening the competitiveness and innovation of the Swedish business community, and to promote public sector innovation and the ability to contribute to solutions to societal challenges.

RISE's sustainability work comprises two strategic areas, 'Our Offer is Sustainable' and 'A Sustainable RISE'. The sustainable offer means that RISE will engage in sustainable business with our customers and partners and continue working to establish the organisation as an important operator in society as well as trade and industry. A Sustainable RISE focuses on our ambition to be an attractive workplace where employees thrive. At the same time, efforts will continue to incorporate sustainability work into our operations and show that sustainability is a success factor for a modern research institute. In accordance with the Annual Accounts Act, chapter 6, section 11, RISE has chosen to prepare the statutory sustainability statement separately from the annual report. The scope of the sustainability statement, which also relates to RISE's Sustainability Report, is stated on page 25.

Work and composition of the Board of Directors during the year

For a description of the Board of Directors and information regarding the work of the Board, refer to RISE AB's Corporate Governance Report for 2022.

RISE AB follows the State guidelines for remuneration of senior executives. For more information regarding remuneration, refer to Note 11 and RISE AB's Corporate Governance Report for 2022.

Proposed appropriation of profits

The Board of Directors proposes that the available funds of SEK 238,955,851 be appropriated as follows:

Profit brought forward from the previous year:	SEK 237,519,738
Transfer of other reserves:	SEK 6,959,770
Net profit/loss for the year:	SEK -5,523,657
Retained earnings at year end will be carried forward:	SEK 238,955,851

Equity attributable to owners of the Parent Company in the Group amounts to SEK 815 (750) million.

For further information regarding the Company's profit/loss and financial position, refer to the following statements of profit or loss and statements of financial position, with associated comments on the financial statements. All amounts have been rounded off to the nearest thousand, unless stated otherwise. Information in parentheses refers to the previous year.

RISKS AND RISK MANAGEMENT

Effective, fit-for-purpose risk management is a prerequisite for successful operations with acceptable risk exposure. RISE has a structured and group-wide approach to systematically manage risks and opportunities. A risk-based approach aims to increase risk awareness and understanding throughout the group, and to help clarify and capture development opportunities. Active risk management in line with the agreed risk appetite ensures the quality of the Group's strategic decision-making.

Many parts of the Group's operations are directly or indirectly affected by circumstances beyond the Company's control, and to ensure that RISE's business is conducted with adequate governance and internal control, clear procedures must be in place which continuously:

- Identify and categorise risks and opportunities
- Assess and analyse risks and opportunities
- Decide on measures that eliminate, distribute, limit or accept risks
- Evaluate the effectiveness of the measures through internal control plans

The risk areas that RISE has identified are outlined below. All risks are analysed based on our ability to manage the risk, as well as on the main activities that we implement to manage the risk. In combination with the analysis, all risks are assessed based on their probability of occurring and their potential consequences. Below is a summary of the analysis.

Risk	Analysis	Management
Strategic risks	Strategic risks are comprised of external surrounding environment factors that cannot be controlled, but the negative impact of which could be limited.	
Strategic research choices	In order to be an attractive innovation partner, it is crucial that RISE has a relevant platform of competencies, adapted to both the market's current and future needs.	We continuously conduct market analysis linked to RISE's areas of operations with regard to current and future needs, which are based on active customer dialogue and systematic external environment analysis.
Individual customers and industries	Specific parts of RISE's operations have extensive exposure to individual large customers or individual industries, which entails both risks and opportunities.	In 2022, we worked actively on ensuring a positive and continuous dialogue with key customers and several customer relationships have developed into long-term partnerships. RISE's business development organization works continuously to analyse, systematize, strengthen and support our divisions to develop our customer relationships in a businesslike manner.

Risk	Analysis	Management
Operational risks	Operational risks mainly relate to the risk of financial and credibility consequences resulting from deficiencies in internal procedures and systems and operations-related risks in research and development operations.	
Project risks	Customers are aware that RISE provides research and development services and that such activities always include a certain level of uncertainty and a risk that intended objectives are not always achieved.	We are constantly developing our organisation and strengthening our leadership, with clear ownership of our business and project deliveries being critical elements. Our project model describes how we manage our projects, including clear principles for allocating roles to project stakeholders. This work continued in 2022, and we now have well-established systematic processes for improving our internal governance, follow-up and control, thus minimising risks.
Skills supply	As RISE's sales increase, we need to recruit more competent employees to enable our continued growth. This is a challenge, and the Swedish labour market is characterised by both high demand and high competition for the same expertise.	In 2022, we have continued to work on highlighting and strengthening RISE's employer brand, which has had a positive impact. We continued to use an internal recruitment function to ensure efficiency and quality in the recruitment process, which has also contributed to developing RISE's attractiveness as an employer.
Brand risk	The creation of a new institute, and thus the creation of new processes, policies and guidelines, carries the risk of a lack of awareness and thus of compliance with policies and guidelines.	In 2022, we have continued the work of building a strong brand. We have also made great strides in establishing a complete landscape of policies and guidelines to govern our operations. A group-wide management system is in place.
Information security	Like any other company, RISE processes a large amount of data, most of which is processed digitally.	Today, the Group has systematic, well-established IT security processes in place aimed at impeding and preventing attacks on the IT infrastructure and minimising the impact of potential attacks. In 2022, we further developed our monitoring and authentication procedures to support a modern, mobile work process while maintaining cyber security.
Protective security	The updated security protection legislation has increased the scope of responsibility for Sweden's security protection linked to RISE's activities.	The processes and responsibility for ensuring secure handling of RISE's confidential information and material have been significantly strengthened through the development of our central security organisation, systematisation of processes and methods, and staff training. We also have a centralised export control function in place in the area of protective security.
Sustainability risks	Within the scope of RISE's operations, a large amount of testing, demo and lab activities are conducted, where proper handling of various environmental aspects is critical to avoid impermissible environmental impact. Risks relating to social conditions and human rights also exist in RISE, of course, but have been assessed as smaller in scope than the environmental risks.	Specific environmental impact and consequence analyses are continuously performed in the implementation of new facilities or changes to, and implementation of, new processes. In addition, internal analyses of environmental risks in the operations are used frequently. The handling of some equipment and/or chemicals requires licences or permits, which are managed in a systematic and appropriate manner. Risks relating to social conditions and human rights are managed mainly through setting demands in procurement processes. In some parts of RISE, there is potentially a greater risk of corruption. This can refer to, for example, areas in which RISE approves products, systems or services. The Group has an established Code of Conduct which, together with our Ethics Policy, provides guidelines on how we handle various issues, such as corruption.
Work environment	RISE has broad and diversified operations, which means that we have risks that include every aspect of the working environment (physical, mental, organisational and social).	We conduct systematic health and safety management, which means that we actively work to map, identify, risk assess, resolve, plan and follow up on risks in our operations. In 2022, the focus has continued to be on the work environment when working from home and managing return to the office. Also in 2022, employees have had the right to purchase certain office equipment as a salary benefit.

Risk	Analysis	Management
Legal risks	Legal risks include both ethical choices concerning our employees and stakeholders and good knowledge of the rules and laws that apply to research and development activities.	
Patent disputes	Risks related to patents entail, among other things, a risk of infringing on patents or third-party IP in cases where RISE has failed to identify existing patents or new patents published during the course of a project, which could lead to a risk of legal sanctions.	The patent situation is continuously monitored in the areas where we conduct ongoing research, as well as in ongoing projects. In projects with research in areas with a high patent focus, the projects actively work with alternative patent plans and strategies.
Impartiality	Risks related to RISE's impartiality are primarily to do with customers that use RISE both as a research partner and a certification partner.	RISE strives for a high degree of information sharing to avoid situations in which impartiality could be at risk. In order to increase knowledge of RISE's role as an impartial partner, a leadership and culture of high moral standards regarding impartiality is maintained through training and continuous internal dialogue.
Financial risks	Financial risks primarily entail exposure to risks regarding funding opportunities and cash flow.	
Establishment of new business	In order to be a leading-edge research institute, a certain degree of risk-taking is required with regard to future needs in the establishment of new business.	We use sensitivity analyses to ensure reasonable risk-taking in the establishment of major new operations. A reasonable balance in our overall operations is ensured by weighing the business risks taken against the sustainability of our investments in new areas. Larger investments are preferably carried out with a customer guarantee, which significantly reduces the risk exposure.
Economic changes/geopolitical situation	Historically, the Group as a whole has not been affected by economic fluctuations to any great extent. However, we cannot rule out that this may be the case in the future, as the current economic situation may have other effects on the business since it is driven by mechanisms we have not experienced for a long time.	The uncertain geopolitical situation in combination with a very uncertain economic situation emphasizes the importance of being able to quickly adjust operations, both in terms of our mission and activities. In 2022, an updated analysis was conducted with regard to the changed external situation. Moreover, we are constantly monitoring the situation with regard to Russia's invasion of Ukraine and its consequences for the Group's operations, not least from a financial perspective. Special focus on both interest rate and currency exposure. Measures are continuously being taken to minimise risk exposure.

Other financial risks are presented in Note 3

Consolidated Financial Statements

Consolidated statement of profit or loss

Amounts in kSEK	Note	2022	2021
Net sales	5, 6	3,993,498	3,617,553
Other operating revenue	8	12,091	21,179
Other external expenses	10	-1,042,361	-877,958
Personnel costs	11	-2,593,357	-2,423,084
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	16, 17, 18	-346,392	-314,997
Other operating expenses	9	-4,485	-4,391
Share of profit of associates	19	2,827	3,566
Operating profit	5	21,821	21,868
Financial revenue	12, 13, 18	70,246	7,726
Finance expenses	12, 13, 18	-19,396	-22,944
Profit before tax		72,671	6,650
Income tax	14	-18,065	-13,211
Net profit for the year		54,606	-6,561
Owners of the Parent Company		39,220	-13,710
Non-controlling interests		15,386	7,149
Earnings per share*			
Earnings per share (SEK)	15	108	-38
Average number of outstanding shares		364,000	364,000

* Earnings per share, calculated as profit attributable to owners of the Parent Company during the year expressed as SEK per share).

Consolidated statement of comprehensive income

Amounts in kSEK	Note	2022	2021
Net profit for the year		54,606	-6,561
Other comprehensive income			
<i>Items that have been or that may be reclassified subsequently to profit or loss</i>			
Exchange differences on translating foreign operations		5,808	5,422
<i>Items that will not be reclassified subsequently to profit or loss</i>			
Remeasurement of net retirement benefit obligation	30	6,665	-866
Deferred tax effect of net retirement benefit obligations	14	-1,376	178
Other comprehensive income for the year		11,097	4,734
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		65,703	-1,827
TOTAL COMPREHENSIVE INCOME FOR THE YEAR ATTRIBUTABLE TO:			
Owners of the Parent Company		49,886	-9,840
Non-controlling interests		15,817	8,013

Consolidated statement of financial position

Amounts in kSEK	Note	31 Dec. 2022	31 Dec. 2021
ASSETS			
Non-current assets			
Intangible assets	16		
Capitalised development expenses		3,208	2,125
Patents and licences		10,282	10,814
Goodwill		21,836	18,241
Total intangible assets		35,326	31,180
Property, plant and equipment	17		
Land and buildings		605,388	589,044
Leasehold improvements		50,488	59,039
Equipment, tools, fixtures and fittings		493,822	344,562
Non-current assets under construction		556,658	297,029
Total property, plant and equipment		1,706,356	1,289,674
Usufruct assets	18	588,331	591,218
Financial assets	3		
Participations in associates	19	34,667	32,156
Other securities held as non-current assets	20, 33	30,373	56,043
Other long-term receivables	21, 33	26,138	32,348
Total financial assets		91,178	120,547
Deferred tax assets	14	14,052	25,711
Total non-current assets		2,435,243	2,058,330
Current assets			
Inventories	22	15,371	10,508
Accrued, uninvoiced revenue	23	617,580	590,407
Trade receivables	24, 33	549,139	553,655
Tax assets		100,020	101,702
Other receivables	25, 33	84,476	46,123
Prepaid expenses and accrued revenue	26, 33	64,718	38,277
Cash and cash equivalents	27, 33	856,459	802,326
Total current assets		2,287,763	2,142,998
TOTAL ASSETS		4,723,006	4,201,328

Consolidated statement of financial position, continued

Amounts in kSEK	Note	31 Dec. 2022	31 Dec. 2021
EQUITY			
Equity attributable to owners of the Parent Company			
Share capital		36,400	36,400
Other reserves		47,999	54,485
Translation reserve		3,097	-2,280
Retained earnings including total net profit for the year		727,445	661,103
Total equity attributable to owners of the Parent Company		814,941	749,708
Non-controlling interests		27,079	90,129
TOTAL EQUITY	28	842,020	839,837
LIABILITIES			
Non-current liabilities			
	3		
Liabilities to credit institutions	29, 33	445,086	328,892
Non-current lease liabilities	18	438,516	439,256
Other liabilities	31, 33	72,609	108,779
Deferred tax liabilities	14	40,363	43,319
Retirement benefit obligations	30	44,050	46,279
Other provisions		8,603	11,206
Total non-current liabilities		1,049,227	977,731
Current liabilities			
	3		
Liabilities to credit institutions	29, 33	33,222	27,667
Current lease liabilities	18	149,521	161,474
Invoiced unaccrued revenue		1,605,172	1,349,815
Trade payables	33	332,446	194,491
Current tax liabilities		13,514	4,168
Other liabilities	31, 33	306,243	300,248
Accrued expenses and deferred revenue	32	391,641	345,897
Total current liabilities		2,831,759	2,383,760
TOTAL EQUITY AND LIABILITIES		4,723,006	4,201,328

Consolidated statement of equity

Attributable to the Parent Company's shareholders								
Amounts in kSEK	Note	Share capital	Other reserves	Translation reserve	Retained earnings including net profit for the year	Total	Non-controlling interests	Total equity
OPENING BALANCE AT 1 JANUARY 2021	28	36,400	57,198	-6,838	672,788	759,548	77,118	836,666
Comprehensive income for the year								
Net profit for the year		-	-	-	-13,710	-13,710	7,149	-6,561
Other comprehensive income for the year		-	-	4,558	-688	3,870	864	4,734
Comprehensive income for the year		-	-	4,558	-14,398	-9,840	8,013	-1,827
Transactions with owners of the Group								
Paid-in capital from non-controlling interests		-	-	-	-	-	4,998	4,998
Redistribution*		-	-2,713	-	2,713	-		
Total transactions with owners of the Group		-	-2,713	-	2,713	-	4,998	4,998
CLOSING BALANCE PER 31 DECEMBER 2021	28	36,400	54,485	-2,280	661,103	749,708	90,129	839,837
OPENING BALANCE PER 1 JANUARY 2022	28	36,400	54,485	-2,280	661,103	749,708	90,129	839,837
Comprehensive income for the year								
Net profit for the year		-	-	-	39,220	39,220	15,386	54,606
Other comprehensive income for the year		-	-	5,377	5,289	10,666	431	11,097
Comprehensive income for the year		-	-	5,377	44,509	49,886	15,817	65,703
Transactions with owners of the Group								
Paid-in capital from non-controlling interests		-	-	-	-	-	-	-
Acquisition minority stake					15,347	15,347	-78,867	-63,520
Redistribution*		-	-6,486	-	6,486	-	-	-
Total transactions with owners of the Group		-	-6,486	-	21,833	15,347	-78,867	-63,520
CLOSING BALANCE PER 31 DECEMBER 2022	28	36,400	47,999	3,097	727,445	814,941	27,079	842,020

* Part of the capital gain from the sale of associated companies is dedicated to research in Digital Systems. These funds are recognised as other reserves and have been worked off during the year. For further information see Note 28.

Consolidated statement of cash flows

Amounts in kSEK	Note	2022	2021
Cash flows from operating activities			
Operating profit before financial items		21,821	21,868
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	16, 17, 18	346,392	314,997
Other non-cash items	37	5,415	-29,600
Interest received	12	46,603	7,726
Interest paid	12	-19,084	-21,472
Income taxes paid		-22,289	-16,068
Cash flows from operating activities before changes in working capital		378,858	277,451
Cash flows from changes in working capital			
Increase/decrease in operating receivables		-73,972	-138,692
Increase/decrease in operating liabilities		227,008	213,459
Total changes in working capital		153,036	74,767
Cash flows from operating activities		531,894	352,218
Cash flows from investing activities			
Payments for intangible assets	16	-3,261	-4,962
Payments for property, plant and equipment	17	-870,952	-519,033
Acquisitions of subsidiaries	7	-69,790	-24,917
Sales of associates	19	1,731	-
Increase/decrease in other financial assets		25,939	11,890
Cash flows from investing activities		-916,333	-537,022
Cash flow from financing activities	38		
Loans raised during the year	29	150,000	179,700
Repayment of loans during the year	29	-27,667	-27,667
Repayment of liability from acquisitions		-35,868	-27,543
Payment from non-controlling interests		-	4,950
Investment grants		530,000	253,000
Repayment of lease liabilities		-177,893	-156,497
Cash flow from financing activities		438,572	225,943
CASH FLOW FOR THE YEAR		54,133	41,139
Cash and cash equivalents at the beginning of the year	27	802,326	761,187
Cash and cash equivalents at the end of the year	27	856,459	802,326

Notes

Note 1 General information

RISE Research Institutes of Sweden AB's mission is to bring together the Swedish institute sector and to strengthen its role in the innovation system through efficient ownership and work with matters related to structure, efficiency and funding. The research institutes gathered under the RISE AB umbrella shall be internationally competitive and facilitate sustainable growth in Sweden by strengthening the competitiveness and renewal of the business sector.

