



**KUKA**

Shaping  
tomorrow

Sustainability Report 2022

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# Sustainability Highlights 2022



## COMPANY AND STRATEGY

The Swisslog division has developed a sustainability program to drive investment in GreenLog and to anchor the idea of sustainability throughout the corporate culture. This is accompanied by a KPI-supported roadmap. (p. 7)



## ECOLOGICAL RESPONSIBILITY

In the year under review, KUKA succeeded in improving its rating on the relevant sustainability platform EcoVadis to silver status. This is the result of cross-departmental collaboration as well as a higher level of transparency. (p. 25)



## SUSTAINABLE SUPPLY CHAIN

KUKA has created a global basis for the implementation of the German Supply Chain Due Diligence Act. For this purpose, several policies have been updated and others have been newly created. In the future, as part of a risk analysis, KUKA will identify and assess human rights and environmental risks, both for its own business area and for its suppliers. (p. 41)



## EFFICIENT PRODUCTS AND SOLUTIONS

KUKA used its own Innovation Challenge to initiate ideas for the circular economy. In the current fiscal year, seven ideas will be developed into pilots that can become part of the product portfolio if successfully scaled. (p. 32)



## SOCIAL ENGAGEMENT

By participating in the Female Researchers Camp, KUKA encourages young women who want to pursue a technical career. The participants worked on a task set by KUKA with the help of a robot and a 3D printer. (p. 61)



## COMPLIANCE

KUKA has added web-based access to its whistleblowing system to increase the effectiveness of compliance controls. This enables employees and external parties worldwide to report suspected cases of possible violations, anonymously if they wish. (p. 18)



## RESPONSIBLE EMPLOYER

With the "new WE" strategy project, KUKA is strengthening its strategy, structure and culture and optimizing its way of working. The focus is on factors such as progress, communication, global mindset, and a modern failure and leadership culture. (p. 48)

# Facts & Figures



## -40%

### CO<sub>2</sub> Emission Targets

(by 2030 vs. 2019 baseline)

## ~ 15,000 m<sup>2</sup>

### New office in Augsburg

Fostering new KUKA working environment



### Diversity

Our diversity principles, which are valid worldwide, emphasize KUKA's positive attitude toward diversity within the company

## KUKA

### Code of Conduct



The workforce is united by a common understanding of fundamental values, principles and corporate culture



Responsible Global Sourcing

# > 10,000 Suppliers

We foster sustainability in our supply chain and have clearly formulated our expectations towards our suppliers

### Corporate Compliance



- » global whistleblowing system in place
- » e-learning programs for all employees



Focus on energy efficiency of our products and solutions

### KR QUANTEC KR C5

## ~ 60% less energy consumption

(vs. 2010 baseline)

# About this report

With this Sustainability Report, KUKA AG is once again accounting for the company's economic, ecological, social and societal responsibility. Our target audience is comprised of our employees, customers, suppliers, capital market, non-governmental organizations, politicians and authorities as well as interested members of the public. We would like to inform the aforementioned parties about the measures we are taking to implement responsibility and corporate sustainability throughout our processes, products, the supply chain and towards our employees.

This report was created in accordance with the GRI Standards (2021). In preparation for this, we validated the key sustainability topics for KUKA in an updated materiality analysis.

The reporting period corresponds to the 2022 fiscal year (January 1 to December 31). The information relates to all affiliated companies of KUKA AG that are included in the KUKA Annual Report. Any deviations have been identified as such. This report was published in German and English at the end of April 2023. In the future, it will continue to be published annually in April.

## Foreword by the Management Board

### Dear Readers,

How can we produce without using too many resources? How can we achieve economic success without future generations or other countries paying the price? How can we create an attractive and team-oriented corporate culture?

Sustainability has many facets – from climate protection to responsible supply chains and beyond to a respectful interaction with one another. And we as KUKA have to meet our responsibility in each of these aspects. The expectations of our stakeholders, customers, employees and the general public are rising.

Sustainability is an important topic and we want play an active role in shaping it. We would like to be transparent and speak openly about the work that KUKA is doing. For this reason, we have decided – despite KUKA's decision to delist from the stock exchange – to continue to voluntarily publish our sustainability report each year.

We have made achievements on a number of levels. We have set ourselves clear CO2 reduction targets and offer our customers robots with greater energy efficiency. At the same time, we are opening up new areas of business – such as automated, modular home construction,

which seeks to provide more affordable and resource-efficient construction. We have stepped up our responsible supply chain work with our more than 10,000 suppliers and have published a code of conduct with clear guidelines to this end.

As a member of the Augsburg Climate Pact, we are collaborating with other companies in the region to construct a more sustainable future. Our employees around the world are working together on a Group-wide project to continue developing and improving KUKA's corporate culture. In a global innovation campaign, we also collected ideas on the circular economy in order to examine concrete opportunities for sustainability and our business as well as to develop corresponding business models.

All of these aspects are important milestones on the way to a more sustainable future. However, there is still a long way to go and a lot of work ahead of us. As a result, we not only want to highlight successes, but also indicate areas where we would like to improve. For that, we need to define standards against which we can compare our sustainability performance over several years. This is why we are working on the transparent presentation of our global sustainability performance.

The EU is significantly expanding the rules on reporting as of 2025. As part of these requirements, we are establishing a standardized reporting system to disclose our strategies, targets and measures. This also includes questioning our decisions in a regular basis and being open to adjustments.

I am convinced that if we are successful in this, it will also pay off for our business. Studies show: sustainability pays off – not only for the environment and society, but also for industry. Sustainable companies score high with lower energy costs, are a more attractive employer for young talent and, thanks to more resource-efficient products and solutions, also have more satisfied customers. Economic success and sustainability go hand in hand – and for KUKA, this can create a competitive advantage.

This year, we are celebrating our 125th anniversary. Since KUKA's founding in 1898, our company has continually reinvented itself and helped shape a changing world. For 125 years, KUKA has combined tradition with innovation



as well as regional roots with an international orientation – and has continued to develop as a result. This is what has made us a successful global company. Change is part of KUKA, and with this will to adapt we are continuing to shape the path to a more sustainable future.

*Peter Schneider*



# Company and strategy

KUKA is a global automation corporation with sales of around € 3.9 billion and roughly 15,000 employees. As one of the world's leading producers of intelligent automation solutions, KUKA offers customers everything they need from a single source: from the component, such as robots or automated guided vehicles (AGVs), to manufacturing cells and even fully automated systems and their networking in markets such as automotive, plastics, metal, general industry, consumer goods, e-commerce/retail and healthcare. Today, KUKA plays a central role worldwide in the implementation and design of intelligent automation, the digital networking of production, and modular and flexible manufacturing concepts.

- ▶ Corporate profile
- ▶ Our strategic high-priority markets
- ▶ Corporate governance with responsibility
- ▶ Sustainability management at KUKA
- ▶ In dialog with society
- ▶ Significant risks and effects
- ▶ Results of the materiality analysis

## Corporate profile

For over 100 years, KUKA has been committed to making life and work easier for people. We have a passion for automation. KUKA is one of the world's leading specialists in automation. We support our customers in the holistic optimization of their value creation by providing comprehensive automation and digitalization know-how. In 2022, KUKA generated sales of €3.9 billion (2021: €3.3 billion) with 15,064 employees (2021: 14,128)\*.

The global technology corporation operates in more than 50 countries in Europe, the Americas and Asia.

The company offers its customers everything they need from a single source: from the core component – such as robots, automated guided vehicles (AGVs) and other automation components – to production cells, turn-key systems and networked production with the aid of cloud-based IT tools. Through its advanced automation solutions KUKA contributes to increased efficiency and improved product quality for its customers.

Industrie 4.0 – the next stage of the Industrial Revolution – is bringing digital, networked production, flexible manufacturing concepts and logistics solutions, as well as new business models to the fore. With its decades of experience in automation, in-depth process know-how and cloud-based solutions, KUKA ensures its customers have an edge on the competition. The strategic markets include the automotive, electronics, consumer goods, e-commerce/retail and healthcare industries.

\* Figures for employees are based on the full-time equivalent..



€3,9  
billion in revenues

### Corporate structure

The organizational structure includes five business segments: KUKA Systems, KUKA Robotics, Swisslog, Swisslog Healthcare and China. KUKA Aktiengesellschaft, headquartered in Augsburg, is the Group's holding company and is responsible for corporate tasks within the group of companies. The business segments are operationally coordinated by the respective managers, who in turn report to the Management Board. With the exception of the China division, the segments operate globally and are supported by their local establishments, regional subsidiaries, and assembly and support services.



15,064  
employees



### KUKA Systems division

The Systems portfolio covers the entire value chain of a system: from individual system components, tools and fixtures to complete turnkey systems. From traditional body-in-white production in the automotive industry, through battery production plants in the electromobility sector to initial non-automotive projects: the goal is the efficient design of production processes by means of adaptable, modular and automated manufacturing and logistics processes. Systems works together with its customers on flexible, scalable concepts and solutions for the factory of tomorrow. As an automation specialist for hardware and software solutions, Systems provides impetus for the digital factory.

Markets in Germany and elsewhere in Europe are served from the headquarters in Augsburg, while the Greater Detroit area in the USA is responsible for the North/South America region, and Shanghai in China manages the Asian market. In Toledo, USA, KUKA Toledo Production Operations (KTPO) manufactures the Jeep® Gladiator for Chrysler under the terms of a pay-on-production contract.

### KUKA Robotics division

The core component for automating production processes is provided by the Robotics division: industrial, collaborative and mobile robots – along with the robot controller, software and digital services for the Industrial Internet of Things. The broad product portfolio – ranging from traditional 6-axis robots to DELTA and SCARA robots – covers payload ranges from three to 1,300 kilograms. In addition, the Robotics portfolio includes robot-based, modular manufacturing cells for a wide range of applications. This enables KUKA to meet the various requirements of its customers optimally. Robotics also offers comprehensive support services. Customers can attend technical training and professional development courses in KUKA Colleges at more than 30 sites worldwide. Most robot models are developed, assembled, tested and shipped in Augsburg. The control cabinets are produced in two Hungarian plants, in Taksony and Füzesgyarmat.

KUKA Robotics is continuously expanding the range of products so as to offer customers from all kinds of sectors the solutions that are appropriate for them and to allow even small and medium enterprises to use robots economically.



Research & development activities have an important role to play here. The trend is also towards robots that are simple to program, flexible to deploy and easily integrated and networked. Enhanced with mobility and autonomous navigation, robots are being transformed into flexible production assistants that are becoming more and more intelligent.

KUKA's new products and technologies open up additional markets and create new applications for robot-based automation. Robots will play a key role in the factory of the future. By taking these measures, industrial nations will be able to expand their competitiveness and, at the same time, mitigate the effects of demographic change on the labor market.



### Swisslog division

With its Swisslog division, KUKA is tapping the growth markets of e-commerce/retail and consumer goods in the field of intralogistics. Based in Buchs (Aarau), Switzerland, Swisslog serves customers in over 50 countries worldwide. The division implements integrated automation solutions for forward-looking warehouses and distribution centers. As a general contractor, Swisslog offers complete turnkey solutions, from planning through to implementation and service, employing data-driven and robot-based automation in particular. Swisslog offers smart technologies, innovative software and adapted support services to improve the long-term competitiveness of its customers in the logistics sector. By combining Swisslog logistics solutions with the robotic automation solutions of the other divisions of the Group, KUKA offers new possibilities of flexible automation along the entire value chain.

### Swisslog Healthcare division

The Swisslog Healthcare division (HCS) develops and implements automation solutions for modern hospitals. The aim is to boost efficiency and increase patient safety. With the aid of process optimizations in the field of medication management during and after in-patient treatment, hospital staff can free up more time for patient care. At the same time, the use of automation solutions can reduce the incidence of medication errors.

### China division

The China segment comprises all business activities of the Chinese companies in the Systems, Robotics, Swisslog and Swisslog Healthcare divisions. In addition to KUKA industrial robots, automation solutions such as warehouse management systems and automated solutions for the healthcare sector are developed, offered and marketed in China. Industrial robots are manufactured at the Shunde location and sold on the Chinese market. Furthermore, new robot models, such as the SCARA and DELTA robots, have been developed in China.

### Shareholders

The squeeze-out of minority shareholders resolved by the Annual General Meeting on May 17, 2022 became effective upon entry in the Commercial Register on November 9, 2022. All shares held by minority shareholders have been transferred to the majority shareholder Guangdong Midea Electric Co., Ltd. which is a holding company of the Chinese parent company Midea. The minority shareholders received cash compensation of EUR 80.77 per share from Guangdong Midea Electric Co., Ltd.



## Our strategic high-priority markets

KUKA's most important markets are in Europe, the Americas and Asia.



### Automotive/Tier 1

The automotive industry has always been of great importance to KUKA and remains a key pillar. It is a very important driver of technology and innovation and has been in a period of transition for some time. Established concepts and business models are undergoing major changes in terms of the way vehicles are developed, built, sold and used. KUKA will continue to grow around the world with its expanding portfolio of automotive and tier 1 customers and support them as a partner in automation, digitalization and electrification.

### Electronics

The electronics industry is one of the most diverse sectors in the present-day industrial landscape. It includes the production of household electrical appliances, cutting-edge technologies such as semiconductors or solar cells, and industrial electronics. The most important sub-market with the highest revenues is the 3C market (computers, communications and consumer electronics).

### Metal & plastics

Entry into robot-based automation in emerging markets often starts with arc welding applications. Robots are used not only for welding applications and machine handling, but also for a wide range of other tasks, for example polishing or processing. This versatility also opens up growth opportunities in saturated industries.

### E-Commerce & retail

Electronic commerce results in large quantities of varied goods being sent to consumers via goods distribution centers. Fast and correct order processing is crucial for profitable operation. The required efficiency can only be

managed by means of automation. The e-commerce segment is therefore an important sales market for smart logistics concepts linked to intelligent software and innovative, robot-based automation.

### Consumer goods

For many years, robots have been successfully and efficiently assisting the production of fast-moving consumer goods (FMCG, everyday products). They play a particularly important role in the food and beverage industry. Additionally, they are also used in the manufacture of shoes and textiles, cosmetics and pharmaceuticals.

### Healthcare

The healthcare sector is one of the most important growth markets of the future. Demographic change, medical innovations and the development of healthcare systems in emerging countries are creating a high demand for innovative solutions. Furthermore, market dynamics are being driven by a shortage of skilled labor and increasing cost awareness among healthcare facilities. The automated supply of medication can be part of the solution to the challenges in the healthcare sector: The aim is to boost efficiency and increase patient safety. With the aid of process optimizations in the field of medication management during and after in-patient treatment, hospital staff can free up more time for patient care. At the same time, the use of automation solutions demonstrably reduces the incidence of medication errors.

KUKA Medical Robotics offers a comprehensive portfolio of robotic components for integration into medical technology products. The KUKA robots are used in X-ray imaging as well as in radiation therapy and patient positioning. Robot-based assistance systems also provide support during surgical procedures in the operating room or in the field of rehabilitation.

## Corporate governance with responsibility

As a German stock corporation, the statutory rules impose on KUKA AG a dual corporate governance system comprising a Management Board and a Supervisory Board. The members of the Management Board share the responsibility for company management. The CEO coordinates the work of the Board; he is responsible for representing and leading the Board in its cooperation with the Supervisory Board and its members.

The Management Board of KUKA AG consists of the Chief Executive Officer (CEO) Peter Mohnen and the Chief Financial Officer (CFO) Alexander Tan.

