



# Merus Power Plc **Sustainability Report** **2023**



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*For Merus Power, sustainability means working innovatively for the good of the environment, economy and people.*





# Merus Power designs and manufactures energy storages and power **quality solutions** for a safer and more sustainable world

With its innovative technology, the goal of Merus Power is to promote sustainable development and bring solutions and hope to a world faced with the climate crisis, ensuring security for nations and people and offering as many of them as possible a good life.

The green transition is progressing, and in that renewable energy plays a key role. The common project for all humankind has been described by many measures, for example by calculating that the investments required to ensure the progress of energy efficiency and circular economy will be USD 650 billion by 2030 and almost USD 800 billion by 2050.<sup>1)</sup> So there is certainly plenty to do for companies like Merus Power. Our growth is supported by global megatrends such as the electrification of society, the climate change mitigation and emission reduction goals, the green transition and the various investment programs and responsibility goals.

## A leader in electrical engineering

The business of Merus Power is based on modular and scalable power electronics, intelligent software technologies and electrical engineering expertise. Design, engineering and manufacturing of Merus products is done at the Ylöjärvi factory.

Our business is divided into two technology areas, energy storage systems and power quality solutions. Our energy storage systems enable the integration of renewable energy into the power grid and provide our customers with new business models made possible by renewable energy. We aim at strong growth, especially on energy storage markets making use of renewable energy – especially in Finland and Sweden but also in Europe. Our power quality solutions reduce electrical disruptions caused by poor power quality. Merus products also improve reliability, profitability and energy efficiency in our customers' operations. We anticipate that our position and development in the power quality market will remain strong in the future.

Our customer base is broad, including players in the fields of industry, power generation and renewable energy. Our goal is to profile ourselves at the top of the value chain as a reliable systems supplier,

while in the power quality solutions business we want to be a significant supplier for various kinds of integrators and sales partners. Our solutions are already in use in over 70 countries around the world.

To fulfil our mission, we bring together diverse representatives of prestigious international know-how and talent in electrical engineering, digitalization and renewable energy. Our headquarters are located in Ylöjärvi, Finland, where we moved in steps during 2023. Merus Power has subsidiaries in Singapore and Hongkong<sup>2)</sup> and offices in Germany and the United Arab Emirates. We are all united in our commitment to promote the success of our customers every day.

<sup>1)</sup> IRENA, 2022: *World Energy Transitions Outlook, A roadmap to 2030*, <https://www.irena.org/Digital-Report/World-Energy-Transitions-Outlook-2022>

<sup>2)</sup> No business activity in Hongkong



# We participate, innovate, **and** **develop together**

At Merus Power, the meaningfulness of work and enthusiasm for technology have always been at the core of our operations. In addition to technology, we have always wanted to work towards a better future. We want to act responsibly by ourselves and through our products promote issues important to all, such as the energy transition and more energy efficient industrial operation. This has been our goal ever since the foundation of our company. We are on a strong growth path and we aim to continue growing in the future. In 2023, we started up projects to fulfill the requirement of the CSRD directive in the future. In our sustainability report, we also address the double materiality analysis, as in the course of the year, we started a strategic development process associated with it.

Evaluating Merus Power's sustainability entails understanding the whole nature of the company's operations, what the tireless efforts and work of the Merus personnel intend to accomplish. The guiding principle in all our products is to promote the increase of renewable energy production and to improve power quality and

energy efficiency. The Merus solutions help to reduce CO<sub>2</sub> emissions and thus combat global climate change. We help our customers to reduce their carbon footprint and foster the sustainable and energy efficient development of economy and society globally.





With our products, we can exert influence beyond our size. We monitor the realization of sustainability goals through the following statistics: green energy capacity connected to the grid, share of energy storage capacity on the fast Finnish frequency control market, and the potential reduction of CO<sub>2</sub> emissions for our customers throughout the year. We also continuously reduce the environmental burden of our operations on the environment.

Part of our business is to serve as a registered importer of industrial batteries and we are committed to decommissioning and recycling batteries in Finland.

### **Our strategy supports sustainable development in many ways**

Increasingly complex energy systems require novel thinking and knowhow from the companies in the business and energy facility operators. Merus Power aims to deliver ever wider energy storage entities enabling us to offer our customers all the expertise we have. Thus, our customers need not be experts in the business models created by the energy storage entities or they do not need to know about the secrets of plant dimensioning or even apply for construction permits or design plant construction. With a turnkey delivery, we facilitate the customer's purchase process and lower the investment threshold. That way we hope to expedite the startup of new projects to support the green transition.

In energy storage solutions, the company

has developed its strategy and seeks strong growth primarily in Finland and Sweden but also on the European market. We profile ourselves as a reliable system supplier, offering services for a profitable investment concept all the way from plant planning and applying for construction permits to the actual delivery of the energy storage and offering the lifecycle services.

Finland is a frontrunner in many kinds of technological development, including solutions in promoting green energy. At Merus Power, it has been our privilege to pilot the industry's energy efficiency and technology fostering the growth of renewable energy. Through our power quality solutions, we have supported sustainable global development at a rate beyond the size of our company. Our export efforts are growing strongly, and we are ready to continue to offer our products to enable the green transition.

### **A responsible employer**

For us, sustainable development has always included social and economic aspects. The safety and wellbeing of our employees are all-important to us. We aim to make Merus Power a unique workplace. That is why we feel it is particularly important to invest in our personnel and its diversity and offer people the opportunities to learn and broaden occupational education.

Overall, we have taken significant steps to improve our ecological, social, and economic resilience in 2023.



# Our products support our customers' goals of sustainable development

The key idea behind our solutions is to deploy our technology to mitigate and stop climate change. Reporting on the sustainability of our operations, in addition to the carbon footprint, we want to publicize positive effects on the environment, how our operations promote sustainable and energy efficient development of the economy and society globally. That is why we want to keep track of our following achievements: Our solutions have enabled 619 MW of renewable energy to be connected to the grid and our share of the Finnish electricity market's reserve is 18%. In 2023, with our technology, our customers achieved over 170 000 tons of emission reductions, which is equivalent to over 1 400 000 London-Madrid passenger flights. At Merus Power, we are convinced of the ability of technology to slow down global warming and climate change.

## Controlling power quality has numerous positive effects

Saving energy, reducing material loss and process disturbances as well as developing more efficient solutions are at the core of Merus Power's power quality solutions.

Customers applying Merus Power's power quality solutions, achieve savings by producing more with the same amount of energy and with fewer disturbances in production.

Our solutions have enabled

**619 MW**

of renewable energy to be connected to the grid.

Our share of the Finnish electricity market's reserve is

**18 %**

The annual CO<sub>2</sub> emission reductions for our customers are over

**170 000 tons,**  
equivalent to  
**over 1 400 000**

passenger flights  
(London-Madrid).



## Energy storages promote the green transition

No more electricity can be produced than is consumed. The growth of the relative share of renewable energy necessitates energy storages to redress momentary imbalance between consumption and production. The balancing feature of energy storages enables the growth of the share of renewable energy in the grid. Many of our customers utilize energy storages to balance their energy production, to improve the operational reliability of the grid, and to participate in the frequency control market.

In renewable energy projects there are typically several parties and customers, such as engineering companies, integrators, investors, and electricity producers. According to its strategy, Merus Power has developed its expertise, knowhow, and understanding of the development of the electricity market and related projects. The company places this expertise at its customers' disposal and helps them at all stages of their energy storage projects right from investment mapping to the trading platform. Merus Power supports its customers in the new and rapidly de-

veloping market. Through its deliveries, the company enables the green transition and the continued growth of renewable energy.

## The climate benefits enabled by Merus Power help to reach the UN's Sustainable Development Goals

Sustainable development consists of activities that meet the needs of the present without compromising the ability of future generations to meet their own needs. In 2015, all UN member states approved a plan for a better future for all – Agenda 2030 with 17 Sustainable Development Goals, SDG for 2016-2030. The goals of the program are to end poverty, ensure sustained and inclusive economic growth, social inclusion and environmental protection.

Merus Power is committed to the goals of the Agenda, and we have ascertained that with our operations and technology, we can actively promote positive development in three areas, Goals 7, 9 and 13.

7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



13 CLIMATE ACTION



# How does power quality influence our customers' operations and how does improving it promote sustainability?



## Infrastructure and utilities

### PROBLEM:

For example, in water and wastewater processes, there are several frequency-controlled pumps or motors, which cause disturbances to the grid.

### BENEFITS:

With power quality products energy efficiency improves, the pumps and processes operate more reliably and the customer can achieve better power quality.



