

KUKA



Smart & Responsible
Sustainability Report 2020

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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 and shareholders as well as analysts and investors, suppliers, 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 “Core” option of the GRI standards. In preparation for this, we validated the key sustainability topics for KUKA in an updated materiality analysis.

According to the amended sections 289b et seq. of the German Commercial Code [HGB] (CSR Directive Implementation Act/CSR-RUG), publicly traded companies in Germany are obliged to publish a non-financial statement or a separate non-financial Group report. KUKA is complying with this obligation in the non-financial report within this document. The non-financial report can be identified by

the dark gray background of the pages and the “non-financial report” label. The non-financial report was submitted to KUKA AG's Supervisory Board for examination and was approved.

The reporting period corresponds to the 2020 financial 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 2021. In the future, it will continue to be published annually in April.

» Position the company for the future «

KUKA CEO Peter Mohnen and CFO Andreas Pabst on sustainability in difficult times

Coronavirus pandemic, economic crisis, lockdown: does a CEO even have time to think about sustainability in this exceptional situation?

Peter Mohnen: Sustainability is very present at KUKA and I regard it as one of the most important topics for our future. When we are working on innovations, analyzing our figures or developing strategies, it is always a question of how we can position the company for the future – especially in times of crisis like these.

The coronavirus pandemic has driven digitalization forward enormously in almost all areas of business. As a technology group, we are naturally helping to shape this development. The virus and its effects have posed unprecedented challenges for us, but even without this crisis, the economy has been undergoing a phase of upheaval. This can be seen particularly clearly in the automotive industry, one of our most important markets. Here we are supporting our customers in the transition to new drive technologies. Because for us it is clear: sustainability is a relentless and important development.



Mr. Pabst, as CFO, you had your eye on KUKA's revenues and investments in a challenging year. The general conditions were not exactly encouraging at first.

Andreas Pabst: It is no secret that our industry has suffered heavily from the coronavirus crisis. The economy temporarily came to a standstill in 2020, and entire factories were closed. Customers exercise caution in such situations and also hold back on investments. As a supplier of capital equipment, we are naturally greatly

affected by this reticence. The pandemic has thus heavily impacted our figures. For this reason, we have enhanced our efficiency and worked on our structures in order to position KUKA sustainably for the future. The emphasis here is on sustainability: we are committed to investing in KUKA's future even in difficult economic times, such as in a new education center to prepare apprentices and employees for the work of tomorrow – or in the new district heating pipeline at the Augsburg site, which supplies us with green energy from a regional supplier.

» Virtual solutions can keep production and the economy running globally. «

Moreover, sustainable management allows us to save materials, conserve resources and reduce both costs and emissions. However, our innovations also help our customers to cut their energy costs. In this way, our new products reduce costs and lower energy consumption. Our latest robot generations, for example, are characterized by particularly high energy efficiency.

We have talked about the effects of the coronavirus pandemic and the technological transformation in the automotive industry. What does this shake-up mean for KUKA's future?

Peter Mohnen: COVID-19 and technological transformation pose challenges for the entire industry – including KUKA. But automation and robotics will play an increasingly important role. We see the industries that are increasingly coming into focus: an overburdened health-care system or goods logistics in the busy online retail sector are areas in which we can provide support with our solutions. And an automated, digitalized production system is reliable, efficient and resistant to viruses. All this will increase the demand for automation solutions.

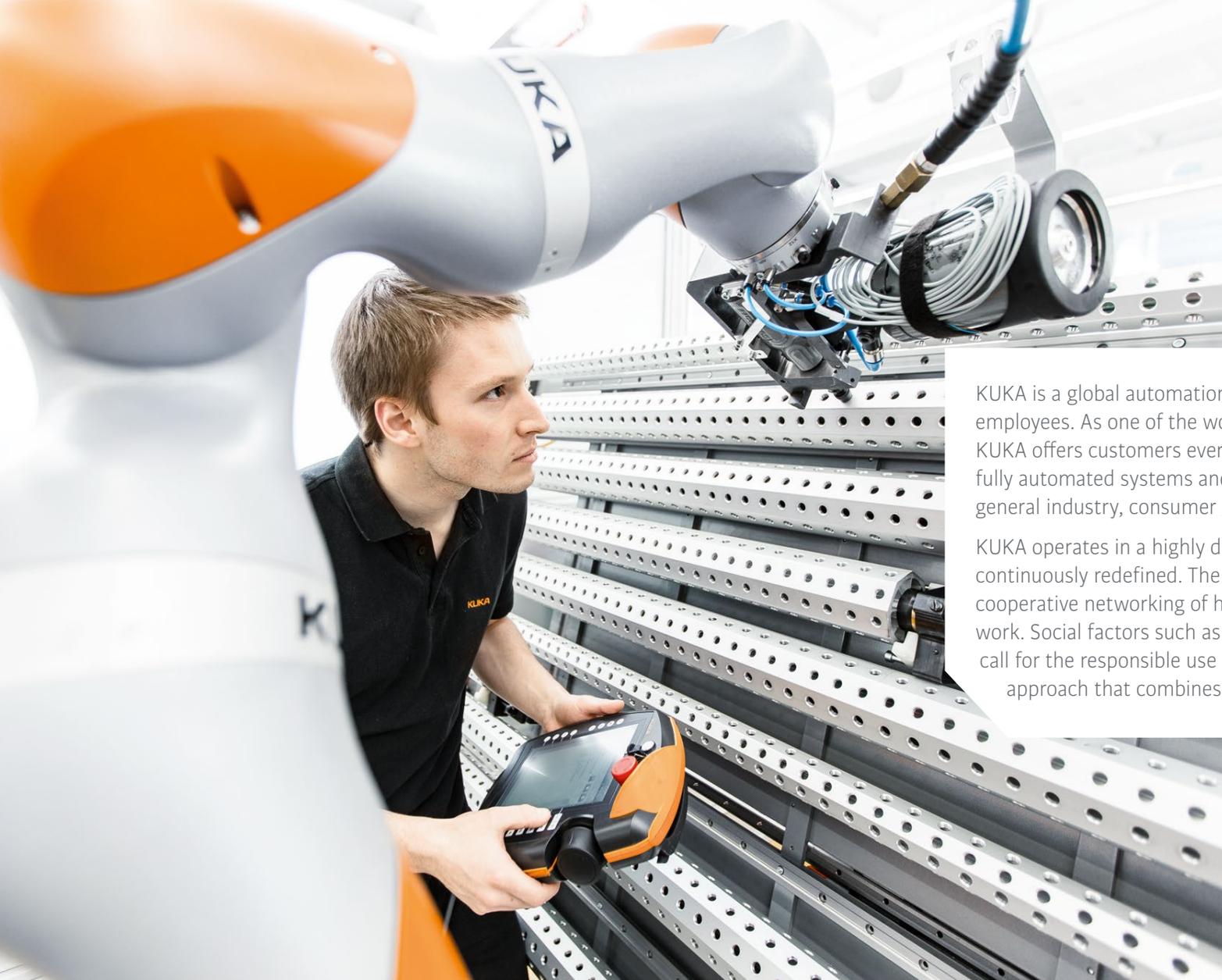
This development will take time, however. We will probably not be back to the same levels as 2019 for another two years. I anticipate that our customers will reduce their investment backlog in the coming years and that there will be increased demand for such solutions.