The Supervisory Board of KUKA AG has twelve members pursuant to the Articles of Association. In accordance with the German Co-Determination Act, six members are appointed by the shareholders and six by the employees. Four Supervisory Board mandates were held by women in 2022. The ratio of women on this board is thus 33 percent. The Supervisory Board is elected every five years. The last election took place on March 28, 2023.

The responsibilities of the Supervisory Board include the appointment of members of the Management Board as well as their supervision and the provision of advice. The Chairman of the Supervisory Board, Dr. Andy Gu, coordinates the work of the Supervisory Board. Furthermore, the Supervisory Board and the Management Board regularly inform themselves about key topics.

The Supervisory Board has formed five committees. An overview is provided on page 6 of the [Annual Report](#). Environmental and social issues impact many topics, and these are dealt with by the Supervisory Board, both in the Audit Committee and in other individual committees responsible.

The Supervisory Board is also responsible for designing the compensation system, which was restructured for the 2021 fiscal year and approved by the Annual General Meeting. According to this system, an individual target total compensation is set for each Management Board member, consisting of a flexible component (40%) and

a variable component (60%). Important criteria are the duties and expected performance of the Management Board member as well as the economic situation of the Company. In addition to financial targets, sustainability goals and the interests of the various stakeholders are also taken into account.

In its corporate governance, KUKA follows the guidelines of the German Corporate Governance Code with the exception of recommendation B.1 on diversity in the composition of the Management Board. The corporate governance statement is published on the [KUKA webpage](#). The objective is to continuously enhance the trust in corporate governance by combining sustainable governance and the necessary transparency.

## Sustainability management at KUKA

For KUKA, sustainability means responsible corporate action towards the environment, our employees, customers, investors and our social environment. The goal is the continuous and sustainable further development of the company in view of dynamic changes in the economy, environment and society. With our sustainable management (ecological, social and economic), we simultaneously help our customers to implement and achieve their sustainability goals, thereby establishing important conditions for our economic success.

Various departments within the Company monitor these changes and analyze how external trends affect KUKA. We also monitor the legal framework with regard to sustainability and react with adequate measures if necessary. Sustainability management is therefore controlled by Facility Management, the Procurement department, Human Resources or other corporate departments, depending on the topic. At Group level, the Corporate Sustainability (ESG) department works with the various departments and segments to formulate Group-wide goals and strategies. The Management Board adopts Group-wide goals and strategies. The departments report their key figures and qualitative analyses to the Management Board members as part of management reviews.

The Sustainability Report with integrated non-financial report pursuant to the CSR Directive Implementation Act (CSR-RUG) is prepared on behalf of the Management Board and approved at a Management Board meeting.

### Sustainability program at Swisslog

Swisslog pursues a sustainability program with an interdisciplinary team, led by the CFO, and a Sustainability Committee. This is intended to anchor sustainability in the corporate strategy at segment level in order to promote long-term activities and investments in corresponding technologies (GreenLog). At the same time, the idea of sustainability is to become an integral part of Swisslog's corporate culture.

The program is based on a joint framework with KUKA and has four pillars:

- 1) Responsible employer,
- 2) Ecological sustainability,
- 3) Efficient products and solutions,
- 4) Supply chain due diligence.

In an initial workshop, the team defined the vision of driving sustainable logistics automation with the help of intelligent systems. The next steps are to design a sustainability roadmap and define relevant metrics, such as a CO<sub>2</sub> footprint.

To increase the visibility of its transformation, Swisslog is running a podcast series together with Kühne Logistics University entitled "Das Gleiche in Grün?!". In it, Swisslog's Head of Innovation Management, Timo Landener, discusses sustainable ideas for logistics together with Prof. Moritz Petersen and changing guests.



## In dialog with society

KUKA is in regular contact with various sectors of society. In some instances, these may have quite different perspectives and demands on the company and may, under certain circumstances, impact KUKA's reputation. Our key stakeholders are customers, business partners, suppliers, but also media representatives, the public and our employees.

Communicating openly with these stakeholders is important to KUKA, because this forms the basis for mutual understanding and acceptance of the business decisions. The respective divisions are responsible for communicating with the various stakeholders. We have been collaborating closely with various customers for many years in the implementation of technical innovations in industrial production within the scope of joint projects. The purchasing department is the contact for suppliers, the human resources department for employees, and the press department for representatives of the media. Sustainability rating agencies are handled by the management systems department. Since 2008, KUKA has regularly participated in the CDP (formerly Carbon Disclosure Project), which analyzes information relating to climate and water risks from a financial perspective. In 2022, KUKA's rating was C in both the Climate Change and Water Security categories, and thus in a good middle position.



The allocation of the added value in KUKA Group to the key stakeholders can be seen in the [Annual Report](#).

### International cooperation

KUKA is a member of numerous organizations and initiatives. We also participate in specific working groups. Within the German Mechanical Engineering Association (VDMA), we are active in the Corporate Responsibility, Business and Human Rights and Public Relations working groups, participate in the Battery Production department and are involved in the Robotics + Automation association.

KUKA is also active in various OPC UA (Open Platform Communications – Unified Architecture) working groups. OPC-UA offers networking technology for factory and process automation, as required for Industrie 4.0.

Together with other companies, KUKA is working on standards that will enable standardized communication between devices and machines in the future. Germany is one of the world's leading markets in the field of mechanical engineering and automation components manufacturing, and is expected to play an active role in shaping these standards. Other associations of which KUKA is also a member include the Federation of German Industries (BDI), EUnited (European Engineering Industries Association), euRobotics, the International Federation of Robotics (IFR) and the Association for Advancing Automation (A3).

KUKA cooperates with various international colleges, universities and institutes as part of several development projects.

## Significant risks and effects

### Risk management

The Management Board has implemented a comprehensive corporate risk management system to systematically identify, evaluate, manage, monitor and report internal and external risks for all business segments and subsidiaries.

Identified risks – including those relating to sustainability issues – are assessed throughout the Group according to their potential impact on business development and the achievement of corporate targets (such as revenues and EBIT). The analysis also includes the legal framework for sustainability reporting and other legal sustainability requirements. The analysis considers probabilities of occurrence both qualitatively and, if possible, quantitatively. A monthly reporting process (risk inventory) identifies new risks and performs follow-up assessments of existing risks. This monthly risk report is submitted to the Management Board.

The managers of the business segments and subsidiaries are directly responsible for the early identification, control and communication of risks.

### Impact on the economy, environment and society

With its products and solutions, KUKA contributes to economic growth, promotes technological progress and improves working conditions for its customers. KUKA sees itself as a partner to its customers and a responsible employer for its workforce and their families.

KUKA protects the environment through the careful use of natural resources and an effective environmental management system. Applicable laws and regulations are respected at all times. KUKA takes this responsibility seriously and is also aware of the possible negative impact of its business activities. This includes identifying and mitigating the consequences for the economy, the

environment and society, as well as for the Company and its employees.

### Material sustainability topics

Today, sustainability affects economic, ecological and social aspects. Therefore, the key issues for the Company must be identified in order to be able to develop a sustainability strategy. In this context, we also take into account such demands as are placed on us from outside the company.

In 2021, KUKA addressed in a structured manner the topics that are material for the management and reporting of sustainability aspects. With this analysis, we have pursued the goal of combining the different requirements for materiality according to the respective definitions in the German CSR Directive Implementation Act (CSR-RUG) and in the Sustainability Reporting Standards of the Global Reporting Initiative (GRI). At the same time, we aimed

to document and take into account current stakeholder expectations. The topics discussed were viewed from different perspectives and compared with external requirements. The analysis was based on desktop research, interviews and workshops. The results are reflected in this report.

Based on the desktop research and a subsequent initial review for practicality, a shortlist of eleven topics emerged. These were subsequently discussed in workshops with specialists and in individual interviews, and validated in an online employee survey. Following this, the list was reduced to nine topics. In conjunction with a critical review of their business relevance, four topics remained of key importance: “Climate protection and climate risks” as a central environmental topic, “Efficient and responsible products and solutions” from the economic topic area, and “Responsible procurement” and

“Employee responsibility and development” from the social and societal area. The topic of “Good Corporate Governance” covers other material topics as an important interdisciplinary function.

Sustainability goals were defined for KUKA on the basis of the materiality analysis. They were clustered into the four fields of action “Ecological responsibility,” “Efficient products and solutions,” “Sustainable supply chain” and “Responsible employer”.

**Fields of action**

- Ecological responsibility
- Efficient products and solutions
- Sustainable supply chain
- Responsible employer

**Goals**

- Continuous improvement of our environmental performance, e. g. 2030 Target for Scope 1 + 2 emissions => -40% vs. 2019 baseline  
2050 Target for Scope 1 + 2 emissions => CO<sub>2</sub> neutrality\*
- Continuous improvement of the energy and resource efficiency of our products and solutions
- Our goal is to prevent risks associated with human rights and to minimize or end violations
- Increasing employer attractiveness

**Measures in the year under review**

- Ongoing energy-saving measures and raising environmental awareness, e. g. through energy-saving campaigns
- Energy and material reduction achieved for products from our portfolio
- Implementation of code of conduct, publication of policy statement and revision of policies
- Shaping the working world of the future, such as New Office and SMART Work program

\* for KUKA's large (production) locations

## Results of the materiality analysis

Material topics	Concerns according to CSR Directive Implementation Act	Material impacts Internal and external to the company	GRI-Standards
Climate protection and climate risks	Environmental concerns	External	GRI 302: Energy GRI 305: Emissions
Efficient and responsible Products and solutions	Social concerns	External	GRI 302: Energy GRI 416: Customer health and safety GRI 417: Marketing and labeling GRI 418: Customer privacy
Employee responsibility and development	Employee concerns	Internal	GRI 401: Employment GRI 402: Employee-employer relationship GRI 403: Occupational health and safety GRI 404: Training and further education GRI 405: Diversity and equal opportunity
Responsible procurement	Human rights	External	GRI 204: Procurement practices GRI 303: Water and effluents GRI 306: Waste GRI 308: Supplier environmental assessment GRI 407: Freedom of association and collective bargaining GRI 408: Child labor GRI 409: Forced or compulsory labor GRI 414: Supplier social assessment
Good Corporate Governance	Anti-corruption	Internal	GRI 205: Anti-corruption GRI 206: Anti-competitive behavior

# Compliance

Ethical, responsible corporate governance is one of KUKA's most important principles. Our Corporate Compliance Program provides a basic framework to ensure that our employees behave in a manner that complies with laws and regulations. Our compliance structure is based on fundamental ethical values and is intended to protect our economic values. This also applies to product safety. It is our aim to protect our customers against risks and damage caused by our products, both in terms of their health and also with regard to data protection issues. We thus create a safe and secure environment for customers, employees and our company.

- ▶ Tough on corruption and bribery
- ▶ Corporate compliance as a foundation
- ▶ Guidelines for product safety
- ▶ Reporting according to the EU Taxonomy Regulation

## Tough on corruption and bribery

Even though our market environment is subject to dynamic changes worldwide, our fundamental ethical standards and the associated internal rules remain unchanged. As a foundation for our business activities, we have anchored our core values in policies. They are included in our Corporate Compliance Program and thus an integral part of our daily business decisions. Our core values are:

- » Ethical principles are a core element of our business activities.
- » Laws and regulations must be complied with, as must our core values and internal policies.
- » A working environment in which all employees are appreciated and receive equal treatment form the basis for good cooperation.

- » Transparency in decision-making processes and a high degree of integrity are what set us apart.
- » The health and safety of employees in the workplace is a priority for us.

Corruption and bribery must be systematically combated for both legal and ethical reasons, and sanctioned where necessary. Cases of corruption entail reputational risks for our company and can result in fines, claims for damages or exclusion from public tender procedures.

In competition with other companies, KUKA prohibits any form of corruption and demands abidance by the principles of fair competition. This self-image is a fundamental part of our corporate culture. That is why we do not participate in price fixing and other anti-competitive practices.

### Compliance structure

The Compliance department falls within the remit of the CEO of KUKA AG. The Chief Compliance Officer (CCO) is responsible for the compliance program and its operational implementation. Moreover, the senior executive levels are involved in the operational implementation; this responsibility devolves to all management levels. We have established various processes and measures in order to implement compliance together with all employees and external partners. Together, these elements form our Compliance Management System (CMS).

One core element is the Corporate Compliance Program established in 2008, for which the Management Board is responsible. Each corporate policy is in turn an integral part of this program and applies globally to KUKA Aktiengesellschaft. The policies describe in detail how employees are to behave in certain problem situations or other situations in terms of business practices with integrity.

## Corporate compliance as a foundation

Compliance with legal framework conditions and internal guidelines is firmly rooted in the [Corporate Compliance Program](#). The content of this program – which is also the foundation of the CMS – is laid out in our Corporate Compliance Manual. This includes the most important points of contact as well as the 16 compliance-specific corporate policies which define the rules of conduct, cooperation, personal commitment and framework for KUKA’s business operations.

The Manual constitutes the basis of the CMS. It is available to all employees via the company-wide intranet and is accessible to the public on the company’s website. The Manual is revised as necessary to adapt it to current requirements. Thus, in 2022, we revised all compliance-specific corporate policies to ensure they are up to date. In the year under review, we also drew up a corporate policy on supply chain risk management with a view to implementing the Supply Chain Due Diligence Act (LkSG). This deals with internal responsibilities as well as the corresponding organizational structure.

Another foundation for the CMS at KUKA is an internal database in which compliance inquiries and issues are systematically recorded. It is regularly evaluated in order to draw conclusions on the effectiveness and need for adaptation of the CMS.

### Online and classroom training

In order to train employees in compliance issues, training measures are an inherent feature of the CMS. They are provided in various formats. These include computer-supported learning methods (e-learning) and worldwide classroom training on selected topics as required on specific occasions. Participation in “Corporate Compliance” e-learning is mandatory for all employees and is confirmed with a certificate after successful completion. Both new and existing employees are invited to take part in the e-learning at regular intervals. All employees are urged to refresh their compliance know-how on a regular basis.

E-learning programs are used to teach the core values as well as fundamental compliance skills and codes of conduct. Available in 13 languages, the program has a modular format and is geared to specific target groups. In 2022, a new module was added to the e-learning program, the

need for which arose from revision of the Risk Map. Furthermore, an annual cycle was introduced in which the Corporate Compliance e-learning must be completed. The use of e-learning modules is to be expanded in the future as well, this method having proved its worth in the training concept.

For employees who are unable to participate in the e-learning program, offline training material is available. It is aimed, for example, at employees in Production and Logistics. The content and language of the training have been adapted to this target group. If required, additional classroom training is carried out.

New employees are sensitized to compliance issues at selected locations on Onboarding Days.

» Available in 13 languages, our e-learning program has a modular format and is geared to specific target groups. «

### Proven communication channels

All KUKA employees should be able to provide information about suspected compliance violations without fear of negative consequences. This is set out in our Corporate Compliance Manual. The various communication channels available to both employees and external parties in the event of a suspected violation are also listed here in detail. They may report concerns to their manager, the HR department or Compliance Officers who are deployed on site and regionally. Suspected violations cases can also be reported anonymously to an ombudsperson who is not employed by the company and is therefore independent. The ombudsperson forwards the issues to the Compliance Officer (CCO), in anonymous form if so desired. The communication channels which are currently in place also proved effective in 2022. During the fiscal year, KUKA Group became aware of 20 potential compliance incidents (2021: 25). These were carefully processed and, if necessary, appropriately sanctioned. Furthermore, cases of corresponding relevance were reported to the Management Board or the Audit Committee of the Supervisory Board.

