



# Sustainability Report 2023

**maxon**

# The most important figures at a glance



**1,180 MWh**

Solar energy produced on our sites



**4,495 t CO<sub>2</sub>e**

Greenhouse gas emissions, Scope 1 and 2 (location-based)



**47%**

Recycling rate



**17,966 MWh**

Total energy consumption



**8.1%**

Investment in research & development and prototype production as a proportion of revenue



**47.5% & 52.5%**

Women & men in the workforce



**9.3 years**

Employees' average years of service



**83% & 17%**

Full-time & part-time employees



**14%**

Employee turnover rate



## Editorial

# Our path to sustainability – maxon in 2023

The positive feedback from our customers and employees in response to maxon's first Sustainability Report encourages us to continue in our commitment to sustainable development. Our business partners are interested in maxon's commitment to sustainability and our employees are also concerned about these issues. This second Sustainability Report presents important content in a condensed form. The publication now includes assembly plants in addition to production sites. In terms of employees, this corresponds to around 91 percent of our company.

One of our key priorities for 2023 was to further develop our greenhouse gas accounting. Along with reporting on additional locations, we are now disclosing emissions from purchased metals, magnets, and electronic components for the first time. Looking at our industry, it is hardly surprising that most emissions arise in Scope 3 as classified by the Greenhouse Gas Protocol.

As we continue to develop metrics and increase transparency, we are working on a number of measures. These have been combined in a sustainability roadmap, which we developed and was approved by the management board in 2023. It includes activities across all eleven sustainability topics of maxon (see p. 6). In 2023, we implemented a group-wide environmental guideline, for example. By disclosing our commitment, we have earned the "Committed" badge from EcoVadis.

Last year, we also conducted a survey on psychological safety in our operational units for the first time. The positive result is one of my personal highlights, because the well-being of employees has always been a major priority at maxon.

These are just some of the topics covered on the following pages. I hope you find this report an interesting reading and I look forward to your feedback.

Eugen Elmiger, CEO of the maxon Group

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# With passion for precision

As a leading manufacturer of electric drive systems, maxon is operative all over the world. Our products save lives on Earth and move robots on Mars. Since 1961, we have been developing and delivering high-precision systems that are used in the fields of medical technology, aerospace, robotics, industrial automation, and mobility solutions: from brushed and brushless DC motors to gearheads, sensors, controllers, and mechatronic drive systems; from unique, customized items to high-volume production.

### Swiss quality – worldwide

maxon stands for quality and innovation. We produce the components of our drive systems at nine production sites: Sachseln (headquarters, Switzerland), Sexau (Germany), Veszprém (Hungary), Cheonan (Korea), Beynost (France), Enschede (Netherlands), Taunton (USA), Suzhou (China), and in Poole near Bournemouth (UK). We develop our own machines and production lines, which permit extremely high production standards, flexibility for custom modifications, and rapid and reliable order processing. We check our products' resistance to vibration, extreme temperatures, and pressure and impact loads in our own test laboratories.

maxon is represented in all key global markets, to maintain close relations with our customers. In addition to our nine production and assembly sites, a sales network encompassing 40 countries spans the entire globe. maxon's online shop has played a pioneering role within the industry, and now offers over 6,000 individual components with approximately 10 million possible combinations.

### Progress is what drives us

The maxon Group employs approximately 3,300 employees worldwide. One in ten of our employees works in research and development. In 2023, maxon invested 8.1 percent of its revenue in research. In Switzerland, our development focus is on motors, encoders, and controllers; in Germany, it is on

gearheads; and in Korea, it is on high-torque motors with slotted stators. Our regular collaboration with universities education has proven to be extremely valuable.

### Highest performance packed into the smallest of spaces

Our drives are used wherever there is no room for compromise on precision, performance, reliability, and quality. Nowhere are the requirements higher than in medical technology: Absolute precision, sterilizability, minimal vibration, power density in a compact size, and low heating of the motor are all essential. In industrial automation, notwithstanding the complexity of the mechatronics systems, and perfectly matched components, the focus must always be on cost.

The aerospace industry – whether long-distance aircraft, UAVs, or Mars rovers – requires powerful drive systems that can function reliably with high precision even under extreme conditions. The future of mobility is electric. In the field of mobility solutions, maxon develops safe and efficient drive systems for people and goods: from lightweight e-bike drives, to underwater vehicles and autonomous logistics robots.

### Corporate governance and division of responsibilities

As a privately held, family-owned company, we are independent and can make quick decisions, think long term, and prioritize quality and operational excellence. The organizational structure of the maxon Group is based on the principal company, maxon international ag, with the Board of Directors, Group management, and the business units Medical, Industrial Automation, Mobility Solutions, Aerospace, and Intralogistics. These units provide the link between customer projects around the world and our development departments and production sites, in order to meet the specific needs of our individual, highly diverse markets. The principal entity is also home to various central services.