The motto of this year's KUKA Sustainability Report is "Globally networked". What does this mean to you?

Andreas Pabst: KUKA has strong regional roots and is active in more than 40 countries around the world. Our international organization is a major key to our success. Global activity also involves great responsibility, however. It is this challenge and the search for the most sustainable solution that we aim to address in this year's report.

Peter Mohnen: The coronavirus crisis has brought home just how vulnerable our globally networked world is – and at the same time it has also shown us the opportunities of automation and digitalization: robotics can ease burdens and support employees in dangerous or systemically important areas. Virtual solutions can keep production and the economy running globally. And if the post-pandemic trend is towards more regional supply chains,

automation will be virtually indispensable. In short, automation will come out of this crisis as a winner. Not immediately, of course – but in the medium term.



Company and strategy

KUKA is a global automation corporation with sales of around 2.6 billion euro and 13,700 employees. As one of the world's leading suppliers of intelligent automation solutions, KUKA offers customers everything they need from a single source: from robots and cells to fully automated systems and their networking in markets such as automotive, electronics, general industry, consumer goods, e-commerce/retail and healthcare.

KUKA operates in a highly dynamic, innovation-driven market environment, which is being continuously redefined. The increasing digitalization of production and logistics, and the cooperative networking of humans and machines are fundamentally changing the world of work. Social factors such as these, as well as the ecological threat posed by climate change, call for the responsible use of resources. KUKA is facing up to these challenges with an approach that combines ethics and efficiency.

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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 2020, KUKA generated revenues of 2.6 billion euro (2019: 3.2 billion euro) with 13,700 employees (2019: 14,000). The global technology corporation operates in more than 40 countries in Europe, the Americas and Asia.

2.6

billion euro revenue in 2020



13,700
employees

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, turnkey 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.

Industry 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.

Corporate structure

The organizational structure comprises five divisions: 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 activities of the divisions are operationally coordinated by the respective managers, who in turn report to the Executive Board. With the exception of the China business segment, the segments operate globally and are supported by their local establishments and regional subsidiaries in both their sales efforts and their assembly and field service work.

KUKA Systems

In an age of e-mobility, intelligent vehicles and entirely new services, the automotive industry is undergoing changes in all areas – from development and production to logistics. The Systems division is a reliable partner for the automotive sector in the fields of robotics, automation and intralogistics. With adaptable, modular and automated manufacturing and logistics processes, we are laying the groundwork for long-term success in the automotive industry. We have been the strategic partner of major manufacturers worldwide for decades and are already working with our customers today on flexible, scalable concepts and solutions for the factory of tomorrow. As a pioneer in hardware and software solutions, we are providing the crucial impulses for transforming the vision of Industry 4.0 into corporate reality. From engineering and testing to servicing, our expertise serves a single purpose: to give our customers a decisive edge at all times. Driven by this commitment, we repeatedly set new global standards. The Systems portfolio covers the entire value chain of a system: from individual system components, tools and fixtures to complete turnkey systems.



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

The core component for automating production processes is supplied by the Robotics division: industrial, collaborative and mobile robots – together with robot controllers, software and digital services for the Industrial Internet of Things. The broad product portfolio – ranging from traditional 6-axis robots to 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, counteract demographic change.



Swisslog

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, this division 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 ensure that the competitiveness of its customers in the logistics sector is sustainably improved. 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

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 and pharmacists can gain

more time for personal care and consultation. At the same time, the use of automation solutions can reduce the incidence of medication errors.



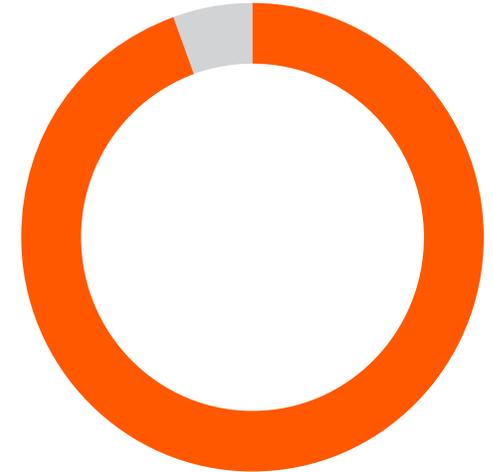


China

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 healthcare systems are developed, offered and marketed in China. Industrial robots are manufactured at the locations in Shanghai and Shunde and sold on the Chinese market. Furthermore, new robot models, such as the SCARA robot, are developed in China.

Shareholders

At the end of 2020, KUKA AG had a market capitalization of around 1.6 billion euro (2019: 1.5 billion euro). Shares are held by both institutional and private investors. At the end of 2020 – as in the previous year – 94.6 percent of the shares were held by Midea Group and 5.4 percent by other institutional and private investors.



Focus markets

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

Automotive/Tier 1

The automotive industry has always been of great significance for KUKA. It is a very important driver of technology and innovation. The automotive segment accounts for the largest share of sales revenues. KUKA will continue to grow around the world with its automotive customers and support them as a partner in automation, digitalization and electrification.

General Industry

Probably the greatest advantage of robot-based automation is its high flexibility. Robots are not only used for handling and welding tasks, but also find a diverse spectrum of applications in different markets due to their wide-ranging functionalities. This opens up new growth opportunities while simultaneously reducing dependence on a specific industry. General industry markets, in other words non-automotive markets, include, for example, the metal and plastics industries, the construction sector and also the aerospace industry.