External parties can find the contact details of the compliance officers and the ombudsperson on KUKA's website and can use them to report suspected violations. These are treated with the same diligence as internal notifications.

The reporting system was already evaluated with regard to the requirements of EU Directive 2019/1937 in 2021 and a certain need for adaptation was identified. As at the end of 2022, the existing reporting system was expanded in line with the EU directive to include a web-based solution via which suspected compliance violations can be reported worldwide, anonymously if desired.

### Further training of compliance experts

KUKA has been working closely with the Center for Professional Development and Knowledge Transfer (ZWW) at the University of Augsburg for many years. As in previous years, KUKA once again offered to host the Company Campus Days of the "Compliance Officer (univ.)" certification course in 2022. The course provides participants with practical insight into compliance issues within an industrial company.

It was not possible to hold the events on site at KUKA due to the restrictions resulting from the coronavirus pandemic, but employees from the Compliance organization were available for digital exchanges.



## Guidelines for product safety

We are committed to safety, whether in production, purchasing, quality management or service and sales. We also live up to this expectation after delivery and installation of our products and systems. That is why, already during the development of new products, KUKA works on excluding product defects or operating errors to the fullest possible extent. All details and responsibilities are explained thoroughly in the KUKA policy on product safety.

KUKA frequently sells to system integrators that install our products at the end customers' facilities. KUKA is thus often unaware of the purpose and location of the individual robots, and in such cases only comes into contact with the product again via Customer Service, for example during routine maintenance. Here, the service technicians pay attention to potential safety risks and other relevant aspects.

We have clearly defined processes and procedures for potential safety risks involving robots that have already been installed. Furthermore, we monitor content on social media that could run counter to the proper use of our products. Corresponding risks are reported to the Product Compliance department. In the event of a safety risk being identified, we actively approach the customer.

With the aid of worldwide product monitoring and the experience we have gained over the years, as well as by tracking, and in some cases actively participating in, the activities of standards working groups, we are able to prepare our products early for a future state of the art. In 2022, we trained a total of 204 employees on product safety and technical safety regulations.

The principle of "Security by Default" or "Privacy by Default" is being increasingly taken into account at KUKA against the background of advancing networking. At KUKA, we program the factory settings in our products or other applications in such a way that users and their data are protected without any corresponding settings having to be made to this effect.

Our customers and business partners learn how to safely handle and program robots and cells in user training courses at KUKA Colleges around the world. In addition to the expert operation of the machines and components, the aim is to prevent accidents and increase work safety for the customer. In 2022, over 3,000 robot training courses were held at KUKA locations worldwide. For courses that did not require practical training on the robot, the proportion of events conducted digitally increased due to the pandemic.



> 3,000

robot training courses were held at KUKA locations worldwide.

### Reviews and training

The Product Compliance department at KUKA regularly monitored compliance with the Product Safety policy during the year under review, checked any deficiencies and successfully remedied them. In addition to safety aspects, the policy includes a variety of product labeling requirements that are playing an increasingly important role in market entries and lowered trade barriers in global supply chains. Essential for this are the product directives of the European Union, in particular the Machinery Directive, which must be applied to all industrial robots and production systems. Equally relevant are market-specific certification and approval requirements, for example for the North American or Asian markets.

KUKA meets these requirements by means, among other things, of continuous training of its employees and the expertise of internal and external specialists. Frequent interdepartmental reviews additionally ensure product compliance prior to distribution.

We intensify the dialog on relevant topics through a continuous exchange of experience among product safety experts within KUKA Group.

### Tax compliance

KUKA underscored its Group tax strategy in 2021 with a corporate policy on tax compliance. KUKA strives to fulfill the tax law obligations applicable worldwide out of a sense of social and ethical responsibility. A Tax Compliance Management System (Tax CMS) ensures that the tax obligations of Group companies are met and that integrity standards are maintained by adopting appropriate measures – such as efficient, high-quality and reliable expertise, processes, systems, methods and controls. The Tax Compliance policy defines the framework for these activities and governs the corresponding responsibilities.

### Information security and data protection

KUKA is committed to protecting the information processed by our customers and ourselves. To this end, we have incorporated the issues of information security and data protection into the product development cycle as fixed elements and take them into account with the goals of “security by design” and “privacy by design” when developing the hardware and software for our products.

KUKA has implemented globally applicable policies on information security and data protection; these provide a uniform level of protection and are based on internationally recognized standards (for example, ISO 27001, EU GDPR). Our employees are able to contact the responsible departments at KUKA directly in the event of queries or incidents. In addition to the personal points of contact, general e-mail accounts can also be used for these topics.

Information security and data protection affect all KUKA employees. For this reason, in addition to the extensive internal regulations, there are also mandatory online training courses on data protection and information security in five or six languages respectively. All employees are required to undergo this training each year.

For employees who do not have access to a PC, corresponding classroom training is available. Specially tailored training courses have been created for groups of people who are confronted with particular requirements regarding information security or data protection (for example, information security for developers, data protection for HR employees).

In 2022, we again addressed phishing prevention in a campaign. Despite technical safeguards, employees may occasionally receive fraudulent e-mails that can cause damage. In anonymized tests, we raised awareness of fraudulent e-mails and the associated dangers.

Additionally, we introduced a classification tool for Office documents and Outlook mails in the year under review. The tool classifies the information according to the “need-to-know” principle and automatically prompts users to classify it before saving it or alerts them to the security level when receiving e-mails. This is intended to strengthen the risk-based IT infrastructure and protect confidential and highly confidential information in particular.

» In addition to the extensive internal regulations, there are also mandatory online training courses on data protection and information security in five or six languages respectively. «

## Reporting according to the EU Taxonomy Regulation

As part of the action plan for financing sustainable growth in the European Union, the EU Taxonomy Regulation aims to redirect capital flows towards sustainable investment. The Taxonomy Regulation is a classification system with technical requirements for economic activities that are of particular importance for the transformation to a climate-compatible and sustainable economy. Consequently, only a selection of economic activities is included in the Taxonomy. If these economic activities are taxonomy-compliant, they thus contribute to the transformation or are compatible with the EU's environmental objectives. The EU Taxonomy itself is still being developed: By early 2023, the technical screening criteria were available for two of the six EU environmental objectives in total – namely for (a) climate change mitigation and (b) climate change adaptation. The requirements for the other EU environmental objectives are still being prepared.

At KUKA, the focus has long since been on the development of energy-efficient products and solutions. The energy efficiency of our new robot generations has improved greatly over the past few years. We are thus making a contribution to reducing emissions during their useful life. Whether this contribution is substantially better than that of comparable products and solutions on the market cannot be confirmed at the present time, as the necessary measurements and evaluations of competitor products are not available. For this reason, KUKA does not currently report any taxonomy-compliant economic activities. Some of our capital expenditures (CapEx) and operating expenditures (OpEx) fall under taxonomy eligibility and compliance. These were reported in the previous year. Detailed reporting on the EU taxonomy for KUKA Group will be available from fiscal year 2025.





# Ecological responsibility

An intact environment and responsible use of natural resources are important prerequisites for long-term business success. However, the ever more urgent climate crisis, polluted air, increasingly scarce resources, escalating waste problems, contaminated soil and water, and the loss of biodiversity require the adoption of countermeasures. As an industrial company, KUKA wants to make a measurable contribution to the reduction of environmental pollution.

- ▶ Environmental protection in the company
- ▶ Systematic energy saving
- ▶ Conserving resources

## Environmental protection in the company

Operational environmental protection has always been of great importance at KUKA. In particular, we want to make an active contribution to climate protection, because CO<sub>2</sub> emissions are the most significant cause of climate change. Mindful of our responsibility for climate protection, and also in the interests of efficient production, we aim to keep our carbon footprint at all production locations to an absolute minimum.

Waste also pollutes the environment. Surface waters and soils may be adversely affected by illegal disposal or unforeseeable accidents. KUKA counteracts potential environmental impacts from its waste disposal with far-reaching measures.

Together with the responsible employees, our environmental management continuously considers and evaluates the environmentally relevant effects of our business activities. Our main production locations work according to internationally recognized management standards in the areas of environment (ISO 14001), energy (ISO 50001), quality (ISO 9001) and other industry-specific regulations, for example, VDA 6 Part 4.

With our Code of Conduct, we have defined the principles for quality, health protection, occupational safety, environmental and energy management with regard to all management standards. Responsibility for the cross-location environmental management system lies with the Management Board of the Group.

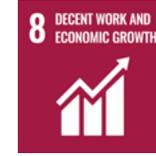
Environmental management focuses on energy consumption in production, and waste and water management at the production locations. CO<sub>2</sub> emissions are generated through energy consumption. This includes electricity and heat production, but also the use of the vehicle fleet and logistics. Environmental management takes all of these factors into consideration and strives to find ecologically efficient processes and potential alternatives at the crucial points.

The immediate goal of environmental management at KUKA is to avoid or limit the harmful effects of our locations on people and the environment. Regular internal and external audits ensure a consistently high level of protection. If weak points are diagnosed, we take consistent action. In 2022, as in the preceding years, we had no significant incidents to record.

In addition to audits, independent ratings also help to assess the level of sustainability performance and indicate deficiencies. In the reporting year, KUKA was assessed by the EcoVadis rating platform and improved its status from bronze to silver. This puts KUKA in the top quarter of all companies analyzed from the mechanical engineering sector. In addition to measures in the areas of labor rights, human rights and ethics, improved sustainability reporting contributed to a higher overall score. Potential for improvement from the rating is communicated to the departments concerned.

### Contribution to the UN development goals

Environmental management at KUKA contributes to the achievement of several goals or targets of the United Nations' Agenda 2030. In particular, this relates to the following UN Sustainable Development Goals (SDGs):



**SDG 8.4:**  
Improve resource efficiency in consumption and production



**SDG 12.2:**  
Sustainable management and efficient use of natural resources

**SDG 12.4:**  
Environmentally sound management of chemicals and all wastes

**SDG 12.5:**  
Substantially reduce waste generation



**SDG 13.2:**  
Climate protection measures and strategies

## Systematic energy saving

With our certified environmental and energy management systems, we are pursuing the goal of minimizing our energy consumption and its impact on the environment.

However, saving energy does not only make sense for ecological reasons. Energy costs are a significant cost factor in every industrialized country. We are all becoming much more aware of this due to the historic rise in energy prices, caused in part by the war in Ukraine. That is why KUKA has launched an energy-saving campaign at the Augsburg location, for example, to mitigate the consequences of the energy crisis. Measures are being taken to further reduce energy consumption at KUKA. In addition, all employees receive ideas on how to save energy. The measures and tips in the energy-saving campaign range from office operations and production to voluntary actions in both professional and private contexts. As a result, the campaign led to savings of 6.7% in electricity and 17.6% in heat consumption compared to the previous year.

At its production locations in Germany, KUKA analyzes energy consumption with the aid of a state-of-the-art software tool. Detailed analyses – for example of the paint shop, individual assembly areas or production machine units – help us to initiate and implement improvements as needed. In Augsburg, data are collected with the aid of meter installations at around 700 measuring points, around two-thirds of which are electricity

meters. All data are collected centrally and made available to the participating locations for the development of optimization measures. Environmentally friendly and energy-saving effects are also taken into account when purchasing new components.

KUKA is one of 33 companies and 6 research institutes participating in the “[DC-INDUSTRIE2](#)” project of the ZVEI, funded by the German Federal Ministry for Economic Affairs and Climate. In this project, the partners are testing the supply of power for industrial plants via a direct current (DC) grid, which reduces the conversion losses of alternating current (AC) and is thus significantly more efficient. Until now, it has been necessary to use individual AC/DC converters for each device in a production system – in this project, by contrast, there is just a single central converter for an entire production shop. The efficiency potential is enormous and can contribute significantly to revolutionizing industrial power supply in terms of sustainability. The considerably lower power consumption combined with increased supply stability can save resources and reduce industrial emissions. Furthermore, electric drives can also feed their braking energy back into the DC supply system without converting it into heat via braking resistors and releasing it unused. By incorporating storage devices in the DC grid, peak loads can be reduced and the DC grid can continue to operate during AC-side power outages.

Apart from future customer applications, KUKA is gaining experience by converting its own “SmartProduction Center”. The use of DC technology and braking energy has reduced the energy consumption of our robots by more than 7%. Furthermore, a peak load reduction of more than 80% was achieved, resulting in lower resource consumption for copper lines and relieving upstream power grids. Direct current technology makes it possible to avoid conversion losses and to integrate renewable energies such as photovoltaics and wind power more efficiently. Additionally, a failure of the AC grid was simulated and the self-sufficient continued operation of the DC grid from the storage system was successfully tested.

By integrating a 5G mobile network in the SmartProduction Center, plant components can be converted and future network subscribers validated in regular operation. Compared to WLAN, more subscribers can be integrated in the same space via the 5G mobile network. The private frequency allocation of the Campus network prevents interference to third-party radio subscribers and thus increases the security and stability of radio transmission.



### Group-wide energy-saving measures

Other measures to reduce our power consumption include the ongoing conversion of lighting to LED; automated shutdown of machinery; demand-oriented, automated control of heating, ventilation and air-conditioning systems; regulation of light intensity depending on daylight; modern, energy-efficient air compressors and refrigeration systems; installation of programmable thermostats and temperature adjustment of the water heater. Within the company, there is an exchange between the locations about implemented measures and optimization possibilities. Last but not least, we also raise employees' awareness of the need to use energy responsibly. For example, we offer an energy consumption comparison with the company average of company cars used in Germany, both combustion engines and plug-in hybrid vehicles. We have set an upper limit of 130 g CO<sub>2</sub>/km for emissions in Germany. In addition to this, we want to make our fleet at all KUKA locations in Germany CO<sub>2</sub>-neutral by 2030.

With the dismantling of one building and the refurbishment of another at the Augsburg site in 2022, KUKA expects to achieve annual thermal energy savings of over 300,000 kWh. Measures designed to achieve these savings include insulating the roof, replacing outdated air heaters with ceiling-mounted radiant heating panels, and using advanced measurement and control technology. Additionally, an older decentralized refrigeration system has been decommissioned and connected to the KUKA

refrigeration network. Finally, implementation of a New Office concept with desk sharing has resulted in improved utilization of office space, enabling the removal of less efficient office containers.

KUKA Systems North America initiated participation in its power utility's renewable energy program in 2022. Due to high demand there is a waiting list, so KUKA North America will not be supplied with renewable energy until 2024. In China, a roof at the Shunde location was equipped with solar panels capable of producing a total of 2.5 MW of electricity. The other seven buildings at the location will also be equipped accordingly, increasing the capacity of the company's own electricity production by around 15 MW.

### Energy consumption

By means of a global project for collecting all energy data, KUKA pursues strategic environmental and energy goals. These are primarily the reduction of energy consumption, CO<sub>2</sub> emissions and waste volumes, as well as the research and development of sustainable products and technologies. At the production locations, we evaluate data using energy management, set detailed consumption targets and develop measures for reducing consumption.

In Augsburg, we have achieved a significant reduction in CO<sub>2</sub> emissions since 2015 through the use of district heating. We also meet the requirements of the latest version

of the German Energy Saving Ordinance (EnEV) in terms of energy efficiency and the requirements of the Renewable Energies Heat Act (EEWärmeG) for new and existing buildings. The modernization and increase in efficiency of the entire heating system have also resulted in additional savings in consumption and thus in the operating costs.