# Sustainable progress

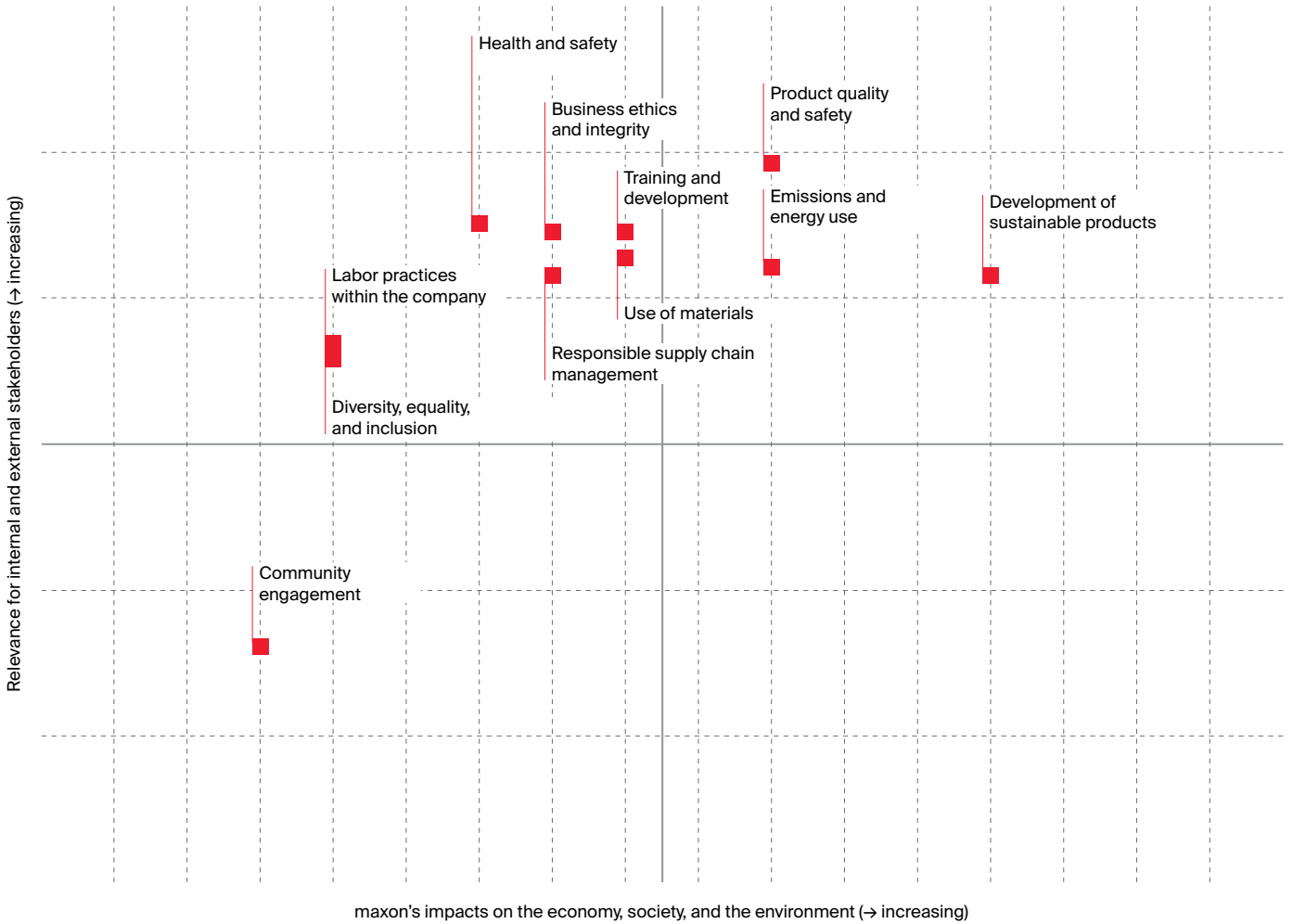
As a family company, maxon thinks long term. We do so with the goal of advancing the company and employees by developing ever more perfect solutions for our customers. An intact social and natural environment is a fundamental prerequisite in this respect. We are part of the society in which we are rooted, so we take responsibility for people and the environment. This is enshrined in our guiding principles and in our Code of Conduct.

For us, sustainability encompasses social, environmental, and economic aspects. We have compiled these aspects in eleven topics that we consider especially relevant to our business model and which we address in this report:

## Our sustainability topics

People	Environment	Responsible business conduct
Labor practices within the company	Emissions and energy use	Product quality and safety
Diversity, equality, and inclusion	Use of materials	Business ethics and integrity
Health and safety	Development of sustainable products	Responsible supply chain management
Training and development		Community engagement

### Materiality matrix



### Materiality analysis

In 2022, we assessed the sustainability topics in a materiality analysis. On the one hand, we evaluated how strong maxon's impacts are on the economy, society, and the environment as a particular topic. On the other hand, we asked stakeholders inside and outside the company how relevant the topics are for them in their relationship with maxon. The materiality matrix summarizes the results of the analysis. The process enhanced our understanding of sustainability and we gained valuable

insights into the expectations, desires, and aspirations of various stakeholders. We took this feedback on board when discussing our goals and drafting measures. Based on this, we developed a comprehensive roadmap with activities in different areas. These activities are now being implemented by various departments and organizational units. Acceptance of the roadmap and its transfer to project teams are milestones in maxon's overarching sustainability management.

# Fair and socially minded – our relationship with our employees

Our employees shape our corporate culture and embody it both inside and outside the company. Collaboration, curiosity, motivation, customer focus, responsibility, and reliability form its core. These principles were revised and actively communicated to all employees in 2023 – for example through core value games that focus on strengths and promote exchange and constructive feedback.

Our Code of Conduct (see also p. 14) specifies that staff treat each other with respect, that all are valued equally, and that maxon takes responsibility for the well-being of the company's employees. Through fair working conditions and company rules of behavior we lay a foundation that our employees can rely on at any time. These rules and conditions are founded on the locally applicable labor laws, contractual rights, safety regulations, social security systems, and other requirements.

To understand the expectations and desires of the workforce, we make use of proven formalized approaches such as appraisal interviews, surveys, and employee representation bodies. We foster an open communication culture and constantly strive to ensure that employees feel comfortable and valued at maxon and enjoy their work.

## The well-being of our employees is paramount

As an employer, we take our responsibility for occupational health and safety seriously. In our production and manufacturing, many of our employees work with precision technologies, and not on large industrial machinery. Health risks arise primarily when handling adhesives and hazardous substances (see p. 12), from unhealthy postures, repetitive sequences of movement, or from excessive eye strain. Outside of maxon's buildings and grounds, accidents during business travel, such as traffic accidents, are among the greatest dangers.

### Working safely

Our employees complete mandatory safety trainings and are schooled in the specific hazards of their area of activity. Where necessary, we conduct events, campaigns, and other awareness-raising initiatives – also for leisure activities. Regulated procedures, work instructions, protective clothing and equipment, and safety data sheets all help to prevent accidents and to ensure safe handling of machines, tools, or risky materials.

The relevant authorities regularly check our compliance with all the legal requirements and we report to the government

bodies in accordance with the local regulations. We compile meaningful key figures on occupational health and safety every quarter so we can review our management systems. We also conduct inspections. The reporting and documenting of incidents and near-accidents likewise provide valuable information. To implement effective measures, we analyze the causes and involve the affected employees in the optimization process.

### Physical and mental health

Workplace ergonomics is a key area of focus in health management, particularly at our production sites. We ensure that breaks are taken at our production facilities and encourage employees to exercise, for example by doing group gymnastics or stretching. All across the Group, we offer free eye tests in our operational units and supplementary health checks and consultations on site, according to local needs and priorities. In 2023, we also conducted a pilot survey on psychological safety in our operational units, the results of which were very positive. This topic continues to be relevant for maxon and a focal point in human resources management.

## Individuals with a wide range of valuable talents

We foster a culture of lifelong learning that establishes curiosity, precision, collaboration, and innovation as core values in the company. We help our employees to fulfill their personal and professional potential.