RISE AB is a company of the designation 'aktiebolag' (roughly equivalent to 'limited company'), registered in Sweden and with its head office in the City of Gothenburg. The visiting address of the head office is Sven Hultins plats 5, Gothenburg, Sweden. The Company is a wholly owned State company.

This annual report and associated consolidated financial statements were approved for publication by the Board of Directors and CEO on 30 March 2023. The annual report will be presented for adoption at the annual general meeting of shareholders on 25 April.

Note 2 Summary of important accounting policies

2.1 Basis of preparation

The consolidated accounts of the RISE Research Institutes of Sweden AB-Group have been prepared in accordance with International Financial Reporting Standards Board (IFRS) issued by the International Accounting Standards Board (IASB) as adopted by the EU. The Swedish Financial Reporting Board's recommendation RFR 1 Supplementary Accounting Rules for Groups has also been applied.

Assets and liabilities have been recognised at their respective costs, with the exception of certain financial instruments measured at fair value through profit or loss. The most important accounting principles applied in the preparation of these consolidated financial statements are described below. These principles have been applied consistently for all years presented, unless stated otherwise. Non-current assets and non-current liabilities are comprised, in all material respects, of the amounts expected to be recovered or paid later than twelve months after the closing date. Current assets and current liabilities are comprised, in all material respects, of the amounts expected to be recovered or paid within twelve months after the closing date.

The preparation of financial statements in accordance with IFRS requires the application of a number of important estimations for accounting purposes. Furthermore, Group management is required to make certain assessments when applying the Group's accounting principles. The areas that involve a high degree of assessment, which are complex, or in which estimations and assumptions are of material importance for the consolidated financial statements, are described in Note 4.

The Parent Company's financial statements have been prepared in accordance with the Swedish Financial Reporting Board's recommendation RFR 2 Accounting for Legal Entities, and the Swedish Annual Accounts Act. Those cases in which the Parent Company applies accounting principles deviating from those of the Group are presented under the Parent Company's Note 1 – Accounting Principles.

All amounts have been rounded off to the nearest thousand, unless stated otherwise. Information in parentheses refers to the previous year.

Changes in accounting principles and disclosures

The Group applies the amendments to IFRS 3, IFRS 16, and IAS 37 as of 1 January 2022. The amendments have not had any material impact on the Group's financial reports.

New and amended IFRS with future application are not expected to have any material effect on the Company's financial reporting.

2.2 Consolidated financial statements

2.2.1 Subsidiaries

Subsidiaries are all companies over which the Group exercises a controlling influence. The Group is considered to exercise control over a company when it is exposed to or is entitled to variable returns on the basis of its participation in the Company and is able to impact this return through its influence in the Company. Subsidiaries are included in the consolidated financial statements from the date on which control is transferred to the Group. They are excluded from the financial statements from the date on which control is relinquished.

The purchase method is applied in reporting the Group's acquisitions of subsidiaries. The purchase price for the acquisition of a subsidiary is comprised of the fair value of the transferred assets, issued equity instruments and liabilities assumed or arising as per the date of transfer. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are initially measured at fair value at the acquisition date, irrespective of the extent of the extent of any non-controlling interest. The amount by which the purchase price and the fair value of the Group's share Identifiable acquired assets, assumed liabilities and contingent liabilities is recognised as goodwill. If the purchase price is less than the fair value of the acquired subsidiary's assets, liabilities and contingent liabilities, the difference is recognised directly in the statement of profit or loss.

Intra-Group transactions, items in the statement of financial position and unrealised gains and losses on transactions between Group companies are eliminated. The accounting principles of subsidiaries have been changed where necessary to ensure consistency with the principles adopted by the Group.

All acquisition-related transaction costs are recognised as expenses. These costs are recognised in the consolidated statement of profit or loss in the item Other external expenses. Costs recognised in this item are transaction costs, any remeasurement of supplementary purchase consideration and remeasurement to fair value of previously acquired participations from sequential acquisitions.

2.2.2. Changes in ownership interest in a subsidiary without any change of controlling interests

Transactions with non-controlling interests that do not result in a loss of control are recognised as equity-transactions – that is, as transactions with the owners in their role as owners. For acquisitions from holders without control, the difference between fair value of the consideration paid and the proportionate acquired share of the carrying amount of the identifiable net assets in the acquired business is recognised as equity. Gains or losses on sales to non-controlling interests are also recognised in equity.

2.2.3 Sales of subsidiaries

When the Group no longer exercises control, any remaining participation is recognised at fair value from the date on which control is relinquished. Changes in the carrying amount are recognised in

Note 2, continued

the statement of profit or loss. The fair value is applied as the initial carrying amount and forms the foundation for the continued recognition of the remaining participation as an associate, joint venture or financial asset. All amounts referring to the divested entity which were previously recognised in other comprehensive income are recognised as though the Group had directly divested the associated assets or liabilities. This may result in amounts previously recognised as other comprehensive income being reclassified as profit.

2.2.4 Associates

Associates are companies in which the Group has a significant interest, but not control, usually associated with a shareholding of between 20 and 50 per cent of the voting rights. Holdings in associates are recognised according to the equity method. The application of the equity method implies that the investment is initially measured at cost, with the carrying amount subsequently increasing or decreasing pursuant to the Group's share of the associate's profit or loss after the acquisition date. Dividends also impact the participation in the associate. The Group's carrying amount of holdings in associates includes goodwill identified on acquisition.

If the participation in an associate decreases but the investment continues to be classified as an associate, only a proportional amount of the profit or loss which was previously recognised other comprehensive income is reclassified as profit.

The Group's share of profit arising after the acquisition is recognised in the statement of profit or loss, while its share of changes in other comprehensive income after the acquisition is recognised in other comprehensive income, with a corresponding change in the carrying amount of the participation. When the Group's share of losses in an associate equals or exceeds its participation in the associate, including any unsecured receivables, the Group does not recognise any further losses unless it has assumed legal or constructive obligations or made payments on behalf of the associate.

The Group assesses, at the end of each reporting period, whether there is objective evidence of an impairment requirement for an investment in an associate. If this proves to be the case, the Group calculates the amount of impairment required as the difference between the associate's recoverable amount and its carrying amount, and recognises this amount in the item "Share of profit of associates" in the statement of profit or loss.

2.3 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The RISE Group has five operating segments. These five segments are Bioeconomy and Health, Digital Systems, Materials and Production, Built Environment, and Safety and Transport. Further information is provided in the table in Note 5.

2.4 Translation of foreign currencies

2.4.1 Functional currency and presentation currency

Items in the individual financial statements for the various entities within the Group are measured in the currency of the primary economic environment in which the respective entity operates (functional currency). The consolidated financial statements are presented in Swedish krona (SEK), which is the presentation currency of the Group.

2.4.2 Transactions and items in the statement of financial position

Transactions in foreign currencies are translated to the functional currency using the exchange rates prevailing at the transaction dates or the date when the items are remeasured. Foreign exchange gains and losses arising from the settlement of such transactions, and from the translation of monetary assets and liabilities denominated in foreign currencies at the closing rate, are recognised in the statement of profit or loss.

Foreign exchange gains and losses attributable to loans and cash

and cash equivalents are recognised in the statement of profit or loss as financial revenue or expenses. All other foreign exchange gains and losses are recognized in the items other operating expenses and other operating income in the profit and loss statement.

2.4.3 Group companies

Profit and loss and financial position of all Group companies (none of which have a hyperinflationary currency as their functional currency) that have a functional currency other than the reporting currency is translated into the consolidated reporting currency as follows:

- (A) assets and liabilities in these entities' statements of financial position are translated at the closing rate,
- (B) income and expenses in these entities' statements of profit or loss are translated at the average exchange rate (if this average rate constitutes a reasonable approximation of the accumulative effect of the applicable rates on the transaction date, otherwise revenues and expenses will be translated at the rate applicable on the transaction date), and
- (C) all translation differences are recognised as other comprehensive income.

Goodwill and adjustments to fair value arising on the acquisition of a foreign entity are treated as assets and liabilities attributable to this entity, and are translated at the closing rate. Translation differences are recognised in other comprehensive income.

2.5 Intangible assets

2.5.1 Research and development

Expenditure incurred during the research phase is charged to expenses as incurred. Development costs are capitalised when a new product or a new product application has reached the stage in its development that, when it commences an industrialisation process - at which point it is considered to have reached the equivalent point as being launched as an independent product or an integrated component of an existing product - the expenditure is recognised as an asset. All such expenditure has previously been charged to expenses on an ongoing basis. Research costs previously recognised in expenses will not be recognised as assets during a subsequent period. Amortisation according to plan commences in conjunction with the commercialisation of the respective product. The cost for internally-generated intangible assets includes all expenditure directly-attributable to the asset. For the most part this refers to salaries and other costs related to employment for personnel directly involved in the work to develop the product or application, as well as expenditure for external services. Amortization is made on a straight-line basis over 3–8 years based on individual assessments of the asset.

2.5.2 Patents

Patents have a determinable useful life and are recognised at cost less accumulated amortisation. Amortisation is undertaken on a straight-line basis to distribute the cost of the patent over its estimated useful life of 10 years.

2.5.3 Goodwill

Goodwill arises on acquisitions of subsidiaries and is comprised of the amount by which the purchase consideration, any non-controlling interest and the fair value of any previous participation in equity as per the acquisition date exceeds the fair value of the acquired entity's identifiable net assets. If the amount is less than the fair value of the acquired subsidiary's net assets, in the event of a bargain acquisition, the difference is recognised directly in the statement of profit or loss.

Goodwill acquired in a business combination is allocated to cash-generating units or groups of cash-generating units expected to benefit from synergies arising from the acquisition, for the purpose of

impairment testing. Each unit or group of units to which goodwill is allocated represents the lowest level in the Group at which the goodwill in question is monitored according to internal governance procedures. Goodwill is monitored at the operating segment level.

Goodwill is tested annually for evidence of an impairment requirement, or more often if events or changes in circumstances indicate the possibility of a decrease in value. The carrying amount of a cash-generating unit to which goodwill is allocated is compared with the recoverable amount, which is the higher of the value in use and fair value less selling expenses. In the event that an impairment requirement is identified, the impairment is recognised immediately as an expense and is not reversed.

2.6 Property, plant and equipment

Land and buildings are comprised mainly of testing facilities and offices. Property, plant and equipment are recognised at cost less depreciation. The cost includes expenditure that is directly attributable to the acquisition of the asset.

Additional expenditure is either added to the carrying amount of the asset or recognised as a separate asset, depending on whichever is the most suitable, although only when the future economic benefits associated with the asset will accrue to the Group and the asset's cost can be reliably measured. The carrying amount of any replaced component of an asset is removed from the statement of financial position. All other forms of repair and maintenance are recognised in the statement of profit or loss as expenses during the period in which they arise.

Land is not depreciated. Depreciation of other assets, to allocate their cost down to the estimated residual value over their estimated useful life, is undertaken on a straight-line basis according to the following:

Buildings	25–50 years
Computers	3 years
Equipment, tools, fixtures and fittings	5–20 years
Leasehold expenditure	5 years
Cost of leasehold improvements	20 years
Land development	20–35 years

A gain or loss on the sale of an item, comprised of the difference between the sale price and the carrying amount of the asset, is recognised in other operating expenses and other operating income in the profit and loss statement.

2.7 Leasing

The Group's leases mainly consist of rights of use for premises, vehicles and office equipment. When a contract is concluded, it is assessed whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract transfers the right to determine for a certain period the use of an identified asset in exchange for compensation.

The Group recognises a usufruct asset and a lease liability on the start date of the lease. The usufruct asset is initially valued at cost, consisting of the original value of the lease liability plus lease payments paid on or before the start date plus any initial direct expenses. The usufruct asset is then depreciated on a straight-line basis from the start date to the earlier of the end of the asset's useful life or the end of the lease term.

The lease liability is initially valued at the present value of future lease payments that have not been paid on the start date. Lease payments are primarily discounted at the implicit interest rate of the lease. If this interest rate cannot easily be determined, the Group's marginal borrowing rate is used.

The lease liability is valued at amortised cost using the effective interest method. The lease liability is revalued if future lease payments change as a result, inter alia, of changes in an index or a price. When the lease liability is revalued in this way, a corresponding adjustment is made to the carrying amount of the usufruct asset.

The Group has chosen not to recognise usufruct assets and lease liabilities for leases that have a lease term of 12 months or less or underlying assets of low value. Lease payments for these leases are recognised as an expense on a straight-line basis over the lease period.

The Group has sublease agreements that are directly linked to a usufruct asset. The part classified as a leasing contract is recognised as a reduction in the relevant usufruct asset and non-current and current receivable. Payments are distributed between interest income and amortisation of the receivable. Income from the other part of the sublease agreement is recognised as other income evenly distributed over the lease period.

2.8 Impairment of non-financial assets

Intangible assets with an indefinite useful life or intangible assets that are not ready for use, are not amortised but are, instead, tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment is recognized as the amount by which the asset's carrying amount exceeds its recoverable amount.

The recoverable amount is the higher of the asset's fair value less selling expenses and its value in use. When assessing impairment requirements, the assets are grouped at the lowest level at which it is possible to identify independent cash flows (cash-generating units). Assets (other than goodwill) that have previously been impaired are tested on each closing date for possible reversal.

The useful lives and residual values of property, plant and equipment are reviewed, and adjusted if appropriate, at each closing date. If the carrying amount of an asset is greater than its estimated recoverable amount, the value of the asset is immediately written down to the recoverable amount.

The impairment amount is initially allocated to goodwill, after which a proportional impairment is undertaken on other assets included in the cash-generating unit.

2.9 Financial instruments

2.9.1 Classification

The Group classifies its financial assets and liabilities into the following categories: financial assets measured at fair value through profit or loss, financial assets measured at fair value through other comprehensive income, financial assets measured at amortised cost and other financial liabilities. The classification depends on the purpose for which the financial asset or liability was acquired and, for financial assets, on what the agreed cash flow consists of.

Financial assets at fair value through profit or loss are financial instruments held for trade and derivatives. A financial asset is classified as belonging to this category when it is acquired with the primary objective to be sold within the short-term. Financial assets measured at fair value through profit or loss consist of financial investments such as fixed income funds and index bonds, which are reported in the statement of financial position, among other long-term securities holdings, and derivatives included in the item other receivables.

Financial assets measured at fair value through comprehensive income are equity instruments that are not held for trading and where the Group has made an irrevocable choice to report subsequent changes in fair value as other comprehensive income. They are primarily comprised of shareholdings in unlisted companies and are included in non-current assets if Group management does not intend to dispose of the asset within 12 months after the end of the reporting period.

Financial assets in the above categories are classified as current assets if they are expected to be settled within twelve months; if not, the assets are classified as non-current assets.

2.9.2 Financial assets at amortised cost

Financial assets at amortised cost include financial assets that are not derivatives, that have fixed or determinable payments and that are held

in a business model aimed at collecting contractual cash flows. These items are included in current assets, except for those with maturities greater than 12 months after the closing date, which are classified as fixed assets. Financial assets carried at amortised cost consist of other long-term receivables, trade receivables, accrued uninvoiced income, other receivables, and accrued income in the statement of financial position. Cash and cash equivalents are also included in this category.

The financial assets in this category are recognised, in subsequent periods, at amortised cost, with the application of the effective interest method, less any provision for reductions in value. Trade receivables maturing less than 12 months after the closing date are recognised at nominal value, which corresponds to fair value.

Interest income, exchange rate gains and losses and impairment losses are recognised in profit or loss. Gains or losses arising from cancellation are reported in profit or loss.

2.9.3 Cash and cash equivalents

Cash and cash equivalents include cash, bank balances and short-term investments maturing within three months of the acquisition date.

2.9.4 Trade payables

Trade payables are obligations to pay for goods and services acquired from suppliers in the course of the Group's normal operating activities. Trade payables are classified as current liabilities if they mature within one year (or within the course of one operating cycle, if this is longer than one year). Otherwise, these are recognised as non-current liabilities.

2.9.5 Borrowings

Borrowings are initially recognised at fair value, net after transaction costs. Borrowings are then reported at amortized cost and any difference between the amount received (net of transaction costs) and the amount of the repayment is recognised in the statement of profit and loss spread over the loan period, using the effective interest rate method.

Fees which are paid for loan commitments are recognised as transaction costs for borrowing to the degree it is probable that portions of or the entire credit facility will be utilised. In such cases, the fees are recognised when the credit facility is utilised. When there is no evidence to suggest that it is probable that portions of or the entire credit facility will be utilised, the fees are recognised as an advance payment for financial services and are allocated over the tenure of the loan commitment in question.

Credit overdraft facilities are recognised as borrowings under Current liabilities in the statement of financial position.

2.9.6 Other financial liabilities

The Group's trade payables and other current liabilities are classified as other financial liabilities and valued at amortised cost using the effective interest method.

2.9.7 Recognition and measurement

Purchases and sales of financial assets are recognised on the trade date – the date on which the Group commits to purchase or sell the asset.

A financial asset (other than trade receivables that do not have a significant financing component) or financial liability is initially measured at fair value plus, in the case of financial instruments that are not measured at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue. Accounts receivable without a significant financing component are valued at the transaction price.

Financial assets are removed from the statement of financial position when the right to receive cash flows from the instrument has expired or has been transferred, and when the Group has transferred all material risks and rewards of ownership.

Financial assets measured at fair value through profit and loss are

recognised after the acquisition date at fair value.