At an increasing number of locations, we are using environmentally friendly green sources to cover a share of electricity requirements (EE-01). Compared to the average electricity mix in Germany, purchasing green electricity enables us to save around 6,000 tonnes of CO<sub>2</sub> annually. Additionally, a new system is currently being installed at the Augsburg location, which will be able to produce around 400,000 kWh of solar power annually.

In 2022, KUKA expanded the scope of reporting to include additional locations. Additional production sites and offices were integrated in the data collection across all segments. The data reported in 2021 was adjusted accordingly. As part of the preparation for the CSRD (Corporate Sustainability Reporting Directive), further global locations will be gradually integrated into the scope of reporting.

KUKA pursues a Group-wide target of reducing its emissions from Scope 1 and Scope 2 by 40 percent compared to the base year 2019.

In 2022, total energy consumption was reduced compared to the previous year. Compared to the previous year,

CO<sub>2</sub> emissions were reduced to 34,603 tonnes. Despite the strong growth in sales revenues by almost 20 percent, CO<sub>2</sub> emissions were reduced by 9 percent.

Total energy consumption increased slightly by 1 percent compared to the previous year, despite the strong growth in sales revenues. Savings measures at several sites reduced our electricity consumption. Energy consumption from heat, on the other hand, increased. This was mainly due to an increase in the use of gas-fired heating systems in the production area.

**Energy consumption<sup>1</sup>**

in MWh	2021	2022
Heat	33,795	37,146
Electricity	75,215	72,921
<b>Total</b>	<b>109,010</b>	<b>110,067</b>

**CO<sub>2</sub> Emissions<sup>1</sup>**

in t CO <sub>2</sub>	2021	2022
Scope 1 (direct emissions)	10,408	8,190
Scope 2 (indirect emissions)	27,477	26,413
<b>Total</b>	<b>37,885</b>	<b>34,603</b>

<sup>1</sup> KUKA's large sites in Europe, North America and Asia (Augsburg, Bremen, Obernburg, Dortmund, Westerstede, Kunshan, Shanghai, Shunde, Sterling Heights, Toledo, Denver, Fyzesgyarmat, Taksony, Sibiu, Sipbachzell, Buchs, Boxholm, Cuneo, Maranello).

**Logistics and transportation**

Regarding the vehicle fleet, KUKA is also making contributions to emissions reduction and electrification (see also the section "Group-wide energy-saving measures"). The proportion of hybrid and electric vehicles in the company vehicle pool at the German locations is being successively raised and the charging infrastructure is being expanded. The Augsburg site now has more than 50 charging stations to provide employees, customers and project partners with sufficient charging options.

Other KUKA locations in Germany and internationally are also expanding their charging options each year, thus making their contribution to an environmentally friendly transformation in transportation. At locations in the United Kingdom, legal requirements regarding the maximum fuel consumption of company cars are driving the expansion of electromobility. At locations in Switzerland and Sweden, for example, new vehicle policies ensure that CO<sub>2</sub> emissions of our vehicle fleet are being reduced ever further.

## Conserving resources

Within the framework of the environmental management system, KUKA also considers the development of waste and wastewater volumes, adopting measures to reduce them. With forward-looking environmental management, we are thus able to make measurable contributions to the conservation of resources.

### Waste management

Supporting our recycling service providers to enable high-quality recycling, production waste at KUKA in Augsburg is consistently collected and separated into waste categories. In 2022, more than 75 percent of the hazardous waste generated during production at the Augsburg location was recycled. Also in 2021, we developed a new waste concept for the Augsburg location, which is to be introduced in 2023.

When packaging our products and components in Augsburg, we use eco-friendly returnable packaging instead of disposable packaging in order to reduce packaging waste. The waste generated in 2022 amounted to 10,215 tonnes (2021: 9,713 tonnes).

While revenue growth was almost at 20 percent, the volume of non-hazardous waste increased only slightly by 3 percent year-on-year. Hazardous waste increased temporarily in 2022, mainly due to building demolition work at the Augsburg site.

### Waste generation and disposal<sup>1</sup>

in tonnes	2021	2022
Non-hazardous waste	9,006	9,277
Hazardous waste	707	938
<b>Total</b>	<b>9,713</b>	<b>10,215</b>

<sup>1</sup> KUKA's large sites in Europe, North America and Asia (Augsburg, Bremen, Obernburg, Dortmund, Westerstede, Kunshan, Shanghai, Shunde, Sterling Heights, Toledo, Denver, Fyzesgyarmat, Taksony, Sibiu, Sipbachzell, Buchs, Boxholm, Cuneo, Maranello).

### Water management

KUKA obtains the water required for production and administration primarily from the local drinking water supply systems. In Augsburg, around 250,000 m<sup>3</sup> of groundwater is drawn from three production wells to cool the data center and parts of the main building. Here, the water is heated exclusively in a controlled manner and the same volume is returned to the groundwater. Wastewater is returned via the local networks and in the quality stipulated by the local authorities.

Water consumption is measured according to the environmental management specifications. Based on these data, we develop specific saving measures that have both environmental and cost benefits. Various saving measures have been implemented in the production shops and office buildings, for example.

Water consumption increased to 203,437 m<sup>3</sup> (2021: 161,760 m<sup>3</sup>). The increase was mainly due to construction work resulting from the expansion of our production capacities in China. This was also associated with a strong increase in the number of employees.

### Conservation of resources in buildings

By means of continuous improvements to its building stock, KUKA has been able to reduce its heating requirements at the Augsburg location by around 2 percent annually over the past six years. Besides new energy-efficient buildings, existing buildings are also being gradually renovated. In addition to the energy-efficient renovation of a building in Augsburg (see above), the energy supply of the buildings is also being increasingly centralized.

Progress continues to be made on the refurbishment of the energy duct at the Augsburg location in 2023. Within the energy duct, all heat-carrying and cold-carrying lines are being sheathed with highly efficient insulating materials. In this way, the transmission losses of the energy carrier media at the location are being reduced to a minimum. The routing of the lines in the energy duct also allows permanent accessibility for maintenance and repair purposes, thereby significantly increasing the operational reliability of the location.

As part of the refurbishment project, this energy duct will be built in such a way that at the end of its life cycle the different building materials can be separated by type. The main issue here is bituminous coatings, etc., on concrete surfaces. This measure results in eliminating landfill waste and instead a valuable resource for new buildings and building materials remains in circulation.

The measurement, control and regulation technology of the buildings at the Augsburg location is also being successively renewed and optimized. This allows energy flows to be provided in line with demand and further efficiency potential to be uncovered.

We take the issue of resource conservation in our existing buildings just as seriously. At the hot beverage vending machines, for example, many KUKA employees in Augsburg contribute to environmental protection by bringing their own drinking vessels. Here, the vending machines automatically detect whether people are using their own vessels. Beyond this, the disposable cups still present have been replaced by paper cups, for which an environmental fee of 50 cents is charged. This is used to purchase paper cups as well as reusable cups.

Furthermore, we use reusable containers from Re Bowl and Recup for serving our “to go” food and beverages in our company canteen in Augsburg, at the kiosks and at the coffee bar. Employees pay a deposit for each container and can return it quite flexibly (even outside KUKA) at numerous return stations in and around Augsburg.

Swisslog’s Austrian subsidiary is moving to a new building in the second quarter of 2023. The newly constructed office building will be connected to four production and development halls, which will enable greater capacity and the optimized design of a modern manufacturing facility. The more sustainable construction of the building, especially the use of wood as a building material, as well as the connection to the biomass heating system of the neighboring property, saves CO<sub>2</sub>.

The new building with a modern office environment goes hand in hand with Swisslog’s “Smart Working” model, which focuses on a balance between classic face-to-face and virtual or hybrid collaboration. The project is scheduled for completion in September 2023.

» By means of continuous improvements to its building stock, KUKA has been able to reduce its heating requirements at the Augsburg location by around 2 percent annually over the past six years. «



# Efficient products and solutions

Products and systems from KUKA are synonymous with innovation, quality and efficiency. We know from our own production operations that energy is a significant cost driver, both for us and our customers. In addition to functionality and acquisition costs, the operating costs of a robot or system are thus an increasingly important decision-making criterion. This particularly applies to our customers in countries and regions with high energy prices. Furthermore, KUKA is working jointly with other companies and researchers on the working world of tomorrow, which will be characterized by interaction between humans and machines.

- ▶ Cutting costs with energy-efficient products and solutions
- ▶ Energy efficiency in robotic products
- ▶ Energy efficiency in plants and systems
- ▶ World of work of the future
- ▶ Digitalization and information security

## Cutting costs with energy-efficient products and solutions

Energy-efficient robots and systems are an important lever for reducing our customers' consumption. The Research and Development department at KUKA is implementing these requirements and specifically working on new products with lower energy consumption compared to predecessor models. This has resulted in a wide range of energy-efficient solutions.

In our experience, energy costs account for at least 40 percent of the total cost of ownership (TCO) for production systems. For this reason, the topic of "Efficient and responsible products and solutions" is one of the four key sustainability aspects at KUKA.

We are involved in various industry initiatives and working groups to further develop our approach and attract even more customers to energy-efficient products.

With an optimized energy model in the case of newly developed robots, the upgrading of welding processes, pre-configured "ready2\_use" applications and large-scale automation solutions for warehouse logistics, we have recently been able to launch groundbreaking innovations. With the new generation of KR CYBERTECH nano, the new LBR iisy cobots, and the Delta K3 D1200 robot, 2022 also saw the launch of products that support energy-efficient operations. In our own research and development as well as in cooperation with renowned partners from industry and research, we systematically address customer requirements and are continuously working on solutions to achieve greater energy efficiency.



## Energy efficiency in robotic products

For all manufacturing companies wanting to operate sustainably, the energy consumption of an industrial robot is an important factor. This is because in the context of the current German electricity mix, energy consumption is associated not only with costs, but also with significant CO<sub>2</sub> emissions. Eco-efficiency as a contribution to both cost reduction and climate protection is therefore becoming increasingly important. Market dynamics are also driven by the European Green Deal, which makes the contribution of industrial products and processes to sustainability an important criterion in lending.

KUKA attaches great importance to eco-efficiency in the new development of a robot system. Robots are issued with a certificate in accordance with the AIDA procedural instruction relating to the energy consumption of industrial robots and can thus be compared with competitors. Furthermore, most newly developed robot systems are equipped as standard with an optimized energy model, making it possible to determine energy consumption for a wide range of applications without the need for additional peripheral equipment. This applies to both ongoing operation and simulation. It opens up a wide range of possibilities for further reducing the energy consumption of the application in question.

With this commitment, we are doing our part to achieve the UN Sustainable Development Goals (SDGs), in particular target 7.3 (“Double the rate of improvement in energy efficiency”).



### SDG 7.3:

Double the rate of improvement in energy efficiency

One product series with a wide range of fields of application in forward-looking industries is that of the SCARA robots, which have a payload class of up to 12 kg. From electromobility applications, such as stacking in battery production, to the production of photovoltaic systems: four-axis SCARA robots offer versatile operation in automation and pick-and-place tasks and take on monotonous tasks in sustainability technologies.

The recycling of electronic consumer goods plays an essential role in the circular economy. The Irish technology company Votechnik has developed a system with a KUKA robot that overcomes these challenges. The system is used for automated processing and safe disposal of electronic waste. Process automation with robots also eliminates human contact with harmful gases and liquid crystals. The system is equipped with the KUKA KR QUANTEC industrial robot for high payloads. Thanks to its modular design, the number of components is greatly reduced, which, in turn, helps to minimize maintenance requirements.

Innovative cabling and power supply concepts additionally reduce operating costs. The robot itself is also up to 90 percent recyclable.

Eco-efficiency and cost-effectiveness can also be a product of reliable and troublefree operation. This is ensured, for example, by the iiQoT software platform launched at the end of 2021. The name is derived from ii = industrial intelligence, iQ = intelligent capability, and IIoT = Industrial Internet of Things. KUKA iiQoT provides important status data for an entire robot fleet in real time. In addition to the visualization, supplementary orientation parameters help to interpret messages more easily and to be able to correct any errors. The application thus facilitates remote monitoring of robotic systems, covering the hardware, software and controller. In this way, the system minimizes downtime, maximizes operating time and ensures smooth operations. This added value is enhanced by functions currently under development such as energy and cycle time monitoring as well as predictive maintenance.

At KUKA, sustainability is always to be linked to leaps in efficiency. The new iiQKA.OS operating system is designed for both experts and beginners. iiQKA.OS is easy to use and offers beginners an intuitive application of robotics and experienced users an improvement of their automation processes. The modern and modular software architecture of the new operating system enables high user-friendliness, performance and flexibility, thereby increasing the efficiency and speed of development processes.



## Energy efficiency in plants and systems

KUKA offers industrial robots in a wide range of versions with various payload capacities and reaches. The spectrum of products also includes the appropriate robot peripheral equipment – from linear units to end effectors and on to controller software. KUKA thus offers solutions for a wide variety of manufacturing processes at maximum speeds behind safety fencing as well as in mobile solutions or direct interaction in human-robot collaboration (HRC).

The portfolio also covers custom-tailored complete solutions for automating manufacturing processes. The expertise lies in automating individual production processes such as welding and joining, processing various materials and integrating different production stages to form a fully automatic system.

»» The portfolio also covers custom-tailored complete solutions for automating manufacturing processes. «

KUKA Systems already focuses on energy efficiency during the planning and design of new systems: industrial robots, the robot controller and programming are optimized in such a way as to minimize energy consumption while maintaining short cycle times. The location of the system and how the cycle times are regulated also play a role. This can significantly reduce energy consumption, e. g. by keeping robot travel distances short.

### Areas of application for greater sustainability

When it comes to the automation of manufacturing processes in electromobility, KUKA has a wide range of bundled experience and competencies in engineering, project management, process expertise, commissioning and servicing. KUKA has an equally strong presence in the automated production of electric vehicles and their powertrains.

KUKA is present in every single step of the process chain: from battery module & pack assembly lines to rotational friction welding systems for the production of battery contacts and battery compartments using robot-guided friction stir welding and on to robot systems for the assembly of electric motors or hybrid transmissions, to quality control with leak tests and even the installation of battery packs in the electric vehicle as well as solutions for the

production of battery cells. In this context, KUKA is primarily seeking synergies from its expertise in mechanical engineering and the Digital Factory for efficient and intelligent automation.

For about three years, KUKA has been part of the “DC-INDUSTRIE2” research program funded by the German Federal Ministry for Economic Affairs and Climate Action (BMWK) and is working with 38 other partners on the potential and implementation of direct current concepts. For this purpose, KUKA converted an existing cell in the SmartProduction Center at the Augsburg site to direct current. Recovered braking energy or yields from PV systems, for example, can be stored with low losses. This energy can then be used when needed, thus reducing peak loads in the grid. This storage supplies the required energy even in the event of short-term AC grid failures, so that the system can continue to operate self-sufficiently. In order to make it easier for DC technology to enter the market, further standards must be incorporated into the world of standardization and DC-compatible devices must be available as standard. The project will be completed in the first quarter of 2023. The Open Direct Current Alliance (ODCA) then ties in seamlessly with the research project. The findings and solutions relating to DC technology are to be disseminated internationally with the ODCA. KUKA is one of the founding members.

With its own global Innovation Challenge, KUKA has been seeking to drive transformative ideas throughout the organization for the past four years. In the year under review, the Challenge revolved around the topic of the Circular Economy. To this end, all employees, regardless of hierarchical level or location, were able to contribute ideas on how KUKA can help shape this growth field over the next five to ten years and underscore its claim to be one of the leading automation specialists in this field. A total of 140 ideas were submitted, seven of which will be explored further in 2023. These include a pilot project and a possible acceleration phase. If potential scalability can be derived from the first sales, series development will commence and the innovation will become a permanent part of the KUKA portfolio.