### The Global maxon Academy

Through our in-house program of education and training, we enhance our employees' technical skills, product knowledge, as well as organizational and leadership capabilities. The Global maxon Academy forms the core of this internal study program, encompassing in-person training, e-learning, and self-study. A skills matrix indicates which training must be completed in order to qualify for a given area of activity. The matrix is used in the yearly interviews conducted with employees to define development plans and goals.

In our two international leadership programs, we promote cross-border exchange and collaboration. We learn about new tools and methods and apply them in practice. We also apply other methods such as mentoring or coaching in an individualized way. Beyond that, maxon supports training outside the company with financial contributions and time credits.

### Vocational training

In Germany and Switzerland, we train apprentices and regularly recruit interns. University graduates can join maxon





through our Global Trainee Program. maxon maintains relationships and partnerships with various universities and colleges. In Germany, maxon has developed its own course of study together with the Offenburg University of Applied Sciences, and in Switzerland we sponsor laboratories at the Swiss Federal Institutes of Technology (ETH in Zürich and EPFL in Lausanne). If employees do not have vocational training, we give them the opportunity to catch up on this – for example through a shortened apprenticeship to become an automation technician with a nationally recognized certificate of proficiency.

## Diversity, inclusion, and equal opportunity

An inclusive environment and equal opportunity are a promise to our employees that is anchored in our mission statement. Inclusion is specified as a guiding principle: “We guarantee that everyone is treated fairly and with dignity. We ensure that different views and opinions are respected and that every person feels valued. We create a feeling of belonging.”

### Appreciation and inclusion

We firmly believe that our employees will carry out their tasks with more joy, commitment, and motivation if they feel comfortable and respected at maxon. Managers play a key role when it comes to appreciation. We prepare them in specialized trainings based on locally defined leadership principles. In our preventive measure efforts, we have observed that discrimination often happens unconsciously and without malicious intent. We therefore raise awareness, for example through training on the topic of unconscious bias. Any grievances can be reported through our anonymous reporting process (see p. 15). Misconduct is considered a violation of our Code of Conduct, and can ultimately result in dismissal.

### Tackling gender inequality

In the companies that are covered by this report, there are roughly just as many women employed as men. In terms of gender, however, major differences are found at maxon in relation to function and job description. Women form a greater proportion of the production workforce in particular – at maxon in Hungary, for example, they make up 75 percent. In senior management, however, only 14 percent of positions are held by women. With our Women in Engineering initiative, we seek to encourage women to train for technical professions, to highlight what women are already doing for the future of drive technology, and to strengthen the network of women within the company.

Where possible, we advertise positions in Switzerland as part-time and analyze advertisements to ensure inclusive language. We give equal pay for equal work and have this reviewed regularly in accordance with local laws. To make it easier for our employees to reconcile the demands of work and family life, we have had an in-house daycare center at our largest site, in Sachseln, for more than 50 years.

### People with disabilities

The maxon Group is a member of “the Valuable 500”, an international network of companies which have publicly committed themselves to the inclusion of people with disabilities. We employ people with disabilities and regularly assign work to sheltered workshops. In Sachseln, we employed individuals on a temporary basis through one such collaboration.

### Employees with a migrant background

In the same way, we give persons with a migrant background the opportunity to find work with us. In Germany, maxon participates in work integration programs for migrants. In Switzerland, maxon covers the cost of German language courses. Migrant workers are also potential candidates for shortened apprenticeships.

# Employees at maxon production and assembly sites in numbers

Legend: HQ headquarters / PU production unit / AU assembly unit

Employees	Switzerland (HQ+PU)	Germany (PU)	Hungary (PU)	South Korea (PU)	Assembly units (AU)	Total
<b>Employment status</b>						
Permanent employees	1,347	512	479	143	473	2,954
Temporary employees	84	0	0	1	91	176
Full-time equivalent	1,240	476	476	142	531	2,865
Proportion of temporary employees	6%	0%	0%	1%	16%	6%
Proportion of full-time employees	72%	82%	98%	100%	93%	82.8%
Proportion of part-time employees <sup>1</sup>	28%	18%	2%	0%	7%	17.2%
Employee turnover (voluntary departures)	10%	9%	24%	22%	19%	14%
New hires	147	25	24	50	99	345
Average years of service	10.6	10.3	7.8	4.2	7.5	9.3
<b>Health and safety</b>						
Workplace accidents or work-related illnesses	14	6	4	0	1	25
Absenteeism rate due to workplace accidents <sup>1</sup>	0.09%	0.05%	0.10%	0.00%	0.04%	0.07%
<b>Diversity</b>						
Women in the workforce	47.1%	39.8%	74.9%	47.9%	29.3%	47.5%
Women in senior management positions <sup>1</sup>	7.8%	3.4%	22.2%	13.6%	22.4%	11.7%
Employees under 30 years of age	14.6%	15.8%	15.0%	34.3%	24.1%	17.4%
Employees between 30 and 50 years of age	55.8%	50.4%	65.1%	62.2%	42.9%	54.6%
Employees over 50 years of age	29.6%	33.8%	19.8%	3.5%	33.0%	28.0%
<b>Training and development</b>						
Hours of training	13,483	7,750	1,504	1,791	6,933	31,460
Hours of training per employee	10	15	3	13	15	11
Number of appraisal interviews	1,228	448	536	145	442	2,799
Proportion of appraisal interviews carried out <sup>2</sup>	91%	88%	112%	101%	93%	95%

<sup>1</sup> Explanations and further information about these figures can be found in the GRI content index (p. 18 and 21).

<sup>2</sup> In Hungary and South Korea, the value is over 100% because appraisal interviews take place in January and the unit had more employees at the start of 2023 than at the end of the year.

# Conserving resources

The efficient use of energy and other resources, the reduction of greenhouse gas emissions, and responsible waste management with a high rate of recycling are all central to maxon's corporate environmental management. Our position and core principles with regard to our environmental impacts are set out in the Group's environmental directive implemented in 2023. Our employees play a key role in its implementation. We heighten their awareness in relation to mindful, responsible, and environmentally responsible behavior through events, training, and further education. In 2023, we made a contribution equivalent to 350 t CO<sub>2</sub>e to a climate protection project run by the myClimate foundation in Madagascar. maxon's production units as well as the assembly units in the Netherlands and China are certified in accordance with the environmental management standard ISO 14001.