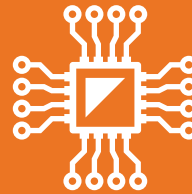
## Heavy industry

### PROBLEM:

The cyclic nature of the processes in smelting furnaces, for example, causes challenges to power quality such as power loss and flickering of lights in the grid of the plant and surrounding area.

### BENEFITS:

Energy efficiency improves, power quality requirements in the grid are met, there are no disturbances to the grid, and the service interval of the furnaces is longer. Energy is saved.



## Light industry

### PROBLEM:

In the semiconductor industry, for example, the processes are characterized by a high level of automation, robotics, and frequency-controlled motors, which cause disturbances to the grid and themselves. This causes unnecessary shutdowns and material loss.

### BENEFITS:

Production gets more efficient, energy efficiency improves and the processes operate more reliably.



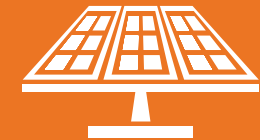
## Large buildings

### PROBLEM:

In shopping centers, lighting, staircases, elevators, and air-conditioning are typical causes of problems with power quality.

### BENEFITS:

Energy efficiency improves, disturbances are reduced and the power quality requirements of the grid are fulfilled.



## Renewable energy

### PROBLEM:

In solar and wind farms, the level of renewable energy production varies. Between production and grid, there is technology which converts direct current into alternating current. Not all inverters produce sufficiently high-quality electricity to be fed into the grid. The requirements vary between countries and in Australia, the UK and South Africa, for example, the requirements to connect to the grid are strict.

### BENEFITS:

The quality requirements of the power grid are fulfilled.





# The growth company makes a significant tax footprint **and important investments in the future**

Merus Power is an employer and corporate citizen of growing importance based in the region of Pirkanmaa in southern Finland. We have made major investments in technologies for enabling renewable energy connection to the grid, improving power quality and energy efficiency. Our product development costs alone in 2023 were EUR 1.9 million.

Merus Power is investing in the future, for example through the 3-year Energy ECS ECSEL project, in which we participate in developing smart power grid solutions to support the advancement of renewable energy and electric mobility. In addition to the control system platform, an important part of the project involves machine learning and the development of cloud-based solutions utilizing artificial intelligence to strengthen the company's digital service portfolio. The research project represents

different views of traffic and energy consumption and helps our society transition to a decarbonized economy.

Merus Power has invested in knowhow, for example by building an expert analyst team concentrating on energy storages and the energy market, which analyzes the development of the energy market and with our customers produces an understanding of the behavior of the electricity market in the society.



### Important cooperation projects with educational institutions and societies

An important part of Merus Power's corporate citizenship is to offer young people opportunities to get started in working life; to learn on the job, to develop their own skills, and to become experts in some field. We have cooperation projects with several schools and educational institutions of various levels, including vocational schools, universities of applied sciences, universities, and the student bodies of those institutions. Merus Power's experts have given lectures, for example, at Tampere University and Aalto University.

Education on the energy storage side is still new even on the global level, so it is important for us to advance this education to ensure that new professionals are available in the field.

We participate in the LEMENE project, which is among the flagship projects of the Finnish Ministry of Economic Affairs and Employment and an 'energy community' consisting of industrial and commercial companies. The core of the project is formed by an independent 12 MW ring network controlled by a microgrid system capable of predicting energy production and controlling it according to consumption. Merus Power has delivered an energy storage system to its customer Lempäälän Energia, which forms a separate island, a microgrid, and enables

flexible use of electricity in that energy community.

Another interesting cooperation project in which Merus Power is involved is the Battery Recycling Innovation Park project of the Ylivieska Technology Innovation Park and the SEKES (Finnish Association of Development Agencies) network. The project entails building a totally new circular economy environment in the area to investigate and develop new recycling opportunities and business models for lithium-ion batteries. Merus Power is a member of the Finnish Clean Energy Association and through it monitors and influences development in the field.

### A significant investment in new premises

The design of the new premises of Merus Power inaugurated in 2023 paid special attention to monitoring and minimizing electricity consumption. Energy efficiency is achieved, for example, by LED lighting and heat retention structures, which prevent heat from escaping. The factory is connected to the district heating network, which means that the heating itself has no effect on direct electricity consumption. Electricity is used for normal lighting, office equipment, and product testing, which is crucial for product safety. All equipment and systems Merus delivers to its customers undergo testing at the Merus factory in individual testing cells.

*An important part of Merus Power's corporate citizenship is to offer young people opportunities to get started in working life; to learn on the job, to develop their own skills, and to become experts in some field.*



# What is essential to Merus and our operating environment?

Our operation at the core of energy and electricity management has assumed ever-growing importance in our rapidly changing world. Our operations influence several different stakeholders every day. As crucial as the safety and wellbeing of our own personnel are to us, we are also mindful of the effects of our work and operations on others. In 2023, a lot of development work was carried out in the company specifically to understand sustainability and to develop our own sustainability impact.

Our primary stakeholders are customers, suppliers, personnel, analysts, and shareholders. We want to have an active dialogue with them in order to better understand the challenges and opportunities related to our business environment and sustainability.

## **Merus Power is working on its sustainability reporting for the future**

The concept of double materiality is at the core of sustainability reporting based on the CSRD directive. Systematic work has been initiated at Merus Power for this reporting. A sustainability mapping and survey of the sustainability of our supply chain were carried out in the company in early summer 2023. Based on the background information from these surveys, a double materiality assessment was initiated with interviews and fact-finding among various stakeholders: customers, suppliers, and personnel.

The purpose of the analysis is to ascertain how we affect others and also what they expect of us. The analysis assesses the importance of various topics based on what is essential for Merus and which issues we affect indirectly or actively by our activities and operation. Impact materiality defines how our company's activities and operations affect the environment, people and society and the financial materiality of sustainability topics shed light on the business risks and opportunities created by sustainability aspects.

In the interviews, the following stood out as essential topics: energy efficiency, mitigation of climate change, reduction of emissions, the value chain and its management, prevention of air, water and soil pollution, minimization and recycling of waste, environmental biodiversity, wellbeing of employees, and prevention of the use of child labor.

During 2024, the company's sustainability plan for the future will be drawn up, dealing with those topics that we can actively influence. We will be reporting in greater detail on the results of these in the forthcoming sustainability reports based on CSRD.

According to the review, customers and other partners alike regard Merus Power as a sustainable company. The responses in informants' own words revealed that the company's business area and products were considered sustainable, as they promote renewable energy connection to the grid. The company's sustainability communications is moreover deemed to be open and transparent.

# Merus Power is a workplace where **people enjoy their work and stay**

Committed employees are what Merus Power's success is based on. That is why in all possible ways, we want to foster a working environment where people enjoy their work, feel that they are appreciated and respected as employees. The company wants to offer its people an opportunity to improve in their work and skills, advance in their careers and with sufficiently challenging and interesting jobs and responsibilities. A fair and welcoming workplace means everything and does not come about by chance.

## The principle of continuous improvement

At Merus Power, we firmly believe that a supportive and committed working community is built from inside out. We carry out an annual personnel survey, which elicits employees' opinions and individual job and working community experiences very widely. The results from the 2023 survey were by way of an exception published already in the 2022 sustainability report due to its date of publication (June 8, 2023), hence this report repeats those results. The next personnel survey will be carried out in spring 2024 and reported in the 2024 sustainability report.

In the personnel survey we ascertain what our employees' work means to them, what their work motivation and ability

are, and how they rate Merus as an employer. A monthly info session is organized for the personnel, where, in addition to the information given, the personnel have an opportunity to ask management about current issues. The monthly Merus® News Package presents the doings and achievements of different teams and their employees.

For us at Merus it is important that everybody feels safe and good at work. The company has instructions on addressing inappropriate behavior, accompanied by a low-threshold policy on raising issues if inappropriate behavior is detected. It has been a pleasure to see that, according to the personnel reviews, our employees themselves have detected no inappropriate behavior or bullying, and that is how we aim to keep it in the future.

## Personnel story

### Ville Valkonen, Aftersales & Service Trainee

Ville Valkonen joined Merus as a summer trainee in May 2023. He applied for a job at the company on a friend's recommendation. It was originally an electrician's job that he applied for, but he ended up as a trainee in the Aftersales & Service team. The simplicity and fluency of the recruiting process gave Ville a very positive impression.