Gains and losses arising as a result of changes in the fair value in respect of the category financial assets at fair value through profit or loss are recognised in the period when they are incurred as financial revenue or expenses. Dividend revenues from securities classified as financial assets at fair value through profit or loss are recognised in the statement of profit or loss under Other revenue when the Group's right to receive payment has been established.

Changes in the fair value of equity instruments classified as financial assets measured through other comprehensive income are recognised in other comprehensive income. Dividends are recognised as income in profit or loss as part of Other income when the Group's eligibility to receive payment has been established, unless it is clear that the dividend represents recovery of part of the cost of the investment. Other net gains and losses are reported in other comprehensive income and are never reclassified to profit or loss. The Group accumulates gains/losses in the fair value reserve in equity and transfers these to retained earnings when the related instrument is sold.

Interest on debt securities, calculated according to the effective interest method, is recognised in the statement of profit or loss under Financial revenue.

2.10 Impairment of financial assets

2.10.1 Assets at amortised cost

Provisions for expected credit losses are made using either a credit loss provisioning model based on a basic model that tracks the credit risk of the receivables. The amount of the provision consists of the difference between the asset's carrying amount and the present value of estimated, discounted future cash flows, discounted with the original effective rate of interest. Expected bad debt losses are recognised in the line item other operating expenses in the statement of profit and loss. The reversal of amounts previously written off is credited to the item Other operating expenses in the statement of profit or loss.

The loss reserve for trade receivables and contract assets is always valued at an amount corresponding to expected credit losses during the remaining maturity of the receivable. The Group uses a matrix for calculating the loss reserve with expected loss percentages divided by how many days a receivable is late. The loss percentages are based on historical experience and specific conditions and expectations at the end of the reporting period. Loss reserves for financial assets measured at amortised cost are deducted from the gross value of the assets.

The gross carrying amount of a financial asset is written off when the Group has no reasonable expectation of recovering all or part of a financial asset.

In the event that an impairment requirement is no longer deemed to be necessary in a subsequent period, and the change can be attributed to an event occurring after the impairment was recognised (for example, an improvement in a debtor's credit rating), the reversal of the impairment is recognised in the consolidated statement of profit or loss.

2.11 Inventories

Inventories are measured at the lower of cost and net realisable value. The acquisition cost corresponds to the purchase price. The cost is determined using the first-in, first-out method (FIFO). The net realisable value is the estimated sales price in the ongoing operations, with deductions for the applicable variable selling expenses. Inventories include both components (work in progress) and finished goods.

2.12 Projects in progress

The Group engages in three types of projects: research projects, partially commercial projects and fully commercial projects. Research projects are funded via grants or collaboration partners. Partially commercial projects refer to projects funded via both grants and commercial

funding, i.e. sales to external parties. Revenue from these projects is recognised as expenses are incurred. A provision is made for estimated cost overrun. Commercial projects are funded exclusively via sales to external parties. The cost for these projects consists of direct salaries and other direct expenses. The net realisable value is defined as the estimated sales price less any estimated selling expenses. Confirmed or feared losses in the projects are reported in the line Other operating expenses in the statement of profit or loss. The reversal of amounts previously written off is credited to the item Other operating expenses in the statement of profit or loss.

2.13 Share capital

Ordinary shares are classified as equity. Transaction costs directly attributable to new share issues are recognised, net after tax, in equity as a deduction of the issue proceeds.

2.14 Current and deferred tax

The tax expense for the period comprises current and deferred tax. Tax is recognised in the statement of profit or loss, with the exception of tax referring to items recognised in Other comprehensive income or directly in equity. For such items, the associated tax is also recognised in Other comprehensive income or directly in equity, respectively. Current tax for the period is calculated on the basis of the tax laws enacted or substantively enacted as at the closing date in those countries in which the Parent Company and its subsidiaries operate and generate taxable income. Group management evaluates, on an ongoing basis, the declarations presented in the income tax returns for those situations in which the tax regulations are subject to interpretation. Provisions are made, as deemed necessary, for amounts which are likely to be payable to the tax authorities.

Deferred tax is recognised on all temporary differences arising between the tax base of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax liabilities are, however, not recognised if incurred as a result of the initial recognition of goodwill. Deferred tax is also not recognised if it arises from the initial recognition of an asset or liability in a transaction other than a business combination, which at the time of the transaction impacts neither the recognised nor fiscal results. Deferred income tax is calculated using tax rates (and laws) that have been enacted or substantially enacted as at the closing date and that are expected to apply when the deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets are recognised to the extent that it is likely that a future fiscal surplus will be available against which the temporary differences and loss carry-forwards can be utilised.

Deferred tax liabilities are calculated in taxable temporary differences arising on participations in subsidiaries, associates and joint ventures, with the exception of those deferred tax liabilities for which the point in time of the reversal of the temporary difference can be determined by the Group and it is probable that the temporary difference will not be reversed within the foreseeable future. Under normal circumstances, the Group cannot determine the reversal of temporary differences referring to associates. This is only possible in cases in which an agreement has been entered into granting the Group the possibility of determining the reversal of temporary differences.

Deferred tax assets attributable to deductible temporary differences on participations in subsidiaries, associates and joint ventures are recognised only to the extent that it is likely that the temporary difference will be reversed in the future and that a future fiscal surplus will be available against which the deduction can be utilised. Deferred tax assets and liabilities are offset when there is a legal right to offset the tax assets and tax liabilities in question, when the deferred tax assets and liabilities refer to taxes levied by one and the same tax authority and when they refer either to the same taxpayer or different taxpayers, and when there is the intention to settle the balances on the basis of net payments.

2.15 Employee benefits

2.15.1 Short-term benefits

Short-term employee benefits such as salaries, social security contributions, holiday pay, etc., are recognised in expenses during the earning period.

2.15.2 Defined contribution pension plans

Defined contribution pension plans are those plans where the company's obligation is limited to the contributions it has undertaken to pay. The size of the employee's retirement benefits is dependent on the fees which the Company pays into the plan or to an insurance company and the return on capital generated by these fees. The Company's obligations with regard to fees paid into defined contribution plans are recognised as an expense in profit or loss at the rate they are vested through the employee rendering services on behalf of the Company for a defined period.

2.15.3 Defined benefit pension plans

The defining characteristic of a defined benefit pension plan is that it states an amount for the retirement benefit an employee receives upon retirement, usually based on one or more factors such as age, period of service and salary.

The liability recognised in the statement of financial position for defined benefit pension plans is the present value of the defined benefit obligation on the closing date less the fair value of plan assets. The defined benefit obligation is calculated annually by an independent actuary with the application of the projected unit credit method. The present value of the defined benefit obligation is determined through the discounting of the estimated future cash flows, applying the interest rate for Swedish mortgage bonds issued in the same currency as the currency in which the benefits will be paid, and with maturities comparable to the pension obligation in question.

Actuarial gains and losses resulting from experienced based adjustments and re-measurements in the actuarial assumptions are recognised in other comprehensive income in the period in which they arise.

Expenses attributable to service during previous periods are recognised directly on the statement of profit or loss.

2.15.4 Termination benefits

Termination benefits are recognised directly when the Company has communicated an established plan for the termination and does not have a realistic possibility of withdrawing the plan. In the event that an employee is exempted from work during the notice period, a provision is made for the salary during the notice period directly. In the event that no such exemption is granted, the salary during the notice period is recognised in expenses during the notice period.

2.16 Revenue recognition

Revenue comprises the fair value of the amounts received or which will be received for the sale of goods and rendering of services in the course of the Group's operating activities. The Group recognises revenue when the amount can be reliably measured, it is likely that future economic benefits will accrue to the Company and particular criteria have been met for each of the Group's operations as described below.

2.16.1 Grants

Received project grants are recognised in revenue at the pace they are qualified for.

2.16.2 Sales of services

The Group's revenue consists, in all material respects, of revenues from rendered services (research and development projects).

The time frames for the completion of these projects vary between 6 and 36 months. Projects are executed on both a current account basis and on a fixed price basis. The outcome of a fixed price contract can be

reliably estimated when the total contractual revenue can be reliably measured, when it is likely that the economic benefits associated with the assignment will accrue to the Group, when the degree of completion and total expenses as per the closing date can be reliably measured, and when all assignment expenses can be identified and reliably measured. An assignment undertaken on a current account basis can be reliably estimated when it is likely that the economic benefits associated with the assignment will accrue to the Group and when all assignment expenses can be identified and reliably measured.

The revenues are recognised over time as control over the delivery is transferred to the customer. This implies that all assignment revenue and assignment expenses are recognised relative to the assignment's degree of completion as per the closing date. The degree of completion of an assignment is established through an assessment of the relationship between hours worked as per the closing date and the estimated total hours required to complete the assignment. When it is likely that the total assignment expenses will surpass the total assignment revenue, the expected loss is recognised immediately in expenses. The Group recognises receivables from the principles of all ongoing assignments, for which assignment expenses and recognised profits (less deductions for recognised losses) exceed the invoiced amount, as assets. Partially invoiced amounts which have not yet been paid by the customer and amounts withheld by the principal are included in the item Trade receivables. The Group recognises as liabilities all liabilities to principals of ongoing assignments for which the invoiced amounts surpass the assignment expenses and recognised profits (less deductions for recognised losses).

2.16.3 Interest revenue

Interest revenue is recognised over its term with the application of the effective interest method.

Note 3 Financial risk management

3.1 Financial risk factors

Through its operations, the Group is exposed to various types of financial risks: Market risk (consisting of foreign exchange risk and interest rate risk), credit risk and liquidity risk.

The Group applies a common risk management strategy for all entities. The description provided in this Note is therefore, in all material respects, also applicable for the Parent Company.

Risk management is undertaken by the CEO in accordance with the policies approved by the Board of Directors. The Board of Directors establishes an overall financial policy for risk management, which is divided into different chapters for specific areas, such as currency risk, interest rate risk, credit risk and liquidity risk as well as investment of excess liquidity.

Foreign exchange risk

Currency risk means the risk that the fair values and cash flows of financial instruments may fluctuate when the value of foreign currencies changes. The Group operates primarily in Sweden, which means that the companies mainly have revenues and expenses in local currency. The currency risk in the Group is thus limited. The Group is affected by exchange rate fluctuations when converting the foreign subsidiaries' assets and liabilities into the parent company's currency. The fair values and cash flows of financial instruments may also fluctuate as the value of foreign currencies changes.

Interest rate risk

Interest rate risk means the risk of fluctuations in cash flow and earnings as a result of changes in market interest rates. The Group's external borrowing increased during the year, which, in combination with rising market interest rates, contributed to increased interest expenses. The development of market interest rates is monitored and evaluated continuously.

Sensitivity analysis

Factor	Change	Effect on profit before tax, kSEK
Interest rate level for interest-bearing liabilities	+/- 1 percentage point	+/- 4 783

Credit risk

Credit risk, or counterpart risk, is the risk that the counterpart in a financial transaction is unable to fulfil its obligations on the due date. Credit risk arises from bank deposits, accounts receivable and accrued uninvoyced revenue.

Most of the Group's bank balances are in Swedish banks with high credit ratings. The risk of credit losses is therefore considered minimal in respect of these assets.

The primary financial risk in the Group is the credit risk in accounts receivable and accrued uninvoyced revenue. The risk is managed through regular credit monitoring and credit checks of both new and existing customers. The Group's credit checks entail that, before credit is granted, a credit agency is engaged to undertake a credit check. For existing or previous customers, the present payment situation and history is also analysed. In the event that a credit check or analysis of payment history indicates deficiencies, the Group does not normally grant credit, but instead offers other alternatives such as fulfilling the assignment upon the payment of an advance fee. Credit risk in the Group is managed at company level. There is no significant concentration of credit risks.

The model for calculating credit loss reserves is based on a basic model in which the credit risk associated with the changes is monitored in accordance with IFRS 9.

Note 3, continued

Liquidity risk

Liquidity risk is the risk that the Group lacks liquid funds to meet their payment obligations. Liquidity risk is managed prudently and by ensuring that the Group always has sufficient cash and cash equivalents to be able to meet the companies' payment obligations regarding operating expenses, interest and amortization. As per 31 December 2022, the Group has cash and cash equivalents of kSEK 856,326 (802,326), mainly consisting of bank balances and a small amount of short-term investments in the form offixed income funds and index-linked bonds. These assets fulfil the requirements of the Group's Finance Policy, stating that the Group's liquid funds are to be invested in assets which are considered safe investments and which yield a reasonable return over time. Financial investments are always to be preceded by a thorough risk assessment, and the investment is to have a low credit risk and high liquidity.

The table below analyses the Group's financial liabilities according to the time remaining after the closing date until contractual maturity. The amounts in the table below are contractual, undiscounted cash flows.

Liquidity risk (undiscounted cash flows)

31 Dec. 2022 (kSEK)	Less than 3 months	From 3 months to 1 year	Between 1 and 2 years	Between 2 and 5 years	Longer than 5 years
Borrowings	12,292	36,877	48,129	192,769	297,144
Lease liabilities	51,882	127,475	139,854	228,230	99,268
Trade payables	332,446	-	-	-	-
Other liabilities	74,401	28,156	-	35,312	-
31 Dec. 2021 (kSEK)	Less than 3 months	From 3 months to 1 year	Between 1 and 2 years	Between 2 and 5 years	Longer than 5 years
Borrowings	8,348	25,043	33,191	131,403	202,669
Lease liabilities	45,663	134,452	138,381	249,615	62,711
Trade payables	194,491	-	-	-	-
Other liabilities	171,481	19,641	26,188	53,564	30,888

As the Group's liquidity is good, this implies that ongoing investments can largely be financed with the Group's own funds. Investments in SEEL and biorefineries will be funded via loans and targeted grants. Future liquidity pressure in general refers to payments of trade payables and other current liabilities. For 2023, a continued increase in market interest rates is expected, after which future liquidity burdens will be closely monitored through ongoing forecasts.

Note 4 Important estimates and assessments

Estimates and assessments are evaluated on an ongoing basis and are based on historical experience and other factors, including expectations of future events deemed to be reasonable under the prevailing circumstances.

Important accounting estimates and assumptions

The preparation of financial statements requires the application of a number of important estimations and assumptions for accounting purposes by the Board of Directors and Group management.

These estimations and assumptions impact both the statement of profit or loss and statement of financial position, as well as information disclosed about contingent liabilities. The areas involving a material amount of estimations and assumptions are as follows:

- Assessment, valuation and provisioning of projects in progress. Revenues are recognised at the pace they are

3.2 Management of capital risk

The Group is owned by the Swedish State. No dividends are paid, as specified in the Articles of Association.

The Group's capital structure is assessed on the basis of the equity/assets ratio and return on equity. The KPIs are calculated as adjusted equity as a percentage of total assets and net profit as a percentage of adjusted equity. As per 31 December 2022, the equity/assets ratio was 17.8% (20) and Return on equity was 1.5% (-0.8).

3.3 Measurement of fair value

The carrying amounts, after any possible impairment, of trade receivables and other receivables, as well as trade payables and other liabilities is assumed to be equivalent to their fair values, as these items are short-term in nature. The fair values of financial instruments traded on an active market are based on the quoted market prices on the closing date. The quoted market prices used for the Group's financial assets are the current bid price. The financial assets measured at fair value in the Group consist of short-term investments (including, for example, fixed income funds, index bonds) which are reported as cash and cash equivalents in the statement of financial position. These instruments are at Level 1 in the fair value hierarchy. Furthermore, the Group holds financial assets in the form of currency derivatives that are measured at fair value at level 2 of the fair value hierarchy.

Note 4, continued

other assets. This measurement takes place both on an ongoing basis and in conjunction with the preparation of the financial statements.

- Measurement of provision for doubtful debts. Provisions are recognised according to a model for calculating credit loss reserves, which is based on a basic model in which the credit risk associated with the changes is monitored. If there is information about an individual customer's payment capacity and where a further credit risk is deemed to exist, supplemental provisions are made.

- Measurement of pension liabilities. Reasonable potential changes in actuarial assumptions have no impact on the size of liabilities.
- The measurement of loss carry-forwards is made each year to examine whether it is pertinent to capitalise deferred tax assets attributable to the year's tax loss carry-forwards. Deferred tax assets are recognised only on loss carry-forwards for which it is probable that they can be offset against future taxable profits and taxable temporary differences.

Note 5 Segment information

Group management has determined the operating segments on the basis of the information processed by the Board of Directors of RISE Research Institutes of Sweden AB and which is used as the foundation for strategic decisions. No individual customer of the Group accounts for more than 10% of revenues. An immaterial amount of revenues are generated abroad. Property, plants and equipment are located in Sweden, with an immaterial amount located abroad.