## Energy management

At our largest site, in Sachseln, we have installed heat pumps as an ecofriendly option for the building's energy, and use two groundwater wells for heating, cooling, and ventilation. We also feed waste heat from production processes and exhaust air into the energy cycle. At several locations, we source most of our electricity from renewable sources. We also produced 1,180 MWh of solar energy in 2023 (excluding Parvalux in the UK). We also increase energy efficiency through measures such as converting to LED lighting, insulating buildings, or conducting energy efficiency analyses of our production machinery.

## Waste management and disposal

Professional waste management in our operations entails thorough sorting and type-specific disposal. We take advantage of the recycling options available in local waste management systems and from disposal providers. Special attention must be paid to hazardous waste (e.g., chemicals, contaminated water, and hazardous substances), which made up approximately 15 percent of our operational waste in 2023. We also feed valuable raw materials – such as metals, magnets, and plastics – back into the materials cycle.

## Efficient, lightweight, and durable products

Our powerful drive systems bring high performance to insulin pumps, humanoid and mobile robots, and camera lenses. One of the things that sets them apart is their high efficiency. We offer BLDC motors (brushless DC motors) with efficiency of more than 90 percent, thereby making a contribution to the energy efficiency of the end product. Our engineers are constantly working to make our products even lighter, using even less material – while keeping performance at the same

level or higher. This is crucial not only to maintaining and expanding our market position, but also for the conservation of resources. Thus, about 8.1 percent of our revenue in 2023 went to research and development and the production of prototypes.

## Durability as a major goal

Our components should provide high-level performance in our customers' products for as long as possible – that is our quality commitment (see also p. 14). In the control electronics, we therefore make it possible for the software to be updated and expanded over a long period of time. In addition, we specify design requirements to ensure that our control electronics are easy to repair and maintain.

## Sustainable selection of materials

Looking at the upstream value chain and the processing involved, the choice of materials we use and how we handle them are critical for environmental impacts. In 2023, we purchased around 1,300 metric tons of metal, electronics, plastic, and magnets. For the production of high-performance motors with high efficiency, we use the magnetic material neodymium, a metal that is one of the rare earths. It is important to use this material sparingly. We make use of the latest simulation tools to optimize our designs in regard to the use of rare earths. We also regularly optimize our manufacturing processes to minimize scrap from production.

Chemicals and hazardous substances are also used in our production processes. We have specified a multi-stage approval process for the use of hazardous substances, involving specialists from areas within the company such as process engineering, occupational safety, and environmental management. Adherence to regulations, both those of the company itself and external regulations, is regularly checked through audits and unannounced inspections. Rules on hazardous substances are also part of risk management in our supply chains and are enshrined in our Supplier Code of Conduct (see p. 15).

Compliance with the REACH and RoHS requirements of the European Union is ensured by an in-house workgroup. This project aims to eliminate the environmentally harmful substances specified in the regulations from our products, or to lower them to the required maximum quantities. The workgroup also develops additional product design rules that are applied even before the legal regulations come into force. An example is the reduction of lead content in aluminum materials. Firstly, we have specified that these substances may no longer be used in the development of new products. Secondly, we are converting existing products to alternative materials.

Legend: **HQ** headquarters / **PU** production unit / **AU** assembly unit

Greenhouse gas emissions (in t CO <sub>2</sub> e)	Switzerland (HQ+PU)	Germany (PU)	Hungary (PU)	South Korea (PU)	Assembly units (AU)	Total
<b>Scope 1 emissions</b>	<b>217</b>	<b>118</b>	<b>167</b>	<b>18</b>	<b>245</b>	<b>765</b>
Heating energy	160	89	151	0	141	540
Fuels (own vehicle fleet)	57	29	17	18	104	225
<b>Scope 2 emissions (location-based)</b>	<b>629</b>	<b>1,772</b>	<b>665</b>	<b>236</b>	<b>428</b>	<b>3,730</b>
Purchased electricity	629	1,772	665	236	428	3,730
<b>Scope 2 emissions (market-based)<sup>1</sup></b>	<b>64</b>	<b>1,339</b>	<b>931</b>	<b>236<sup>1</sup></b>	<b>333<sup>1</sup></b>	<b>2,904</b>
Purchased electricity	64	1,339	931	236 <sup>1</sup>	333 <sup>1</sup>	2,904
<b>Scope 3 emissions</b>	<b>73,728</b>	<b>1,612</b>	<b>7,587</b>	<b>15,370</b>	<b>673</b>	<b>98,969</b>
Purchased goods and services (electronics, magnets, metals, plastic, paper, cardboard, water) <sup>2</sup>	71,281	905	6,579	15,228	Not reported	93,993
Fuels and energy emissions	38	295	126	26	69	554
Operational waste and water disposal <sup>3</sup>	7	5	23	7	39	80
Business travel (by air and rail) <sup>4</sup>	844	22	44	73	283	1,267
Employees commuting <sup>4</sup>	1,558	385	815	35	281	3,074
<b>Total emissions (location-based)</b>	<b>74,574</b>	<b>3,502</b>	<b>8,420</b>	<b>15,623</b>	<b>1,346</b>	<b>103,464</b>
<b>Total emissions (market-based)<sup>1</sup></b>	<b>74,008</b>	<b>3,069</b>	<b>8,686</b>	<b>15,623<sup>1</sup></b>	<b>1,251<sup>1</sup></b>	<b>102,638</b>
<b>Scope 1 &amp; 2 intensity (location-based) (t CO<sub>2</sub>e/FTE)</b>	<b>0.7</b>	<b>4.0</b>	<b>1.7</b>	<b>1.7</b>	<b>1.3</b>	<b>1.5</b>
<b>Scope 1 &amp; 2 intensity (market-based)<sup>1</sup> (t CO<sub>2</sub>e/FTE)</b>	<b>0.2</b>	<b>3.1</b>	<b>2.3</b>	<b>1.6<sup>1</sup></b>	<b>0.9<sup>1</sup></b>	<b>1.0<sup>1</sup></b>

**Energy consumption (in MWh)**

Heating energy	103	439	741	0	692	1,976
Purchased electricity	5,158	4,570	2,831	636	1,944	15,139
Solar energy produced and consumed on our sites	270	85	302	0	195	851

<sup>1</sup> Market-based if appropriate greenhouse gas factors were available. If not available, location-based values were taken into account.<sup>2</sup> Excluding assembly units, as purchased and reported centrally in some cases or not available at the time of publication.<sup>3</sup> For production sites and Parvalux (UK).<sup>4</sup> Excluding Parvalux (UK).