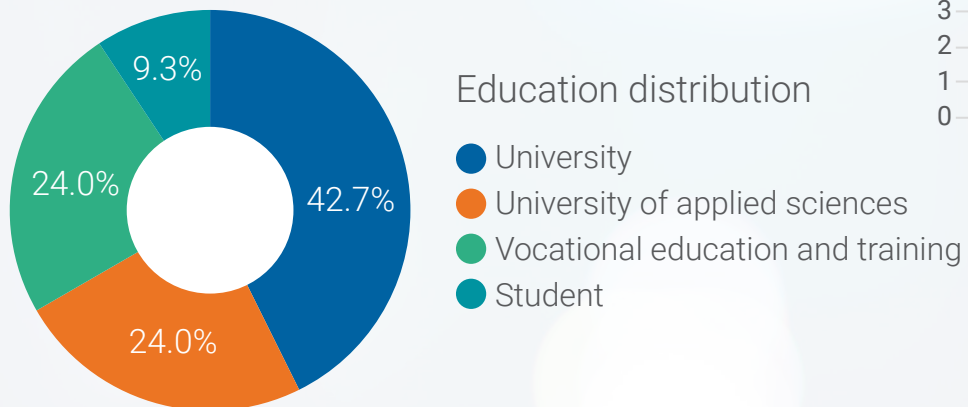
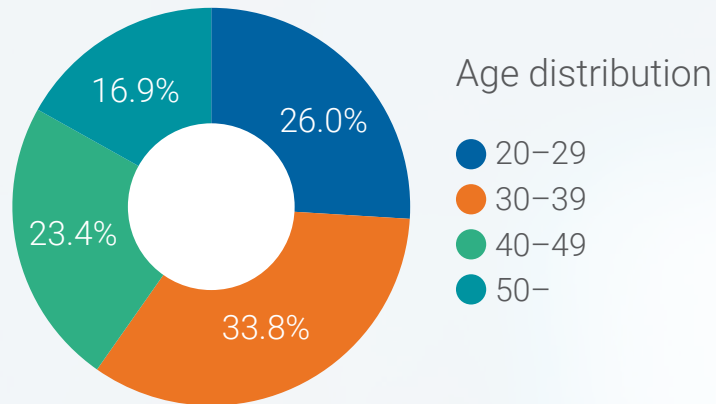
The job description of a trainee in the Aftersales & Service team includes a lot. Ville helps other team members in daily tasks - dealing with customer complaints, creating purchase orders and orders based on warranty, repairing equipment and troubleshooting in the service department as well as remote monitoring of customer equipment and general customer service. Ville has also been given his own areas of responsibility, which he finds rewarding.

During his traineeship, Ville has also had a chance to experience some business travel, an inherent part of service work, as he participated in the annual scheduled maintenance of the LEMENE energy community's ESS energy storage system and also the scheduled maintenance to the SVC system located at a customer's premises in Sagunto, Spain. "Both trips were very instructive and I appreciate the chance to participate in those operations as a summer trainee," Ville is grateful to his employer.

Ville has enjoyed being at Merus so much that, given the opportunity, he will continue working after the traineeship alongside his studies. "I have been familiarized with my work very thoroughly and I have got the feeling that I am valued as an employee and that they want to invest in me. Of course that motivates me to learn more and give my best. At Merus everybody works towards the same goal and the cooperation and friendship between teams is seen very clearly. I can go and talk to or ask help from anybody whatever the title or team," says Ville.



# Results of the personnel survey, **spring 2023**





## Personnel growth

Our personnel has more than doubled during the period 2020-2023 from 40 people to 90. In recruitment we are mindful of the skills requirements demanded by internationalization and organizational development as well as the various aspects related to equality and diversity. Our personnel includes a very balanced mix of highly skilled individuals in different life situations. When recruiting, we have emphasized both fresh skills and views as well as solid work and working life experience. To develop, our fast-growing company needs both young people at the beginning of their careers as well as more experienced people.

As the company grows, it is not always necessary to hire new people; through internal recruitment we have been able to offer our existing personnel new job opportunities, career prospects, and scope to develop their skills.

## We value diversity

Different views bring results. The best ideas, more competitive products, and profitable international business are often the result of cooperation among different kinds of people. That is why the goal of Merus is a diverse work community. Doing our utmost to encourage this, we strive to create and develop teams whose members represent different backgrounds, genders, and cultures. That adds up to valuable human capital, which we also want to foster.

We deem it important to offer sensible work opportunities for professionals educated in Finland regardless of their country of origin so that they can work in Finland at the international top and stay in Finland to promote development. Merus represents globally acknowledged top technology, so it also makes good sense for us to hire foreign top talent educated outside of Finland to work for us here.

We want to promote gender equality. In Finland the share of female students studying electrical engineering, automation, and energy technology at vocational schools and universities varies between 4 and 10% depending on the method of calculation. At Merus Power we are happy to have succeeded in the last few years in recruiting talented women for our growing team. Currently 16% of our personnel are women and we look forward to a considerable increase in this in the near future. To guarantee our personnel's satisfaction and wellbeing, we go that extra mile to accommodate employees in different life situations and career phases and offer support and flexibility to successfully coordinate different aspects of life.

We believe that diversity makes us an interesting work community and thus creates value for both our personnel and our customers. In Merus Power's operation handbook, the company's goal and source of profitable growth and responsible operation have been defined as satisfied customers served by a highly competent motivated and satisfied personnel in a healthy working environment.

## Personnel story

### Sebastian Molina, Commissioning and Service Engineer

Sebastian Molina is one of the newest Merus people. He joined the company in February 2023, "out of pure enthusiasm and interest", as he describes his own decision-making. Sebastian had already acquainted himself with Merus Power in his home country, Bolivia, as in his previous job he was responsible for the operation of a Merus® STATCOM system. He became interested in their technology to the extent that when the opportunity arose to come to Finland and join Merus, he seized it right away.

In his job as a commissioning and service engineer, Sebastian particularly enjoys the variety of tasks. "Every day is different and I can work with different kinds of projects and people around the world. I never thought I would get an opportunity to get to know so many countries and cities, and that has been made possible in such a short time." In his previous job, Sebastian was often frustrated with the monotony of the tasks and he is delighted to say that at Merus Power, he has not had one single boring moment. "It is great that the employer offers both challenges and opportunities to learn new skills in a healthy working environment, which also facilitates free time and hobbies to charge your personal batteries," says Sebastian.





## We think before we act

The company concentrates with its products on improving power quality, consultation and comprehensive solutions. New employees are thoroughly familiarized with their tasks and matters related to work safety. All our products are manufactured at the Merus facilities. In our production, there is occasional noise, but very little use of toxic chemicals. Physical and ergonomic exposure is related to working positions in manufacturing and display screen work. Physical workload is created by time pressures, travel, and staying alert with electricity, and occasionally language barriers and cultural differences in international connections.

In 2023 the company moved to new premises designed to support personnel wellbeing, ensuring, for example, that each employee has an electrically adjustable work desk. In our manufacturing department, the mechanics have electrically assisted installation points. Manufacturing, design, and service functions are all located near each other, and the fluency of communication enabled by this arrangement is an important part of wellbeing at work and our capability to serve our customers well.

We aim at zero accidents at work. Our goal is a safety culture, where, in addition to complying with instructions, we think before we act. This keeps human error to a minimum. When developing products and working conditions, we try to foresee

possible danger spots in manufacturing, installation, testing and product use and design the product to be as safe as possible. We also upgrade our existing products if we find a way to improve safety or user-friendliness.

Merus is using a model for work ability management and early support. Together with occupational healthcare professionals, we have made an action plan focusing primarily on preventive action and offering expert services in situations of potentially impaired working ability.

## Transparent pay system

In all countries, Merus complies with the local legislation and collective labor agreements. In addition, initial wages and salaries are compared by job and education to the general salary level in the field. The legislation and regulations set the minimum level, but actual wages and salaries are often higher. The basic wage or salary is determined by local conditions, job difficulty, the qualifications of the employee and the task. 94.8% of Merus personnel are currently paid monthly for full-time and day work.

Growth is conducive to ever more systematic and efficient action. In 2023, we started building a salary system. The aim is to create a transparent and competitive remuneration system for Merus' needs. The system entails defining role-based job evaluations and wage and salary scales according to the evaluation classes.

## Personnel story

### Mari Lindstedt, R&D Engineer

Mari Lindstedt is one of Merus Power's product development engineers. She has been employed by Merus since 2012 and has been working, for example, in prototype testing. During her second parental leave, Mari became enthusiastic about programming and participated in a basic course – and was sold. "I have never been so excited about any course I have taken," says Mari. And so she continued studying alongside work after returning from her parental leave.