Electronics

The electronics industry is one of the most diverse sectors in the present-day industrial landscape. It encompasses the production of electrical household appliances, cutting-edge technologies such as semi-conductors, solar cells, precision medical equipment and electronic automotive and aerospace components as well as industrial electronics. The most important submarket with the highest revenues is the 3C market (computers, communications and consumer electronics). In the electronics industry, we are expecting great demand for automation and a significant rise in the number of new robots deployed in the coming years.

E-Commerce/Retail

Electronic commerce results in large quantities of varied goods being sent to consumers via goods distribution centers. Fast and correct order fulfillment is crucial for profitable operations and can only be achieved in the long term through automation. The e-commerce segment is therefore an important sales market for smart logistics concepts based on intelligent software combined with innovative, robot-based and data-driven automation.

Consumer Goods

Robots have been efficiently supporting the production of fast-moving consumer goods (FMCG) for many years, especially in the food and beverage industry, but also in footwear or textile production, cosmetics and pharmaceuticals. New generations of robots that are sensitive and mobile, and thus able to work hand in hand with humans, supported by the software at the heart of every system, are opening up new applications along the process chain.

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, as well as the resulting shortage of skilled workers and the increasing cost awareness of healthcare facilities, are creating a need for new solutions. The automated supply of medication can be part of the solution to the challenges in the healthcare sector: after all, 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.

KUKA Medical Robotics offers a comprehensive portfolio of robotic components for integration into medical technology products: KUKA robots are used in applications ranging from X-ray imaging and radiation therapy to patient positioning and robot-based assistance systems for surgical procedures in operating rooms, or as a supporting partner 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 an Executive Board and a Supervisory Board. The members of the Executive 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 Executive Board of KUKA AG consists of the Chief Executive Officer (CEO) Peter Mohnen and the Chief Financial Officer (CFO) Andreas Pabst. For information on the compensation of the Executive Board, please refer to the Annual Report 2020, starting on page 48.

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 2020. The ratio of women on this board is

thus 33 percent. The Supervisory Board is elected every five years, the next elections being scheduled for 2023. The responsibilities of the Supervisory Board include the appointment of members of the Executive 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 Executive Board regularly inform themselves about key topics. The compensation of the Supervisory Board is also outlined by KUKA in the Annual Report on page 53.

The Supervisory Board has formed five committees. An overview of them is provided on page 12 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. An explanation of the diversity concept is published in the [Corporate Governance Statement](#).

In terms of corporate governance, KUKA strictly adheres to the guidelines of the German Corporate Governance Code. The objective is to continuously enhance the trust in corporate governance by combining sustainable corporate control 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 in the company monitor and analyze these changes in terms of how our business activities impact the corresponding issues and, conversely, how external trends impact KUKA. We also monitor changes in the legal framework that affect sustainability factors so that we can respond with appropriate measures as required. Accordingly, sustainability management is carried out by, for example, Facility Management, Procurement, Human Resources or other divisions depending on the issue. At Group level, the Corporate Social Responsibility department works with the various divisions to formulate, among other things, Group-wide goals and strategies. The aim is to identify opportunities and risks at an early stage in order to develop appropriate measures. The department reports to the CFO within the scope of management reviews.



SDG 12.2: Sustainable management and efficient use of natural resources



Like many industrial companies, we face global challenges. By acting sustainably and responsibly, we are pursuing the vision of helping to shape the future-proof and efficient industrial production of tomorrow. We therefore place great importance on energy-efficient products and solutions, conserve resources and reduce emissions. In this way, we support our customers so that they, too, can operate in an environmentally-friendly and sustainable manner. For KUKA, sustainability is a decisive success factor.



Kerstin Heinrich, Head of Investor Relations & CSR



The Sustainability Report with integrated non-financial report pursuant to the CSR Directive Implementation Act is prepared on behalf of the Executive Board and approved at an Executive Board meeting. After a preliminary review of the non-financial report by the Audit Committee of the Supervisory Board, the final review is carried out by the Supervisory Board.

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 investors and shareholders as well as 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, for example through implementing technical innovations in industrial production within the scope of joint projects. Purchasing is the point of contact for suppliers, HR for employees, and the Press department for media representatives. The Investor Relations department is in direct contact with investors and analysts. Sustainability rating agencies are served by the Management Systems department. Since 2008, KUKA has regularly participated in the [CDP](#) (formerly Carbon Disclosure Project), which analyzes information

relating to climate risks from a financial perspective. In 2020, KUKA's rating improved from D- to C in the Climate Change category and from D to C in the Water Security category.

The allocation of added value in KUKA Group to the key stakeholders may be noted from the Annual Report.

International cooperation

KUKA is also engaged in numerous organizations and initiatives, in many cases playing an active role in various working groups. Within the German Mechanical Engineering Association (VDMA), for example, these include the Corporate Responsibility and Public Relations working groups, the project group for an industry initiative relating to the National Action Plan on Business and Human Rights (NAP) and the Robotics + Automation association.

KUKA is also active in various OPC UA (Open Platform Communications – Unified Architecture) working groups. OPC UA offers the technologies required for achieving the goal of networking in factory and process automation, as envisaged in the concept of Industry 4.0. Together with

» Communicating openly with its stakeholders is important to KUKA, because this forms the basis for mutual understanding and acceptance of the business decisions. «

other companies, KUKA is working on standards that will form the basis for unified global communication between devices and machines in the future. It is useful and necessary to help shape such future international standards, firstly because Germany is one of the world's leading markets in the field of mechanical engineering and the manufacture of automation components, and secondly in order to secure Germany's viability as an industrial location. Furthermore, KUKA is also a member of EUnited (European Engineering Industries Association), euRobotics, the International Federation of Robotics (IFR) and the Robotic Industries Association (RIA).

Significant risks and effects

Risk management

The Executive Board has implemented a comprehensive corporate risk management system to systematically and continuously identify, evaluate, manage, monitor and report the internal and external risks to which its divisions and subsidiaries are exposed.

Identified risks – including risks arising from sustainability issues – are assessed throughout the Group according to their potential impact on the company’s business development and the achievement of corporate targets (such as revenues and EBIT). This also applies to changes in the legal framework that influence sustainability factors. The analysis is performed qualitatively and, if possible, quantitatively, taking into account the probability of occurrence. The risk management system is subject to a monthly reporting process (risk inventory) which involves identifying new risks and carrying out a follow-up assessment of existing risks. The information collected in this way is summarized in a monthly risk report to the Executive Board.