### Optimization of logistics centers

KUKA also implements automation solutions for forward-looking warehouses and distribution centers. Swisslog, a business segment of KUKA, is an expert in the implementation of automated warehouses and distribution centers. For its customers, Swisslog has created its own energy efficiency label GreenLog (further information can be found on the Swisslog website).

In complex logistics applications, energy consumption is becoming an increasingly important criterion. Significant savings can be achieved by improving energy management for entire plants or subsystems. For example, the power requirement peaks that occur when shuttles or stacker cranes start to move can be considerably reduced by sequencing the start times. Brake energy recovery also helps to balance out peaks in power demand at the start of motion. Energy efficiency gains like these can be simulated in advance, enabling customers to participate in determining their own ecological footprint in various scenarios.

During the coronavirus pandemic and the associated travel restrictions, Swisslog commissioned many of its customers' facilities and systems remotely. At the same time, this new service has resulted in less travel and thus a reduction in energy consumption and emissions.

KUKA also enables the virtual commissioning of systems. In 2021, for example, the new simulation software KUKA Sim 4.0 was introduced for this purpose. Details and processes can be realistically simulated and then transferred to the actual system controller without in-depth programming knowledge on the part of the customer. In 2022, Swisslog commissioned a new distribution center in Germany with state-of-the-art automation technology. The facility uses advanced robotics as well as automated picking and sorting systems to ensure fast and efficient distribution of products.



## World of work of the future

The digital transformation of the economy is an unstoppable process that simultaneously forms the basis of KUKA Group's business. Within this dynamic market environment of industrial automation and digitalization, the share of robotics is gradually increasing. In Germany, for example, the number of industrial robots per 10,000 employees was at a record 397 units in 2021 – the highest figure in Europe. In the same year, robot density worldwide was 141, having more than doubled in six years.

We are aware of the social responsibility that this change entails. While certain manual or industrial occupational profiles that were common decades ago are now in decline, new jobs have emerged at the same time in areas that did not previously exist. Occupational profiles are changing due to increasing digitalization and automation. In this way, automation can also lead to production facilities that were once relocated abroad being brought back to Western industrialized nations and contributing to economic growth here.

### Good work – with robots

Today, robots perform many tasks, but they cannot carry out an entire qualified occupation. They lack creativity, intuition, and the ability to complete multiple activities in succession or in parallel. What they can do is to take on jobs that are generally monotonous, repetitive, physically demanding, or even posing a health hazard. With our automation solutions, we thus support our customers and their employees in equal measure.

In the [Good Work Charter](#) of the [EUnited Robotics](#) European Engineering Industries Association, of which KUKA is a member, and which has in the meantime merged with VDMA Robotics + Automation, the European robotics industry presents its vision of good work for the future. Here it identifies ten focus areas and argues for a transition to an era of digitization and automation. In this age, the focus remains on people as workers.

Focus 9 "Sustainability" is about using resources efficiently in light of the growth of the world's population. The charter outlines the contribution made by automated production in minimizing the consumption of energy and natural resources. This will make it an important part of a largely CO<sub>2</sub>-neutral economy of the future.

» With our automation solutions, we thus support our customers and their employees in equal measure. «

As a member of the [Learning Systems Platform](#) (Plattform Lernende Systeme) funded by the German Federal Ministry of Education and Research, KUKA is working on integrating artificial intelligence (AI) into the working world of tomorrow. With its nearly 200 members in various working groups, the platform develops positions on, and potential courses of action for, the responsible use of AI. KUKA is a member of Working Group 2 "Future of Work and Human-Machine Interaction".

Other social opportunities arise that are addressed by several focus areas in the Good Work Charter. These opportunities include qualification (each machine needs to be operated and maintained) and the inclusion of physically disabled people – with the aid of robotic assistants or exoskeletons. Robots in medical technology provide precise support in diagnostics, surgery or therapy, for example. In hospitals, in particular, the shortage of skilled workers combined with the aging of society can cause severe bottlenecks. In order to reduce the workload, one obvious solution is for nursing staff to no longer to carry out activities away from the patient. This is one of the goals in the PeTRA project, which is funded by the German Federal Ministry of Education and Research (BMBF). Here, KUKA is working with other partners to develop a demonstrator that can transport mentally healthy patients to X-ray or physiotherapy, for example. In various different operating modes, PeTRA is intended to enhance patient mobility – from autonomizing a wheelchair or walker to assisting a patient in walking freely.

### Progress through cooperation

The capability of networking different machines is the basis for a successful fourth industrial revolution. KUKA is a founding member of the “[Open Industry 4.0 Alliance](#)” and has provided the chairman of the board since December 2022. The Alliance’s objective is to enable up to 80 percent of a manufacturing company’s machines to communicate with each other in a smart factory. In doing so, location-specific isolated solutions must be overcome in order to give a decisive boost to digital transformation in industry.

The companies in this alliance have committed themselves to implementing uniform standards for integrated communication between machines and also between the different software solutions of the companies involved. Among other things, the framework includes agreement on existing industrial communication standards such as IO-Link, OPC UA, ECLASS or NAMUR.

In some cases, cooperation networks are industry-, technology- or market-specific. For this reason, KUKA is also active in other networks. For example, KUKA sits on the advisory board of [Digital Industries World e.V.](#), founded by Siemens, and is a founding and board member of [Industrial Digital Twin Association e.V.](#), a cooperation between VDMA, ZVEI and Plattform Industrie 4.0. In these networks, KUKA strives to improve efficiency and reduce the consumption of energy and resources.

Since 2021, KUKA has been a member of the AI Living Lab ([KI Reallabor](#)) cooperation initiative founded by the Industrial Automation Division of the Fraunhofer Institute of Optronics, System Technologies and Image Exploitation (Fraunhofer ISOB-INA). Here, ten partner organizations are working to better leverage the potential of artificial intelligence.

In the KIVI project, up until the end of the project in February 2022, KUKA worked on an AI toolbox that makes it possible to predict the service life of robot components. The project was funded by the Bavarian Ministry for Economic Affairs, Regional Development and Technology. The project results are intended to increase plant availability, make production processes more efficient and conserve resources. The findings will be used in two ways during the project exploitation phase. In the medium term, algorithms evaluated in the project are to be incorporated into the development of iiQoT (see above) and thus generate additional added value through AI. We are thus exploiting the project commercially. The topic offers additional potential, which is why the Technology & Innovation Center continues to work on predictive maintenance and condition monitoring in internal projects, thus ensuring scientific connectivity.

## Digitalization and information security

The global megatrends of digitalization and automation are changing the working world – particularly during the coronavirus pandemic. Job requirements and descriptions are changing. New and often interdisciplinary qualifications are needed. Some established occupational profiles will become less important, while new ones will emerge. Employees at our own company and also those of our customers will have to be prepared for this.

With its products, KUKA is a driving force behind automation and technological progress and is an innovation leader in Industrie 4.0. KUKA is involved in various different committees to help shape digitalization and the world of Work 4.0.

This will undoubtedly be accompanied by new uncertainties related to application risks, and we have to make higher demands on the safety of products, processes and information. The legislature has regulated the application safety of robot-based automation solutions, and KUKA conscientiously implements the corresponding requirements. We therefore also involve our suppliers. Thus, we can ensure that all Group companies worldwide achieve the same standard in the market.

The KUKA Product Safety policy serves to implement the product compliance requirements, including safety aspects, and centrally regulates the necessary requirements, tasks, activities and responsibilities. The policy is managed by the central Product Compliance department, which reports to the head of the Legal department. Customers learn how to work safely with the robots and program them at our KUKA College.

KUKA takes its responsibility with regard to the data protection of customers and employees seriously. For this purpose, a global data protection management system is in place to systematically organize, implement and monitor the high requirements worldwide. In recent years, numerous new data protection regulations from the European Union, the USA, Brazil and China have been incorporated into our data protection management system.

In our cooperation with automotive customers, we additionally use the Trusted Information Security Assessment Exchange (TISAX). This is an industry-specific standard for information security, for which we provide online training courses in several languages. Our information security management system was last certified by TÜV Rheinland

in 2022 at various international locations in accordance with TISAX criteria. Further locations are being prepared for TISAX certification in the coming years.

### Data protection

KUKA has been working closely with many customers for years and attaches great importance to data protection. KUKA ensures that it has a globally uniform minimum standard in place for handling corporate and personal data.

Customer data are protected from unauthorized access and misuse, being processed in a CRM system to which only a small number of authorized employees have access. In the current year under review, once again, no infringements of customer privacy or loss of customer data were reported to us.



# Sustainable supply chain

Suppliers can have a major impact on a company's sustainability footprint. By instilling a common understanding of quality and responsibility, and by delegating monitoring duties to the business segments and regions, we are able to shape our supply chain on the basis of sustainability criteria. By systematically anchoring sustainability criteria in our policies and procurement processes, as well as corresponding audit procedures, we are also meeting the increasing regulatory obligations in this area.

- ▶ Supply chain responsibility
- ▶ Local procurement

In the year under review 2022, KUKA focused on the global implementation of the Supply Chain Due Diligence Act (LkSG). As part of a global project, we first identified which specifications and measures were already in place both in our own business area and in our supply chain. The status was compared with the objective and served as a starting point for the next project steps.

KUKA strives to integrate the required new standards into its business processes promptly and adequately. As part of the project, a globally uniform basis was developed and adopted by the Management Board by adapting existing policies and creating new ones. Particular mention should be made of the policies for procurement and risk management, in which risk policy is defined as an integral part of business processes. Furthermore, in the future, vulnerable groups will be identified as part of a risk analysis. For all new and updated policies, training is planned for the employees concerned who are required to implement the specifications.

Moreover, both the internally applicable Code of Conduct and the Code of Conduct for Business Partners have been revised. They contain a summary of our most important principles. These are our guard rails on the way to a successful and more sustainable future. The Code of Conduct serves as an aid to orientation for our employees. We expect them to comply with our ethical standards at all times. We require our suppliers to comply with fundamental human rights and environmental standards and address them appropriately within their value chain. Our principles are guided by the internationally recognized United Nations Guiding Principles on Business and Human Rights, the United Nations Universal Declaration of Human Rights, the core labor standards of the International Labor Organization (ILO), and the OECD Guidelines for Multinational Enterprises.

In fiscal 2022, an initial risk analysis identified potential risks both at KUKA and in our supply chain. A comparison with the already established preventive measures resulted in the net risk analysis. Preventive measures to prevent violations in our own business area are firmly anchored in place – for example, through our corporate compliance program. The Code of Conduct for Business Partners applies to our suppliers. New suppliers are subject to a segment-specific onboarding process. Beyond this, we either request further details via specially developed questionnaires or use an online platform for this purpose. If any anomalies are identified via this information, or as part of our annual risk analysis, we take corrective steps. This includes dedicated exchanges or on-site supplier

audits. The experience thus acquired will be incorporated into our risk analysis in fiscal 2023 in order to obtain a clearer focus on the risks in our supply chain.

For KUKA, appropriate and effective complaints management is therefore an important part of our due diligence processes. Violations or suspected violations can be reported to KUKA via the Compliance complaints procedure and remedial measures thus demanded.

In our Declaration of Principles, which is publicly available on our website, we commit to our human rights due diligence obligations pursuant to the LkSG.

»» For KUKA, appropriate and effective complaints management is therefore an important part of our due diligence processes. «

## Supply chain responsibility

Globally oriented supply chain management based on the principles of sustainability is a significant success factor for KUKA. After all, quality-related, ecological or social risks on the part of suppliers can have a direct impact on the satisfaction of our customers.

We are always talking to our suppliers about ways to minimize potential risks. After all, the impact that our supply chain has on our own sustainability performance grows in direct proportion to the increase in the quantity of outsourced products and services. Depending on the division, the scale of the impact felt at KUKA can be significant.

Basic and uniform rules of conduct apply worldwide to cooperation within the company and with our suppliers. These are summarized in a [Code of Conduct](#) and in our [Corporate Compliance Manual](#). Furthermore, we are guided by various Group-wide and segment-specific policies. However, we are aware that despite all supplier management measures, the supply chain is still exposed to human rights risks. Even proven processes and

management systems cannot fully cover all risks. However, high standards are important to us, particularly in view of our global growth strategy.

The systematic integration of sustainability and compliance into operational processes is continuously being driven forward in supply chain management. Through the introduction of the supplier portal at Robotics and Systems at selected locations in Europe, we can check fundamentally necessary preconditions in the registration or qualification process of a new supplier. These include, for example, approval of the [Code of Conduct for Business Partners](#), valid [environmental certification](#), or the degree of maturity of hazardous materials management.

### Ecological and social factors

We work with a binding Code of Conduct for Business Partners to establish basic requirements for minimum standards and norms within our global supply chain network. This Code of Conduct is aligned with KUKA's corporate values and contains, among other things, core elements relating to environmental protection, product quality and safety, data protection and information security, as well as the protection of human rights, including good working conditions. Other essential components include compliance with and dissemination of the contents of the Code of Conduct by suppliers to their subcontractors. Environmental aspects are ensured, for example, in the supplier portal, via supplier questionnaires or via our online platforms, by means of relevant certificates and checks in the area of material compliance.

KUKA trains the responsible employees in the respective segments on the meaning, scope and implementation of the defined core contents of the Code of Conduct for Suppliers. New employees – especially in Purchasing – are also made aware at an early stage of the importance of ecological and human rights due diligence at KUKA.

### Segment-specific responsibility

The processes and responsibilities pertaining to supply chain management are clearly defined at KUKA. Our overall business is divided into individual segments, each with its own responsible management bodies. These report directly to the Management Board, so that segment-specific requirements can be implemented within the associated functions while at the same time maintaining close coordination between the specialist departments.

In the Robotics business segment, Supply Chain Management with its Order Management, Planning, Logistics, Purchasing and Supplier Quality Management departments is responsible for the procurement of products and standard solutions. This area closely coordinates with the corresponding functions of other segments. In this way, potential can be exploited in a targeted manner at the global level while taking local conditions into account. The Robotics segment has procurement departments at all of its production locations.

At KUKA Systems, the regional companies in Europe, North America and China use their own purchasing processes and corresponding reporting lines. In all regions, the compliance-related requirements for suppliers are firmly rooted in the Purchasing Terms and Conditions, which also relate to human rights.

At Swisslog, procurement consists of Divisional Purchasing (management and central procurement services), Production Purchasing (purchasing for in-house production) and Project Purchasing (project-specific purchasing services).

The business activities of the Systems, Robotics, Swisslog and Swisslog Healthcare divisions at the Chinese subsidiaries are bundled in the China segment. Depending on the product and system solution, China is thus closely intertwined structurally with the corresponding business segments (Systems, Robotics, Swisslog and Swisslog Healthcare) for various customer groups. There is no separate description of supplier management in this report considering the fact that the processes used by the divisions around the world are organized in a similar way.

## Local procurement

KUKA has more than 10,000 suppliers worldwide across all segments. Wherever possible, preference is given to regional suppliers from the vicinity of our respective production plants. When selecting suppliers, we primarily check quality and reliability, as well as the business terms and conditions. In the China segment, the local supplier base is being continuously expanded. Here, right from the outset of a project, local procurement strategies are incorporated into all new developments that are tailored to the Chinese market. In this way, we are contributing to a continuous further reduction in long-distance transportation and the associated environmental impact.