Mari is glad that at Merus her enthusiasm was encouraged and that on her own initiative she could move to the software development team. "It was also great that I didn't have to be a fully trained programmer immediately but I was allowed to use a few hours of my working time every week to study the technologies used by the software development team," she says, and continues: "At first I could participate part time and later full time in the team's work. I was well received, and right from the beginning I have been given a lot of support and feedback on the code I have written." Mari enjoys that there is always more to learn in programming, and you don't get bored with it. "Problem solving is great, and I get support from very talented people. I really like it that there is a strong feeling of continuous development at Merus."

# Sustainability does not come about by accident

Sustainability can only arise from systematic development work and management. We at Merus want to act responsibly both internally and towards our stakeholders and society. For us, sustainability does not mean heroic deeds but good and responsible routines day by day. Achieving and maintaining sustainable results is a continuous process. The growth of Merus Power is a direct result of determined and constant product development and investments in business development in a field where we have a major sustainability impact. We are committed to offering our customers safe, sustainable, and reliable electrical engineering solutions and services so that their production causes only minimal emissions and waste. This work requires responsible management.

Implementing responsible management policies in our operation means responsible action inside our company, in society, and in the communities for which and with which we work to accelerate the green transition and sustainable development. We continuously seek to develop our products, processes, and services and fulfill our commitment with concrete measures.

Managing sustainability in Merus Power is based on our values: creating customer value through innovative and environmentally friendly technology, maintaining an atmosphere of trust and respect for other people's work and building a sustainable and energy-efficient future. We respect the law and regulations and are committed to the EU's sustainable development principles.

Managing diversity is an important part of our corporate culture and essential for our competitiveness. The principle of inclusion demands an ability to understand diversity: to give everyone a voice and encourage everyone to participate.

## **Management by Objectives and Key Results guarantees that we do the right things**

In all our operations we aim at efficient and sensible organizational structures. Alongside growth, we have developed our organization to support our current operations. The Management by Objectives and Key Results (OKR) method has been introduced at management team level and pervades the entire personnel. While growing, we have sought to guarantee time for development and with OKR we

can concentrate on those themes needing change, which is executed in sensible steps. It is also important that reaching intermediate steps is reported regularly.

The Director, QEHS and Sustainability is responsible for the company's measures aimed at sustainability development and for reporting them, while responsibility for external sustainability reporting is shared by the Director, QEHS and the Director, Marketing and Communications. Both are members of the Management Team and report to the CEO.

## **Our responsibility extends beyond our company**

Merus Power does not have a separate team for sustainable development: each function is responsible for the sustainability of its own area and for coordinating

and developing the associated processes. Everyday sustainability management is among every supervisor's tasks. We implement our sustainability strategy in everyday choices and through projects, programs, and processes. We also maintain standards of business ethics and extend these principles to the supply chain.

Our supply chain comprises numerous products and components and we endeavor to purchase pretested components to keep the quality in our production as high as possible. All the equipment and systems we produce, whether individual pieces of equipment, control systems, system modules or entire systems, are subjected to factory tests at Merus.



# Standardized, responsible quality starting right at the beginning

Quality and quality management work is audited annually at Merus Power and we rely on external auditor DNV for assistance. We apply three quality standards: The ISO 9001 Quality Management System, ISO 14001 Environmental Management System, and the newest, recently adopted ISO 45001 Health and Safety Management System. In addition to the external standards, we conduct regular process-based internal audits.

Throughout its history, Merus Power has paid attention to quality, so our first certificate dates back to 2010, that is two years after the company was founded. This ISO 9001 Quality Management System was adopted before we had a single customer or had made any deliveries, although the first deliveries were made that same year. ISO 9001 is intended to improve customer satisfaction and entails a process-like way of thinking, the main focus being on the product and operational quality.

## Managing quality has many dimensions

Merus Power products are designed and manufactured in Finland. The guiding principle throughout our operation is that what we do we do sensibly and with respect for the principles of sustainability. Right from the beginning, our equipment is designed to be of high quality, durable, and energy-efficient. Quality also means innovations and product development.



The ideology of modularity and scalability enables us to supply our customers with products that perfectly meet their requirements. It is a source of pride to us to deliver properly dimensioned and designed products and systems.

Cost efficiency is yet another dimension of quality which we influence through product development. Good design can often help reduce the number of parts in a system, which makes a piece of equipment both more reliable and cost efficient to produce. Fewer components also means that the equipment has fewer parts which may suffer damage and need repair over the years.

We constantly monitor the material and labor costs of the products as well as the failure rate of equipment. High-quality replacement products are sought when necessary. An important principle guiding our design is that we never compromise on component quality. Quality components are not replaced by reason of cost efficiency unless they are of the same quality or better. Right from the design phase we endeavor to minimize not only overall material consumption but also the waste material generated; for example, cables are pre-cut to exact lengths or sourced as sets of wires to avoid waste.

### **Customer satisfaction is the sum of several factors**

We monitor how we meet our customers' requirements by means of an annual customer satisfaction survey. The survey

consists of sections such as satisfaction with products, operations at large, delivery, service at different stages, and product support. An external source is responsible for the interviews and the respondents can participate in the survey anonymously. So far, the surveys have yielded very good feedback on our operation.

### **Our high-tech simulator guarantees product safety**

The software and the systems used for testing the parametrization at Merus are state of the art. The Real Time Digital Simulator we use for product development and testing represents top technology and enables control system testing and operation optimization even before equipment installation. For example, at a steel plant, all data is collected for the electric arc furnace at different process stages, on how the furnace is operating and on the type of power and voltage in the plant's power grid. The data is fed into a simulator connected to a control system and the operation of the system can be simulated in real conditions. This helps commissioning and evaluating what type and size of equipment is needed at the plant. At the same time, it is possible to ensure that the equipment and control system are definitely operating and are correctly dimensioned even if the plant to which the system is connected is on the other side of the world. This entails less need for onsite adjustment than would be necessary without a simulator.





# Responsibility for products and supply chain and ethical business practices



## Design

Quality first

Availability of components  
and primarily in Europe

Small total  
material consumption

Minimizing waste

Package optimization



## Procurement

EU directives and  
other regulations

High quality  
components

Audits and  
inspections



## Production/ Manufacturing

In Finland

Minimizing  
material loss

Recycling

Quality design



## Sales

Following good and  
sustainable procedures

Background checks

Confidentiality of  
customer relationship



## Project opera- tion/Installation

Pretests

Remote connections

Video connections



## Satisfied customer



## Service/ Product failure

Repaired equipment

We do what  
we promise



# We guarantee a high recycling rate and quality

In our production, we utilize all components to minimize waste and the material is used as efficiently as possible. By processes to address complaints we seek to ensure that all faulty parts are returned to the supplier to minimize the supplier's waste. To achieve a high degree of recycling, the waste is sorted as precisely as possible. All that can be recycled is recycled. For example, copper, cable waste, and SER waste are passed on as raw material for other processes and the unrecyclable packaging material becomes energy waste.

What happens if Merus equipment is damaged on the customer's premises? Our priority is always to repair the customer's damaged Merus equipment – sometimes, however, a new piece of equipment is delivered at the customer's request. All systems and equipment are already tested by Merus Power at our factory to guarantee the operation and suitability of the equipment before installation. This helps us avoid unnecessary travel and guarantees the high quality of the products.