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

Impact on the economy, environment and society

KUKA’s products and solutions make an important contribution to the economic growth, technological progress and improved working conditions of its customers. For this reason, KUKA considers itself to be 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 always observed. KUKA takes this responsibility seriously and is also aware of any negative effects that may be associated with its own actions and which could have consequences for the economy, environment and society as well as for the company and its employees if they do occur.

Material sustainability topics

Sustainability stands for the consideration of economic, ecological, and social or societal aspects. In order to be able to reconcile this with a corporate strategy, the topics relevant to our industry and to us as a company must be identified. In this context, we also take into account the demands placed on us from outside the company.

Since 2017, KUKA has regularly and systematically analyzed material topics for sustainability management. In the first few years, we dealt with a list of 13 topics incorporating the requirements of the [GRI Standards](#) and the German CSR Directive Implementation Act (CSR-RUG). In 2020, after much prior discussion, we merged some of these topics together, so that the list now only consists of ten material topics (see following page).

In the Sustainability Report 2019, we dealt intensively with the [Sustainable Development Goals \(SDGs\)](#) of the United Nations and how they relate to the topics we had identified. The “SDG spotlights” presented in the report remain an accurate reflection of our opportunity/risk assessment. In the current Sustainability Report 2020, we have decided on a different form of presentation in which the KUKA managers responsible explain their view of the SDGs (at target level).

Materiality analysis

In the revision of the material topics in 2020, we have reorganized three topics: “Leadership and values” and “Diversity” have now been merged to form the topic “Attractive employer”. The new topic “Employee responsibility” now stands for “Training and education”, “Employment” and “Occupational health and safety”. The former topic “Anti-corruption and fair competition” has been renamed “Compliance”. The scope and designation of the other material topics remain unchanged from previous years.

Results of the materiality analysis

Material topics	Concerns according to CSR Directive Implementation Act	Material impacts internal and external to the company	GRI Standards
Digitalization and automation	Social concerns	Internal and external	GRI 203 Indirect economic impacts GRI 418 Customer privacy
Employee responsibility	Employee concerns	Internal	GRI 401 Employment GRI 403 Occupational health and safety GRI 404 Training and education
Product safety	Social concerns	External	GRI 416 Customer health and safety GRI 417 Marketing and labeling
Attractive employer	Employee concerns	Internal	GRI 402 Labor/Management relations GRI 405 Diversity and equal opportunity
Procurement	(not material)	Internal and external	GRI 204 Procurement practices GRI 308 Supplier environmental assessment GRI 414 Supplier social assessment
Compliance	Anti-corruption	Internal	GRI 205 Anti-corruption GRI 206 Anti-competitive Behavior
Human rights	Human rights	External	GRI 407 Freedom of association and collective bargaining GRI 408 Child labor GRI 409 Forced or compulsory labor
Sustainable and efficient products	Environmental concerns	External	GRI 302 Energy
Resource-saving production	(not material)	Internal	GRI 302 Energy GRI 303 Water and effluents GRI 306 Effluents and waste GRI 307 Environmental compliance
Social engagement	(not material)	External	GRI 413 Local communities



Compliance

With a compliance program, KUKA provides binding rules to ensure that all employees comply with the law and follow our self-imposed rules. Our compliance structure ensures the highest possible level of protection, based on fundamental ethical standards and maintaining our economic values. This also applies to product safety. It is our goal for no user to be harmed by our products, neither in terms of health nor through gaps in data protection laws. We thus create a safe and secure environment for customers, employees and our company.

- › Corporate compliance as a foundation
- › Guidelines for product safety

Anti-corruption and bribery code

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 rules. They are included in our Corporate Compliance Program and thus an integral part of our daily business decisions. Our core values are:

- » Respect for ethical principles as a core element of business
- » Compliance with applicable laws and regulations as well as our core values and internal guidelines
- » Maintaining a working environment characterized by good cooperation and ensuring equal treatment of all employees
- » Transparency in decision-making processes and maintaining a high level of integrity
- » Ensuring the health and safety of employees in the workplace

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. It includes not participating in price fixing and other anti-competitive practices.

Compliance structure

The Compliance department falls within the remit of the CEO of KUKA Aktiengesellschaft. The Chief Compliance Officer is responsible for the compliance program and its operational implementation. Moreover, the senior executive levels are involved in the operational implementation as part of their leadership responsibility; this responsibility devolves to all management levels. In order to implement compliance together with all employees and external partners, we apply various processes and measures. All of this forms our Compliance Management System (CMS). It is included in the Corporate Compliance Manual, which was revised in March 2020.

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 Compliance Management System (CMS) – is laid out in our [Corporate Compliance Manual](#). It also contains the most important points of contact as well as the 16 Group guidelines which establish the rules of conduct, cooperation and 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 required to adapt it to current requirements. In 2020, for example, we updated the “IT Systems and Data Protection” Group policy and began revising other Group policies. In the year under review, we also drew up a code of conduct for suppliers, which provides binding rules for their obligations in dealing with environmental protection as well as labor and human rights.

Another foundation for the CMS 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 instruct employees about compliance, training measures have been made 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. Participation in “Corporate Compliance” e-learning is mandatory for all employees and is confirmed with a certificate after successful completion. New employees are invited to participate in 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 2020, development of a new Compliance Risk Map module was completed at KUKA, which will be rolled out from 2021 onwards. In addition, the focus was on the first steps of a complete revision and redesign of the e-learning program.

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

In order to sensitize new employees to compliance as soon as they join the company, the topic is presented during the so-called Onboarding Days at selected locations.

Proven communication channels

It is important to us that employees can report suspected compliance violations without fear of negative consequences. If a violation is suspected, employees have various communication channels at their disposal. They may report concerns to their manager, the HR department or Compliance Officers who are deployed on-site and regionally. If an employee chooses to make an anonymous report, the suspected violation may be disclosed to the ombudsman, who has no position in the company and is therefore independent. The ombudsman forwards the issues to the Compliance Officer, in anonymous form if so desired. The communication channels which are currently in place also proved effective in 2020. During the fiscal year, KUKA Group became aware of 23 potential compliance incidents (2019: 51). These were carefully processed and, if necessary, appropriately sanctioned.