The segment information provided to Group management, referring to the segments for which information is to be provided, for the financial year 2022 is as follows:

Group	January-December 2022			January-December 2021		
Division (kSEK)	Net sales	Operating profit	Operating margin, %	Net sales	Operating profit	Operating margin, %
Bioeconomy and Health	803,057	-32,267	-4.0	783,666	-34,926	-4.5
Digital Systems	692,840	32,283	4.7	649,840	36,720	5.7
Materials and Production	699,275	-1,689	-0.2	628,402	-16,241	-2.6
Built Environment	591,460	2,365	0.4	555,588	12,028	2.2
Safety and Transport	1,076,788	62,988	5.8	897,438	66,119	7.4
Total Divisions	3,863,420	63,680	1.6	3,514,934	63,700	1.8
Unallocated joint costs/eliminations	130,078	-44,686	-	102,619	-45,398	-
Adjustment cloud computing rearrangement						
Share of profit of associates	-	2,827	-	-	3,566	-
TOTAL GROUP	3,993,498	21,821	0.5	3,617,553	21,868	0.6

Note 6 Distribution of net sales

Net sales by type of revenue:

Group (kSEK) 2022	Bioeconomy and Health	Digital Systems	Materials and production	Built Environ-ment	Safety and Trans-port	Unallocated joint costs/ eliminations	Total
Revenue from trade and industry	389,544	148,657	339,065	302,970	667,245	-16,136	1,831,345
Public research funding bodies	237,497	318,652	234,096	160,513	232,983	-4,643	1,179,098
SC funds (Strategic competence funds)	147,579	157,728	114,322	115,320	130,205	146,729	811,883
EU funds	28,437	67,802	11,793	12,657	46,356	4,128	171,172
GROUP TOTAL	803,057	692,840	699,275	591,460	1,076,788	130,078	3,993,498
Group (kSEK) 2021							
Revenue from trade and industry	353,708	126,729	318,268	282,976	587,509	-18,250	1,650,939
Public research funding bodies	226,011	266,216	169,086	143,799	154,637	-5,943	953,806
SC funds (Strategic competence funds)	156,353	186,368	121,170	121,572	119,300	121,759	826,522
EU funds	47,595	70,527	19,879	7,242	35,993	5,052	186,286
GROUP TOTAL	783,666	649,840	628,402	555,588	897,438	102,619	3,617,553

Note 7 Business combinations and divestments

As of 1 July 2022, Institut de la Corrosion (subsidiary of RISE AB) acquired all shares in MECM (Material Engineering & Corrosion Management), based in France.

The purchase price amounted to SEK 5,269 thousand and the company was included in the Group's net sales in the fourth quarter of 2022 with SEK 4,003 thousand and in profit before tax with SEK 478 thousand. If the acquisition had occurred on 1 January 2022, it is estimated that the Group's revenues would have been SEK 8,217 thousand and the profit for the period would have been SEK 1 056 thousand for full-year 2022.

At the end of September 2022, RISE AB made an additional acquisition in the previously partly owned subsidiary Asta Zero. The previous shareholding was 61.33 per cent, after which the remaining 38.67 per cent was acquired. At the end of 2022, RISE AB thus owns 100 per cent of the shares in the company.

On 1 June 2021, RISE AB acquired 100 per cent of the shares in SSPA Sweden AB, a company specialising in testing and research activities in the marine sector.

SSPA Sweden AB was included in consolidated net sales for the fourth quarter in an amount of kSEK 35,284 and in profit before tax in an amount of kSEK 2,317. If the acquisition had occurred on 1 January 2021, it is estimated that the Group's revenues would have been SEK 3,663 million and the profit for the period would have been SEK 10 million for full-year 2021.

Group (kSEK)	2022	2021
Purchase consideration paid in cash and cash equivalents	5,269	84,300
Transferred compensation	5,269	84,300
Recognised amounts of identifiable assets and assumed liabilities		
Property, plant and equipment and intangible assets	517	23,372
Financial assets	38	876
Trade receivables and other receivables	1,744	11,712
Cash and cash equivalents	439	59,383
Liabilities to credit institutions	-144	-
Inventories	-	29,518
Other provisions	-	-2,880
Trade payables and other liabilities	-436	-36,094
Total identifiable net assets	2,158	85,887
Non-controlling interests	-	-
Goodwill	3,111	-1,587
Surplus value property, plant and equipment	-	-
Transferred compensation	5,269	84,300
Acquired cash and cash equivalents	-439	-59,383
Paid cash and cash equivalents	5,269	84,300
Cash flow effect upon acquisition	4,830	24,917

Cash flow effect on the acquisition of Asta Zero amounted to SEK 64,961 thousand.

Note 8 Other operating revenue

Group (kSEK)	2022	2021
Rental revenue	10,339	4,939
Foreign exchange gains/losses on operating receivables	2,444	1,320
Furlough compensation	-16,550	4,662
Negative goodwill, acquisitions	-	1,587
Revaluation of currency futures	-	316
Other revenue	15,858	8,355
GROUP TOTAL	12,091	21,179

Note 9 Other operating expenses

Group (kSEK)	2022	2021
Foreign exchange gains/losses on liabilities of an operating nature	-1,413	-712
Other expenses	-3,072	-3,679
GROUP TOTAL	-4,485	-4,391

Note 10 Audit fees

Audit engagement refers to the audit of the annual report and accounting records, as well as the management of the Company/Group by the Board and the CEO, other tasks incumbent on the Company's auditor to perform, as well as advice or other assistance arising from observations made during the audit or the implementation of such other tasks. Everything else is other services.

Group (kSEK)	2022	2021
KPMG		
Audit engagement	3,410	3,229
Other auditing services	480	-
Tax advisory services	-	-
Other services	2,425	4,441
OTHER AUDITORS		
Audit engagement	359	181
Other auditing services	73	87
Tax advisory services	-	-
Other services	312	128
GROUP TOTAL	7,059	8,066

Note 11 Employee benefits, etc.

Group (kSEK)	2022	2021
Salaries and other remuneration to the Board of Directors	1,483	1,534
Salaries and other remuneration to the CEO	4,839	4,543
Salaries and other remuneration to other senior executives	18,484	18,635
Salaries and other remuneration to other employees	1,766,903	1,587,137
Social security contributions	521,032	495,684
Retirement benefit costs for the Board of Directors and CEO	1,478	1,170
Retirement benefit costs for other senior executives	5,685	5,511
Retirement benefit costs for other employees	211,441	227,774
TOTAL	2,531,345	2,341,988

Average number of employees	2022	2021
Men	1,846	1,779
Women	1,248	1,118
TOTAL	3,094	2,897

Average number of employees by country	2022	2021
Sweden	2,979	2,799
Norway	67	61
France	49	37
TOTAL	3,094	2,897

Fees to the Board of Directors (kSEK)	2022	2021
Fees to the Board of Directors	1,483	1,534
Social security contributions	466	482
TOTAL	1,949	2,016

Subsidiaries (kSEK)	2022	2021
Of salaries and other remuneration in subsidiaries, amounts referring to CEOs	8,846	8,593
Boards of Directors	1,048	1,456
Retirement benefit costs for CEOs	2,071	2,029
TOTAL	11,965	12,078

Group (kSEK)	2022	2021
CEO salaries	13,685	13,136
Boards of Directors	2,531	2,990
Retirement benefit costs for CEOs	3,549	3,199
TOTAL	19,765	19,335

The Group has 9 (9) employees designated as senior executives, of whom 44 (56) per cent are men. The Parent Company's Board of Directors is composed of 11 (11) members, of whom 64 (64) per cent are men.

Remuneration to senior executives

Guidelines

With regard to remuneration and other terms of employment, RISE AB applies the principles adopted by the Government in "Principles of remuneration and other terms of employment for senior executives of state-owned companies adopted on 27 February 2020".

According to these principles, the remuneration should be competitive, capped, fit for purpose and not market-leading in relation to comparable companies, and may consist of the following components: fixed cash salary, severance pay, pension benefits and other benefits. Variable remuneration must not be paid to senior executives.

Premiums for old-age and survivors' pensions must be defined contributions that do not exceed 30 per cent of fixed annual cash salary, unless the benefits are provided through a group pension plan applied to the Company. In such a case, the contributions are determined by the terms and conditions of the pension plan. Any expansion of a group pension plan above the pay level covered by the plan must be on a defined contribution basis where the maximum contribution is 30 per cent of the part of salary above the cap. The minimum retirement age must not be under 65 years. If a salary exchange scheme is offered, the solution must be cost-neutral.

Benefits may total a maximum of 15 per cent of the fixed annual cash salary. Compensation in the event of incapacity for work due to illness must comply with the conditions regarding sick pay and disability pension in the applicable collective agreement. Any expansion of group health insurance above the pay level covered by collective agreements must correspond to market practice.

As regards employment relationships governed by non-Swedish legislation, appropriate adjustments may be made concerning pension benefits and other benefits in order to comply with mandatory rules or established local practices; in doing so, the overall purpose of these guidelines must be satisfied as far as possible.

In the event of termination of employment by the Company, the notice period must not exceed six months and severance pay must be limited to a maximum of twelve months' salary.

Remuneration and other benefits to the Board of Directors (kSEK)

Name	Salary, Committee and Board fees	
	2022	2021
Jan Wäreby	396	387
Sven Wird	46	182
Anna-Karin Stenberg	220	215
Elena Fersman	46	182
Fredrik Winberg	46	182
Klas Bendrik	209	204
Torbjörn Holmström	185	182
Pernilla Jonsson	139	-
Mikael Hannus	139	-
Christina Petrescu	139	-
Hanna Lagercrantz*	-	-
Linda Ikatti**	-	-
Magnus Naesman**	-	-
Ulf Nordberg**	-	-
TOTAL	1,565	1,534

* No remuneration has been paid to employees of the Swedish Government Offices.
** No remuneration has been paid to employee representatives.
No other benefits and retirement benefits have been paid to the Board.

Remuneration and other benefits 2022 – Senior executives (kSEK)

Name	Position	Period*	Payroll expens- es**	Other ben- efits	Retirement benefit costs	Total
Pia Sandvik	CEO	January-December	4,828	11	1,478	6,317
Johanna Flanke	Director of Human Resources	January–August	1,233	25	548	1,806
Anette Anjou	Director of Human Resources	March-December	1,625	9	401	2,035
Robert Casselbrant	Chief Financial Officer	January-December	1,935	47	612	2,594
Marco Lucisano	Head of Division – Built Environment	January-December	2,185	5	695	2,885
Pernilla Walkenström	Head of Division – Materials and Production	January-December	2,203	37	694	2,934
Timo van't Hoff	Chief Business Development Officer	January-December	1,884	11	595	2,490
Charlotte Karlsson	Head of Division – Digital Systems	January-December	2,120	29	804	2,953
Paul-Halle Zahl Pedersen	Head of Division – Safety and Transport	January-December	2,170	124	680	2,974
Magnus Hallberg	Head of Division – Bioeconomy and Health	January-December	2,055	33	653	2,741
TOTAL			22,238	331	7,160	29,729

* Period, salary, other benefits and retirement benefit costs correspond with period of service in the RISE Group.
** In the 2022 salary review, a first step was taken in adapting salaries for senior executives to the market.
In addition to the year’s remuneration, provision was made for additional remuneration in 2023 for Johanna Flanke amounting to kSEK 1,330

Remuneration and other benefits 2021 – Senior executives (kSEK)

Name	Position	Period*	Payroll expens- es**	Other ben- efits	Retirement benefit costs	Total
Pia Sandvik	CEO	January-December	4,520	23	1,170	5,713
John Rune Nielsen	Director of Research and Business Development	January-September	2,321	35	349	2,705
Johanna Flanke	Director of Human Resources	January-December	1,606	47	518	2,171
Robert Casselbrant	Chief Financial Officer	January-December	1,856	45	591	2,492
Yvonne Näsström	Chief Communications Officer	January-June	857	12	311	1,180
Ola Davidson	Head of Strategy and Operational Excellence	January-June	981	11	358	1,350
Marco Lucisano	Head of Division – Built Environment	January-December	1,960	15	629	2,604
Pernilla Walkenström	Head of Division – Materials and Production	January-December	1,963	37	624	2,624
Timo van't Hoff	Chief Business Development Officer	May-December	1,149	3	323	1,475
Charlotte Karlsson	Head of Division – Digital Systems	January-December	1,890	46	729	2,665
Paul-Halle Zahl Pedersen	Head of Division – Safety and Transport	January-December	1,814	116	403	2,333
Magnus Hallberg	Head of Division – Bioeconomy and Health	January-December	1,830	41	676	2,547
TOTAL			22,747	431	6,681	29,859

* Period, salary, other benefits and retirement benefit costs correspond with period of service in the RISE Group.

Retirement age, period of notice and severance pay – Senior executives

Name	Position	Retirement age	Period of notice (employ- ee/company)	Severance pay
Pia Sandvik	CEO	65	6/6	18
Annette Anjou	Director of Human Resources	67	6/6	-
Robert Casselbrant	Chief Financial Officer	67	6/6	-
Marco Luciano	Head of Division – Built Environment	67	6/6	-
Pernilla Walkenström	Head of Division – Materials and Production	67	6/6	-
Timo van't Hoff	Chief Business Development Officer	67	6/6	-
Charlotte Karlsson	Head of Division – Digital Systems	67	6/6	-
Paul-Halle Zahl Pedersen	Head of Division – Safety and Transport	67	6/6	-
Magnus Hallberg	Head of Division – Bioeconomy and Health	67	6/6	-

Note 12 Financial revenue and expenses

Group (kSEK)	2022	2021
Financial revenue:		
Interest revenue on bank balances	1,988	234
Fair value measurement – derivatives	21,912	654
Profit on sales of short-term investments at fair value through profit or loss	1,731	2,005
Foreign exchange gains/losses	41,099	587
Other financial income	3,516	4,246
Financial revenue	70,246	7,726
Finance expenses:		
Interest expenses on retirement benefit liability	–419	–218
Other interest expenses	–15,657	–17,817
Foreign exchange gains/losses	–1,978	–3,043
Profit on sales of short-term investments at fair value through profit or loss	–310	–1,469
Other financial expenses	–1,032	–397
Finance expenses	–19,396	–22,944
FINANCIAL ITEMS GROUP - NET	50,850	–15,218

Note 13 Foreign exchange gains/losses

Group (kSEK)	2022	2021
Other operating revenue	2,444	1,320
Financial revenue	41,099	587
Finance expenses	–1,978	–3,043
TOTAL FOREIGN EXCHANGE GAINS/LOSSES	41,565	–1,136

Note 14 Taxes

Group (kSEK)	2022	2021
Deferred tax on temporary differences	2,964	–1,478
Deferred tax on loss carry-forwards	–11,667	–1,269
Total deferred tax in the statement of profit or loss	–8,703	–2,747
Current tax	–9,362	–10,464
TOTAL INCOME TAX	–18,065	–13,211

The difference between recognised tax expense and estimated tax expense based on applicable tax rates is as follows:

Group (kSEK)	2022	2021
Profit before tax	72,671	6,650
Income tax according to applicable tax rate for the Group 20.6% (20.6%)	-14,970	-1,370
Tax effect of following items		
Non-taxable revenue	1,169	3,305
Non-deductible expenses	-4,174	-4,599
Increase in deficit without corresponding activation of deferred tax	-250	-5,646
Utilised loss carry-forwards that have not previously been activated	2,616	-
Effect of change in tax rate	-281	-
Adjustments referring to previous years	-1,751	-4,713
Miscellaneous	-424	-188
TOTAL TAX EXPENSE	-18,065	-13,211

Deferred tax assets and tax liabilities are broken down as follows:

Group (kSEK)	2022	2021
Deferred tax assets which will be utilised after more than 12 months		
Opening carrying amount	25,711	26,276
Reclassifications	-	-
Change for the year	-11,659	-565
Total deferred tax assets	14,052	25,711
Deferred tax liabilities which will be utilised after more than 12 months		
Opening carrying amount	43,319	41,137
Acquired balances	-	-
Change for the year	-2,956	2,182
Total deferred tax liabilities	40,363	43,319
DEFERRED TAX LIABILITIES – NET	26,311	17,608

Deferred tax assets and tax liabilities are attributable to the following items:

Group (kSEK)	2022	2021
Deferred tax assets		
Non-current assets	5,511	5,062
Current assets	957	890
Retirement benefit obligations	797	1,072
Loss carry-forwards	6,787	18,687
Total deferred tax assets	14,052	25,711
Deferred tax liabilities		
Non-current assets	17,770	14,101
Retirement benefit obligations	-	-
Untaxed reserves	22,866	29,218
TOTAL DEFERRED TAX LIABILITIES	40,636	43,319

The Group has accumulated loss carry-forwards amounting to kSEK 237,193 (305,314). None of the tax-loss carry-forwards have an expiration date. For kSEK 204,246 (214,600) of the tax loss carry-forwards, no deferred tax assets have been recognised, due to uncertainty as to when in the future sufficient taxable profits will be recognised. Deferred tax assets relating to deficits have been recognised in an amount of kSEK 32,947 (90,714), as it is deemed likely that a tax surplus will be recognised in the future against which these deficits can be offset.

Note 15 Earnings per share

Group (kSEK)	2022	2021
Earnings attributable to owners of the Parent Company	39,220	-13,710
Average number of outstanding shares	364,000	364,000
EARNINGS PER SHARE	108	-38

Note 16 Intangible assets

Group	Capitalised development expenses	Patents and other rights	Goodwill	Total
Financial year 2021				
Opening carrying amount	823	8,889	18,241	27,953
Via acquisitions of subsidiaries	-	169	-	169
Purchasing	1,383	3,579	-	4,962
Sales and disposals	-	-	-	-
Reclassifications	147	-147	-	-
Depreciation	-231	-1,681	-	-1,912
Impairment losses	-	-	-	-
Translation differences	3	5	-	8
Closing carrying amount	2,125	10,814	18,241	31,180
Per 31 December 2021				
Cost	3,841	21,942	31,432	57,215
Accumulated depreciation	-1,716	-11,128	-	-12,844
Accumulated impairment	-	-	-13,191	-13,191
Carrying amount	2,125	10,814	18,241	31,180
Financial year 2022				
Opening carrying amount	2,125	10,814	18,241	31,180
Via acquisitions of subsidiaries	-	28	3,111	3,139
Purchasing	352	2,909	-	3,261
Sales and disposals	-	-	-	-
Reclassifications	1,051	-2,267	-	-1,216
Depreciation	-176	-1,216	-	-1,392
Impairment losses	-156	-	-212	-368
Translation differences	12	14	696	722
Closing carrying amount	3,208	10,282	21,836	35,326
Per 31 December 2022				
Cost	5,226	22,626	35,239	63,121
Accumulated depreciation	-1,892	-12,344	-	-14,236
Accumulated impairment	-156	-	-13,403	-13,559
Carrying amount	3,208	10,282	21,836	35,326

Impairment testing for cash-generating units containing goodwill

The Group assesses, each year, if there is an impairment requirement as regards goodwill, in accordance with the accounting principle described under the heading Impairment of non-financial, non-current assets. The goodwill that is recognised arose through the acquisition of Innventia AB as of 1 April 2016 and the acquisition of Swerea AB as of 1 October 2018.