## Small daily choices can make a big difference

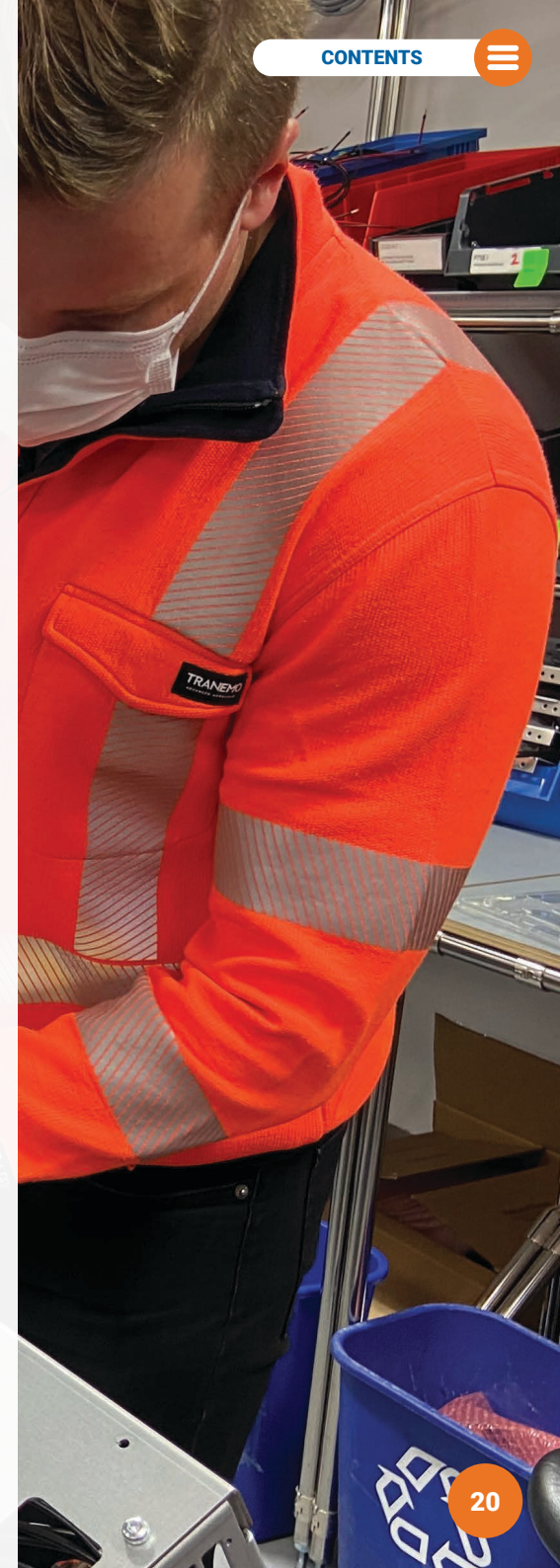
The general principle of Merus Power is that to avoid emissions, unnecessary trav-

el is avoided by all functions. We therefore use Teams connections both for internal team communication and for communication with our customers. We have also invested in enabling our customers to follow Factory Acceptance Tests (FAT) using video rather than traveling. We use this same procedure to monitor our supplier's FAT tests for our own procurements. For example, we have been able to source components for our customer in South America locally without needing to travel there or for them to need to come to the other side of the world.

In all departments of Merus Power and in all parts of the supply chain, sustainability often consists of small everyday choices.

The company's marketing department, for example, does not order plastic pens, but favors metal pens, and at exhibitions, we try to reuse wall elements and tables.

Confidentiality is for us an important part of sustainability. We can always be trusted. We always keep our promises. We never discuss our customers' issues with third parties. We deliver according to contracts, and if some deviation is inevitable, we come to terms with the customer on that and everything is duly documented. Merus Power wants to be a reliable partner to all of its stakeholders.



## The share of virgin raw material is minimized in the SVC modernization of the Ovako steel plant

Ovako is renowned as a supplier of customized and high-quality solutions based on clean and sustainable technology. The company produces structural steel for the demanding applications of customers in the bearings, automotive, and engineering industries. Ovako sets high sustainability targets and its production has been carbon neutral ever since January 2022; it uses recycled steel and fossil-free electricity.

In summer 2024, Merus Power will deliver a Static Var Compensator (SVC) modernization to Ovako's steel plant in Imatra. Besides being cost-efficient, the modernization is an environmentally friendly, sustainable way to extend the lifetime of the existing SVC system. The project has been super-carefully planned so as not to needlessly replace a single component but to use all the filter capacitor banks and buildings of the existing system. Only the essential components, such as systems requiring intelligence, software, thyristor valves, and the cooling system are to be replaced. "Responsible business includes taking care of existing equipment. It is not always necessary to buy completely new equipment; modernization is a cost-efficient alternative, which also saves the customer time. Downtime in modernizations is significantly shorter than when installing a totally new compensator," says **Markus Ovaskainen**, Sales Director of Merus Power.

The steel industry is heavy on energy.

Enhancing power quality and investing in energy-efficient solutions can minimize the amount of electricity needed for production or then produce more with the same amount of energy. The SVC system to be modernized will compensate for voltage fluctuations in the electric arc furnace (EAF) and ensure appropriate power quality at the high-voltage connection point of the steel plant. The compensator will reduce the reactive power and the disturbance caused by the EAF to the grid while optimizing the operation of the furnace.

"At Ovako, we want to continuously improve the environmental friendliness and energy efficiency of all our operations. We are already using fossil-free electricity and our main raw material is iron scrap instead of iron ore. By modernizing the reactive power compensator, we ensure optimal and more energy-efficient operation of our production," says **Kari Välimaa**, Director of the Steel and Rolled Products Unit of Ovako Imatra.

### Ovako Imatra Oy AB in brief

- Approximately 600 employees
- Capacity of 862 thousand tonnes per annum (TTPA)
- Share of plant production using iron scrap 97%
- Turnover almost 300 million euros
- A subsidiary of Sanyo Special Steel
- A part of Nippon Steel Corporation

## Improving energy efficiency raises the level of sustainability in the Colombian steel industry

Steel is one of the world's most recycled materials. It can be recycled almost endlessly and still retain its properties. However, steel production is heavy on energy. By investing in energy efficiency and improving power quality, the power consumption needed to make steel products can be significantly reduced. In 2023, a Merus® STATCOM static compensator was taken into use in the Grupo Siderúrgico Reyna (GSR) steel plant in Columbia, which helps the plant to operate more energy efficiently and comply with demanding grid codes.

Among other things, Grupo Siderúrgico Reyna manufactures earthquake-proof steel bars for the construction industry. The Merus® STATCOM system supplied by Merus Power to the steel plant will compensate for the reactive power of the electric arc furnace and the ladle furnace in the medium-voltage network. This makes it possible to stabilize the power grid, optimize the operation of the furnaces while also reducing the plant's maintenance needs. The static compensator also improves the power factor of the steel plant, enabling grid code compliance, the violation of which could mean tough sanction fees for the steel plant.

"To comply with the new electrical code of

Columbia is a challenging task, requiring advanced technology. We have chosen Merus Power as our partner from among numerous alternative suppliers due to their state-of-the-art power quality solutions and their extensive experience in steel industry applications. With the robust, reliable and ultra-fast Merus® STATCOM static compensator, our steel plant can improve power quality and comply with the most demanding grid codes. Together with their distributor, Bulla y Salcedo Ingeniería, Merus Power supports us with their engineering expertise," declares **Ricardo Prada**, General Manager of GSR.

The goal of the undertaking is to save 15-20% electric energy per year. The project

is in line with Grupo Siderúrgico Reyna's principles of sustainable development and social responsibility. The company has managed to make a 6% decrease in CO<sub>2</sub> emissions during last year. Additionally, the plant promotes circular economy by utilizing 200,000 tons of metal scrap monthly. "The project is an excellent example of how Colombian companies, such as Grupo Siderúrgico Reyna, in the same way as Finnish companies, see the energy transition as an ever more important social developmental trend and want to promote it to benefit us all globally," declares **Antti Kaski**, the Ambassador of Finland to Columbia.





# Finnish capital helping Finnish technology to accelerate the green transition

Electricity production and consumption must always be in balance. Increasing the production of renewable energy has changed the nature of the electricity grid and electricity market and also the need for balancing. For the share of renewable energy to continue growing, balancing mechanisms are needed, and one of these is the frequency reserve market. This is due to wind and solar power being connected to the grid without a large rotating mass, unlike traditional condensing power plants. The relative amount of inertia in the electric grid decreases while changes in production and consumption cause faster and greater frequency changes. To compensate for this, an electricity reserve that can be quickly activated and deactivated is needed. This demand accelerates the green transition while at the same time creating interesting investment opportunities.

Taaleri Energy is a Finnish renewable energy project developer and fund manager with one of Europe's largest renewable energy investment teams. It is also the largest producer of wind power in Finland and has ordered a 30 MW / 36 MWh battery energy storage system to support the operation of the electric grid. Merus Power is the project developer and is responsible for the turnkey delivery of the energy storage right from obtaining the building permit. The energy storage under construction is a demanding entity, consisting of batteries, power electronics, and intelligent software. It will be able to accommodate the grid's balancing need in fractions of a second. The main task of the Lempäälä energy storage is to support the balancing of the production and consumption of electricity in the main grid by participating in Fingrid's reserve market. It will have the largest energy capacity of all energy storages in the Finnish frequency

reserve market. The grid inverters, control and protection systems as well as the remote monitoring software were all designed and manufactured by Merus Power. The building project is right on schedule and will be completed by April 2024.