Due to the high quality requirements and the frequently complex technical specifications, it is rarely the case that our requirements can be met with standardized catalog goods. That is why we produce many special configurations with a high development effort, and for which the origin of the required components is already very transparent for quality reasons alone. In addition to standard industrial sheet metal, electronic parts, cables and hoses, we purchase specialized gear units, motors, castings and structural parts for the robot arms, for example.

### Sustainability goals

With our commitment to ecological and social criteria in the supply chain, we want to support the human rights-related targets of the United Nations Sustainable Development Goals (SDGs). For us, these are the following targets in particular:

- » **SDG 8.5:** Achieve full and productive employment and decent work, and equal pay for work of equal value
- » **SDG 8.7:** End modern slavery, human trafficking and child labor
- » **SDG 8.8:** Protect labor rights and promote safe and secure working environments

At KUKA, so-called conflict minerals (raw materials from conflict areas) may at most be contained in purchased components. No direct procurement of non-certified melts is carried out. KUKA requires its suppliers to avoid indirect use of minerals from high-risk areas. In doing so, we comply with the recommendations of the "OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas".



### Requirements at KUKA Systems

The contracts, audit specifications and self-disclosure questionnaire for suppliers of KUKA Systems deal with issues of legal compliance, occupational health and safety, environmental protection and adherence to human rights. They require suppliers to prove that they employ internationally recognized management systems such as ISO 9001 and ISO 14001 or adhere to comparable standards.

KUKA Systems in Europe conducts a risk analysis every two years for strategically important suppliers. More than 20 suppliers were audited in 2022. Management system certificates are regularly monitored with regard to their validity. Random audits are performed in Europe every year. There were no anomalies in 2022.

### Auditing of suppliers at Robotics

Our key suppliers are encouraged to observe and heed the specified environmental goals. According to the contractually agreed performance requirements, for instance, they are obliged to use environmentally-friendly products and energy-efficient processes both for their own services and for ancillary services provided by third parties.

By using reusable packaging for selected supply processes, for example, it is possible to reduce the amount of paper required annually by more than 20 tonnes. An extension of this approach to other suppliers has already been initiated.

Additionally, it has been possible to use recycled variants as an environmentally friendly alternative for the direct use of materials in some cases. The aim is to exploit further potential for more environmentally friendly packaging at our production sites.

Before entering into cooperation, an on-site audit is always carried out at relevant suppliers. In addition to content-related focal points such as quality, costs, delivery capability or process reliability, environmental risk avoidance and compliance issues are also addressed. Further audits can be arranged if critical performance metrics suggest that these are necessary.

» Random audits are performed in Europe every year. There were no anomalies in 2022 «

Continuous improvement of the supply chain with regard to process optimization and quality is always carried out in close cooperation with quality, environmental and energy experts. Findings from audits, such as corrective and preventive actions, are regularly analyzed and processed. The Supplier Quality Team continuously audits the supplier base with clearly defined priorities and defined cycles. In the year under review, due to pandemic-related travel restrictions, the focus remained on Internet-based exchange. At the same time, it was also possible for the preferred personal on-site visits as an essential component of supplier management to take place more frequently again.

»» During the selection of suppliers, requirements relating to sustainability, occupational safety and compliance are also checked, among other things. They constitute an important decision-making basis for supplier approval. «

In our audits on environmental, occupational and health and safety standards, we check how materials are stored, used and disposed of. We also analyze waste separation, check hygiene standards and evaluate the machine pool. One focus is on avoiding risks associated with the use of substances of very high concern (SVHCs) and potential conflict minerals in our products. These substances can be harmful to human health, have a negative impact on the environment or result in human rights violations.

As an established function within quality management, the Material Compliance Coordinator deals in detail with the use or avoidance of SVHCs and conflict minerals in the components of our robots. The supplier portal will allow the audit processes to be more systemized and adapted to the German Mineral Resources Due Diligence Act (MinRohSorgG), which has been in force in Germany since 2021.

### Assessment procedures at Swisslog

At Swisslog, the sustainability assessment has been carried out with the support of a system on the IntegrityNext online platform since 2021. More than 20 ESG (Environmental, Social, Governance) criteria are managed. The registration process has become standard for new major suppliers of direct material since the third quarter of 2022 using IntegrityNext.

At the end of 2022, around 80% of the purchasing volume of registered suppliers was managed using IntegrityNext. In the reporting year, a sustainability team was set up to drive forward the due diligence process in the supply chain by means of audits (on-line and on-site) and remedial measures among other things. There were no significant anomalies in 2022.

### Assessment procedures at Swisslog Healthcare

At Swisslog Healthcare, the Production Purchasing and Project Purchasing departments are responsible for supplier evaluation. Project Purchasing at Swisslog Healthcare is divided into four regions: Europe, Americas, China and Rest of Asia.

During the selection of suppliers, requirements relating to sustainability, occupational safety and compliance are also checked, among other things. They constitute an important decision-making basis for supplier approval.

Suppliers are evaluated using a supplier performance rating system on a quarterly basis or upon completion of a project, as appropriate. Swisslog Healthcare uses its own auditing process for this. In addition to the standard audits for existing suppliers, further full assessments of potential new suppliers were performed in 2022.



# Responsible employer

As an automation corporation, KUKA specializes in future-oriented technologies. Our working environment is shaped by our customers' expectations with regard to sustainability, efficiency and cost discipline. We are meeting these challenges with forward-looking human resources work. As a company, we are continuously transforming. Our corporate values are however essential constants. This includes quality-driven education and training and a commitment to diversity. KUKA promotes a working environment in which everyone can develop. This requires adaptable work models that offer greater flexibility by means of freedom in terms of time and space. In this way, KUKA is creating a more modern (work) culture in order to attract and retain talent. We are also promoting occupational health management measures even more intensively.

- ▶ Responsibility as an employer
- ▶ Employees: challenges and opportunities
- ▶ Vocational training in a future-oriented industry
- ▶ Leadership and values
- ▶ Diversity as a success factor
- ▶ Occupational health and safety

## Responsibility as an employer

KUKA is shaping the workplace of the future. With our technologies, we have a formative influence on many different sectors. Just like our customers, we also have to address the challenges of digitalization. We are continually advancing digital processes and preparing our employees accordingly through structured training and continuing education. This is why, as one of the key topics of the materiality analysis updated in 2021, “employee responsibility and development” is a top priority for KUKA. The measures in human resources are intended to create added value for our company as well as designed in an intuitive and modern way to ensure our future viability as an automation specialist.

Challenging projects, agile teams and an international setting offer plenty of room for shaping these future topics and people’s personal careers at KUKA. Our success is founded upon productive and motivated employees. They are key to dealing with the changes our customers experience and to opening up new markets for robot-based automation.

### Human resources management

The Corporate Human Resources (CHR) department reports directly to the Chief Executive Officer and, together with our experienced Centers of Expertise, is responsible for all strategic HR processes worldwide. We manage these processes via a globally and regionally differentiated HR business partner organization, taking business-relevant specifics into account. Local HR departments and highly effective Shared Service Centers are responsible for efficient and legally compliant implementation.

The interests of our employees are safeguarded by means of a number of contracts and policies. In Germany, for example, collective bargaining agreements and local works agreements apply. Around 50% of our employees worldwide are covered by collective bargaining agreements. In Germany, this proportion is 80%. Employees not covered by collective bargaining agreements receive pay increases in line with collective bargaining agreements. Moreover, the company has its own target agreements and working time regulations, policies and code

of conduct. Our Integrated Management System (IMS) describes and governs principles, organizational structures, tasks, processes and responsibilities. In the case of particularly high production capacity utilization, KUKA also resorts to the use of temporary workers in the form of personnel leasing.

### Broad support

KUKA is striving to further improve its attractiveness as an employer. This includes the promotion of job rotation, a challenging training and development package, diversity and equal opportunities, a good work-life balance, the possibility of sabbaticals, individual development plans, high occupational safety standards, and a health and sports program. Diversity within the company is governed, among other things, by the Group guideline “Principles of cooperation within KUKA Group” as part of the Corporate Compliance Manual. In Germany, KUKA is also a signatory to the “Diversity Charter” and is thus publicly professing to the company’s commitment to diversity and a prejudice-free work environment.

KUKA measures the success of these measures using various KPIs. These include, for example, the turnover rate and the number of applications received, especially for key and bottleneck positions.

» In Germany, KUKA is also a signatory to the ‘Diversity Charter’ and is thus publicly professing to the company’s commitment to diversity and a prejudice-free work environment. «

## Employees: challenges and opportunities

### Increasing employer attractiveness

Our success is founded on committed and creative employees. They work on challenging projects in an international setting that gives them plenty of room for shaping these future topics and their personal and career development.

KUKA is committed to further improving its attractiveness as an employer. Through a positive image within and outside the company as well as high attractiveness of the location, we want to retain talent in the company and attract high-profile applicants to KUKA.

One example is the location in Taksony, Hungary. There, Hungária Kft was named a top employer by one of the world's largest HR service providers and ranked 4<sup>th</sup> in the annual survey (2021: 7<sup>th</sup>). Furthermore, the site was awarded silver in the "Comprehensive Employer Branding Strategy" category of the HR KOMM Awards.

As an integrated and global solution provider, KUKA is working on new concepts to further develop the in-house working methods. In the year under review, we launched the internal "new WE" project. A co-creation team of 50 employees is working on an overarching renewal of strategy, structure and culture by 2025. We intend to use this momentum to further develop the KUKA Group into the most globally competitive company in robot-based automation. To achieve this, KUKA intends to optimize its way of working by strengthening the factors of progress, communication, global mindset, and failure and leadership culture.

We are also working increasingly on "New Office" concepts that, among other things, use desk-sharing models. We are continually advancing digital processes and training our employees accordingly. In 2021, KUKA started implementing the New Office concept in Augsburg. This is a desk-sharing model that serves to optimize the use of space while addressing the needs of the respective departments. A total of around 1,500 office employees were involved in the first implementation phase. We are aiming for an over-occupancy of 0.8 – in other words, 100 employees share 80 workplaces.

### Work and private life

At many locations, KUKA offers flexible working times to allow work and private life to be better combined. For example, our employees at the German sites may work part-time, use flextime arrangements or work from home (teleworking). The "reduced full-time" model was also continued in 2022 in accordance with the IGM collective agreement. This model includes an entitlement to reduce working hours down to 28 hours per week for a period of between six months and two years, as well as a right to return to the collectively agreed full-time working hours of 35 hours per week. Internal job opportunities for management positions with a part-time option of at least 32 hours per week are also offered in Augsburg.

» In the year under review, we launched the internal 'new WE' project. A co-creation team of 50 employees is working on an overarching renewal of strategy, structure and culture by 2025. «



Swisslog Healthcare’s SMART Work program offers employees various options to make their own workday more flexible. Each individual’s situation is assessed individually. SMART Work describes adaptable work models and includes a flexible arrangement of working hours and/or a choice of work location. Thus, each job is checked in advance for the following options: flexible work hours, telework, job sharing, reduced work hours, shortened work week, remote work.

At our headquarters in Augsburg, the non-profit association Orange Care e. V. founded by KUKA employees offers a daycare center with a capacity for 30 children. In addition, KUKA also offers a kid’s holiday club.

**Employees by age group, type of employment and gender<sup>1</sup>**

	2021	2022
Under 35 years	5,241	5,728
36 to 55 years	6,794	7,112
Over 56 years	2,066	2,178
<b>Total</b>	<b>14,101</b>	<b>15,018</b>
Female	2,810	3,070
in %	19.9	20.5
Male	11,291	11,948
in %	80.1	79.5
<b>Temporary employees</b>	<b>1,759</b>	<b>1,806</b>
Female	417	363
Male	1,342	1,443
<b>Permanent employees</b>	<b>12,342</b>	<b>13,212</b>
Female	2,393	2,707
Male	9,949	10,505
<b>Full-time employees</b>	<b>13,634</b>	<b>14,504</b>
Female	2,526	2,755
Male	11,108	11,749
<b>Part-time employees</b>	<b>467</b>	<b>514</b>
Female	284	315
Male	183	199
<b>Number of leased employees</b>	<b>1869</b>	<b>1472</b>

<sup>1</sup> Group-wide, December 31. Active personnel excluding casual workers, student trainees, apprentices, interns, dormant jobs and employees exempted from normal duties.

### Satisfaction surveys

Another customer satisfaction survey conducted by Group IT in November 2022 was related to our employees' satisfaction with their IT equipment and IT services. Almost 2,000 employees worldwide (just under 14 percent of the relevant workforce) took part. The survey results showed a high level of overall satisfaction and an increase compared to the previous year, particularly in the EMEA region.

### Employees by region and employee turnover<sup>1</sup>

	2021	2022
Europe/Middle East/Africa	8,662	9,130
Americas	2,977	3,145
Asia/Pacific	2,462	2,743
<b>Total</b>	<b>14,101</b>	<b>15,018</b>
<b>Temporary employees</b>		
Europe/Middle East/Africa	377	191
Americas	0	0
Asia/Pacific	1,382	1,615
<b>Permanent employees</b>		
Europe/Middle East/Africa	8,285	8,939
Americas	2,977	3,145
Asia/Pacific	1,080	1,128
<b>Full-time employees</b>		
Europe/Middle East/Africa	8,207	8,635
Americas	2,967	3,131
Asia/Pacific	1,080	2,738
<b>Part-time employees</b>		
Europe/Middle East/Africa	455	495
Americas	10	14
Asia/Pacific	2	5
<b>New hires</b>	<b>2,442</b>	<b>2,831</b>
<b>Employee departures</b>	<b>2,068</b>	<b>1,986</b>

<sup>1</sup> Group-wide, December 31. Active personnel excluding casual workers, student trainees, apprentices, interns, dormant jobs and employees exempted from normal duties.





## Vocational training in a future-oriented industry

Vocational training and continuing education in the fields of robotics and automation turn junior KUKA talent and employees into responsible participants in shaping Industrie 4.0. Our commitment to education and training is our contribution to achieving the UN Development Goal SDG 4.3, “Equal access to affordable technical, vocational and higher education”.

We offer apprenticeships at our sites in Augsburg, Oberburg and Bremen. The Group offers apprenticeships ranging from technical professions such as industrial mechanic, lathe/milling machine operator, mechatronics technician, electronics technician for automation technology and warehouse logistics specialist to the commercial sector with occupations such as industrial clerk, specialist for forwarding and logistics services, IT specialist and technical product designer. In the Swabian region of Bavaria, KUKA Augsburg is top ten among the approximately 5,000 regional training companies.

KUKA trains in line with requirements. On completion of their training, our apprentices are qualified specialists immediately ready for their jobs and with whom future projects and new technologies can be quickly implemented.

We also offer the occupational field “Robot Trainer”; these are people who train customers in the use of our robots at KUKA College. After a training period of up to three years, the trainers are endowed with a broad range of technical know-how for maintaining and programming robots. They also have teaching skills for the transfer of knowledge.

When it comes to the vocational training of young people, KUKA offers apprentices not only specialist know-how, but also an opportunity to learn in an intercultural setting and to think and act globally on a Group-wide scale. We attach great importance to familiarizing apprentices with the international strategy of the Group at an early stage.

KUKA has a state-of-the-art education center at its Augsburg location. In addition to the employee and customer training rooms, this also houses the Personnel Development department with the premises of the KUKA Academy and the HR Development team.