Resources and materials	Switzerland (HQ+PU)	Germany (PU)	Hungary (PU)	South Korea (PU)	Assembly units (AU)	Total
Purchased materials: Electronics, magnets, metals, plastic, paper, and cardboard (in tons) <sup>1</sup>	682	304	158	152	Not reported	1,296
Water consumption (in megaliters)	12	3	7	2	7	32

**Waste**

<b>Waste generated<sup>2</sup></b>	<b>206</b>	<b>192</b>	<b>82</b>	<b>18</b>	<b>368</b>	<b>865</b>
Non-hazardous waste (in tons)	183	108	78	18	345	732
Hazardous waste (in tons)	22	84	4	0	23	134
Hazardous waste as proportion of the total waste quantity	11%	44%	5%	0%	6%	15%

**Waste by type of processing**

Waste for recycling	36%	40%	43%	22%	59%	47%
Copper	2%	0%	4%	0%	1%	1%
Other metals	9%	32%	6%	7%	44%	29%
Paper and cardboard	24%	7%	33%	14%	14%	17%
Hazardous waste	11%	44%	5%	0%	6%	15%
Waste for disposal	54%	16%	52%	78%	35%	38%

<sup>1</sup> Excluding assembly units / <sup>2</sup> For production sites and Parvalux (UK).

# Quality and safety of our products

We make no compromises when it comes to our products. Durable, error-free, and safe products are of the utmost importance for the satisfaction of our customers. This is why we consider functional safety to be particularly important and embed quality management in our core processes. From product development, to production and manufacture, to marketing and sales, there are risk analyses, reviews, checks, tests, systematic controls, and other dedicated steps for quality planning and control.

The centerpiece of quality management is the quality manual. More specific process descriptions, directives and guidelines apply depending on the product lines or areas of application. We regularly measure our performance using meaningful quality indicators. Internal audits and external re-certifications check our quality management systems to ensure they are functional and up to date. The various evaluations enable continuous improvement. That they have the desired effect is confirmed by our low complaint rates and high customer satisfaction.

## The human factor

Our employees have a significant influence on our results. They work on our products by hand, operate and service machines, and conduct checks. Training for specific functions and roles as well as refresher training are therefore of major importance. For example, employees learn to carry out manual work neatly and flawlessly on tiny objects, using materials that are difficult to work with. To integrate quality standards into the way employees think and act, we conduct awareness-raising measures, training, and evaluations.

## Quality and safety

The quality management in our production units as well as in the assembly units in France, the UK, the Netherlands, China, and the US is ISO 9001-certified. Our high-precision drive solutions for medical technology meet the requirements of the medical standard ISO 13485. As a developer and manufacturer of components for the aerospace industry, we are certified in accordance with EN 9100. We are also certified to IATF 16949 for the automotive industry. On top of that, we also stipulate requirements on the quality and safety of the materials, products, and components that we purchase from our suppliers. Corresponding requirements are laid down in part-specific supply agreements or specifications and in quality assurance agreements.

## Fair, professional, and respectful – the cornerstones of our conduct

Our employees greatly affect how maxon is perceived by our stakeholders. Their behavior is fundamental to our good

reputation and the high degree of trust that is placed in us. We want to be respectful, professional, and fair in our conduct both with each other and with our stakeholders.

## Our Code of Conduct

All employees are bound by the Code of Conduct, which sets out the rules of behavior mentioned above. Further stipulations include compliance with laws in general, the avoidance of conflicts of interest, corruption, bribery, and anticompetitive conduct. Specific guidelines clarify various topics, and we have an internal control process to ensure that we do not breach sanction lists or trade embargoes, for example. The Code of Conduct of the maxon Group is [published on our website](#). For suppliers, maxon has drawn up our own maxon Supplier Code of Conduct, [which is likewise published on our website](#). maxon requires suppliers to familiarize themselves with this Code of Conduct and to confirm their compliance with it on a regular basis.

Training courses are held regularly to ensure that the rules of conduct are known within the company. New employees complete training on the Code of Conduct. The new Compliance Training Framework is used to plan how often which content should be taught. In 2023, we introduced an e-learning module on the subject of data protection.



### Due diligence on child labor

In accordance with Swiss regulations, we comply with Article 964 j-I of the Swiss Code of Obligations and its implementing regulation on Due Diligence and Transparency in relation to Minerals and Metals from Conflict-Affected Areas and Child Labor (DDTrO). maxon is exempt from due diligence and reporting obligations in respect of minerals and metals from conflict-affected areas because the amount of minerals and metals listed in Annex 1 of the DDTrO that is imported and processed by maxon is below the threshold. With respect to child labor regulations, maxon is obliged to conduct a risk analysis and report on its due diligence obligations.

Detailed analyses of the supply chains of purchased parts with a potential risk for child labor have shown that the risk of the presence of child labor in these purchased parts is low. maxon has published further details of this analysis [in a separate report](#).

### Our reporting system

We have set up [a reporting system](#) for the reporting of potential violations of laws and internal regulations and guidelines. The processes are communicated to all employees worldwide. If they notice potential violations, they can contact their immediate superior, or the local or global human resources managers and compliance officers. The platform for anonymous or confidential reports using one's own identity has also been accessible to external individuals on the maxon website since 2023.

The reports are reviewed by our Compliance function, and documented. If a suspicion is confirmed, actions are initiated and their implementation and effectiveness are reviewed. The annual Compliance Report informs the Management Board and Board Of Directors about any incidents. Depending on the degree of severity, the boards may be informed and involved immediately. Furthermore, our internal auditors regularly audit the compliance processes in all units.

### Our responsibility does not stop at our front door

We carry a sense of responsibility with us into our relationships with business partners and especially with our suppliers. By doing so, we seek to change things for the better. We know our important partners well, and are building on long-term, trust-based relationships.

### Our supplier management

The core processes in supply management are standardized and controlled centrally. maxon defines global conditions and processes as a framework within which the local units can procure components and other products and services. We have commodity managers who take responsibility for purchasing important groups of goods. They work in a team that includes quality and purchasing specialists at headquarters and at other sites. The total value of the goods that are managed strategically in this kind of matrix structure comes to around 70 percent of our total purchasing volume. A new supplier must meet our minimum requirements in terms of quality, price, and availability of supply. The exact conditions can vary according to the supplier category.