"Additional development in renewable energy is the only sustainable way out of the current energy crisis and to achieve climate targets in Finland and also globally. The volume of renewable energy production varies a lot, so additional energy storage facilities are increasingly needed in large quantities to further increase the share of renewable energy on the electricity grid. With this project, we are creating stability in our electricity network and presenting our investors with an interesting opportunity," says **Ville Rimali**, Energy Storage Investment Director of Taaleri Energy.

## Taaleri Energy in brief:

- Part of the Taaleri Group, which is listed on the Nasdaq Helsinki Stock Exchange
- Assets under management 2.5 billion euros in September, 2022.

# Responsible operation to manage risks is a common issue for the entire supply chain

There are risks inherent in the normal operation of Merus, which we, like any other company, must mitigate to acceptable level. By maintaining a risk-aware operating culture emphasizing sustainability and managing risks proactively, the company seeks to ensure that it can implement its strategies efficiently, achieve its goals, and be prepared for external risks.

In its operations, Merus Power follows generally accepted good ethical business practices and the UN human, children's, and employees' rights. The company's sustainable operation includes acting according to the EU regulations.

At Merus Power, component procurement always puts quality first. We take note of the availability criteria of components and parts already at design stage and seek to get as many of the suppliers needed from countries subject to EU legislation. If this is not possible, we seek to ensure by supplier audits that our partner's quality certificates are in order and that it adheres to the UN general principles regarding, for example, incorruptibility, working conditions, and fair pay. As battery suppliers, for example, Merus Power uses big globally acknowledged chains with solid sustainability reporting open to inspection so that we can be sure that our partner is operating ethically.

When necessary, the customer companies' backgrounds are also checked. The inspection consists of checking the operation, solvency, and the company's key personnel relating to sanction lists and targets. We have a Whistleblowing channel in use to disclose and deal with wrongdoing.

## Environmental hazards are minimized by good planning

We prefer suppliers from the EU area also because we want to reduce the carbon footprint caused by component transportation. In transportation, we utilize as much other than air transportation and in logistics we seek to optimize the routes to minimize the carbon footprint unless the delivery is particularly urgent. The environmental impacts of logistics are already taken into consideration at the design stage of the products, which are designed in such a way

that we can pack them as tightly as possible to save on transport costs and emissions. In transportation, we favor recycled packaging.

To develop our environmental reporting, we calculated our carbon footprint according to the GHG protocol (Sc1, Sc2 and Sc3) for 2022.

In battery design, Merus Power has preferred batteries that emit nothing to the atmosphere, water or soil and selected battery models, which are not easily flammable. Merus Power is committed to battery recycling and luckily there are currently several new companies specializing in battery recycling in Finland.

## Accurate protocols guarantee information security

Being mindful of cyber security is an important part of a responsible company's operation. For us at Merus Power, cyber security issues play an extra significant role and are divided into two clearly distinct areas, firstly our daily work and its management and secondly the key role of information security and software design in the products we produce.

In our own operation we follow procedures which apply to all our employees. The basic instructions consist of simple things such as not leaving computers unlocked when an employee leaves the workstation and not leaving computers otherwise unattended, for example, inside a car. Everyone has a username and password and access to specific data is clearly determined on a need-to-know basis. Working remote takes place through secure VPN connections to a local server using secure applications.

In our own internal enterprise resource planning

system we use multifactor authentication. We are continuously developing new security systems and we also have a legal obligation to monitor and report information security events and have recovery plans made in case of possible cyberattacks.

Information security is also an integral part of Merus Power's products and services. The EU's NIS Directive (Directive on Security of Network and Information Systems) regulates the information security obligations of the suppliers and operators of critical infrastructure in society. Many of Merus Power's products and system deliveries come under this directive and therefore we consistently comply with its requirements.

Regarding cyber security, Merus Power's products and systems are used in widely differing conditions. Not all products delivered by Merus Power have been connected to data networks. Both standalone solutions and systems connected to a data network are vulnerable to physical penetration, against which we are prepared by monitoring, restricting access to the equipment and with locked fences and doors.

Some of the systems we deliver are equipped with the Merus®MERUSCOPE™ remote monitoring, control, and reporting service with information security as an integral feature. We must ensure that our products cannot be used in a cyber attack against a customer. Logging in to our systems is based on multifactor authentication and user level-based admission. Security of data transfer between systems is guaranteed by protocols containing cryptographic algorithms.

In addition to the firewall, in software design we have taken into consideration segmentation of the networks: access to one part of the network does

not allow access to other segments. The information network and its equipment are hardened, meaning that only essential services, communication ports, and access points are in use. Once switched on, the equipment inspects the software started and this can only run software developed and signed by Merus Power.

In data storage, we comply with the GDPR directive. Storage complies with security requirements and unnecessary data is destroyed. In addition to a firewall, the software in our products has multilayer security to guarantee that in the event of an attack, penetrating one layer does not jeopardize the entire system.

## Risk management is also an opportunity

Risk management is an essential part of the strategic and operative management of Merus Power, and also a part of our corporate culture. It is a systematic uninterrupted process providing an overview of the situation. It identifies and evaluates risks, takes measures to prevent or mitigate the effects, handles necessary communication and consultations and also monitors the results and reviews the operations. The Merus Power Board of Directors is ultimately responsible for determining the risk appetite and risk levels of the company as well as regularly controlling the risk profile.

In risk management, it is essential to identify the essential uncertainties and risks to the company's goal achievement and evaluate whether they are at an acceptable level. When necessary, we take corrective measures to avoid, mitigate, move, and monitor risks. From the point of view of feasibility, risks can also be turned into opportunities.





# GRI Index / Merus Power Plc 2023

Merus Power Plc has reported in accordance with the GRI Standards for the period January 1 – December 31, 2023

GRI 1

GRI 1: Foundation 2021

GRI STANDARD	Disclosure	Page	Location
<b>GRI 2: General Disclosures 2021</b>	2-1 Organizational details	Back page	Merus Power Plc, Pallotie 2, FIN-33470 Ylöjärvi
	2-2 Entities included in the organization's sustainability reporting	3	Factory and head office: Ylöjärvi, Finland. Sales offices: Helsinki, Finland; Germany; Singapore; the United Arab Emirates. Subsidiaries: Merus Power Asia-Pacific PTE. Ltd; Merus Power Hong Kong Ltd; Lempäälän Tasapainotus Oy
	2-3 Reporting period, frequency and contact point		Year 2023, annually, Risto Laakso
	2-4 Restatements of information		No corrections to previous reports.
	2-5 External assurance		No external audit in use.
	2-6 Activities, value chain and other business relationships		<a href="https://meruspower.com/">https://meruspower.com/</a>
	2-7 Employees		Table 2-7 Personnel
	2-8 Workers who are not employees		Subcontractors working in design, installation and commissioning.10 persons on the average.
	2-9 Governance structure and composition		Public limited company, founded in 2008, company listed on First North 2021 <a href="https://sijoittajat.meruspower.fi/liiketoiminta/">https://sijoittajat.meruspower.fi/liiketoiminta/</a>
	2-10 Nomination and selection of the highest governance body		<a href="https://sijoittajat.meruspower.fi/sijoittajatietoa/hallinto/yhtiojarjestys/">https://sijoittajat.meruspower.fi/sijoittajatietoa/hallinto/yhtiojarjestys/</a>
	2-11 Chair of the highest governance body		<a href="https://sijoittajat.meruspower.fi/sijoittajatietoa/hallinto/yhtiojarjestys/">https://sijoittajat.meruspower.fi/sijoittajatietoa/hallinto/yhtiojarjestys/</a>
	2-12 Role of the highest governance body in overseeing the management of impacts		<a href="https://sijoittajat.meruspower.fi/en/for-investors/governance/board-of-directors/">https://sijoittajat.meruspower.fi/en/for-investors/governance/board-of-directors/</a>