The calculation is made on the basis of estimated future cash flows based on a five-year period. Cash flows beyond the five-year period are extrapolated applying an estimated growth rate of 3.9 per cent. The discount rate applied for future cash flows is 11.0 per cent before tax.

Key variables

Method for taxing values:

Market share and growth. The forecast is based on the budget and anticipated future growth. The total market is expected to grow during the forecast period.

Operating expenses:

Operating expenses are estimated on the basis of the planned operations for the forecast period.

Discount rate:

The discount rate is established through a weighted average cost of capital for the RISE Group and reflects current market-based assessments of the time value of money and the risks specifically applying to the RISE Group.

The recoverable amount for Innventia AB and the Swerea Group exceeds the carrying amount. Group management deems that no reasonable changes in the important assumptions can lead to the recoverable amount falling below the carrying amount.

Note 17 Property, plant and equipment

Group (kSEK)	2022	2021
Owned property, plant and equipment	1,706,356	1,289,674
Leased property, plant and equipment	588,331	591,218
TOTAL	2,294,687	1,880,892

The Group's property, plant and equipment consists of both owned and leased assets.

For information on leased property, plant and equipment that constitute usufruct assets, see Note 18.

Group	Land and buildings, including land improvements	Leasehold improvements	Equipment, tools, fixtures and fittings	Non-current assets under construction	Total
Financial year 2021					
Opening carrying amount	611,398	63,602	347,370	18,139	1,040,509
Via acquisitions of subsidiaries	-	-	20,784	1,212	21,996
Purchasing	13,375	-	104,546	401,142	519,063
Reclassifications	293	-1,245	-8,646	9,598	-
Sale/disposal	-	-	-3,700	-	-3,700
Immediate write-off against grants	-	-	-	-133,063	-133,063
Depreciation	-46,043	-3,318	-105,944	-	-155,305
Impairment losses	-	-	-	-	-
Translation differences	103	-	70	1	174
Closing carrying amount	589,044	59,039	344,562	297,029	1,289,674
Per 31 December 2021					
Cost	898,175	99,300	988,900	297,029	2,283,404
Accumulated depreciation	-284,466	-40,261	-644,338	-	-969,065
Accumulated impairment	-24,665	-	-	-	-24,665
CARRYING AMOUNT	589,044	59,039	344,562	297,029	1,289,674
Financial year 2022					
Opening carrying amount	589,044	59,039	344,562	297,029	1,289,674
Via acquisitions of subsidiaries	-	-	471	78	549
Purchasing	50,066	6,036	308,393	506,457	870,952
Reclassifications	60,115	-10,139	69,000	-117,760	1,216
Sale/disposal	-14	-	-	-	-14
Immediate write-off against grants	-45,887	-	-110,237	-129,137	-285,261
Depreciation	-47,371	-4,449	-113,374	-16	-165,209
Impairment losses	-728	-	-5,150	-	-5,879
Translation differences	164	-	158	6	328
Closing carrying amount	605,388	50,488	493,822	556,658	1,706,356
Per 31 December 2022					
Cost	962,618	95,198	1,256,684	556,674	2,871,174
Accumulated depreciation	-331,837	-44,710	-757,712	-16	-1,134,274
Accumulated impairment	-25,393	-	-5,150	-	-30,544
CARRYING AMOUNT	605,388	50,488	493,822	556,658	1,706,356

Note 18 Usufruct assets and leasing obligations

As of 1 January 2019, the Group applies IFRS 16. The Group chose to apply the simplified transition method, which means that the comparative figures have not been recalculated.

For further information on the applied accounting principles, see Note 2.1.

A lease for rent of premises is partly subleased to an external party. This gives rise to the recognition of a long and short other receivable in the Group's statement of financial position, which is also presented below.

Group (kSEK)	2022	2021
Buildings	588,331	591,218
TOTAL	588,331	591,218
Other receivables, Group		
Current	6,401	6,357
Non-current	16,958	22,737
TOTAL	23,359	29,094
Maturity undiscounted other receivables, Group		
1 year	6,661	6,436
2 years	6,661	6,436
3 years	6,661	6,436
4 years	4,996	6,436
5 years	-	4,827
Longer than 5 years	-	-
TOTAL	24,979	30,571
Lease liabilities, Group		
Current	149,521	161,474
Non-current	438,516	439,256
TOTAL	588,037	600,730
Maturity of undiscounted lease liabilities, Group		
1 year	179,357	180,114
2 years	139,854	138,381
3 years	112,556	105,951
4 years	73,827	85,609
5 years	41,846	58,054
Longer than 5 years	99,268	62,711
TOTAL	646,708	630,820

During 2022, there were additional rights of use amounting to kSEK 155,065, of which kSEK 89,880 relates to new leases, kSEK 19,296 relates to changes in the terms of extension options, and the remainder relates to index enumerations of existing contracts of kSEK 51,146 and contracts terminated prematurely of kSEK -5,257.

The lease period varies between leases, and on most contracts there are options to extend the contracts, often between 3 and 12 months. Assumptions that options are likely to be exercised have been made for a number of contracts. Of the total usufruct assets, kSEK 178,170 relates to leases for which these assumptions have been made. Such leases account for a total of kSEK 177,988 of the lease liabilities.

Reported amounts linked to leases in the income statement

Depreciation of rights of use, Group (kSEK)	2022	2021
Buildings	-173,544	-157,780
TOTAL	-173,544	-157,780
Other items impacting earnings, Group		
Interest income, subleases	543	654
Interest expense on lease liabilities	-11,806	-12,656
Expenses attributable to short-term leasing, variable lease payments not included in the lease liability and assets of lesser value	-4,684	-3,882

The total cash flow related to leases in 2022 amounts to kSEK 189,863 (168,500).

Note 19 Participations in associates

Group (kSEK)	2022	2021
Per 1 January	32,156	27,683
Acquisitions of associates	-	907
Sales of associates	-14	-
Reclassifications	-302	-
Share of profit	2,827	3,566
PER 31 DECEMBER	34,667	32,156

Group (kSEK)

Name	Company registration number	Registered office	Share of equity %	Number of shares	Carrying amount 2022	Carrying amount 2021
Swerim AB	556585-4725	Stockholm	20,0	40,000	33,316	30,679
Mavenoid AB	559057-5170	Stockholm	2.5	250,000	-	2
Interspectral AB	556980-5186	Norrköping	11.0	325	-	6
Prindit AB	559029-3865	Västerås	30,0	1,500,000	-	14
DP Pattering AB	556320-4139	Norrköping	17.0	1,096	-	201
Mireca Medicines GmbH	DE 311 693 162	Tübingen, Germany	0.9	1,426	-	93
FlowTech AB	556131-0755	Stockholm	50.0	500	1,351	1,161
TOTAL					34,667	32,156

The holdings are not considered to be material. All holdings are unlisted.

Note 20 Other long-term securities holdings

Group (kSEK)	2022	2021
Financial investments that are non-current assets		
Interest-bearing securities - at fair value through profit or loss	30,009	55,772
Holdings in unlisted companies - at fair value through comprehensive income	364	271
PER 31 DECEMBER	30,373	56,043

Write-downs of SEK 60 thousand have been made on interest-bearing securities.

Note 21 Other long-term receivables

Group (kSEK)	2022	2021
Opening cost	32,348	39,869
Receivable related to subleasing of usufruct asset	-	-
Provision for future retirement benefits	1,233	-
Payment of retirement benefits	-1,663	-1,722
Payments	-5,780	-5,799
CLOSING CARRYING AMOUNT	26,138	32,348

Other long-term receivables in the Group refers to lease receivables, endowment insurance and one loan receivable. None of the long-term receivables are due for payment or require impairment.

Note 22 Inventories

Group (kSEK)	2022	2021
Raw materials and consumables	12,414	8,693
Finished goods	2,957	1,815
TOTAL	15,371	10,508

Note 23 Accrued, uninvoiced revenue

As per 31 December 2022, the RISE Group recognised an amount of SEK 618 (590) million of accrued, uninvoiced revenue referring to work in progress in projects. These projects are recognised at amortised cost, net after provisions for expected credit losses in the total amount of kSEK 689. Of commenced, but incomplete agreements as at 31 December 2022, the expectation is that 59 per cent of the transaction price, amounting to SEK 1,394 million, will be recognised as revenue in the next financial year. The remaining 41 per cent (SEK 739 million) will be recognised in 2024.

Note 24 Trade receivables

Group (kSEK)	2022	2021
Trade receivables	554,124	565,841
Less: provision for bad debts	-4,984	-12,186
TRADE RECEIVABLES – NET	549,139	553,655

Group (kSEK)	2022	2021
Not yet mature	497,696	368,965
Overdue 0–3 months	29,707	122,108
Overdue > 3–6 months	1,195	22,200
Overdue > 6 months	20,541	40,382
TOTAL	549,139	553,655

Credit loss provisions for trade receivables are managed in accordance with principles described in Note 3.

Note 25 Other receivables

Group (kSEK)	2022	2021
Receivables from employees	108	67
VAT receivable	36,827	11,700
Receivable related to subleasing of usufruct asset	6,401	6,357
Tax account	12,375	9,599
Derivatives measured at fair value above profit or loss	22,278	316
Other items	6,536	18,086
TOTAL	84,476	46,123

Note 26 Prepaid expenses and accrued revenue

Group (kSEK)	2022	2021
Prepaid lease fees	10,232	10,914
Prepaid rent for premises	5,065	4,730
Prepaid licence fees	20,771	12,354
Accrued revenue	16,560	1,418
Other items	12,090	8,861
TOTAL	64,718	38,277

Note 27 Cash and cash equivalents/Cash and bank balances

Cash and cash equivalents in the statement of financial position and statement of cash flows includes the following components:

Group (kSEK)	2022	2021
Cash and bank balances	850,895	797,206
Short-term bank deposits	5,564	5,120
GROUP TOTAL	856,459	802,326

Note 28 Specific disclosures regarding equity

Management of capital

Capital refers to equity and borrowings. The Group's objective for its management of capital is to safeguard the Group's continuing operations and discretion to act. The division of equity and borrowed capital shall ensure that the Group maintains a good balance between risk and returns. The capital structure can be adapted where necessary to changes in the economic landscape and other external factors. In order to maintain and adapt the capital structure, the Group can, for example, increase or decrease its level of liabilities. According to the Articles of Association, the purpose of the operations is not to generate profits for shareholders. No dividends are paid out.

The consolidated statement of financial position presents the Group's liabilities and equity. The various components in equity are presented in the Consolidated statement of equity.

Share capital

The share capital amounts to SEK 36,400,000, divided between 364,000 shares of varying types. The quotient value of each share amounts to SEK 100. All shares are paid-up in full. No shares are held by the Company or its subsidiaries.

Translation reserve

The translation reserve encompasses all foreign exchange differences arising on the restatement of financial statements from foreign entities which present their financial statements in a currency different from the currency in which the consolidated financial statements are presented.

Other reserves

Other reserves refers to capital where an external party has some influence in deciding what research the capital is to be used for.

Note 29 Borrowings – credit institutions

Group

Borrowings incur variable interest with a fixed interest margin, STIBOR 3 months. This year's new borrowing amounts to SEK 150 million under existing loan agreements with loan limits of SEK 504 million and SEK 126 million, respectively. As borrowing terms are based on variable interest and the assessment is that there is no material difference in the Group's credit rating as per 31 December 2022 compared with the date for the raising of borrowings, the fair value of borrowings is consistent with the carrying amount.

The change in liabilities is comprised of new borrowings amounting to SEK 150 million and repayment affecting cash flow. No other changes have been noted.

Note 30 Retirement benefit obligations

Group (kSEK)	2022	2021
Obligations in the statement of financial position for defined benefit pension plans	34,264	36,157
Direct retirement benefit commitments	9,786	10,122
Total liability in the statement of financial position	44,050	46,279
Recognised in finance expenses for defined benefit pension plans	419	218
Recognised in other comprehensive income for remeasurement of defined benefit plans	-6,665	866

The change in the defined benefit obligation during the year is as follows:

Group (kSEK)	2022	2021
At the beginning of the year	46,279	46,537
Service expenses during current year	290	1,048
Benefits paid	-3,547	-2,390
Interest expenses	419	218
Changes in financial assumptions	-7,760	373
Experience-based adjustments	1,095	493
Reclassifications	7,274	-
AT THE END OF THE YEAR	44,050	46,279

Defined benefit pension plans

Within the Group there are a number of defined benefit retirement benefit plans under which the employee is entitled to post-employment benefits based on their final salary and period of service.

Retirement benefit obligations for retirement pensions and family pensions related to the defined benefit ITP 2 plan for salaried employees in Sweden are secured through insurance with Alecta. According to a statement made by the Swedish Financial Accounting Council, UFR 10 Classification of ITP plans financed by insurance in Alecta, this is a defined benefit plan covering several employers. For the financial years 2022 and 2021, the Company has not had access to information to be able to recognise its proportionate share of the plan's obligations, plan assets and costs, which means that it has not been possible to recognise the plan as a defined benefit plan. The ITP 2 pension plan which is secured through insurance with Alecta is, therefore, reported as a defined contribution plan. The premium for the defined benefit retirement and family pension is calculated on an individual basis and is dependent on factors such as the salary, previously vested pension and expected remaining length of service of the employee. The expected fees for the next reporting period for ITP 2 insurance with Alecta amount to SEK 57.2 million for 2023. For 2022 these amounted to SEK 77.8 million and for 2021 to SEK 118.8 million.

The collective funding ratio corresponds to the market value of Alecta's assets as a percentage of insurance commitments calculated according to Alecta's actuarial methods and assumptions, which do not comply with IAS 19. The collective funding ratio is normally allowed to vary between 125 and 155 per cent. If Alecta's collective consolidation level falls below 125 per cent or exceeds 155 per cent, measures shall be taken to create the conditions for the consolidation level to return to the normal range. In case of low consolidation, one measure could be to increase the contractual price for new subscriptions and extensions of existing benefits. At high consolidation, one measure could be to introduce premium reductions.

At the end of 2022, Alecta's surplus in the form of the collective funding ratio amounted to 172 (172) per cent. The change in the defined benefit obligation during the year is as follows:

At the time of the most recent measurement, the present value of the defined benefit obligation consisted of approximately kSEK 34,264 (36,157) attributable to retirees covered by the plan.

The most important actuarial assumptions are as follows:

Group	2022	2021
Discount rate, %	3.60	1.20
Inflation	2.0	2.2
Lifetime	DUS 21	DUS 14

The duration of existing pension obligations is 8 years (10 years).

Sensitivity analysis

The table below presents possible changes in actuarial assumptions as of the closing date, with other assumptions unchanged, and how they would affect the defined benefit obligation.

Group	Change in assumption	Increase	Decrease
Discount rate, %	0.50%	-1,221	1,138
Inflation	0.50%	1,123	-1,195
Lifetime	1 year	1,311	-1,330

Note 31 Other liabilities

Group (kSEK)	2022	2021
Other non-current liabilities		
Project funds	36,120	75,000
Debt to partners	31,234	29,700
Other items	6,255	4,078
TOTAL	72,609	108,778
Other current liabilities		
Property tax	2,563	2,587
Payroll tax	3,444	8,127
Employee withholding tax	45,566	44,302
Social security contributions	53,123	46,604
Tax on returns	48	50
VAT liability	4,969	21,239
Project funds	28,156	25,000
Partner funds	131,270	120,464
Other items	37,104	31,875
TOTAL	306,243	300,248

Note 32 Accrued expenses and deferred revenue

Group (kSEK)	2022	2021
Deferred revenue	1,000	-
Personnel-related items	300,215	289,927
Prepaid project grants	19,817	13,441
Purchased services	18,608	-
Other items	52,001	42,529
TOTAL	391,641	345,897

Note 33 Financial assets and liabilities

Classification and fair value and level in the measurement hierarchy

Group 31 Dec. 2022 (kSEK)	Financial assets at fair value through profit or loss	Financial assets at fair value through comprehensive income	Financial assets at amortised cost	Other liabilities at amortised cost	Total
Financial assets					
Financial investments – Interest-bearing securities	30,009	-	-	-	30,009
Financial investments – Holdings in unlisted companies	-	364	-	-	364
Other long-term receivables	-	-	26,138	-	26,138
Trade receivables	-	-	549,139	-	549,139
Other receivables	22,228	-	12,937	-	35,165
Accrued, uninvoiced revenue	-	-	617,580	-	617,580
Accrued revenue	-	-	16,560	-	16,560
Cash and cash equivalents	-	-	856,459	-	856,459
TOTAL FINANCIAL ASSETS	52,237	364	2,078,813	-	2,131,414
Financial liabilities					
Liabilities to credit institutions	-	-	-	478,308	478,308
Lease liabilities	-	-	-	588,037	588,037
Trade payables	-	-	-	332,446	332,446
Other liabilities	-	-	-	137,869	137,869
OTHER FINANCIAL LIABILITIES	-	-	-	1,536,660	1,536,660

The measurement of financial assets at fair value through profit or loss belongs to level 1 or level 2 in the fair value hierarchy. Instruments in level 1 were measured at fair value based on listed market prices on the closing date. Financial investments in interest-bearing securities are included here.