Something that does not vary is that our Supplier Code of Conduct must always be accepted. It imposes requirements

in the areas of labor rights and human rights (including child labor), health and occupational safety, environmental protection, and ethically responsible business practices (including conflict minerals). If all the prerequisites are met, the supplier is considered qualified and is accepted into our supplier network. maxon checks suppliers regularly and, depending on the business volume, products purchased, and risk assessment, has the supplier (re-)audited by our own employees.

### The greatest risks

We regularly evaluate our supplier network for financial, geopolitical, and cybersecurity risks, and for whether companies could be affected by force majeure events such as earthquakes, hurricanes, or tsunamis. We also check the purchased goods for chemicals and ingredients that can be harmful to health and the environment, according to RoHS and REACH (see p. 12). Once a year, our suppliers complete the Responsible Minerals Initiative checklist regarding reporting on conflict minerals. If this indicates that they have relationships with blacklisted smelters, they are urged by maxon to sever their ties with them. So far, there has never been a worst case scenario where maxon warned a supplier but to no avail, and had to terminate the business relationship as a result.

### Achieve more through our commitment to innovation and society

We seek to generate positive momentum as a reliable partner in the societies in which we are established. With our Young Engineers Program, for example, we support startups and educational institutions with discounted or even free drives, and advice for their projects. We help drive innovation through multi-year partnerships, for example with the [Cybathlon](#) or the pioneering [Solar Butterfly](#) project.

At the same time, we provide support in the locations that are both home to maxon as a company and to its employees. We are happy to commit ourselves to projects that promote development in the regions and benefit young people. In the past, we have made contributions to school camps, classical music festivals, and sporting events. We review all requests according to predefined criteria, and provide our support in the form of money, giveaways, products, expertise, and labor.

## About this report

This Sustainability Report deals with the significant economic, environmental, and social impacts of maxon, and sets forth our commitment to a sustainable future. maxon has reported in accordance with the GRI Standards for the period from January 1 to December 31, 2023. The presented metrics, activities, and impacts were selected based on our materiality matrix (see p. 7) and in consultation with managers and experts within the company.

The report covers our headquarters together with the production and assembly units of the maxon Group in Switzerland (Sachseln), Germany (Sexau), Hungary (Veszprém), South Korea (Cheonan), France (Beynost), the Netherlands (Enschede), the US (Taunton), China (Suzhou), and the UK (Poole). These sites employed 2,954 permanent staff as at December 31, 2023. This equates to 91 percent of the workforce of the entire Group, which numbered 3,247 employees in total as at December 31, 2023.

This is the second time that we have published this report. We do so for the purpose of transparency and to provide further impetus for dialog with our stakeholders. Our aim is to present achievements and challenges in a clear, accountable, and assessable way. We are happy to receive any questions and feedback at [media@maxongroup.com](mailto:media@maxongroup.com).



# GRI content index

The following GRI content index is based on maxon's current materiality matrix (see p. 7), which the company drew up in 2022 with the involvement of external and internal stakeholders. Relevant information is presented transparently in the Sustainability Report 2023 and is supplemented with further details in the content index. The correlation of the GRI Standards to the topics assessed in the materiality analysis is shown in the following table:

Sustainability Topics of the maxon Group	GRI Topic Standards
<b>Employees</b>	
Labor practices within the company	GRI 301 Employment (2016)
Diversity, equality, and inclusion	GRI 405 Diversity and Equal Opportunity (2016)
Health and safety	GRI 403 Occupational Health and Safety (2018)
Training and development	GRI 404 Training and Education (2016)
<b>Environment</b>	
Emissions and energy use	GRI 302 Energy (2016) GRI 305 Emissions (2016)
Use of materials	GRI 301 Materials (2016) GRI 306 Waste (2020)
Development of sustainable products	Not covered in the GRI Topic Standards, recorded separately
<b>Responsible business conduct</b>	
Product quality and safety	GRI 416 Customer Health and Safety (2016)
Business ethics and integrity	GRI 205 Anti-corruption (2016)
Responsible supply chain management	Management approach reported
Community engagement	Not covered in the GRI Topic Standards, recorded separately

Standard	Indicator	Reference, comments, and further information
<b>Foundation (2021)</b>		
GRI 1	Foundation	
<b>The organization and its reporting practices (2021)</b>		
GRI 2-1	Organizational details	<p>Interelectric AG, the holding company of the maxon Group, is a family-owned joint-stock company with its headquarters in Switzerland, which owns 100 percent of the principal company maxon international ag.</p> <p><b>Headquarters (of the principal company):</b>  maxon international ag  Brünigstrasse 220  6072 Sachseln  Switzerland  Other sites:  – <a href="#">Product range</a>, p. 611–614</p>
GRI 2-2	Entities included in the organization's sustainability reporting	P. 16
GRI 2-3	Reporting period, frequency, and contact point	P. 16 and 24
GRI 2-4	Restatements of information	None.
GRI 2-5	External assurance	The report has not been audited externally.
<b>Activities and workers (2021)</b>		
GRI 2-6	Activities, value chain, and other business relationships	P. 4 – Website: <a href="#">What we do, Who we are</a> – Website: <a href="#">Product overview</a>
GRI 2-7	Employees	– Information on the workforce: P. 11 – The key workforce figures were recorded per person and analyzed as at December 31, 2023, unless otherwise stated. – Part-time work is defined as all employment contracts with a workload below 100%.
GRI 2-8	Workers who are not employees	As a fundamental rule, maxon does not employ anyone without a contractual employment relationship.
<b>Governance (2021)</b>		
GRI 2-9	Governance structure and composition	<p>The Board of Directors of maxon international ag as at December 31, 2023:</p> <ul style="list-style-type: none"> <li>– Dr. Karl-Walter Braun (Chairman of the Board of Directors)</li> <li>– Dr. Bianca Braun</li> <li>– Dr. Andreas Casutt</li> <li>– Dr. Ulrich Claessen</li> <li>– Eugen Elmiger (Chairman of the Management Board and Vice Chairman and Delegate of the Board of Directors)</li> <li>– Kurt Kwapil</li> <li>– Kurt Meier</li> <li>– Dorothea Zünd-Bienz</li> </ul> <p>The Management Board of maxon international ag as at December 31, 2023:  – <a href="#">Website</a></p>
GRI 2-10	Nomination and selection of the highest governance body	maxon is a privately owned family company. This information is not made public for reasons of confidentiality.
GRI 2-11	Chair of the highest governance body	See GRI 2-9