GRI STANDARD	Disclosure	Page	Location
<b>GRI 2: General Disclosures 2021</b>	2-13 Delegation of responsibility for managing impacts		<a href="https://sijoittajat.meruspower.fi/en/for-investors/governance/board-of-directors/">https://sijoittajat.meruspower.fi/en/for-investors/governance/board-of-directors/</a>
	2-14 Role of the highest governance body in sustainability reporting		Approval of Sustainability Report
	2-15 Conflicts of interest		<a href="https://sijoittajat.meruspower.fi/en/for-investors/governance/board-of-directors/">https://sijoittajat.meruspower.fi/en/for-investors/governance/board-of-directors/</a>
	2-16 Communication of critical concerns		Management review, no reported concerns in 2023.
	2-17 Collective knowledge of the highest governance body		<a href="https://sijoittajat.meruspower.fi/en/for-investors/governance/board-of-directors/">https://sijoittajat.meruspower.fi/en/for-investors/governance/board-of-directors/</a>
	2-18 Evaluation of the performance of the highest governance body		<a href="https://sijoittajat.meruspower.fi/en/for-investors/governance/board-of-directors/">https://sijoittajat.meruspower.fi/en/for-investors/governance/board-of-directors/</a>
	2-19 Remuneration policies		<a href="https://sijoittajat.meruspower.fi/en/for-investors/reports-and-presentations/">https://sijoittajat.meruspower.fi/en/for-investors/reports-and-presentations/</a>
	2-20 Process to determine remuneration		General Meeting
	2-21 Annual total compensation ratio		25%
	2-22 Statement on sustainable development strategy	5,6,7	<a href="https://meruspower.com/">https://meruspower.com/</a>
	2-23 Policy commitments		<a href="https://meruspower.com/">https://meruspower.com/</a>
	2-24 Embedding policy commitments		<a href="https://meruspower.com/">https://meruspower.com/</a>
	2-25 Processes to remediate negative impacts	5	Member of producer associations for material recycling
	2-26 Mechanisms for seeking advice and raising concerns		Management review, whistle blowing, close call, personnel satisfaction review, monthly meetings
	2-27 Compliance with laws and regulations		No observations of non-compliance.
	2-28 Membership associations		Finnish Association of Purchasing and Logistics Tampere Chamber of Commerce & Industry The Taxpayers Association of Finland (TAF) Mining Finland Finnish Wind Power Association Sähkösuunnittelijat NSS ry SELT association Finnish-Latin American Business Council Technology Industries of Finland Recser Oy Finnish Clean Energy Association Suomen Yrittäjät
2-29 Approach to stakeholder engagement	11	Interviews and surveys for double materiality analysis	
2-30 Collective bargaining agreements		In Finland 100%, others 96%	



GRI STANDARD	Disclosure	Page	Location
<b>GRI 3: Material Topics 2021</b>	3-1 Process to determine material topics	11	Double materiality analysis 2023
	3-2 List of material topics	11	Double materiality analysis 2023
	3-3 Management of material topics	11	Double materiality analysis 2023
<b>GRI 201: Economic Performance 2016</b>	201-1 Direct economic value generated and distributed		Table 201-1
	201-2 Financial implications and other risks and opportunities due to climate change	11	Double materiality analysis 2023, impact, risks, opportunities
	201-3 Defined benefit plan obligations and other retirement plans	15	The pension insurance of Merus employees is based on the legislation of each country. In Finland arranged through insurance companies.
	201-4 Financial assistance received from government		EUR 328 181
<b>GRI 202: Market Presence 2016</b>	202-1 Ratios of standard entry level wage by gender compared to local minimum wage		Not reported.
	202-2 Proportion of senior management hired from the local community		Merus Power's subsidiaries are sales offices employing people with local experience. Merus announces open jobs within the group internally to guarantee equal possibilities to apply.
<b>203-2 Significant indirect economic impacts</b>	203-1 Infrastructure investments and services supported		Commercial energy storage project investments in Finland
	203-2 Significant indirect economic impacts		Impact of energy storages on the grid's characteristics
<b>GRI 204: Procurement Practices 2016</b>	204-1 Proportion of spending on local suppliers		Table 201-1
<b>GRI 205: Anti-corruption 2016</b>	205-1 Operations assessed for risks related to corruption		Contractor's liability: Responsible partner report and use of service
	205-2 Communication and training about anti-corruption policies and procedures		Not reported.
	205-3 Confirmed incidents of corruption and actions taken		No reported cases of corruption.
<b>GRI 206: Anti-competitive Behavior 2016</b>	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices		No reported legal action.



GRI STANDARD	Disclosure	Page	Location
<b>GRI 207: Tax 2019</b>	207-1 Approach to tax		Table 207-1
	207-2 Tax governance, control, and risk management		Not reported.
	207-3 Stakeholder engagement and management of concerns related to tax		Not reported.
	207-4 Country-by-country reporting	3	Finland, Singapore
<b>GRI 301: Materials 2016</b>	301-1 Materials used by weight or volume		89 720 kg (A2 raw materials); others 634 585 kg
	301-2 Recycled input materials used		Excluded from this report.
	301-3 Reclaimed products and their packaging materials		Excluded from this report
<b>GRI 302: Energy 2016</b>	302-1 Energy consumption within the organization	10	130 MWh / a (GHG, Scope 2, year 2022, Merus estimate)
	302-2 Energy consumption outside of the organization		4065 MWh 7 a (GHG, Scope 3, year 2022, Merus estimate)
	302-3 Energy intensity		262 Wh / EUR (GHG, year 2022, Merus estimate)
	302-4 Reduction of energy consumption		Excluded from this report.
	302-5 Reductions in energy requirements of products and services		Excluded from this report.
<b>GRI 303: Water and Effluents 2018</b>	303-1 Interactions with water as a shared resource		Excluded from this report.
	303-2 Management of water discharge-related impacts		Excluded from this report.
	303-3 Water withdrawal		Excluded from this report.
	303-4 Water discharge		Excluded from this report.
	303-5 Water consumption	10	372 m <sup>3</sup> / year (water bill, Merus estimate)



GRI STANDARD	Disclosure	Page	Location
<b>GRI 304: Biodiversity 2016</b>	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		Excluded from this report.
	304-2 Significant impacts of activities, products and services on biodiversity		Excluded from this report.
	304-3 Habitats protected or restored		Excluded from this report.
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations		Excluded from this report.
<b>GRI 305: Emissions 2016</b>	305-1 Direct (Scope 1) GHG emissions		0 kg CO2e (self-produced energy, company vehicles)
	305-2 Energy indirect (Scope 2) GHG emissions		30 928 kg CO2e (procured energy)
	305-3 Other indirect (Scope 3) GHG emissions		33 051 085 kg CO2e (use of products, manufacturing of products, etc.)
	305-4 GHG emissions intensity		2 kg CO2e/EUR
	305-5 Reduction of GHG emissions		First calculation; excluded from this report.
	305-6 Emissions of ozone-depleting substances (ODS)		Excluded from this report.
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions		Excluded from this report.
<b>GRI 306: Waste 2020</b>	306-1 Waste generation and significant waste-related impacts	20	Package waste from production (mainly cardboard).
	306-2 Management of significant waste-related impacts		Pirkanmaa Jätehuolto Oy and Lassila & Tikanoja Oy statistics
	306-3 Waste generated		17 t (Pirkanmaan Jätehuolto Oy and Lassila & Tikanoja Oy statistics)
	306-4 Waste diverted from disposal		4 t (Pirkanmaan Jätehuolto Oy and Lassila & Tikanoja Oy statistics)
	306-5 Waste directed to disposal		13t (Pirkanmaa Jätehuolto Oy and Lassila & Tikanoja Oy statistics)
<b>GRI 308: Supplier Environmental Assessment 2016</b>	308-1 New suppliers that were screened using environmental criteria	24	Survey to supply chain accomplished.
	308-2 Negative environmental impacts in the supply chain and actions taken		Survey accomplished regarding minerals from conflict-areas. Part of subcontractors changed based on customer's demands.
<b>GRI 401: Employment 2016</b>	401-1 New employee hires and employee turnover		Table 401-1
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees		All except Epassi.
	401-3 Parental leave		Female 1, male 2, 100%.
<b>GRI 402: Labor/Management Relations 2016</b>	402-1 Minimum notice periods regarding operational changes		Five days, according to co-operation act.