Furthermore, the whistleblower system outlined in EU Directive 2019/1937, which stipulates various communication channels, was evaluated and a certain need for adaptation was identified. The development and implementation of these legislative changes into German law are being monitored and, with the preparatory work that has been done, it will be possible to comply with them quickly.

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 2020. The course gives participants an insight into how compliance is implemented in practice at an industrial company. Due to the restrictions in response to the coronavirus pandemic, the 2020 events unfortunately had to be canceled at short notice. This collaboration will be resumed once again as soon as possible.

Guidelines for product safety

To make our systems and products as safe as possible, we focus on quality. From production, purchasing or quality management to service and sales: safety is our duty – even after delivery and installation of our products and systems. That is why KUKA already works vigorously during the development phase of new products on excluding product defects or operating errors to the fullest possible extent. All details and responsibilities are explained thoroughly in the KUKA Product Safety guidelines.

If safety risks requiring measures to be taken are detected in robots that are already installed, processes and procedures are clearly defined. Being in a position to appraise the situation on site, our service technicians, for example, look out for possible safety risks of installed robot applications. If risks are identified, they are reported directly to the Product Compliance department. If an actual safety risk is identified in this way, 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 adapt our products to the future state of the art at an early stage.

A further aspect that we consider in the context of increased networking is the principle of “security by default” or “privacy by default”. Here KUKA configures 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 the safe handling of robots and cells and their programming 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 2020, around 2,000 robot training courses were held at KUKA locations worldwide, most of them in digital form due to the pandemic.

Monitoring and training

The Product Compliance department at KUKA regularly monitored compliance with the Product Safety guideline during the year under review, checked any deficiencies and successfully remedied them. In addition to the safety aspects, the guideline also addresses various product labeling requirements, which are playing an increasingly important role in opening up new markets and eliminating trade obstacles in global supply chains. The product directives of the European Union, particularly the Machinery Directive, which applies to all industrial robots and production systems, play a key role in this, as do the market-specific certification and licensing requirements, for example those for the North American or Asian markets.

KUKA ensures the effective fulfillment of these requirements through continuous training of the employees, deployment of internal and external specialists, as well as cross-departmental reviews at various times during production and before the market entry of products. In fiscal year 2020, a total of 212 KUKA employees received product safety training in 19 courses. These included five training courses in Chinese for a total of 60 employees in China.

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 guidelines on information security and data protection; these provide a uniform level of protection and are based on internationally recognized standards (e.g. 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 regarding these topics.

Information security and data protection affect all KUKA employees. For this reason, in addition to the extensive internal regulations, there is also a mandatory online training course on data protection in six languages: German, English, French, Portuguese, Hungarian and Chinese. It must be successfully completed by all employees every two years. Since mid-2019, an online training course on information security has also been available in German, English, French, Portuguese and Chinese. This too must be successfully completed by all employees every two years.

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 (e.g., information security for developers, data protection for HR employees).





Ecological responsibility

An intact environment and responsible use of natural resources are important prerequisites for long-term business success. However, the ever more acute climate crisis, polluted air, increasingly scarce resources, escalating waste problems, contaminated soil and water, and the loss of biodiversity speak for themselves. As an industrial company, KUKA wants to make a measurable contribution to the reduction of environmental pollution. For this, we are making a start in our own company: we are cutting our consumption of energy and other resources, lowering our emissions and reducing our quantities of waste.

- › Responsibility for the environment
- › Systematic energy saving
- › Conserving resources

Responsibility for the environment

Environmental issues are continuously taken into account and evaluated by the environmental management team together with the employees responsible. The main priority is energy consumption in production, but we also focus on waste and water management. Energy consumption gives rise to CO₂ emissions. This includes electricity and heat, but also 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.

CO₂ emissions are the foremost cause of climate change. Mindful of our responsibility for climate protection and in the interests of efficient production, we therefore aim to keep our carbon footprint at all sites to an absolute minimum.

Another factor that affects the environment is waste. Waters and soils can also be adversely affected by the legal disposal of waste, or even by unforeseeable accidents. Such events cannot be completely ruled out despite all precautionary measures taken. KUKA therefore takes wide-ranging preventive measures to ensure continual minimization of the potential environmental impact.

Most of our production locations work according to internationally recognized management standards related to environment (ISO 14001), energy (ISO 50001), quality (ISO 9001) and other industry-specific regulations, e.g., VDA 6 Part 4.

With our [Guidelines for Quality, Health, Safety and Environmental Management](#), we have established a specific framework for this. For many years, KUKA has had a cross-location environmental management system lying within the responsibility of the Group's Executive Board.

Safe company locations

Avoidance and limitation of harmful effects of company locations on people and the environment through compliance with safety regulations

Goal:

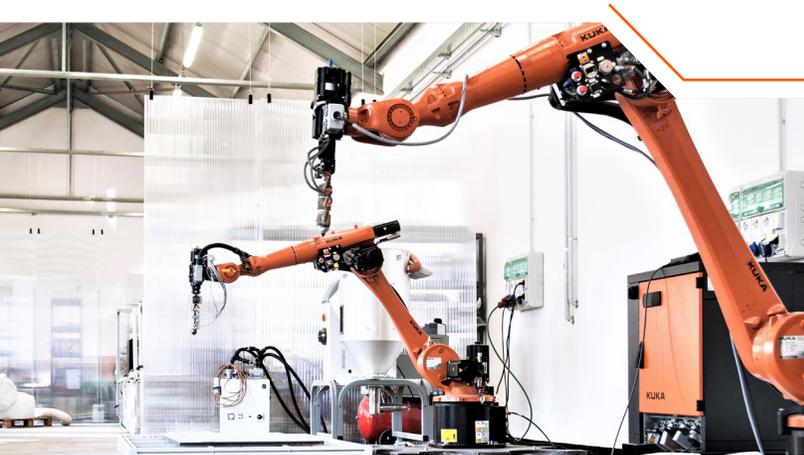
Maintain the high safety management of our locations

Goal achievement:

No significant incidents

Method:

Internal auditing



Systematic energy saving

With our certified environmental and energy management systems, we ensure that negative impacts of our energy consumption are kept as low as possible and continuously minimized.

However, saving energy does not only make sense for ecological reasons. Energy costs are a significant cost factor in every industrialized country. At its production locations in Germany, KUKA analyzes power 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. Data are collected using meter installations with more than 600 measurement points in Augsburg alone. Environmentally-friendly and energy-saving influences that have an impact on the purchase of new components are assessed at all sites. All data are recorded centrally and made available to the locations for the introduction of further optimization.