Training operations have also changed as a result of the experience gained from the pandemic. In recent years, KUKA has invested in digitalization: all apprentices and students are equipped with iPads or laptops as well as with modern learning software. Tools such as the “Apprentice Cockpit”, which have been used to digitalize report books, assessment sheets or transfer plans, are essential components of Training 4.0 at KUKA, along with Microsoft Teams and work in the Office365 cloud.



### SDG 4.3:

Equal access to affordable technical, vocational and higher education

### Offerings with external partners

In addition to the traditional apprenticeships, KUKA offers a dual, training-integrated degree course at the University of Augsburg, culminating in a Bachelor's degree. In addition to the dual studies course for mechanical engineering, mechatronics and electrical engineering, the disciplines of business administration, information technology, technical information systems and business information systems are also available to choose from. KUKA Assembly & Test GmbH in Bremen also offers dual integrated studies courses in mechatronics and mechanical engineering in cooperation with Bremen University of Applied Sciences.

Furthermore, KUKA attends numerous university contact fairs each year and appears at many graduate fairs.

At the Augsburg location alone, KUKA trained 204 apprentices and dual degree students in 2022. In total, there were around 260 apprentices in Germany. This number also includes the apprentices of our external partner organizations. KUKA offers bookable training modules for these partners. In the year under review, 168 people also took part in internships or completed their theses at KUKA.

### Further education and training

As part of the continuing education programs at KUKA Academy, we accompany and support KUKA employees in their personal and professional development. Our diverse range of continuing education courses includes interdisciplinary seminars as well as special technical training for a wide variety of areas in the company.

Our continuing education measures, which we offer internationally with a regional focus, include seminars to promote personal and social as well as intercultural skills, in addition to language courses. Another essential component relates to the Global Leadership Circle, which focuses on teaching and strengthening leadership skills.

KUKA has also further developed the training it offers based on the experience gained from the coronavirus pandemic and has since increasingly offered online seminars in addition to classroom training. Our diverse range of eLearning modules has been further expanded for employees to provide self-directed and time-flexible learning formats. Demand for online language courses in particular rose sharply last year, among other things, as a result of the increasing internationalization of our employees. A total of 69,663 WBT (Web Based Training) modules were successfully completed. In Germany, 3,442 employees took advantage of 351 in-house continuing education events in 2022, resulting in a total of 4,510 participant days. This includes our global leadership programs, to which we welcomed 309 people in 30 workshops.

» Demand for online language courses in particular rose sharply last year, among other things, as a result of the increasing internationalization of our employees. «



## Leadership and values

The high level of commitment, engagement and innovation of KUKA employees is firmly anchored in our leadership culture. The workforce is united by the same understanding of fundamental values, principles and corporate culture. We make a point of ensuring that managers reinforce this culture.

The most important “Leadership Behavior” principles are also part of the performance management for the executive management team, with the expectation that they will model this code of conduct. Within the framework of global feedback initiatives for senior management, employees can provide their managers with feedback on leadership behaviors and thus initiate targeted development measures. The “Leadership Behavior” principles thus have a high level of visibility and form the basis for the global talent management system. This forms the basis for structured succession planning when filling key positions in the Company worldwide. In the year under review, 48 new employees were added to the global talent pool, comprising a total of 125 talents, as part of a structured identification process. Individual development plans as well as specific measures for the personal and professional skills profile are drawn up with all new recruits.

### Worldwide objective

KUKA Leadership Behavior is part of the leadership development program. This is intended to further strengthen their shared understanding worldwide. The continuous exchange of ideas across national borders is an important aspect of our leadership culture. In addition to regular management calls, at least one global management meeting is held each year. In this way, all KUKA managers worldwide exchange ideas and develop concepts together.

## Diversity as a success factor

The diversity of our workforce is a source of creativity and innovation at the company and thus an important business success factor. That is why it is also part of our corporate culture to live and promote diversity. Regardless of social background, gender, age, physical or mental disability, religious beliefs, political opinion or sexual orientation, KUKA employees are equally valued. Our aim is to create a work environment that is characterized by acceptance and tolerance and is free of prejudice. No distinction is made between genders in our compensation system. On the contrary, for us, equal treatment of all includes compensation exclusively on the basis of performance and competence.

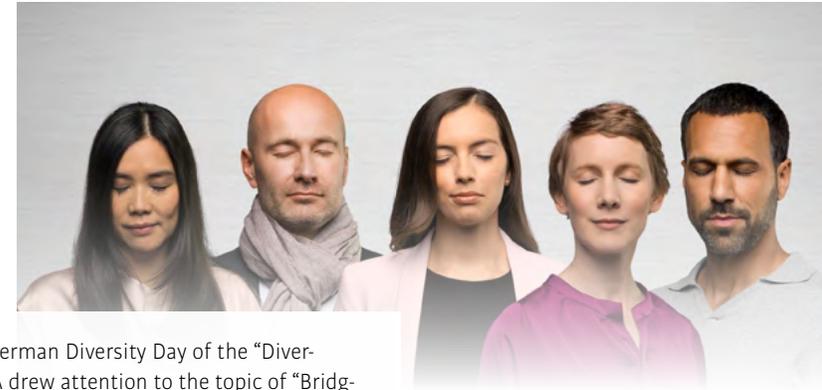


**SDG 10.3:**  
Ensure equal opportunities and eliminate discrimination

### Global KUKA diversity principles and diversity action week

As a signatory to the Diversity Charter, KUKA has anchored the topic within the structure of the company. Diversity and appreciation are included in the corporate policy “Principles of cooperation within the KUKA Group” as part of the Corporate Compliance Manual. Diversity aspects are taken into account when new policies and processes are created. In this way, we support UN Development Goal SDG 10.3, “Ensure equal opportunities and eliminate discrimination”.

Our diversity principles, which are valid worldwide, emphasize KUKA’s positive attitude toward diversity within the company. This is also associated with clear expectations on the part of the Management Board, Corporate Human Resources and the management of all segments. The principles are intended to ensure equal rights, equal opportunities and respect for all, and to prevent discrimination. Any violations will be rigorously sanctioned. A diversity manager coordinates the relevant issues. The document signed by top management and an accompanying presentation were approved in November 2020 and repeatedly communicated via the intranet, among other channels. One such occasion was Diversity Week 2022.



To mark the 10<sup>th</sup> German Diversity Day of the “Diversity Charter”, KUKA drew attention to the topic of “Bridging Cultures” with various activities as part of a Diversity Week in fiscal year 2022. This week focused on creating awareness of different cultures, identifying and preventing prejudice, and developing intercultural skills for national or ethnic cultural communities. It was emphasized that differences between people of the same nationality or culture can be greater than those that exist between nationalities. The idea is to look at conflicting misunderstandings from a reflective point of view. For this purpose, employees were given a digital toolbox with which they can assess their intercultural skills and define knowledge gaps.

» KUKA has also created a network for personal exchange for people from the LGBTQI+ community since the year under review. «

### More female employees

KUKA is working on further increasing the number of women in the workforce and in leadership positions.

As at December 31, 2022, the proportion of women on the Group Management Board and the Management Boards of the three German companies (KUKA AG, KUKA Systems GmbH and KUKA Deutschland GmbH) was cumulatively 0 percent (2021: 0 percent). The first management level below that had 15 percent (2021: 15 percent) women for all three companies, and the second level of management a cumulative 16 percent (2021: 14 percent). The general proportion of women in the workforce in these three companies was 19 percent as at the reporting date (2021: 18 percent).

Worldwide, the general share of women in KUKA Group was 20 percent in 2022 (2021: 20 percent). At the first management level, it was 16 percent (2021: 14 percent) and at the second level, 22 percent (2021: 19 percent).

The share of female apprentices for industrial and technical occupations at the Augsburg location was 10 percent in 2022 (2021: 13 percent). Once again, there were fewer female applicants overall than in previous years. We are also consciously focusing on a continual increase in the proportion of women in the Global Talent Program and in succession planning.

### Networking and support

Through our internal women's network orangeWIN, we promote women in the company and identify female talent. KUKA has also created a network for personal exchange for people from the LGBTQI+ community since the year under review. Regular meetings create a safe space for queer employees to engage in individual problem-solving and collective diversity actions.

The popular "Lunch & Learn" format on cross-divisional specialist topics was continued in 2022. Three events were held with a total of around 61 participants. Digital exchange has proven its worth with higher numbers of participants and an international reach.

The initiative for a worldwide "Female Innovation Network" (femaleIN) also met with great approval. Founded in March 2021, the network aims to increasingly bring together and support the competencies of women in the innovation sector.

An internal mentoring program initiated by orangeWIN for the exchange of experiences and the targeted further development of individual strengths was joined by 6 new pairings from different hierarchical levels in 2022 (2021: 21). Thus a total of 87 pairings have so far participated in the program, which was launched in April 2017.

KUKA is also active in external networks, such as the association of women's networks "Women in Network" (WIN) in Munich and the surrounding area. This includes more than 20 companies whose representatives meet once a quarter. Moreover, KUKA is involved in a network with other Augsburg-based companies from various industries.

In addition, KUKA has been participating in the Augsburg cross-mentoring program since 2011. This program supports young managers with their professional and personal development and is designed as a company-wide program. A female mentee and a mentor from KUKA are taking part in 2022 – 2023. KUKA is also involved in the mentoring partnership MigraNet, which is committed to the professional integration of people with a migrant background. For this purpose, another KUKA employee has become a mentor in 2022.

## Occupational health and safety

Occupational health and safety are an essential requirement for ensuring that business operations run safely and efficiently in manufacturing companies like KUKA. Appropriate management systems and general awareness of occupational health and safety not only serve to protect the health of employees, but also affect the success of our company.

Occupational health and safety belong to KUKA's five core values. We are thus, within the scope of our influence, committed to achieving the UN Development Goal SDG 8.8, "Protect labor rights and promote safe and secure working environments". Occupational health and safety are firmly embedded in management systems at KUKA Group's main production locations, with certifications in some cases. In the year under review, further locations were certified to the international occupational safety standard ISO 45001. Since 2009, our largest production location, Augsburg, has been certified to OHRIS (Occupational Health & Risk Management) – a Bavarian state management system. The scope has been covered by ISO 45001 since 2020. As a result, approximately 65 percent of the company workforce worked at safety-certified locations at the end of 2021.

### Involvement of employees

We consider the active participation and involvement of our employees to be a key factor in the successful implementation of our measures to increase occupational health and safety. They are involved in the adaptation and preparation of the risk assessment as well as in the selection of personal protective equipment. Employee representatives also play an active role in shaping ongoing developments in occupational health and safety by actively participating in safety inspections and work committee meetings or helping to design new workplaces.

Internal and external training courses on occupational health and safety are regularly held at KUKA across the globe. All relevant parties are included, such as the responsible persons of external service providers.

In the year under review, a safety campaign focused on hazards posed by industrial trucks, in particular fork-lift trucks, within plant traffic at the Augsburg location. All employees were able to experience the restricted view through a virtual representation (360° view through VR glasses) as part of an action day. The campaign was supported by several information stands and intranet contributions.



Several times a year, all areas are subjected to inspections related to fire safety and cleanliness regulations. The inspection is usually carried out by a department manager, the responsible safety officer, a representative of the works council and the occupational health & safety specialist. In addition, we held a day of action on fire safety and emergency management in 2022 and offer fire safety volunteer training. The action day addressed other relevant safety risks to environmental, health and hazard management.

In addition, a software-based hazardous substances and dangerous goods management system (i-Chemistry) was introduced to meet requirements in the long term. Part of the software is an automated update service for safety data sheets. Several interfaces link the service to internal IT systems, such as logistics/transport and customer service.

Moreover, a Germany-wide Health & Safety Workshop was held at the Augsburg location in 2022 with the participation of the Augsburg, Bremen, Obernburg, Swisslog Buchs and Swisslog Dortmund locations. This resulted in various specialist improvement measures, including the harmonization of processes and workflows

### Positive balance for 2022

Our reporting system at the Augsburg site registers all occupational accidents involving lost time of one day or more (“lost time injury”) as well as near misses and events with a high hazard potential. For these occupational accidents, an immediate incident report must be put in place as quickly as possible, distributed to all responsible parties in the rest of the organization and communicated to the employees affected. A systematic cause analysis is then carried out for such incidents and appropriate measures are derived. If necessary, new safety standards or a best practice procedure are drafted or adapted to the new findings.

The safety performance indicators recorded across the Group include the LTIR (lost time injury rate). The worldwide figure was 0.33 in 2022 (2021: 0.6). The figure for the 1,000-man ratio that is widely used in Germany was 2.36 in 2022, the year under review (after 9.8 in the previous year). As a key indicator of accident severity, we also track the severity rate (number of lost days per 200,000 working hours), which was 5.94 in the reporting year (previous year: 12.8) and thus developed positively. There have been no fatal industrial accidents across the Group in the last few years.

### Preventive healthcare

Thanks to increasing routine with coronavirus measures, we have refocused on the preventive healthcare approach that was cultivated at KUKA even before the pandemic. To ensure the physical and psychosocial health of our employees in the best possible way, we take a combined preventive approach with “acute measures” in stressful situations. These include stress and conflict management training, fitness classes, balance checks, meditation, team-building activities, practicing appreciation, feedback culture, and providing opportunities for constructive criticism as well as individual and group coaching. In cooperation with a health insurance company, various health offers were revived, such as nutrition days, back training, stress management training and even health check-ups, thus further intensifying corporate health management.

KUKA offers a wide range of sports activities. In Germany, for example, this includes participation in the Augsburg Corporate Challenge Run, which was held in a hybrid form in 2022. KUKA was able to take part via an app and win a number of first places.





# Social engagement

KUKA operates in an innovative industry that has a major impact not only on the manufacturing industry, but also on society, our daily lives and the world of work. This is why we promote education and research and are particularly committed to supporting children and young people. We focus our engagement on the locations of our business activities and, in doing so, also consciously establish regional networks. Recognizing the opportunities and risks for our own business, we also aim to heighten the public's understanding of robotics and present possible solutions to a range of challenges confronting society today.

▶ Our commitment to society

## Our commitment to society

KUKA is a future-oriented company with a sense of social responsibility. With its commitment to socially appropriate initiatives and projects, KUKA also wants to contribute to the implementation of the United Nations Sustainable Development Goals (SDGs). The main focus here is on targets SDG 4.7 and 12.8, which address the promotion of sustainable development through information and education. Beyond this, there are targets relevant to climate change mitigation, SDG 13.2 (Integrate climate change measures into strategies and planning) and 13.3 (Improve education and awareness for climate change mitigation and adaptation).

In the communities near our sites, the non-profit association Orange Care e. V. founded by KUKA employees supports social and charitable causes. In particular, the association is concerned with helping needy children and families, and supporting working parents in balancing family and career. Orange Care frequently supports local projects or ones that can be attributed to the dedication of our employees.

### Support for children, young people and families

Since 2013, Orange Care has also been running a daycare center that makes it easier for families from Augsburg to combine work and family life. Due to the coronavirus pandemic, maintaining regular operations was again a challenge in 2022 – one that was overcome, however. Investments were made, among other things, in the maintenance of the outdoor facilities in the year under review. This included, for example, the replacement of play sand and play equipment as well as the planting of a new herb bed.

Beyond this, Orange Care is committed to helping people who have fallen on hard times through no fault of their own, supporting people with disabilities and offering perspectives to socially disadvantaged young people. One of the social initiatives supported is Kinderweihnachtswunsch e. V. (Christmas wish association for children). The association supports children and young people who live in and are cared for by social institutions in the Augsburg area. Thanks to donations through the association, Orange Care was able to fulfill group wishes.