Other financial assets valued at fair value through profit or loss belongs to level 2 in the fair value hierarchy. Derivatives are included here. The fair values of derivatives are based on quotations with brokers. Similar contracts are traded on an active market and prices reflect actual transactions on comparable instruments.

Group 31 Dec. 2021 (kSEK)	Financial assets at fair value through profit or loss	Financial assets at fair value through comprehensive income	Financial assets at amortised cost	Other liabilities at amortised cost	Total
Financial assets					
Financial investments – Interest-bearing securities	55,772	-	-	-	55,772
Financial investments – Holdings in unlisted companies	-	271	-	-	271
Other long-term receivables	-	-	32,348	-	32,348
Trade receivables	-	-	553,655	-	553,655
Other receivables	316	-	24,443	-	24,759
Accrued, uninvoiced revenue	-	-	590,407	-	590,407
Accrued revenue	-	-	1,418	-	1,418
Cash and cash equivalents	-	-	802,326	-	802,326
TOTAL FINANCIAL ASSETS	56,088	271	2,004,597	-	2,060,956
Financial liabilities					
Liabilities to credit institutions	-	-	-	356,559	356,559
Lease liabilities	-	-	-	600,730	600,730
Trade payables	-	-	-	194,491	194,491
Other liabilities	-	-	-	294,634	294,634
OTHER FINANCIAL LIABILITIES	-	-	-	1,446,414	1,446,414

To provide an indication of the reliability of the input data used in determining fair value, the Group classified the financial instruments in three levels described below:

Level 1- Fair value of financial instruments traded on an active market is based on the quoted market prices on the closing date. The quoted market prices used for the Group's financial assets are the current bid price.

Level 2 - Fair value of financial assets not traded on an active market is determined using valuation techniques that to the furthest possible extent are based on market information, while company-specific information is used to the least extent possible. All material input data required for fair value measurement of an instrument are observable.

Level 3 -Where one or more key inputs are not based on observable market information. This applies e.g. to unlisted instruments.

Note 34 Pledged assets

Group (kSEK)	2022	2021
Property mortgages	52,600	52,600
Floating charges	-	-
Retirement benefit obligations	-	-
Guarantees	779	763
TOTAL	53,379	53,363

Note 38 Reconciliation of liabilities related to financing activities

Group	31 Dec. 2021	Cash flows	Non-cash items		31 Dec. 2022
			Exchange rate differences	Other non-cash items	
Interest-bearing liabilities	356,559	122,333	-	-584	478,308
Leasing debt	600,730	-177,893	-	165,200	588,037
Other liabilities	100,144	-35,868	-	-	64,276
TOTAL	1,057,433	-91,428	-	164,616	1,130,621

Group	31 Dec. 2020	Cash flows	Non-cash items		31 Dec. 2021
			Exchange rate differences	Other non-cash items	
Interest-bearing liabilities	233,914	152,033	-	-29,388	356,559
Leasing debt	654,496	-156,497	-	102,731	600,730
Other liabilities	127,687	-27,543	-	-	100,144
TOTAL	1,016,097	-32,007	-	73,343	1,057,433

Note 39 Events after the closing date

No significant events that have had an impact on the business or the Group's financial position have occurred after the closing date.

Note 35 Contingent liabilities

Group (kSEK)	2022	2021
Retirement benefit commitments	295	278
TOTAL	295	278

Note 36 Related party transactions

The Swedish State owns 100% of RISE AB. In addition to business transactions, which occurred on market terms between companies in the Group, no transactions with related parties occurred.

Note 37 Other non-cash items

Group (kSEK)	2022	2021
Share of profit of associates	-2,827	-3,566
Capital gain on the sale of shares in associates	255	-1,891
Capital gains on proceeds from disposal of property, plant and equipment	3,511	3,700
Change in provisions	-2,603	-38,165
Foreign exchange gains/losses	-	5,894
Miscellaneous	7,079	4,428
GROUP TOTAL	5,415	-29,600

Parent Company Financial Statements

Parent Company statement of profit or loss

Amounts in kSEK	Note	2022	2021
Net sales	2	3,208,259	2,553,439
Other operating revenue	3	68,031	139,399
Other external expenses	5, 6	-1,004,151	-765,037
Personnel costs	7	-2,153,747	-1,830,443
Depreciation and amortisation of intangible assets and property, plant and equipment	11, 12	-127,118	-107,458
Other operating expenses	4	-1,171	-712
Operating profit		-9,897	-10,812
Share of profit of Group companies	13	-27,830	-
Profit from interests in associates and jointly controlled enterprises	14	1,731	-
Other interest revenue and similar profit/loss items	9	24,190	978
Interest expenses and similar profit/loss items	9	-2,656	-1,755
Profit after financial items		-14,462	-11,589
Difference between booked depreciation/amortisation and depreciation/amortisation according to plan		-	-
Change in tax allocation reserve		4,635	527
Group contributions received		15,207	13,618
Group contributions paid		-	-
Profit before tax		5,380	2,556
Tax	10	-10,904	-1,758
NET PROFIT FOR THE YEAR		-5,524	798

Net profit for the year is identical to comprehensive income, for which reason no separate statement of comprehensive income has been prepared.

Parent Company Statement of Financial Position

Amounts in kSEK	Note	31 Dec. 2022	31 Dec. 2021
ASSETS			
Non-current assets			
Intangible assets	11		
Capitalised development expenses		759	1,561
Patents and other rights		10,350	8,851
Total intangible assets		11,109	10,412
Property, plant and equipment	12		
Land and buildings		259,218	276,179
Leasehold improvements		17,579	12,963
Equipment		235,762	195,590
Non-current assets under construction		323,099	96,075
Total property, plant and equipment		835,658	580,807
Financial assets			
Participations in Group companies	13	483,279	413,287
Participations in associates	14	16,639	201
Deferred tax assets	10	3,603	15,271
Receivables from Group companies	26	31,865	30,623
Other long-term receivables	15, 26	6,713	5,861
Total financial assets		542,099	465,243
Total non-current assets		1,388,866	1,056,462
Current assets			
Inventories	16	11,245	6,842
Short-term receivables			
Accrued, uninvoiced revenue	26	516,871	392,923
Advance payments to suppliers		0	0
Trade receivables	17, 26	409,179	354,274
Receivables from Group companies	26	107,050	61,393
Current tax assets		82,914	71,485
Other receivables	18, 26	2,579	3,701
Prepaid expenses and accrued revenue	19	87,863	37,071
Total short-term receivables		1,206,456	920,847
Cash and bank balances	20, 26	683,802	524,053
Total current assets		1,901,503	1,451,742
TOTAL ASSETS		3,290,369	2,508,204

Amounts in kSEK	Note	31 Dec. 2022	31 Dec. 2021
EQUITY AND LIABILITIES			
Equity			
Restricted equity			
Share capital		36,400	36,400
Statutory reserve		72,446	72,446
Other reserves		47,525	54,485
Total restricted equity		156,371	163,331
Non-restricted equity			
Retained earnings		244,480	236,721
Net profit for the year		-5,524	798
Total non-restricted equity		238,956	237,519
Total equity	21	395,327	400,850
Untaxed reserves			
Accumulated excess depreciation	22	-	-
Tax allocation reserve	22	-	4,635
Total untaxed reserves		0	4,635
Provisions			
Provisions for retirement benefits	23	19,193	19,378
Deferred tax liability		-	105
Other provisions		4,561	4,875
Total provisions		23 754	24,358
Non-current liabilities			
Non-current liabilities to Group companies		-	40,000
Other non-current liabilities	24, 26	36,120	75,000
Total non-current liabilities		36,120	115,000
Current liabilities			
Invoiced unaccrued revenue		1,165,772	978,048
Trade payables	26	171,192	131,583
Liabilities to Group companies	26	893,271	407,092
Other liabilities	24, 26	266,818	185,238
Accrued expenses and deferred revenue	25	338,115	261,400
Total current liabilities		2,835,168	1,963,361
TOTAL EQUITY AND LIABILITIES		3,290,369	2,508,204

Parent Company changes in equity

Amounts in kSEK	Note	Restricted reserves			Non-restricted equity	Total equity
		Share capital	Reserve fund	Other reserves		
OPENING BALANCE AT 1 JANUARY 2021	21	36,400	72,446	57,198	111,690	277,734
Net profit for the year					798	798
Redistribution				-2,713	2,713	0
Merger difference					122,318	122,318
CLOSING BALANCE AT 31 DECEMBER 2021	21	36,400	72,446	54,485	237,519	400,850
OPENING BALANCE AT 1 JANUARY 2022	21	36,400	72,466	54,485	237,519	400,850
Net profit for the year					-5,524	-5,524
Redistribution				-6,960	6,960	0
CLOSING BALANCE AT 31 DECEMBER 2022	21	36,400	72,446	47,525	238,956	395,327

* Part of the capital gain from the sale of associated companies is dedicated to research in Digital Systems. These funds are recognised as other reserves. For further information see Note 21.

Parent Company statement of cash flows

Amounts in kSEK	Note	2022	2021
Cash flows from operating activities			
Operating profit before financial items		-9,897	-10,812
Depreciation and amortisation of property, plant and equipment and intangible assets	11, 12	127,118	107,458
Other non-cash items	31	409	-25,806
Interest received	9	24,190	978
Interest paid	9	-2,656	-1,755
Income taxes paid	10	-	-
Cash flows from operating activities before changes in working capital		139,164	70,063
Cash flows from changes in working capital			
Increase/decrease in inventories		-4,403	2,911
Increase/decrease in operating receivables		-211,799	-13,333
Increase/decrease in operating liabilities		609,104	586,454
Total changes in working capital		392,902	576,032
Cash flows from operating activities		532,066	646,095
Cash flows from investing activities			
Payments for intangible assets	11	-2,656	-3,392
Payments for property, plant and equipment	12	-415,562	-160,970
Purchases of financial assets		-868	-
Proceeds from disposal of property, plant and equipment		-	-
Investments in associates		-	-
Sales of associates	14	1,731	-
Acquisitions of subsidiaries	13	-64,962	-84,800
Shareholders' contribution		-	-5,050
Sales of shares in subsidiaries		-	47
Cash flows from investing activities		-482,317	-254,165
Cash flow from financing activities			
Repayment of liability from acquisitions	32	-40,000	-27,543
Investment grants		150,000	0
Cash flow from financing activities		110,000	-27,543
CASH FLOW FOR THE YEAR		159,749	364,687
Cash and cash equivalents at the beginning of the year	20	524,053	159,666
Cash and cash equivalents at the end of the year	20	683,802	524,053

Notes

Note 1 Accounting Principles

The Parent Company prepared its annual accounts in compliance with the Swedish Annual Accounts Act and RFR 2 Reporting for Legal Entities. The rules in RFR 2 mean that, in the annual report for the legal entity, the Parent Company shall apply all IFRS/IAS rules and statements approved by the EU to the furthest possible extent within the framework for the Annual Accounts Act and in consideration of the relationship between accounting and taxation. The recommendation sets out what exceptions are to be made to IFRS/IAS. The provisions according to IFRS/IAS are stated in Note 2 of the consolidated financial statements.

The Parent Company applies the accounting principles stated for the Group except for those stated below.

Participations in subsidiaries and associates are recognised at cost less any impairment. Any dividends received are recognised in financial revenue. Dividends which exceed the subsidiary’s comprehensive income for the period, or which entail that the carrying amount of the subsidiary’s net assets in the consolidated statement of profit or loss is below the carrying amount of the participation, constitute an indication of an impairment requirement.

According to RFR 2, the provisions in IAS 19 that concern defined benefit pension plans do not need to be applied in legal entities. However, information shall be provided regarding applicable parts of IAS 19. RFR 2 refers to the Swedish Pension Obligations Vesting Act for regulations regarding recognition of provisions for retirement benefits and similar obligations and the recognition of plan assets in pension funds.

IFRS 16 “Leases” is not applied in the Parent Company, which means that all payments relating to leases are expensed in the statement of profit and loss on a straight-line basis over the lease period.

The Parent Company recognises the difference between depreciation according to plan and depreciation made for tax purposes as accumulated excess depreciation, which is included in untaxed reserves.

Reporting of Group contributions is done in accordance with the alternative rule in RFR 2. Group contributions are recognised as appropriations.

Note 2 Distribution of net sales

Net sales by type of revenue:

Parent Company (kSEK)	2022	2021
Revenue from trade and industry	1,345,046	1,036,791
Public research funding bodies	981,290	729,719
Strategic competence funds	737,771	656,550
EU funds	144,152	130,379
TOTAL	3,208,259	2,553,439

Note 3 Other operating revenue

Parent Company (kSEK)	2022	2021
Rental revenue	8,803	1,665
Currency differences on receivables and liabilities of an operating nature	62	726
Furlough compensation	-17,521	2,888
Group-allocated costs	65,288	131,728
Other revenue	11,399	2,392
TOTAL	68,031	139,399

Note 4 Other operating expenses

Parent Company (kSEK)	2022	2021
Other expenses	-1,171	-712
TOTAL	-1,171	-712

Note 5 Sales and purchases between the Parent Company and Group companies

During the year, the Parent Company invoiced the subsidiaries kSEK 78,590 (145,412) for services. The Parent Company purchased services from Group companies in an amount of kSEK 18,926 (20,785) with regard to administrative and technical services.

Note 6 Audit fees

Audit engagement refers to the audit of the annual report and accounting records, as well as the management of the Company/Group by the Board and the CEO, other tasks incumbent on the Company’s auditor to perform, as well as advice or other assistance arising from observations made during the audit or the implementation of such other tasks. Everything else is other services.

Parent Company (kSEK)	2022	2021
KPMG		
Audit engagement	1,886	1,614
Other auditing services	480	-
Tax advisory services	-	-
Other services	2,425	4,353
Other auditors		
Audit engagement	-	-
Other auditing services	-	-
Tax advisory services	-	-
Other services	-	-
TOTAL	4,791	5 967

Note 7 Employee benefits, etc.

Parent Company (kSEK)	2022	2021
Salaries and other remuneration to the Board of Directors	1,827	1,534
Salaries and other remuneration to the CEO	4,839	4,543
Salaries and other remuneration to other senior executives	16,190	16,705
Salaries and other remuneration to other employees	1,473,978	1,186,352
Social security contributions	429,400	368,936
Retirement benefit costs for the Board of Directors and CEO	1,478	1,170
Retirement benefit costs for other senior executives	5,002	5,108
Retirement benefit costs for other employees	174,914	168,173
TOTAL	2,107,628	1,752,521

Average number of employees (all employees in Sweden)	2022	2021
Men	1,806	1,273
Women	1,199	851
TOTAL	3,005	2,124

The Parent Company’s Board of Directors is composed of 11 (11) members, of whom 36 (36) per cent are women. Group management consists of 9 (9) members, of which 44 (44) per cent are women.

Remuneration to the Board of Directors, CEO and other senior executives in the Parent Company

Guidelines

The Chair and other members of the Board of Directors receive a fee as determined by the resolution of the annual general meeting. For more information on remuneration for the Board, see Group Note 11.

The annual general meeting has resolved on the following guidelines applying to remuneration to Group management.

Remuneration to the CEO and other senior executives consists of basic salary, other benefits and retirement benefits.

Retirement benefits and other benefits to the CEO and other senior executives constitutes a part of total remuneration.

For more information on conditions for senior executives, see Group Note 11.

Terms and conditions for the CEO

In order to secure the retirement benefits due to the CEO, RISE transfers an annual amount equivalent to 30% of the pensionable annual salary to an occupational pension insurance policy as directed by the CEO. The pensionable annual salary comprises monthly salary including a standard calculation of holiday pay (12.2%).

Remuneration and other benefits 2022 – Senior executives

Name	Position	Period*	Payroll expenses**	Other benefits	Retirement benefit costs	Total
Pia Sandvik	CEO	January-December	4,828	11	1,478	6,317
Johanna Flanke	Director of Human Resources	January–August	1,233	25	548	1,806
Annette Anjou	Director of Human Resources	March-December	1,625	8	401	2,034
Robert Casselbrant	Chief Financial Officer	January-December	1,935	47	612	2,594
Marco Lucisano	Head of Division – Built Environment	January-December	2,185	5	695	2,885
Pernilla Walkenström	Head of Division – Materials and Production	January-December	2,203	38	694	2,935
Charlotte Karlsson	Head of Division – Digital Systems	January-December	2,120	29	803	2,952
Timo van't Hoff	Chief Business Development Officer	January-December	1,884	11	595	2,490
Magnus Hallberg	Head of Division – Bioeconomy and Health	January-December	2,055	33	653	2,741
TOTAL			20,068	207	6,480	26,754

* Period, salary, other benefits and retirement benefit costs correspond with period of service in the RISE Group.
** In the 2022 salary review, a first step was taken in adapting salaries for senior executives to the market.
In addition to the year’s remuneration, provision was made for additional remuneration in 2023 for Johanna Flanke amounting to kSEK 1,330.