KUKA is one of 33 companies and six research institutes participating in the “DC Industry 2” project of the German Federal Ministry for Economic Affairs and Energy. The partners are carrying out research into the power supply of industrial plants via a smart, open DC supply system that can integrate renewable energy sources more efficiently by reducing conversion losses, for example. Here, electric drives can also feed their braking energy back into the DC supply system without losses and without converting it into heat via braking resistors and releasing it unused.



SDG 7.3: Double the rate of improvement in energy efficiency



Thanks to continuous improvements to our production processes, we are increasing energy efficiency and are able to make a measurable contribution to the reduction of environmental pollution and to save costs. In times of climate change and high energy costs, it would be irresponsible not to exploit the potential. With the modernized continuous painting line, we make energy savings of more than 50 percent.



Edmund Bahr, Head of Production, Augsburg



In this project, together with major brand-name companies in the automotive industry, KUKA Systems is investigating the use of DC power supplies in its production facilities. The main aims are to improve system availability and to reduce procurement and operating costs. Additionally, KUKA is gaining experience by converting a machining cell from conventional alternating current supply to direct current supply in its own Smart Production Center – KUKA’s answer to the demands of production in the future.

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; average annual generation of 25,000 kWh of solar power at the Augsburg site; installation of programmable thermostats; adjustment of the temperature of the water heater, and, not least, raising employee awareness of the need to use energy responsibly.

In 2020, for example, the continuous painting line in Augsburg was modernized. Through the use of controllable motors, we expect to achieve savings in electricity consumption of nearly 30 percent. In addition, the line saves a further 30 percent of energy thanks to rotary heat recovery and increased efficiency. Swisslog in the UK also invested in energy efficiency by changing the lighting throughout the facility. In Switzerland, the basis for the use of district heating was established.

Lower energy consumption, more green electricity

By means of a global project for collecting all energy data, KUKA has been pursuing strategic environmental and energy goals since 2019. These are primarily the reduction of energy consumption, CO₂ 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. A new software solution was implemented in 2020 for evaluation and analysis of the data as well as for accounting purposes. In the future, this will allow more complex evaluations in order to monitor the systems with regard to efficiency and other key figures, to enable interactive display of time series and to set up alarms in the case of deviations, etc. This gives the KUKA energy management system a powerful tool for improving the energy and environmental efficiency of buildings and processes.

In Augsburg, we have achieved a significant reduction in CO₂ 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 significant share of electricity requirements. KUKA's Augsburg, Bremen and Obernburg sites will be supplied entirely with green electricity from 2021 onwards. This has already been the case at our Dortmund site for many years. This will again considerably reduce our indirect CO₂ emissions.

CO₂ emissions at our largest production locations totaled 27,569 tonnes in 2020 (2019: 31,923 tonnes).

Overall energy consumption at KUKA's largest production locations was reduced again considerably in 2020. This has been achieved partly through the increasingly energy-efficient use of buildings and the introduction of energy-saving measures, but also as a result of the coronavirus pandemic, which has led to production volumes declining and office employees working from home.

Energy consumption*

in MWh	2018	2019	2020
Electricity	52,599	48,379	44,701
Heat	41,155	34,607	33,992
Total	93,754	82,986	78,693

* Locations in Augsburg, Bremen, Obernburg, Shanghai, Kunshan, Füzesgyarmat, Taksony, Sibiu, Sterling Heights and Toledo.

Logistics and transportation

We further increased the degree of automation in our production facilities in 2020. Logistics concepts – such as material supply via kanban systems, the optimized layout of production shops and the replacement of our forklifts with a tugging train – reduce our internal transport routes as well as shipments from and to suppliers. This, in turn, cuts energy consumption and the associated emissions.

KUKA is also contributing to the reduction of emissions and increased electrification in conjunction with the vehicle pool. 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. At the end of 2020, a further 31 charging stations were installed at the Augsburg site in addition to the existing 20 stations in order to provide employees, customers and project partners with sufficient charging options.

New regulations, for example, at Swisslog, stipulate that company cars in the United Kingdom may now only emit a maximum of 135 grams of CO₂ per kilometer. At the Swedish site, the entire vehicle pool has been restructured in such a way that only the vehicle with the lowest emissions class is purchased. Similar plans are also envisaged for the site in Buchs, Switzerland from 2021. The vehicle guidelines have also been revised at KUKA Group's German locations. Our goal is to reduce the CO₂ emissions of our vehicle fleet to a maximum limit of 130 g CO₂/km over the next few years.

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

Production waste is separated at KUKA and disposed of or recycled expertly by trained personnel. This also includes chemically contaminated waste (contaminated metals), which is disposed of by external service providers in strict compliance with the applicable legal regulations.

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 at our major production locations in 2020 amounted to 5,689 tonnes (2019: 7,478 tonnes).

Since 2020, we have been using a new, thinner film for the standard packaging of nearly all robot types. In this way, we reduce plastic consumption by around 10 tonnes per year (around 45 percent) and also cut costs by more than 40 percent.

The total volume of waste was significantly reduced once again in 2020. This is partly due to the low production volume but also to process improvement measures.

40%

lower costs due to the use of new packaging material of nearly all robot types since 2020

Waste generation and disposal*

in tonnes	2018	2019	2020
Non-hazardous waste	7,609	6,774	5,177
Hazardous waste	730	704	512
Total	8,339	7,478	5,689

* KUKA's largest production sites in Europe, North America and Asia (2018: Augsburg, Obernburg, Bremen, Sibiu, Taksony, Sterling Heights, Toledo, Kunshan, Shanghai; additionally since 2019: Füzesgyarmat).

Water management

KUKA obtains the water required for production and administration from the local water supply systems. This applies equally to production processes and sanitary/kitchen areas. In Germany, the supply is from the municipal water mains; at the foreign locations, water is supplied by public or private utilities. No water is taken directly from surface water, wells or rivers. Wastewater is also 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.

At our largest sites, water consumption per employee remained at a similar level to the previous year at 12.4 m³/FTE. Total water consumption decreased to 93,355 m³ (2019: 104,217 m³), primarily due to the effects of the coronavirus pandemic resulting from home working and the decrease in production volume.