Standard	Indicator	Reference, comments, and further information
GRI 2-12	Role of the highest governance body in overseeing the management of impacts	<p>maxon has been systematically expanding its sustainability management through an initiative started in 2022. Overall responsibility for it lies with the CFO of the maxon Group, Norbert Bitzi. The materiality analysis (see p. 7) was conducted within that process.</p> <p>The Management Board of the Group was regularly and actively involved. Among other things, the Management Board approved the environmental guideline and actively participated in the development of the action roadmap. The Board of Directors welcomed this systematization of the company's sustainability management. The Audit and Risk Committee was kept informed about interim results and the general procedure during the course of the initiative. A member of the Board of Directors also actively participated in many steps of the process, putting forward the Board's point of view.</p>
GRI 2-13	Delegation of responsibility for managing impacts	<p>Overall responsibility for the expansion of our sustainability management lies with the CFO of the maxon Group, Norbert Bitzi. He is supported in this by a core in-house team comprising the head of Human Resources, the general counsel, and the Group's head of Risk, Compliance, and Environmental Management. Decisions on general measures are made by the Management Board, while the relevant specialist units and functions have the duty of implementing them.</p> <p>The Board of Directors is informed of relevant progress and results at least once a year through internal reporting. These results also include maxon's impacts on the economy, society, and the environment. Examples of this reporting include the annual reports on compliance, risk management, human resources, and on the environmental management system.</p>
GRI 2-14	Role of the highest governance body in sustainability reporting	<p>The Sustainability Report 2023 was approved by the Board of Directors. The CEO of the maxon Group and delegate of the Board of Directors, Eugen Elmiger, was involved in the drafting of its contents.</p> <p>The list of material topics was discussed and approved by the Management Board. Views and expectations expressed by the Board of Directors were taken into account when defining the topics.</p>
GRI 2-15	Conflicts of interest	All employees, including the members of the Board of Directors and the Management Board, are bound by legal obligations and maxon's Code of Conduct, which states requirements for dealing with conflicts of interest.
GRI 2-16	Communication of critical concerns	The Board of Directors is informed at least once a year about critical matters through the internal reporting process (see GRI 2-13). In the event of major incidents, the Board of Directors is informed and involved immediately, subject to the assessment of the Management Board and especially of the CEO or the compliance officer.
GRI 2-17	Collective knowledge of the highest governance body	<p>The annual internal reporting informs the Board of Directors about current developments, including those in the area of sustainability in general and in specific aspects of that area. In this regard, the reports on risk management, human resources management, and compliance are especially relevant.</p> <p>Participation in many steps of the ongoing initiative has led to increased knowledge and understanding of sustainability among the members of the Management Board and the Board of Directors.</p>
GRI 2-18	Evaluation of the performance of the highest governance body	
GRI 2-19	Remuneration policies	maxon is a privately owned family company. This information is not made public for reasons of confidentiality.
GRI 2-20	Process to determine remuneration	
GRI 2-21	Annual total compensation ratio	

### Strategy, policies, and practices (2021)

GRI 2-22	Statement on sustainable development strategy	P. 3
GRI 2-23	Policy commitments	P. 14 - Code of Conduct
GRI 2-24	Embedding policy commitments	P. 14

Standard	Indicator	Reference, comments, and further information
GRI 2-25	Processes to remediate negative impacts	<p>maxon pursues different approaches to remediating negative impacts depending on the sustainability topic in question. For details, see the descriptions of the management approaches (see GRI 3-3 in the specific disclosures).</p> <p>Compliance with human rights in general and with specific human rights is laid down internally within the company in our Code of Conduct, and externally for our supply chain in our Supplier Code of Conduct.</p> <p>For more details, see:</p> <p>P. 14 P. 15</p>
GRI 2-26	Mechanisms for seeking advice and raising concerns	See GRI 2-25
GRI 2-27	Compliance with laws and regulations	maxon is a privately owned family company. This information is not made public for reasons of confidentiality.
GRI 2-28	Membership associations	The maxon Group is a member of a number of local associations in Switzerland, but as a medium-sized company, it can exercise only a limited influence in them.

### Stakeholder engagement (2021)

GRI 2-29	Approach to stakeholder engagement	<p>maxon liaises with external partners and stakeholders on a daily basis through its employees. This engagement is manifested in activities and platforms such as membership in associations and interest groups (see GRI 2-28), discussions with customers and suppliers, evaluations and inspections by authorities, media relations, and complaint and feedback processes. Internally, dialog with employees is fostered and maintained through various channels (see p. 8–11).</p> <p>As part of the materiality process, maxon consulted selected stakeholder groups in 2022 (see p. 7).</p>
GRI 2-30	Collective bargaining agreements	maxon employees are not subject to any collective bargaining agreement. maxon formulates its own conditions of employment in the local units of the company. When doing so, compliance with local legislation is ensured. The provisions are also based on typical conditions for the industry and on maxon's ethical principles and <a href="#">corporate values</a> .

### Disclosures on material topics (2021)

GRI 3-1	Process to determine material topics	P. 7
GRI 3-2	List of material topics	P. 7 and p. 17

## People

### → Labor practices within the company

GRI 3: Material topics	3-3 Management of material topics	P. 8
GRI 401: Employment (2016)	401-1 New employee hires and employee turnover	P. 11