Remuneration and other benefits 2021 – Senior executives

Name	Position	Period*	Payroll expenses	Other benefits	Retirement benefit costs	Total
Pia Sandvik	CEO	January-December	4,520	23	1,170	5,713
John Rune Nielsen	Director of Research and Business Development	January-September	2,321	35	349	2,705
Johanna Flanke	Director of Human Resources	January-December	1,606	47	518	2,171
Robert Casselbrant	Chief Financial Officer	January-December	1,856	45	591	2,492
Yvonne Näsström	Chief Communications Officer	January-June	857	12	311	1,180
Ola Dawidson	Head of Strategy and Operational Excellence	January-June	981	11	358	1,350
Marco Lucisano	Head of Division – Built Environment	January-December	1,960	15	629	2,604
Pernilla Walkenström	Head of Division – Materials and Production	January-December	1,963	37	624	2,624
Charlotte Karlsson	Head of Division – Digital Systems	January-December	1,890	46	729	2,665
Timo van't Hoff	Chief Business Development Officer	May-December	1,149	3	323	1,475
Magnus Hallberg	Head of Division – Bioeconomy and Health	January-December	1,830	41	676	2,547
TOTAL			20,933	315	6,278	27,526

* Period, salary, other benefits and retirement benefit costs correspond with period of service in RISE AB.
In addition to the year's remuneration, provision was made for additional remuneration in 2021 for John Rune Nielsen, Ola Dawidson and Yvonne Näsström amounting to kSEK 4,129.

The table above shows remuneration to individuals employed in RISE AB. For complete information for all senior executives, refer to the corresponding table in Note 11 for the Group.

Note 8 Business combinations and mergers

Business combinations

On 1 April 2022, business transfers were made from seven Group companies, RISE Energy Technology Center AB, RISE Innventia AB, RISE Swerea AB, RISE Swerea IVF AB, RISE Swerea SICOMP AB, RISE Swerea Swecast AB and RISE Swerea KIMAB AB. In the transfer, a receivable arose to the companies amounting to kSEK 16,485.

Parent Company (kSEK)	2022	2021
Recognised amounts of identifiable assets and assumed liabilities		
Property, plant and equipment and intangible assets	63,369	-
Financial assets	19,499	-
Trade receivables and other receivables	45,480	-
Trade payables and other liabilities	-111,862	-
TOTAL IDENTIFIABLE NET ASSETS	16,486	-

Merger

On 29 December 2021, 16 dormant subsidiaries were merged with RISE AB. The profit or loss items and balance sheet items that were transferred to RISE AB as of the merger date of 29 December 2021 are presented below.

Parent Company (kSEK)	2022	2021
Net sales	-	-
Operating profit	-	369
Net financial items	-	-80
Untaxed reserves	-	-522
Property, plant and equipment	-	-
Financial assets	-	-94,370
Trade receivables and other receivables	-	-75,828
Cash and cash equivalents	-	12,096
Trade payables and other liabilities	-	285,289

Merged companies 2021	Corporate Identity Number
RISE CBI Betonginstitutet AB	556352-5699
SP Process Development AB	556196-9204
Glafo AB	556111-6855
JTI – Institutet för jordbruks- och miljöteknik AB	556772-8026
SIK – Institutet för Livsmedel och Bioteknik AB	556536-9369
SITAC Aktiebolag	556469-0120
YKI, Institute for Surface Chemistry	556558-0338
RISE ICT AB	556668-2976
RISE Viktoria AB	556542-4339
RISE Interactive Institute AB	556557-3077
Swedish ICT Innovation AB	556539-5448
Ogemi aktiebolag	556564-6865
RISE SICS AB	556587-0119
RISE SICS East AB	556567-9155
RISE SICS North AB	559003-7569
RISE SICS Västerås AB	556877-7139

Note 9 Other interest revenue and similar profit/loss items and interest expenses and similar profit/loss items

Parent Company (kSEK)	2022	2021
Interest revenue and similar profit/loss items:		
Interest revenue on bank balances	5,320	978
Foreign exchange gains/losses	18,870	-
Interest revenue and similar profit/loss items	24,190	978
Interest expenses and similar profit/loss items:		
Interest paid	-2,656	-869
Other financial expenses	-	-
Foreign exchange gains/losses	-	-886
Interest expenses and similar profit/loss items	-2,656	-1,755
FINANCIAL ITEMS – NET	21,534	-777

Note 10 Taxes

Parent Company (kSEK)	2022	2021
Deferred tax on temporary differences		-
Deferred tax on loss carry-forwards	-11,668	-1,758
Miscellaneous	764	-
Total deferred tax in the statement of profit or loss	-10,904	-1,758
Current tax		-
TOTAL INCOME TAX	-10,904	-1,758

The difference between recognised tax expense and estimated tax expense based on applicable tax rates is as follows:

Parent Company (kSEK)	2022	2021
Profit before tax	5,381	2,556
Income tax according to applicable tax rate 20.6% (20.6%)	-1,108	-527
Tax effect of following items		
Non-taxable revenue	361	1,103
Non-deductible expenses	-3,297	-1,210
Impairment of shares in subsidiaries	-5,733	-
Utilised loss carry-forwards that have not previously been activated	-	-
Adjustments referring to previous years	-1,127	-1,124
Miscellaneous		
TOTAL TAX EXPENSE	-10,904	-1,758

Deferred tax assets and liabilities are distributed as follows:

Parent Company (kSEK)	2022	2021
Deferred tax assets which will be utilised after more than 12 months		
Opening carrying amount	15,271	17,028
Reclassifications		
Change for the year	-11,668	-1,757
Total deferred tax assets	3,603	15,271
Deferred tax liabilities which will be utilised after more than 12 months		
Opening carrying amount	105	-
Change for the year	-105	105
Total deferred tax liabilities	0	105
DEFERRED TAX ASSETS – NET	3,603	15,166

Deferred tax assets and tax liabilities are attributable to the following items:

Parent Company (kSEK)	2022	2021
Deferred tax assets		
Non-current assets		
Retirement benefit obligations		
Loss carry-forwards	17,488	15,271
Total deferred tax assets	17,488	15,271
Deferred tax liabilities		
Non-current assets		
Retirement benefit obligations	-	105
Total deferred tax liabilities	-	105
DEFERRED TAX ASSETS – NET	17,488	15,166

Note 11 Intangible assets

Parent Company (kSEK)	Capitalised development Patents and expenses other rights	Total
Per 31 December 2021		
Cost	1,861	11,476
Accumulated depreciation	-300	-2,925
CARRYING AMOUNT	1,562	8,850
Financial year 2022		
Opening carrying amount	1,562	8,850
Purchasing	320	2,336
Business transfers group companies	254	382
Sales and disposals		
Reclassifications	-1,208	-9
Depreciation	-169	-1,209
Closing carrying amount	759	10,350
Per 31 December 2022		
Cost	1,227	14,185
Accumulated depreciation	-468	-3,834
CARRYING AMOUNT	759	10,350

Note 12 Property, plant and equipment

Parent Company (kSEK)	Land and buildings, includ- ing land improvements	Leasehold improvements	Equipment, tools, fixtures and fittings	Non-current assets under construction	Total
Financial year 2021					
Opening carrying amount	296,260	13,624	205,864	14,172	529,920
Purchasing	12,083	-	82,692	66,195	160,970
Reclassifications	-2,798	-	-12,910	15,708	-
Sale/disposal	-	-	-3,700	-	-3,700
Immediate write-off against grants					
Depreciation	-29,367	-661	-76,356	-	-106,384
Impairment losses	-	-	-	-	-
Closing carrying amount	276,179	12,964	195,590	96,075	580,807
Per 31 December 2021					
Cost	536,030	17,102	485,680	96,075	1,134 886
Accumulated depre- ciation	-259,851	-4,138	-290,090	-	-554,076
Accumulated impair- ment	-	-	-	-	-
Carrying amount	276,179	12,964	195,590	96,075	580,808
Financial year 2022					
Opening carrying amount	276,179	12,964	195,590	96,075	580,808
Purchasing	49,033	5,559	144,985	215,985	415,562
Business transfers group companies	-	10,823	41,410	11,039	62,732
Reclassifications	10,452	-9,662	427	-	1,217
Sale/disposal	-	-	-908	-	-908
Immediate write-off against grants	-45,887	-	-52,126	-	-98,013
Depreciation	-30,559	-1,565	-93,616	-	-125,740
Impairment losses	-	-	-	-	-
Closing carrying amount	259,218	17,579	235,762	323,099	835,658
Per 31 December 2022					
Cost	549,628	23,282	619,468	323,099	1,515,477
Accumulated depre- ciation	-290,410	-5,703	-383,706	-	-679,819
Accumulated impair- ment	-	-	-	-	-
Carrying amount	259,219	17,579	235,762	323,099	835,658

Note 13 Participations in Group companies

Group (kSEK)	2022	2021
Opening cost	413,287	420,026
Investment	67,822	89,850
Shareholders' contribution	30,000	5,050
Sales	-	-47
Merging of subsidiaries	-	-96,542
Impairment	-27,830	-
Closing carrying amount	483,279	413,287

The Parent Company and its subsidiaries have participations in the following subsidiaries (kSEK):

Name	Company registration number	Registered office	Number of shares	Participat- ing interest, %	Carrying amount 2022	Carrying amount 2021
RISE Acreo AB	556534-9007	Stockholm	1,000	100	1,530	1,530
RISE SMP Svensk Maskinprovning AB	556529-6836	Lomma	5,000	100	11,079	11,079
AstaZero AB	556802-4946	Borås	61,330	61,33	117,511	52,550
RISE Processum AB	556641-7357	Örnsköldsvik	600	60	240	240
RISE Fire Research AS	982,930,057	Trondheim, Norway	910,000	70	3,300	3,300
RISE Energy Technology Center AB	556992-6651	Piteå	2,000	100	5,250	5,250
Innventia Fastighets AB	556603-1109	Stockholm	50,000	100	50	50
RISE Innventia AB	556603-1109	Stockholm	110	100	52,380	79,909
RISE LignoDemo AB	556139-9485	Stockholm	1,000	100		
RISE PFI AS	986,164,901	Trondheim, Norway	190	95		
Innventia UK Ltd	6,270,672	London, United Kingdom	1	100		
Swerea AB	556664-2228	Stockholm	200,000	100	160,276	160,276
Swerea KIMAB AB	556593-0509	Stockholm	79,567	100		
Institut de la Corrosion	RCS 441396595	Brest, France	1,000	100	2,560	
Swerea IVF AB	556053-1526	Möln dal	1	100		
Swerea SICOMP AB	556520-7601	Piteå	1,000	100		
Swerea SWECAST AB	556186-4587	Jönköping	3,000	100		
SEEL Swedish Electric Transport Laboratory AB	559155-5536	Borås	2,525	50.5	5,303	5,303
MoRe Research Örnsköldsvik AB	556599-2277	Örnsköldsvik	36,000	60	9,000	9,000
SSPA Sweden AB	556224-1918	Gothenburg	160,000	100	84,300	84,300
RISE Medical Notified Body AB	559308-7728	Gothenburg	500	100	30,500	500
Merged companies						
RISE ICT AB	556668-2976	Stockholm	1,000	100		
RISE SICS AB	556587-0119	Stockholm	1,000	100		
RISE Viktoria AB	556542-4339	Gothenburg	100	100		
RISE Interactive Institute AB	556557-3077	Stockholm	1,000	100		
Ogemi AB	556564-6865	Gothenburg	10,000	100		
Swedish ICT Innovation AB	556539-5448	Stockholm	1,000	100		
SITAC AB	556469-0120	Karlskrona	5,000	100		
SIK – Institutet för Livsmedel och Bioteknik AB	556536-9369	Gothenburg	50,000	100		
YKI – Ytkemiska Institutet AB	556558-0338	Stockholm	1,000	100		
RISE CBI Betonginstitutet AB	556352-5699	Stockholm	5,000	100		
Glafo AB	556111-6855	Växjö	1,000	100		
JTI – Swedish Institute of Agricultural and Environmen- tal Engineering AB	556772-8026	Uppsala	500	100		
SP Process Development AB	556196-9204	Södertälje	5,000	100		
TOTAL					483,279	413,287

The carrying value of RISE Innventia AB’s shares was impaired by kSEK 27,830 in 2022. In addition, a shareholder contribution of SEK 30,000 thousand was injected into Medical Notified Body AB and the share-
holding in RISE Asta Zero AB increased to 100 per cent, which means
an increase of SEK 64,961 thousand.

During 2021, SSPA Sweden AB was acquired for a purchase consid-
eration of kSEK 84,300, and a new company, RISE Medical Notified
Body, was started with an original investment of kSEK 500. In addition,
a shareholders’ contribution of kSEK 5,050 was paid to SEEL, while

the participating interest in SEEL dropped to 50.5%, a decline of SEK
47,500.

The percentages of voting rights are consistent with the participa-
tions. The Group is owned by the Swedish State. Dividends are not paid
by the subsidiaries to the Parent Company, with the exception of RISE
SMP Svensk Maskinprovning AB.

Operations in all of the companies in the Group are considered
to be research institutes, with the exception of RISE SMP Svensk
Maskinprovning AB, which is a testing company.

Note 14 Participations in associates

Parent Company (kSEK)	2022	2021
Opening cost	201	264
Acquisitions of associates	16,639	-
Sales of associates	-201	-63
Closing carrying amount	16,639	201

Parent Company (kSEK) Name	Company registration number	Registered office	Share of equity %	Number of shares	Carrying amount 2022	Carrying amount 2021
DP Pattering AB	556320-4139	Norrköping	0	0	-	201
Swerim AB	556585-4725	Luleå	20	40,000	16,639	-
TOTAL					16,639	201

The holdings are not considered to be material. All are unlisted.

Note 15 Other long-term receivables

Parent Company (kSEK)	2022	2021
Opening cost	5,861	3,607
Change for the year	852	2,254
CLOSING CARRYING AMOUNT	6,713	5,861

None of the long-term receivables are due for payment or require impairment.

Note 16 Inventories

Parent Company (kSEK)	2022	2021
Raw materials and consumables	9,066	5,637
Finished goods	2,179	1,205
TOTAL	11,245	6,842

Note 17 Trade receivables

Parent Company (kSEK)	2022	2021
Trade receivables	412,643	360,743
Less: provision for bad debts	-3,464	-6,469
TOTAL	409,179	354,274

Parent Company (kSEK)	2022	2021
Not yet mature	408,311	268,408
Overdue 0–3 months	109	58,655
Overdue > 3–6 months	596	8,833
Overdue > 6 months	163	18,378
TOTAL	409,179	354,274

Credit loss provisions for trade receivables are managed in accordance with the principles described in Note 3 to the Group.

Note 18 Other receivables

Group (kSEK)	2022	2021
Receivables from employees	80	38
Tax account	1,028	3,031
Other items	1,471	632
TOTAL	2,579	3,701

Note 19 Prepaid expenses and accrued revenue

Parent Company (kSEK)	2022	2021
Prepaid rent for premises	35,863	21,978
Prepaid licence fees	18,976	11,120
Retroactive R&D grant	14,859	-
Furlough compensation	-	971
Other items	18,165	3,002
TOTAL	87,863	37,071

Note 20 Cash and cash equivalents/Cash and bank balances

Cash and cash equivalents in the statement of financial position and statement of cash flows includes the following components:

Parent Company (kSEK)	2022	2021
Cash and bank balances	683,802	524,053
TOTAL	683,802	524,053

Note 21 Specific disclosures regarding equity

Parent Company

Share capital

The Parent Company’s share capital amounts to SEK 36,400,000, divided between 364,000 shares of varying types. The quotient value of each share amounts to SEK 100. All shares are paid-up in full. No shares are held by the Company or its subsidiaries.

Note 21, continued

Restricted equity

Restricted equity may not be decreased through the distribution of profits. Restricted equity consists of share capital of kSEK 36,400, a statutory reserve of kSEK 72,446 and other reserves amounting to kSEK 47,525. Other reserves refers to capital where an external party has some influence in deciding what research the capital is to be used for.

Note 22 Untaxed reserves

Group (kSEK)	2022	2021
Opening balance	4,635	0
Change for the year	-4,635	4,635
TOTAL	0	4,635

Untaxed reserves in 2021 consist entirely of tax allocation reserve brought into RISE AB through the merger of subsidiaries.

Note 23 Retirement benefit obligations

Parent Company (kSEK)	2022	2021
Obligations in the statement of financial position for defined benefit pension plans under the Swedish Safeguarding of Pension Commitments Act	12,550	13,787
Direct retirement benefit commitments	6,643	5,591
TOTAL LIABILITY IN THE STATEMENT OF FINANCIAL POSITION	19,193	19,378

The change in the defined benefit obligation during the year is as follows:

Parent Company (kSEK)	2022	2021
At the beginning of the year	19,378	18,189
Retirement benefit costs relating to personal retirement plans	1,233	
Benefits paid	-1,325	-1,060
Interest expenses	147	78
Revaluation	-240	-
Merger	-	2,171
Reclassifications	-	-
AT THE END OF THE YEAR	19,193	19,378

Defined benefit pension plans

For salaried employees in Sweden, the ITP 2 plan's defined benefit pension obligations for retirement and family pensions are secured through an insurance policy with Alecta. According to a statement made by the Swedish Financial Accounting Council, UFR 10 Classification of ITP plans financed by insurance in Alecta, this is a defined benefit plan covering several employers. For the financial years 2022 and 2021, the Company has not had access to information to be able to recognise its proportionate share of the plan's obligations, plan assets and costs, which means that it has not been possible to recognise the plan as a defined benefit plan. The ITP 2 pension plan which is secured through insurance with Alecta is, therefore, reported as a defined contribution plan. The premium for the defined benefit retirement and family pension is calculated on an individual basis and is dependent on factors such as the salary, previously vested pension and expected remaining length of service of the employee. The expected fees for the next reporting period for ITP 2 insurance with Alecta amount to SEK 41.5 million for 2023. For 2022 these amounted to SEK 66.4 million and for 2021 to SEK 75.6 million. The collective funding ratio corresponds to the market value of Alecta's assets as a percentage of insurance commitments calculated according

to Alecta's actuarial methods and assumptions, which do not comply with IAS 19. The collective funding ratio is normally allowed to vary between 125 and 155 per cent. If Alecta's collective funding ratio is less than 125 per cent or greater than 155 per cent, measures shall be taken in order to create the conditions for the funding ratio to return to the normal range. At low consolidation, a measure can be to raise the agreed price for new issues and to expand existing benefits. In the event of high consolidation, one measure may be to introduce premium reductions.