Conservation of resources in buildings

In the construction of new buildings and the renovation of existing ones, KUKA places great emphasis on energy efficiency and other sustainability requirements. The values for the production shop with offices in Augsburg, for example, which was built in 2019, are 25 percent below the limits specified in the Energy Saving Ordinance (EnEV) that is applicable in Germany; this is due, among other factors, to an efficient building envelope, local heating supply and connection to a new central cooling system. The new education center that opened in September 2020 even has values 30 percent below the EnEV limits.

At Swisslog in Dortmund, the foundation stone was laid in 2020 for a new office building that has already received gold certification from the German Sustainable Building Council (DGNB). It is due for completion in March 2021.

Conservation of resources is also a high priority in our existing buildings. At the hot beverage vending machines, for example, many of our employees contribute to environmental protection by using 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.



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 procurement costs, the operating costs of a robot or system are becoming increasingly important decision-making criteria for our customers, especially in countries and regions with high energy prices.

- › 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 data security

Cutting costs with energy-efficient products and solutions

Energy-efficient robots and systems are an important lever for reducing energy consumption in our customers' applications. For this reason, customers expect energy-efficient products and solutions from us. The Research & Development department at KUKA is implementing these requirements and specifically working on new products with lower energy consumption compared to predecessor models. KUKA thus offers a wide range of energy-efficient solutions. Thanks to their efficiency, KUKA robots and systems help our customers to save costs, while at the same time contributing to the conservation of resources and combating climate change. In our experience, energy costs account for about 70 percent of the total cost of ownership (TCO) for production systems, for example.

In order to further develop this approach and convince more customers to operate energy-efficiently, we have joined various industry initiatives and working groups. KUKA is addressing strategic sustainability issues in the VDMA Corporate Responsibility working group.

With technical means such as an optimized energy model in the case of newly developed robots, the upgrading of welding processes, preconfigured "ready2_use" applications and large-scale automation solutions for warehouse logistics, we have recently launched groundbreaking innovations that reduce the energy consumption of our products. In 2020, we also launched innovations that support energy-efficient production, such as the KR IONTEC, the KR SCARA and the KR C5 robot controller. 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 with the objective of reducing consumption still further.



In 2020, we also launched innovations that support energy-efficient production, such as the KR IONTEC, the KR SCARA and the KR C5 robot controller.

Energy efficiency in robotic products

From the perspective of customers in all manufacturing companies wanting to operate sustainably, the energy consumption of an industrial robot is a factor that is not to be underestimated. This is because energy consumption is not only linked to costs, but also to the CO₂ emissions associated with energy production. By contributing at the same time to cost reduction and climate protection, “eco-efficiency” is thus becoming increasingly important – not least because, as a result of efforts at EU level within the framework of the European Green Deal, the contribution of industrial products and processes to sustainability will in the future become a criterion playing a decisive role in decisions regarding credit lines for the purchase of products.

KUKA attaches great importance to eco-efficiency in the new development of the entire 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 and optimizing the energy consumption of the application in question.



SDG 7.3: Double the rate of improvement in energy efficiency



All industrial production is energy-intensive. Because energy is expensive, and generally harmful to the climate, more and more customers are approaching us with the desire for us to develop products and solutions with low energy consumption. We are addressing this with targeted research & development, and by considering not only functionality, but also resource and energy efficiency.



Wolfgang Mayer, Chief Technology Officer, KUKA Robotics



Sustainable new products in 2020

Robot controllers play a decisive role in determining the efficiency of a robot. With the new KR C5 controller for KUKA industrial robots and the corresponding KR C5 micro robot controller for small robots, KUKA is raising automated production to a new level. The controller integrates seamlessly into existing IT and cloud environments while offering considerably more functionalities and even better results. For example, the KR C5 saves ten percent

or more energy compared with its predecessor. At the same time, it is significantly more compact and offers the possibility of operating three robots rather than just one. This is equivalent to space savings of up to 66 percent. With its durable hardware and high energy efficiency during operation, the KR C5 ensures permanently low operating costs and reduces the impact on the environment.

As a robot of the latest generation, the compact KR SCARA is tailored in all parameters to flexible use in

production. The two new KR SCARA robots make automation easier and more economical thanks to their flexibility. Both product variants are light and streamlined, yet offer outstanding speed and performance with a maximum payload of six kilograms. The robots feature an internally-routed media supply for air, power and data – a complete package for the smart integration of peripheral devices and fast adaptation of the robot to virtually any desired application. The KR SCARA robots are flexible in their installation, highly precise in their motion, and have low maintenance requirements – regardless of whether they are used for small parts assembly, material handling or inspection. Together with the KR C5 micro, they can control and execute tasks more intuitively and cost-effectively. With a volume of just 16 liters, the controller provides maximum performance and connectivity in a minimum of space.

Since the start of 2020, a new product series has been available on the market in the medium payload category. The KR IONTEC can be deployed particularly flexibly in the medium payload category. With its large work envelope, it is the best in its class. Thanks to improved drive technology and a reduced weight compared with the predecessor model KR 60-3, the KR IONTEC cuts energy consumption by more than 20 percent.

Technical availability is over 99 percent and the mean time between failures is 400,000 hours of operation. The KR IONTEC also features the lowest maintenance requirements in its class. The maintenance costs are reduced, for example, by the fact that the robot has fewer wearing parts and that, on average, an oil change is only necessary after every 20,000 hours of operation. All these points help the KR IONTEC to deliver top values in terms of ongoing total cost of ownership.

With the new KUKA.AppTech software, tasks for robots can be compiled from ready-made modules. This is a great help for machine manufacturers, integrators and end customers, where a lack of programming know-how often stands in the way of purchasing a robot. With this software, a KUKA robot system can be quickly integrated or programmed for complex tasks. An error strategy and collision avoidance are also included to ensure that robots do not obstruct each other while performing their tasks. KUKA.AppTech offers templates which include commonly used sequences.

Use of robots during the coronavirus pandemic

The coronavirus pandemic has not only boosted digitalization in many sectors. Robots and digital applications have also actively helped to tackle the pandemic:

» For example, the LBR iiwa test robot that has been in operation in the laboratory of Bulovka Hospital in Prague since mid-March 2020 has helped to speed up the evaluation of nasopharyngeal swabs significantly. Using a pipette, the laboratory robot adds a chemical to the samples one after the other, checking immediately by means of its integrated industrial balance whether the correct amount of liquid has been added. The KUKA robot can pipette up to 700 samples per day in the coronavirus application – tirelessly.