### → Diversity, equality, and inclusion

GRI 3: Material topics	3-3 Management of material topics	P. 10
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Standard	Indicator	Reference, comments, and further information
GRI 405: Diversity and Equal Opportunity (2016)	405-1: Diversity of governance bodies and employees	<p>Board of Directors by gender and age as at December 31, 2023:</p> <ul style="list-style-type: none"> <li>- Men: 6</li> <li>- Women: 2</li> <li>- Under 30 years of age: 0</li> <li>- 30 to 50 years of age: 2</li> <li>- Over 50 years of age: 6</li> </ul> <p>Management Board and the Extended Management Board by gender and age as at December 31, 2023:</p> <ul style="list-style-type: none"> <li>- Men: 7</li> <li>- Women: 1</li> <li>- Under 30 years of age: 0</li> <li>- 30 to 50 years of age: 1</li> <li>- Over 50 years of age: 7</li> </ul> <p>Employees by gender and age as at December 31, 2023: P. 11</p> <p>Comment regarding the figure for "Women in senior management positions": Senior management positions are defined as those that involve the management of persons who have managerial responsibilities.</p>
<b>→ Health and safety</b>		
GRI 3: Material topics	3-3 Management of material topics	P. 8
GRI 403: Occupational Health and Safety (2018)	403-1 Occupational health and safety management system	P. 8
	403-3 Occupational health services	P. 8
	403-5 Worker training on occupational health and safety	P. 8
	403-6 Promotion of worker health	P. 8
	403-8 Workers covered by an occupational health and safety management system	All employees are covered by an occupational health and safety management system that has been audited internally and externally.
	403-9a/403-10a Work-related injuries and ill health	<p>P. 11</p> <ul style="list-style-type: none"> <li>- The recorded absenteeism rate (p. 11) is defined as absences due to workplace accidents as a percentage of the planned working hours. In Hungary, parental leave is recorded in this absence category and is included in the absenteeism rate for 2023. We are working on adapting our documentation and data collection.</li> </ul>
<b>→ Training and development</b>		
GRI 3: Material topics	3-3 Management of material topics	P. 8
GRI 404: Training and Education (2016)	404-1 Average hours of training per year per employee	<p>P. 11</p> <ul style="list-style-type: none"> <li>- The figures are not broken down further by gender and employee category.</li> </ul>
	404-2a Programs for upgrading employee skills and transition assistance programs	P. 8
	404-3 Percentage of employees receiving regular performance and career development reviews	<p>P. 11</p> <ul style="list-style-type: none"> <li>- The figures are not broken down further by gender and employee category.</li> </ul>

Standard	Indicator	Reference, comments, and further information
<b>Environment</b>		
<b>→ Development of sustainable products</b>		
GRI 3: Material topics	3-3 Management of material topics	P. 12
Own key figure	Investment in product innovation	In 2023, the maxon Group invested 8.1 percent of its revenue in research and development and in the production of prototypes.
<b>→ Use of materials</b>		
GRI 3: Material topics	3-3 Management of material topics	P. 13
GRI 301: Materials (2016)	301-1 Materials used by weight or volume	P. 13
GRI 306: Waste (2020)	306-1 Waste generation and significant waste-related impacts	P. 13
	306-3 Waste generated	P. 13
	306-4 Waste diverted from disposal	- P. 13 - Waste data is currently not reported broken down by recycling and recovery method.
	306-5 Waste directed to disposal	P. 13 - Waste data is currently not reported broken down by disposal method.
<b>→ Emissions and energy use</b>		
GRI 3: Material topics	3-3 Management of material topics	P. 13
GRI 302: Energy (2016)	302-1 Energy consumption within the organization	P. 13 Standards, methods, and assumptions: - Conversion factors for natural gas: Federal Office for the Environment FOEN (2016) <i>Faktenblatt CO<sub>2</sub>-Emissionsfaktoren des Treibhausgasinventars der Schweiz (Factsheet on CO<sub>2</sub> emission factors of Switzerland's greenhouse gas inventory)</i> .
	302-2 Energy consumption outside of the organization	P. 13 Standards, methods, and assumptions: - See GRI 305-3
GRI 305: Emissions (2016)	305-1 Direct (Scope 1) GHG emissions	P. 13 Standards, methods, and assumptions: - The GHG emissions have been reported and categorized in accordance with the Greenhouse Gas Protocol (according to the GHG Protocol Corporate Accounting and Reporting Standard). - Sources for the emission factors of the greenhouse gases: Federal Office for the Environment FOEN (2018) Switzerland's Greenhouse Gas Inventory 1990-2016, National Inventory Report, Tables 3-12 to 3-16, 3-75; United States Environmental Protection Agency EPA (2018) Greenhouse Gas Emissions from a Typical Passenger Vehicle; United Kingdom Department for Environmental Food & Rural Affairs (DEFRA), GHG Conversion Factors for Company Reporting (v 1.1, 2023); carbon footprint (2023) International Electricity Factors, v0.1, based on Association of Issuing Bodies (AIB) 2022; treeze and PSI (2023) mobitools-Faktoren v3.0; Ecoinvent v3.10; Intep GHG emission factors for the building sector (2022/V1.2); information on emissions and emission factors of suppliers, e.g., power plants.

Standard	Indicator	Reference, comments, and further information
	305-2 Energy indirect (Scope 2) GHG emissions	P. 13  Standards, methods, and assumptions: - The GHG emissions have been reported and categorized in accordance with the Greenhouse Gas Protocol (GHG Protocol Corporate Accounting and Reporting Standard) - See the sources of the GHG emission factors under GRI 305-1
	305-3 Other indirect (Scope 3) GHG emissions	P. 13  Standards, methods, and assumptions: - GHG emissions have been reported and categorized in accordance with the Greenhouse Gas Protocol (GHG Protocol Corporate Accounting and Reporting Standard) and the Corporate Value Chain [Scope 3] Accounting and Reporting Standard). - When calculating the GHG emissions from paper consumption and for business travel and employees commuting, the data has sometimes been estimated. - See the sources of the GHG emission factors under GRI 305-1.  In our efforts to ensure transparency and in accordance with the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, maxon has collected data for the Scope 3 categories as was feasible and appropriate at the time of publication of this report. maxon recognizes that the creation of a Scope 3 inventory provides greater understanding of greenhouse gas emissions along our own value chain. This constitutes a significant step toward efficiently managing risks and opportunities around emissions and contributes to the reduction of GHG emissions throughout the entire value chain. maxon is striving to collect data for further Scope 3 categories and has expanded reporting for the year 2023. Currently, the categories 1, 5, 6, and 7 are reported.

## Responsible business conduct

### → Product quality and safety

GRI 3: Material topics	3-3 Management of material topics	P. 14
GRI 416: Customer Health and Safety (2016)	416-1 Assessment of the health and safety impacts of product and service categories	For the areas of application of maxon products in medical technology, aerospace, and the automotive industry, impacts on health and safety have been examined specifically.

### → Business ethics and integrity

GRI 3: Material topics	3-3 Management of material topics	P. 14
GRI 205: Anti-corruption (2016)	205-2 Communication and training about anti-corruption policies and procedures	P. 14
	205-3 Confirmed incidents of corruption and actions taken	No cases of corruption are known from the reporting period.

### → Responsible supply chain management

GRI 3: Material topics	3-3 Management of material topics	P. 15 - Website: <a href="#">Suppliers</a>
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### → Community engagement

GRI 3: Material topics	3-3 Management of material topics	P. 15
	Sponsorship payments	CHF 1,011,344 (headquarters and production company in Switzerland)

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With this report we have also contributed to sustainability at  
maxon by not producing a printed version.

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