With its project partners #AuxhelpsUkraine and Nadiya, Orange Care also launched a relief campaign called “Care4U” in 2022. As part of the campaign, relief supplies

such as food, medical products and drugstore items are regularly brought in trucks from Augsburg to the eastern border of Slovakia. A well-coordinated team from the Nadiya volunteer aid project then takes over the transport to the Ukrainian cities where the goods are most urgently needed. With this, a network has been established that provides long-term, targeted assistance. Furthermore, the association supported the family of a deceased KUKA employee.



**SDG 4.7:**  
Promotion of sustainable development through information and educational measures



**SDG 12.8:**  
Provide information and create awareness



**SDG 13.2:**  
Integrate climate change measures into policy and planning

**SDG 13.3:**  
Improve education and awareness to mitigate or adapt to climate change

## » Systems North America and KUKA U.S. Holdings Company awarded 24 scholarships to various relatives of our employees in 2022. «

### DIVERSE ENGAGEMENT FOR REFUGEES FROM UKRAINE

Since the beginning of the Russian war of aggression on Ukraine, KUKAns have been involved in many ways to help the people in and from Ukraine. As a company, KUKA offers Ukrainian guest apprentices insights into the manufacturing industry at its education center. Furthermore, some refugees from Ukraine have been able to find a job in robot production. KUKA and the City of Augsburg's coordination office continue to work closely together to provide war refugees with prospects in Germany.

### Activities at US sites

Beyond the Orange Care program in Germany, KUKA employees worldwide are committed to social causes. Employees in the USA, for example, support the KUKACARES Foundation. This is a non-profit organization (under Section 501(c)(3) of the US Internal Revenue Code) established by KUKA Systems North America and KUKA U.S. Holdings Company in conjunction with eight suppliers. Through events such as charity dinners and golf tournaments, funds are raised for individuals and families who are facing particular challenges or difficult situations. The recipients can be nominated via the [foundation website](#). Targeted campaigns are also initiated during the Christmas season to support those in need at a time of year that is difficult for many people.

In early fall, the KUKACARES Foundation Charity Golf Event was held to raise funds for the Foundation. Additionally, KUKACARES hosted a Wild Game Charity Dinner. A total of USD 175,000 in donations was raised during the year under review. The KUKACARES Foundation is active in many areas in the Detroit metropolitan region – from veterans memorials over installing medical play equipment to providing a dream vacation for children with cancer.

KUKACARES was founded with the aim of providing social support to our employees and their families. This commitment has meanwhile developed into a comprehensive program for the community. Internally, KUKA

Systems North America and KUKA U.S. Holdings Company awarded 24 scholarships to various relatives of our employees in 2022. In addition to academic achievement, all scholarship recipients were involved in a variety of community activities, demonstrating initiative, passion, integrity, and adaptability. A total of 250 scholarships have been funded since the program was initiated 20 years ago.

Since 2021, KUKA USA has participated in “National Care for Your Coworker Day”. This acknowledged that it has only been possible to meet pandemic-related challenges because of employee support for one another. This has developed an annual event where the stories of employees and their families have become more widely appreciated.

Other events that could be held (again) in 2022 were the Family Summer Picnic, the Farm'tastic Family Fun Day, the Family Baseball Night, the College Football Spirit Day, the Employee Golf Outing, the Christmas Card Design Contest and the Toys for Tots Campaign.

### Social campaigns at our Hungarian locations

At our sites in Budapest, a Christmas party was organized at an elementary school, where around seventy children with disabilities joyfully awaited the arrival of Father Christmas and his helpers. In two Szeghalom kindergartens, our volunteers worked on the renovation and

maintenance of the yards and also collected donations in the form of clothing and toys for the children. Furthermore, there was a waste collection campaign at the location in Budapest, as well as a planting campaign in Taksony for Earth Day.

At several KUKA locations, employees also collected and donated boxes of Christmas presents for needy children.

### Bringing robotics and automation closer to the public

As every year, KUKA again participated in November 2022 in the European Robotics Week initiated by the European robotics association euRobotics. During this week of events, KUKA employees have the opportunity to get involved in raising awareness of robotics and automation in the general public. Another aim is to arouse the interest of young people in technology and scientific subjects.

In the year under review, KUKA again offered a varied program under the motto “You and I experiencing robots together”, including an art competition and a robotics lecture for children at the Augsburg Planetarium on the topic of “Humans and machines on Mars – what robotics can do in space”. Young people were also able to take a look at production at KUKA during a digital tour of the plant. In a virtual lecture, education robotics experts playfully illustrated the areas in which the world of industrial robots is already part of the school curriculum and why robot programming could one day be as normal as math or German.

In 2022, once again, a number of KUKA employees visited schools and institutions for children. In this way, they were able to introduce the children to the topic of robotics in an age-appropriate presentation and hand out giveaways.

In Germany, KUKA has been a sponsor of the Herrenberg-Gäu Aerospace Lab e. V. youth research center for many years now. The aim of this non-profit association is to familiarize children more with applied robotics and programming at an early age. This way, the children are introduced to technical topics and research by means of long-term and individual support in group work for STEM subjects. In addition to this, following a break due to the pandemic, a Girls’ Day was once again held at the Augsburg location’s education center in the year under review, in which twelve girls participated. Various stations offered insight into mechanics, electronics, control technology and working with robots. The girls were able to assemble components, plug together installation circuits, set up pneumatic systems or even program a robot.

Furthermore, a “Female Researchers Camp” for female students interested in technology was held in November 2022 in cooperation with the Bildungswerke Bayerische Wirtschaft and the HDBW University of Applied Sciences and Management. Ten participants were able to spend a week working on a task set by KUKA. KUKA supported the participants in their project with lectures, a plant tour and an explanation of robotic cells. They were able to develop and implement their ideas by means of independent programming on the robot as well as a 3D printer. The initiative creates points of contact between the young female researchers and technical professions.

In the year under review, KUKA also sponsored the international start-up competition “Robotics for Good Innovation Factory” with prize money of \$20,000. The competition is organized by the United Nations, which promotes collaborative AI solutions through its Artificial Intelligence (AI) for Good platform in order to push ahead with the SDGs. In addition to the prize money, KUKA supports the competition through its participation in the jury. This competition is still running until the beginning of July 2023.

### Innovation Award for medical technology

With the KUKA Innovation Award, we raise awareness of innovation through automation and robotics in new fields of activity. The prize has been awarded since 2014 and is endowed with € 20,000. In the year under review, the Innovation Award revolved around the fields of health and medicine and was presented at MEDICA 2022. The Danish start-up ROPCA convinced the jury with its robotics application in hospitals. The ARTHUR platform can automate arthritis ultrasound examinations for patients. Here, artificial intelligence ensures high consistency and quality of the ultrasound images.





# Appendix

The standards of the Global Reporting Initiative (GRI) support companies in disclosing their sustainability performance in a transparent and comprehensible manner. This serves to fulfill the information needs and requirements of a wide range of stakeholder groups, including customers, suppliers, policymakers, capital markets and the general public.

- ▶ GRI Content Index
- ▶ Imprint and contact

## GRI Content Index

<b>Declaration of use</b>	KUKA AG reports on the 2022 fiscal year in accordance with the GRI standards.
<b>GRI used</b>	GRI 1: Foundation 2021
<b>Applicable GRI sector standard(s)</b>	None

<b>GRI Standards</b>	<b>Page</b>	<b>Response/Comment</b>
<b>General Disclosures</b>		
<b>GRI 2: General Disclosures 2021</b>		
<b>1. The organization and its reporting practices</b>		
2-1 Organizational details	7–11	
2-2 Entities included in the organization's sustainability reporting	5	
2-3 Reporting period, frequency and contact point	5	
2-4 Restatements of information		In 2022, KUKA expanded the scope of reporting to include additional locations. Additional production sites and offices were integrated in the data collection across all segments. The data reported in 2021 was adjusted accordingly.
2-5 External assurance		There was no external assurance on the information in this report.
<b>2. Activities and employees</b>		
2-6 Activities, value chain and other business relationships	7–11, 41–43	
2-7 Employees	52–53	
2-8 Workers who are not employees	49, 52	
<b>3. Governance</b>		
2-9 Governance structure and composition	12, 13	Report of the Supervisory Board as well as our <a href="#">website</a>
2-10 Nomination and selection of the highest governance body	12	

GRI Standards	Page	Response/Comment
2-11 Chair of the highest governance body	12	
2-12 Role of the highest governance body in overseeing the management of impacts	12–13, 15	Report of the Supervisory Board as well as our <a href="#">website</a>
2-13 Delegation of responsibility for managing impacts	12 – 13, 15, 19, 26, 43	
2-14 Role of the highest governance body in sustainability reporting	13, 15	
2-15 Conflicts of interest		No reporting
2-16 Communication of critical concerns	19 – 21	
2-17 Collective knowledge of the highest governance body		Report of the Supervisory Board as well as our <a href="#">website</a>
2-18 Evaluation of the performance of the highest governance body	12	For reasons of confidentiality, KUKA does not disclose information on the salaries of its Management Board members.
2-19 Remuneration policies	12	
2-20 Process to determine remuneration	12	
2-21 Annual total compensation ratio		For reasons of confidentiality, KUKA does not disclose information on the salaries of its employees.
<b>4. Strategy, policies and procedures</b>		
2-22 Statement on sustainable development strategy	5	
2-23 Policy commitments	18 – 20, 38, 42 – 43	
2-24 Embedding policy commitments	19 – 23, 42 – 47	
2-25 Processes to remediate negative impacts	21, 42	
2-26 Mechanisms for seeking advice and raising concerns	19 – 21	
2-27 Compliance with laws and regulations	18 – 24	No such incidents were reported in the year under review.
2-28 Membership associations	14, 27, 36, 38, 39	
<b>5. Stakeholder engagement</b>		
2-29 Approach to stakeholder engagement	14 – 16	
2-30 Collective bargaining agreements	49	

GRI Standards	Page	Response/Comment
<b>Material Topics</b>		
<b>GRI 3: Material Topics 2021</b>		
3-1 Process to determine material topics	15 – 17	
3-2 List of material topics	17	
<b>Climate protection and climate risks</b>		
3-3 Management of material topics	26 – 31	
<b>GRI 302 Energy 2016</b>		
302-1 Energy consumption within the organization	29	
<b>GRI 305 Emissions 2016</b>		
305-1 Direct (Scope 1) GHG emissions	29	
305-2 Energy indirect (Scope 2) GHG emissions	29	
305-5 Reduction of GHG emissions	28 – 31	
<b>Efficient and responsible products and solutions</b>		
3-3 Management of material topics	22 – 23, 33 – 37, 40	
<b>GRI 302 Energy 2016</b>		
302-5 Reductions in energy requirements of products and services	33 – 35	
<b>GRI 416 Customer Health and Safety 2016</b>		
416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	22	In 2022 there were no legal proceedings with fines for breach of customer safety.
<b>GRI 417 Marketing and Labeling 2016</b>		
417-1 Requirements for product and service information and labeling	22 – 23	
<b>GRI 418 Customer Privacy 2016</b>		
418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	40	
<b>Employee responsibility and development</b>		

GRI Standards	Page	Response/Comment
<b>3-3 Management of material topics</b>	12, 22, 23, 49 – 55, 59, 60	
<b>GRI 401 Employment 2016</b>		
<b>401-1</b> New employee hires and employee turnover	53	We do not report on new hires by age group and gender at a global level, as these data are not relevant for controlling purposes.
<b>GRI 402 Labor/Management Relations 2016</b>		
<b>402-1</b> Minimum notice periods regarding operational changes		KUKA complies with the applicable legal requirements with regard to notice periods.
<b>GRI 403 Occupational Health and Safety 2018</b>		
<b>403-1</b> Occupational health and safety management system	59	
<b>403-2</b> Hazard identification, risk assessment, and incident investigation	59, 60	
<b>403-3</b> Occupational health services	59, 60	
<b>403-4</b> Worker participation, consultation, and communication on occupational health and safety	59	
<b>403-5</b> Worker training on occupational health and safety	59	
<b>403-6</b> Promotion of worker health	60	
<b>403-7</b> Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	22, 23, 59, 60	
<b>403-8</b> Workers covered by an occupational health and safety management system	59	
<b>403-9</b> Work-related injuries	60	
<b>GRI 404 Training and Education 2016</b>		
<b>404-2</b> Programs for upgrading employee skills and transition assistance programs	54, 55	
<b>GRI 405 Diversity and Equal Opportunity 2016</b>		
<b>405-1</b> Diversity of governance bodies and employees	12, 52, 53, 57, 58	With regard to corresponding disclosures for the Supervisory Board, see <a href="#">Corporate Governance Statement</a>

GRI Standards	Page	Response/Comment
<b>Responsible procurement</b>		
<b>3-3</b> Management of material topics	30, 42 – 47	
<b>GRI 204 Procurement Practices 2016</b>		
<b>204-1</b> Proportion of spending on local suppliers	45	We do not record the proportion of procurement spending on local suppliers at a global level, as the effort involved in obtaining the information is not reasonably proportionate to its value.
<b>GRI 303 Water and Effluents 2018</b>		
<b>303-1</b> Interactions with water as a shared resource	26, 30	
<b>303-2</b> Management of water discharge-related impacts	30	
<b>303-3</b> Water withdrawal	30	
<b>GRI 306 Waste 2020</b>		
<b>306-1</b> Waste generation and significant waste-related impacts	26, 30	
<b>306-2</b> Management of significant waste-related impacts	26, 30	
<b>306-3</b> Waste generated	30	
<b>GRI 308 Supplier Environmental Assessment 2016</b>		
<b>308-1</b> New suppliers that were screened using environmental criteria	46, 47	
<b>308-2</b> Negative environmental impacts in the supply chain and actions taken	46, 47	
<b>GRI 407 Freedom of Association and Collective Bargaining 2016</b>		
<b>407-1</b> Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	42 – 47	KUKA recognizes the right to freedom of association and assembly at its own locations and expects the same from its suppliers. The expectations on suppliers are described in the <a href="#">Code of Conduct for Business Partners</a> . Further information can be found on our <a href="#">website</a> .
<b>GRI 408 Child Labor 2016</b>		
<b>408-1</b> Operations and suppliers at significant risk for incidents of child labor	42 – 47	

GRI Standards	Page	Response/Comment
<b>GRI 409 Forced or Compulsory Labor 2016</b>		
409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	42 – 47	
<b>GRI 414 Supplier Social Assessment 2016</b>		
414-1 New suppliers that were screened using social criteria	46, 47	
<b>Good Corporate Governance</b>		
3-3 Management of material topics	19 – 21	
<b>205 Anti-corruption 2016</b>		
205-2 Communication and training about anti-corruption policies and procedures	20	We do not collect quantitative data on training measures conducted, as the effort involved in obtaining the information is not reasonably proportionate to its value.
<b>GRI 206 Anti-competitive Behavior 2016</b>		
206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	19	There were no legal actions in the period under review.
<b>Additionally reported topics</b>		
<b>GRI 413 Local Communities 2016</b>		
3-3 Management of material topics	62	
413-1 Operations with local community engagement, impact assessments, and development programs	62 – 64	

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### **Forward-looking statements**

The Sustainability Report contains forward-looking statements on expected developments. These statements are based on current assessments and are naturally subject to risks and uncertainties. Actual results may differ from these statements.

As part of the preparations for the CSRD (Corporate Sustainability Reporting Directive), further global locations will be gradually integrated into the scope of reporting.

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