At the end of 2022, Alecta's surplus in the form of the collective funding ratio amounted to 172 (172) per cent.

At the time of the most recent measurement, the present value of the defined benefit obligation consisted of approximately kSEK 12,660 (12,746) attributable to retirees covered by the plan. The duration of the obligation is 8 years (10).

The most important actuarial assumptions are as follows:

Parent Company (kSEK)	2022	2021
Discount rate, %	3.60	1.20
Inflation	2.0	2.2
Lifetime	DUS 21	DUS 14

Sensitivity analysis

The table below presents possible changes in actuarial assumptions as of the closing date, with other assumptions unchanged, and how they would affect the defined benefit obligation.

Parent Company (kSEK)	Change in assumption	Increase	Decrease
Discount rate	0.50%	-358	382
Inflation	0.50%	359	-339
Lifetime	1 year	534	-521

Note 24 Other liabilities

Parent Company (kSEK)	2022	2021
Other non-current liabilities		
Project funds	36,120	75,000
TOTAL	36,120	75,000
Other current liabilities		
Project funds	28,156	25,000
Property tax	2,448	2,448
Payroll tax	-	-
Tax on returns	27	23
VAT liability	-2,002	10,296
Employee withholding tax	38,361	31,611
Partner funds	134,058	84,000
Social security contributions	39,967	31,860
Other items	25,804	-
TOTAL	266,819	185,238

Note 25 Accrued expenses and deferred revenue

Parent Company (kSEK)	2022	2021
Personnel-related items	273,617	243,423
Partner funds	8,526	-
Rents	2,457	-
Purchased services	18,608	-
Other items	34,907	17,977
TOTAL	338,115	261,400

Note 26 Financial assets and liabilities

Classification and fair value and level in the measurement hierarchy

Parent Company 31 Dec. 2022 (kSEK)	Financial assets at fair value through profit or loss	Financial assets at fair value through compre- hensive income	Financial assets at amortised cost	Financial liabilities at amortised cost	Total
Financial assets					
Other long-term receiv- ables			6,713		6,713
Trade receivables			409,179		409,179
Receivables from Group companies			107,050		107,050
Accrued, uninvoiced revenue			516,871		516,871
Cash and cash equiv- alents			683,802		683,802
TOTAL FINANCIAL ASSETS			1,732,615		1,732,615
Financial liabilities					
Trade payables				171,192	171,192
Liabilities to Group companies				893,271	893,271
Other liabilities				134,059	134,059
OTHER FINANCIAL LIABILITIES				1,198,522	1,198,522

All financial assets and liabilities measured at amortised cost agree with their fair values.

Parent Company 31 Dec. 2021 (kSEK)	Financial assets at fair val- ue through profit or loss	Financial assets at fair value through compre- hensive income	Financial assets at amor- tised cost	Financial liabilities at amortised cost	Total
Financial assets					
Other long-term receiv- ables			5,861		5,861
Trade receivables			354,274		354,274
Receivables from Group companies			92,016		92,016
Accrued, uninvoiced revenue			392,923		392,923
Cash and cash equiv- alents			524,053		524,053
TOTAL FINANCIAL ASSETS	-	-	1,369,127	-	1,369,127
Financial liabilities					
Trade payables				131,583	131,583
Liabilities to Group companies				447,092	447,092
Other liabilities				84,000	84,000
OTHER FINANCIAL LIABILITIES				662,675	662,675

To provide an indication of the reliability of the input data used in determining fair value, the Group classified the financial instruments in three levels described below:

Level 1 Fair value of financial instruments traded on an active market is based on the quoted market prices on the closing date. The quoted market prices used for the Group's financial assets are the current bid price.

Level 2- Fair value of financial assets not traded on an active market

is determined using valuation techniques that to the furthest possible extent are based on market information, while company-specific information is used to the least extent possible. All material input data required for fair value measurement of an instrument are observable.

Level 3-Where one or more key inputs are not based on observable market information. This applies e.g. to unlisted instruments.

Note 27 Leasing commitments

Investment commitments

Leasing commitments

The Parent Company leases various types of premises, vehicles, machinery and office equipment under terminable/non-terminable operating leases.

Future lease payments for non-terminable leases fall due as follows:

Parent Company (kSEK)	2022	2021
Within 1 year	188,148	106,494
Between 1 and 5 years	390,380	207,531
Later than 5 years	40,806	6,533
TOTAL	619,334	320,558
Lease fees charged to expenses for the year	176,689	73,706

Note 28 Pledged assets

Parent Company (kSEK)	2022	2021
Property mortgages	52,600	52,600
Floating charges	20,000	20,000
Guarantees provided	779	763
TOTAL	73,379	73,363

Note 29 Contingent liabilities

Parent Company (kSEK)	2022	2021
Guarantee commitments to the benefit of subsidiaries	502,781	421,798
TOTAL	502,781	421,798

Note 32 Reconciliation of liabilities related to financing activities

Parent Company (kSEK)	31 Dec. 2021	Non-cash items		31 Dec. 2022
		Cash flows	Exchange rate differences Other non-cash items	
Reverse liabilities from acquisitions	75,000		-38,879	36,120
Other liabilities	40,000	-40,000		
TOTAL	115,000	-40,000	-38,879	36,120

Parent Company (kSEK)	31 Dec. 2020	Non-cash items		31 Dec. 2021
		Cash flows	Exchange rate differences Other non-cash items	
Reverse liabilities from acquisitions			75,000	75,000
Other liabilities			40,000	40,000
TOTAL			115,000	115,000

Note 33 Events after the closing date

No significant events which have had an impact on the operations or the Group's financial position have occurred after the closing date.

Note 30 Appropriation of profits

The Board of Directors proposes that the available funds of SEK 238,955,851 be appropriated as follows:

Profit brought forward from the previous year	SEK 237,519,738
Transfer of other reserves	SEK 6,959,770
Net profit for the year	SEK -5,523,657
Retained earnings at year end will be carried forward	SEK 238,955,851

According to the Articles of Association, the purpose of the operations is not to generate profits for shareholders. No dividends are paid out.

Note 31 Other non-cash items

Parent Company (kSEK)	2022	2021
Change in provisions for retirement benefits	-185	1,189
Capital gain on sales of machinery and equipment	908	3,700
Changes in other provisions	-314	-30,695
TOTAL	409	-25,806

The Group's statement of profit or loss and statement of financial position will be presented for adoption at the annual general meeting of shareholders to be held on 25 April 2023.

The Board of Directors and CEO hereby certify that the consolidated financial statements have been prepared in accordance International Financial Reporting Standards, IFRS, as adopted by the EU and give a true and fair view of the Group's financial position and performance. The annual report has been prepared in accordance with

generally accepted accounting principles and gives a true and fair view of the Parent Company's financial position and performance.

The administration report for the Parent Company and the Group provides an accurate depiction of both the Parent Company's and the Group's operations, financial position and performance, and describes significant risks and factors of uncertainty facing the Parent Company and the companies in the Group.

Gothenburg, 29 March 2023

Jan Wäreby
Chair

Anna-Karin Stenberg
Board Member

Cristina Petrescu
Board Member

Pernilla Jonsson
Board Member

Hanna Lagercrantz
Board Member

Klas Bendrik
Board Member

Magnus Hillergren
Board Member, Employee Representative

Johan Berglund
Board Member, Employee Representative

Mikael Hannus
Board Member

Torbjörn Holmström
Board Member

Ulf Nordberg
Board Member, Employee Representative

Pia Sandvik
CEO

Our auditor's report was submitted on 29 March 2023
KPMG AB

Ingrid Hornberg Román
Authorised Public Accountant

Auditor's report

To RISE Research Institutes of Sweden AB, Corporate Identity Number 556464-6874

REPORT ON THE ANNUAL ACCOUNTS AND CONSOLIDATED ACCOUNTS

Opinions

We have conducted an audit of the annual accounts and consolidated accounts of RISE Research Institutes of Sweden AB for the year 2022. The annual accounts and consolidated accounts of the Company are included on pages 64–114 of this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the Parent Company as of 31 December 2022 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the Group as of 31 December 2022 and its financial performance and cash flow for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and the Annual Accounts Act. The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the general meeting of shareholders adopts the income statement and balance sheet for the Parent Company and the Group.

Basis for Opinions

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the 'Auditor's responsibilities' section. We are independent of the Parent Company and the Group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

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

Information other than the annual accounts and consolidated accounts

This document also contains information other than the annual report and consolidated financial statements, which can be found on pages 1–48 and 119. The other information also

consists of the remuneration report which we obtained before the date of this auditor's report. The Board of Directors and Chief Executive Officer are responsible for this other information.

Our opinion on the annual accounts and consolidated accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

In connection with our audit of the annual accounts and consolidated accounts, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the annual accounts and consolidated accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors and the CEO

The Board of Directors and the CEO are responsible for the preparation of the annual accounts and consolidated accounts and that they give a fair presentation in accordance with the Annual Accounts Act and, concerning the consolidated accounts, in accordance with IFRS as adopted by the EU. The Board of Directors and the CEO are also responsible for such internal control as they determine is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts and consolidated accounts, the Board of Directors and the CEO are responsible for the assessment of the Company's and the Group's ability to continue as a going concern. They disclose, as applicable, matters related to going concern and using the going concern basis of accounting. The going concern basis of accounting is however not applied if the Board of Directors and the CEO intend to liquidate the Company, to cease operations, or have no realistic alternative but to do so.

The Audit Committee shall, without prejudice to the Board of Directors' responsibilities and tasks in general, among other things oversee the Company's financial reporting process.

Auditor’s responsibilities

Our objectives are to obtain reasonable assurance about whether the annual accounts and consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinions. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden 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 annual accounts and consolidated accounts.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual accounts and consolidated accounts, 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 opinions. 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 the Company’s internal control relevant to our 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 Company’s internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors and the CEO.
- Conclude on the appropriateness of the Board of Directors’ and the CEO’s use of the going concern basis of accounting in preparing the annual accounts and consolidated accounts. We also draw a conclusion, based on the audit evidence obtained, as to whether any material uncertainty exists related to events or conditions that may cast significant doubt on the Company’s and 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 annual accounts and consolidated accounts or, if such disclosures are inadequate, to modify our opinion about the annual accounts and consolidated accounts. 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 a company and a group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the annual accounts and consolidated accounts, including the disclosures, and whether the annual accounts and consolidated accounts represent the underlying transactions and events in a manner

that achieves fair presentation.

- Obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated accounts. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our opinions.

We must inform the Board of Directors of, among other matters, the planned scope and timing of the audit. We must also inform of significant audit findings during our audit, including any significant deficiencies in internal control that we identified.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Opinions

In addition to our audit of the annual accounts and consolidated accounts, we have also audited the administration of the Board of Directors and the CEO of RISE Research Institutes of Sweden AB for the year 2022 and the proposed appropriations of the Company’s profit or loss.

We recommend to the general meeting of shareholders that the profit be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the CEO be discharged from liability for the financial year.

Basis for Opinions

We conducted the audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the ‘Auditor’s responsibilities’ section. We are independent of the Parent Company and the Group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

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

Responsibilities of the Board of Directors and the CEO

The Board of Directors is responsible for the proposal for appropriations of the Company’s profit or loss. At the proposal of a dividend, this includes an assessment of whether the dividend is justifiable considering the requirements which the Company’s and the Group’s type of operations, size and risks place on the size of the parent company’s and the Group’s equity, consolidation requirements, liquidity and position in general.

The Board of Directors is responsible for the Company’s organisation and the administration of the Company’s affairs. This includes, among other things, continuous assessment of the Company’s and the Group’s financial situation and ensuring that the Company’s organisation is designed so that the accounting, management of assets and the Company’s financial affairs otherwise are controlled in a reassuring manner.

The CEO shall manage the ongoing administration according to the Board of Directors’ guidelines and instructions and among other matters take measures that are necessary to fulfil the Company’s accounting in accordance with law and handle the management of assets in a reassuring manner.

Auditor’s responsibilities

Our objective concerning the audit of the administration, and thereby our opinion about discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance whether any member of the Board of Directors or the Managing Director in any material respect:

- has undertaken any action or been guilty of any omission which can give rise to liability to the Company, or
- in any other way has acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.

Our concerning the audit of the proposed appropriations of the Company’s profit or loss, and thereby our opinion about this, is to assess with reasonable degree of assurance whether the proposal is in accordance with the Companies Act.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with generally accepted auditing standards in Sweden will always detect actions or omissions that can give rise to liability to the Company, or that the proposed appropriations of the Company’s profit or loss are not in accordance with the Companies Act.

As part of an audit in accordance with generally accepted auditing standards in Sweden, we exercise professional judgment

and maintain professional scepticism throughout the audit. The examination of the administration and the proposed appropriations of the Company’s profit or loss is based primarily on the audit of the accounts. Additional audit procedures performed are based on our professional judgment with a starting point in risk and materiality. This means that we focus the examination on such actions, areas and relationships that are material for the operations and where deviations and violations would have particular importance for the Company’s situation. We examine and test decisions undertaken, support for decisions, actions taken and other circumstances that are relevant to our opinion concerning discharge from liability. As a basis for our opinion on the Board of Directors’ proposed appropriations of the Company’s profit or loss, we examined whether the proposal is in accordance with the Companies Act.

Stockholm, 29 March 2023
KPMG AB

Ingrid Hornberg Román
Authorised Public Accountant

Alternative key performance indicators

In accordance with the guidelines issued by ESMA (European Securities and Markets Authority) with regard to the accounting of alternative performance measures, definitions and clarifications of alternative performance measures applied within RISE are provided here. The guidelines entail extended disclosures regarding the financial measures not defined in IFRS. They are used for internal governance and follow-up. As not all companies calculate the financial measures in the same manner, these are not always comparable with the measures used by other companies.

Definitions

Equity/assets ratio:
Total equity on the closing date as a percentage of total assets

Return on equity:
Net profit for the year as a percentage of total equity on the closing date

Liquid ratio:
Current assets excluding inventories and work in progress as a percentage of current liabilities

Net debt/equity ratio:
Interest-bearing liabilities including pension commitments less interest-bearing assets and cash and cash equivalents, divided by total equity on the closing date

Operating margin:
Operating profit after depreciation and amortisation as a percentage of sales

Definitions and glossary

Additive manufacturing	3D printing
Cyber Test Lab Automotive	An advanced test cluster in cyber security for the automotive industry.
Cyber Range	Testbed where virtual tests are carried out in a controlled environment to create stable and secure IT systems.
IFRC	International Financial Reporting Interpretations Committee
MECM	Material Engineering & Corrosion Management was integrated into RISE's subsidiary French Corrosion Institute in 2022.
MNB	RISE Medical Notified Body AB, a start-up company that is to become a notified body for medical devices (MDR 2017/745).
CSI	Customer Satisfaction Index
Resilience	A system's ability to recover from or withstand various disruptions
RISE	The RISE Group consists of the parent company RISE AB and several wholly owned and part-owned subsidiaries with a >50% share of ownership. Also referred to as RISE.
RISE AB	RISE Research Institutes of Sweden AB is the Parent Company of the RISE Group. Also referred to as RISE AB.
RISE Group	Comprised of the RISE Group and the associate Swerim AB.
RISE Research Council	Representatives from the business and academic communities who provide advice on strategic issues concerning research focus and other priority issues.
SBTI	The Science Based Targets initiative is a partnership between CDP, the United Nations Global Compact, the World Resources Institute (WRI) and the World Wide Fund for Nature (WWF) to drive ambitious climate action in the private sector by enabling organizations to set science-based emission reduction targets.
SEEL	Swedish Electric Transport Laboratory
SC funds	Strategic competence funds, a form of basic financing distributed according to the distribution model.
SMES	Small and medium-sized enterprises, also referred to as SMEs
Structural funds	Strategic competence funds distributed to specific projects.
TEF	Test and Experimentation Facilities, physical and virtual environments that promote the implementation of artificial intelligence in the market.
Vinnova	Sweden's innovation authority. Mission: To promote sustainable growth by improving the conditions for innovation, as well as funding needs-driven research.

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RISE

Research Institutes of Sweden

RISE is Sweden's research institute and innovation partner. Through international collaborations with the business community, academia and the public sector, we contribute to ensure the competitiveness of Swedish commerce and industry and a sustainable society.

Our approximately 3,100 employees drive and support all types of innovation processes. RISE is an independent, State-owned research institution offering unique expertise and around 130 test and demonstration environments for future-proof technologies, products and services.

ri.se

The RISE logo consists of the letters 'RI.' stacked above 'SE' in a bold, white, sans-serif font. The 'RI.' is positioned to the left of the 'SE', creating a compact, two-line vertical arrangement.