GRI STANDARD	Disclosure	Page	Location
<b>GRI 403: Occupational Health and Safety 2018</b>	403-1 Occupational health and safety management system	17	ISO 45001
	403-2 Hazard identification, risk assessment, and incident investigation	24	Systematic risk evaluation, safety walk, site-specific evaluations.
	403-3 Occupational health services	12	An action plan of occupational health care has been carried out in the company providing statutory preventive health care services and general practitioner level medical treatment including treatment and tracking of illnesses with necessary medical examinations and minor treatment at the health care center. Workplace survey carried out at Ylöjärvi factory.
	403-4 Worker participation, consultation, and communication on occupational health and safety	12	Annual occupational health survey, performance and career development reviews.
	403-5 Worker training on occupational health and safety		Table 2-7
	403-6 Promotion of worker health	12	Epassi in use. The personnel's psychological wellbeing is supported by offering the employees low-threshold access to the services of an occupational health physician and psychologist. Special attention has been paid to work ergonomics and the personnel's physical work ability and work ergonomics is supported in cooperation with an occupational physiotherapist. The personnel's work ability is also supported by advancing supervisory work with preventive measures supporting work ability and with bringing issues up actively. Close cooperation is done with occupational health care in order to identify changes in work ability as early as possible and plan the necessary measures accordingly. Special attention is further paid to exposure agents, the prevention of accidents, and safety at work.
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	24	Cooperation with suppliers, reporting and audits.
	403-8 Workers covered by an occupational health and safety management system	17	ISO 45001 occupational health and safety management system covers the operation of the entire organization.
	403-9 Work-related injuries		Table 403-9
	403-10 Work-related ill health		Table 403-10
<b>GRI 404: Training and Education 2016</b>	404-1 Average hours of training per year per employee		Table 404-1
	404-2 Programs for upgrading employee skills and transition assistance programs	12	Development plan (MP163_Development plan for the work community)
	404-3 Percentage of employees receiving regular performance and career development reviews	12	Performance and career development reviews 100% / 2023
<b>GRI 406: Non-discrimination 2016</b>	405-1 Diversity of governance bodies and employees		Table 405-1
	405-2 Ratio of basic salary and remuneration of women to men		Not reported.



GRI STANDARD	Disclosure	Page	Location
<b>GRI 406: Non-discrimination 2016</b>	406-1 Incidents of discrimination and corrective actions taken	14	Equality and non-discrimination as well as righteous and fair treatment are important for us at Merus. According to our values and ethical operating principles, we respect every employee's human dignity, privacy and rights and do not tolerate any kind of discrimination, threatening, harassment, insults, bullying or other inappropriate behavior at workplace. The company has a directive for unfair treatment and harassment, which describes the procedure for handling unwanted behavior and creates the personnel good possibilities to succeed in their work and do it in a homely and safe working environment. (MP157_Inappropriate behavior and harassment at work place).
<b>GRI 407: Freedom of Association and Collective Bargaining 2016</b>	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		Supply chains outside Europe.
<b>GRI 408: Child Labor 2016</b>	408-1 Operations and suppliers at significant risk for incidents of child labor		Supply chains outside Europe.
<b>GRI 409: Forced or Compulsory Labor 2016</b>	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor		Supply chains outside Europe.
<b>GRI 410: Security Practices 2016</b>	410-1 Security personnel trained in human rights policies or procedures		Excluded from this report.
<b>GRI 411: Rights of Indigenous Peoples 2016</b>	411-1 Incidents of violations involving rights of indigenous peoples		No reported cases.
<b>GRI 413: Local Communities 2016</b>	413-1 Operations with local community engagement, impact assessments, and development programs		Action required by construction permit.
	413-2 Operations with significant actual and potential negative impacts on local communities		Action required by construction permit.
<b>GRI 414: Supplier Social Assessment 2016</b>	414-1 New suppliers that were screened using social criteria		Excluded from this report.
	414-2 Negative social impacts in the supply chain and actions taken	24	Conflict minerals survey carried out in the supply chain of electronics for active harmonic filters. Part of the subcontractors changed according to the customer's demand.
<b>GRI 415: Public Policy 2016</b>	415-1 Political contributions		No.
<b>GRI 416: Customer Health and Safety 2016</b>	416-1 Assessment of the health and safety impacts of product and service categories	18	No violations of regulations relating to health, safety or other product information nor customer information were detected during the reporting period.
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services		No reported cases.
<b>GRI 417: Marketing and Labeling 2016</b>	417-1 Requirements for product and service information and labeling		Merus Power's products must have labels and markings required by legislation and safety instructions for electronic equipment and critical infrastructure. Use of the products requires familiarization and user training, and no outsiders or untrained persons are allowed near them.
	417-2 Incidents of non-compliance concerning product and service information and labeling		No demands for correction to the markings being used have been presented during the reporting period.
	417-3 Incidents of non-compliance concerning marketing communications		No reported cases.
<b>GRI 418: Customer Privacy 2016</b>	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data		No reported cases.



# Approach to tax

## GRI 207-1

Summary	2023 (EUR)	2022 (EUR)	2022 (EUR)
<b>Taxes borne</b>			
Corporate income tax	0	0	0
Employment taxes and payments	1,433,835	1,052,451	750,778
Other taxes			
<b>Total taxes borne</b>	<b>1,433,835</b>	<b>1,052,451</b>	<b>750,778</b>
<b>Taxes collected</b>			
Net VAT	-278,584	-1,280,107	-1,064,638
Payroll taxes	1,320,184	922,790	663,365
Withholding taxes		0	0
<b>Total taxes collected</b>	<b>1,041,600</b>	<b>-357,318</b>	<b>-401,273</b>
<b>Total tax footprint</b>	<b>2,475,435</b>	<b>695,133</b>	<b>349,505</b>





# Personnel, GRI 2-7 and 405-1

Number of employees	2023	2022	2021
31.12	97	69	59
Average number of employees	88	68	52
Number of employees by office Dec. 31	2023	2022	2021
Ylöjärvi	86	62	58
Helsinki	8	4	0
Singapore	1	1	1
Germany	1	1	0
United Arab Emirates	1	1	0
Workforce by employment contract and type Dec. 31			
Permanent	90.7%	84.1%	76.3%
Fixed-term	9.3%	15.9%	23.7%
Workforce by gender Dec. 31			
Female	14	9	9
Male	83	60	50
Employee category Dec. 31			
Management	10	9	8
White collar	69	49	39
Blue collar	18	11	12
Age distribution Dec. 31			
Under 30 yrs	26	16	16
30-50 yrs	52	39	34
Over 50 yrs	19	14	9



# Total number and rate of new permanent employee hires and employee turnover

## GRI 401-1

TURNOVER	2023	2022	2021
<b>New employee hires</b>	<b>39.2%</b>	<b>39.1%</b>	<b>45.8%</b>
Female	8	2	4
Male	30	25	23
Under 30 yrs	19	12	12
30-50 yrs	17	8	12
Over 50 yrs	2	7	3
<b>Employees leaving</b>	<b>8.2%</b>	<b>24.6%</b>	<b>20.3%</b>
Female	3	2	0
Male	5	15	12
Under 30 yrs	6	10	7
30-50 yrs	2	4	5
Over 50 yrs	0	3	0
<b>Departure turnover</b>	<b>47.4%</b>	<b>63.8%</b>	<b>66.1%</b>



# Key occupational health and safety figures

## GRI 403-9 and 403-10

Injuries and occupational diseases	2023	2022	2021
Fatal accidents	0	0	0
Occupational accidents and accidents on the way to or from work	5	1	0
Accident frequency	0	0	0
Suspected occupational diseases	0	0	0
Occupational diseases	0	0	0
Lost time (days) due to occupational accidents, accidents on the way to or from work or occupational diseases	0	0	0
Per employee	0	0	0
Absence from work			
Total absence days	483	467	208
Average of absence days per employee	5.5	6.9	4.0
Absence from work percentage	2.5%	3.1%	1.8%



# Training hours

## GRI 404-1

Educational background of personnel	2023	2022	2021
Graduate degree/student	44	33	25
Bachelor's degree/student	31	21	17
Vocational college or similar	22	15	17
Other education	18	11	11
Training hours			
Days of training	146.93	108	100
Days of training per person	1,51	2	2
Hours of training	1102	808	749
Female	333	41.5	39.5
Male	669	766	710
<b>Hours of training per person</b>	<b>11.36</b>	<b>12</b>	<b>13</b>
Percentage of employees who received a regular performance and career development review	100.0%	100.0%	100.0%



# Economic value added

## GRI 201-1

Stakeholders	Description	2023 (EUR)	2022 (EUR)	2021 (EUR)
Customers	Net sales	28,954,082	16,203,835	14,770,437
<b>Direct economic value generated and distributed</b>		<b>28,954,082</b>	<b>16,203,835</b>	<b>14,770,437</b>
Suppliers	Purchased goods, materials and services	22,677,690	9,625,268	10,093,855
	Finland	54%	30%	41%
Employees	Obligatory and voluntary personnel costs	6,411,143	4,717,292	3,096,786
Producers of assets	Financial income and expenses	-288,809	-214,525	-204,808
Public sector	Indirect taxes and vehicle taxes	0	0	0
Communities	Donations	0	0	0
<b>Distribution of economic value</b>		<b>29,377,642</b>	<b>14,557,084</b>	<b>13,395,449</b>
<b>Preservation of economic value</b>		<b>-423,560</b>	<b>1,646,750</b>	<b>1,374,988</b>



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