» The sister product KUKA LBR MED forms the basis of ROBERT®, a robot for the mobilization of patients. Particularly in times of social distancing, the robot-based medical product from Life Science Robotics is able to support physiotherapists in their work.

» The Italian company Caracol-AM has developed two solutions for containing the coronavirus using KUKA robots. Using its experience in the field of additive manufacturing, the company has rapidly developed automated 3D printing solutions with KUKA robots to produce face shields with head mounts. The robots are in operation around the clock. Industrial 3D printers are also printing reusable protective masks.

» With its automated medication management, Swisslog Healthcare offers a seamless supply system from warehousing to patient- and system-specific separation in the central pharmacy and the dispensing of medicines in the clinic. This significantly reduces medication errors while increasing transparency and patient safety.

Energy efficiency in plants and systems

KUKA offers industrial robots in numerous variants with a wide range of payload capacities and reaches. The spectrum of products also includes the appropriate robot peripheral equipment – from linear units to end effectors. Combined with cutting-edge software and innovative controllers, KUKA thus offers solutions for different manufacturing processes. This applies to maximum speeds behind the safety fence as well as to mobile solutions or direct interaction between humans and machines in human-robot collaboration (HRC).

KUKA additionally offers customers tailored complete solutions for automating manufacturing processes, covering all activities from planning and design through to the implementation of automated production systems.

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. Here, KUKA is able to offer its customers alternative energy-efficient solutions.

Optimization of logistics centers

Additionally, KUKA implements automation solutions for forward-looking warehouses and distribution centers. The business segment Swisslog offers data-driven and robot-based automation – from small entry-level automation systems to turnkey logistics solutions. Swisslog has created its own energy efficiency label called GreenLog

for its customers. This is because energy consumption is an important criterion in complex logistics applications with many individual automated processes.

Noticeable 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 regeneration can also be used to reduce power requirement peaks 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.

On account of the coronavirus pandemic and the associated travel restrictions, Swisslog has commissioned many of its customers' facilities and systems remotely. This has been made possible through the use of cutting-edge technologies such as HoloLens glasses and network-enabled cameras. At the same time, this process has resulted in less travel and thus reduced energy consumption and emissions.

In 2020, Swisslog won the German Innovation Award 2020 in the "Machines & Engineering" category for the fully automated palletizing solution Swisslog ACPaQ. The award is presented for outstanding innovations

and recognizes applications that differ from existing solutions, particularly in terms of their user-oriented development and added value for customers. The prize is awarded by the German Design Council and funded by the German parliament.

Product quality and safety when working with KUKA robots

Ensuring high-quality products and safe working with KUKA robots

Goal:

Maintain and further develop the high safety and quality level of our products and expand our training portfolio

Goal achievement:

Training of customers in working with KUKA robots

Method:

Availability of training for customers at the KUKA College locations worldwide. Anchoring of product safety in research & development

Innovations

Development of energy-efficient products and solutions to assure customer satisfaction

Goal:

Implement customer requirements with new energy-efficient models, thereby assuring customer satisfaction

Goal achievement:

Market launch of new energy-efficient products

Method:

Systematic implementation of customer requirements in product management and research & development

World of work of the future

Digital transformation is the central topic for KUKA – the digitalization of not only our own processes and production sequences but also those of our customers and partners. The aim is to transfer the knowledge of mechanical engineering into the digital world. We operate in a dynamic, innovation-driven market environment that is continuously changing.

KUKA is a leader in industrial automation and digitalization. In this role, we are aware of the corporate responsibility that it entails. After all, increasing automation is transforming the world of work. This transformation is not always viewed positively, however, because robots and automated industrial processes often arouse the feeling that human work will no longer have any value at some stage. While it is true that certain occupational profiles that were common decades ago are no longer to be found in many cases, it is also true that new jobs have been created in areas that were previously unknown. The world of work of the future will be more connected, digital and flexible. This is attributable to new technologies, new possibilities for machine-to-machine communication and also the emergence of new value chains in a wide range of industries.

Good work – with robots

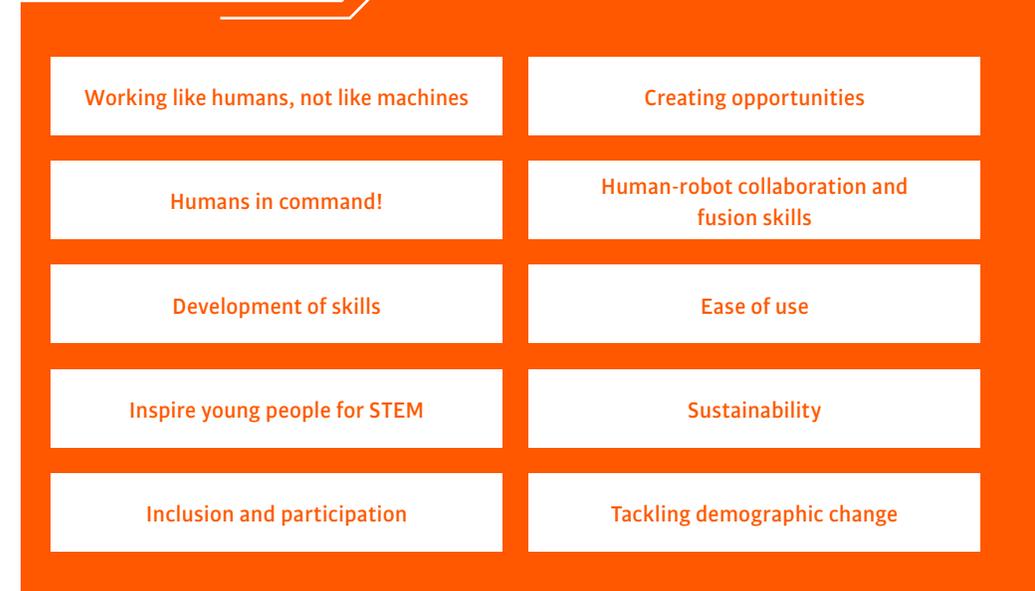
Today, robots perform many tasks, but they cannot carry out an entire qualified occupation. They are incapable of creativity, intuition and the ability to execute several tasks consecutively or to multi-task. Robots, however, complement humans, taking on jobs that are usually simple, repetitive, physically demanding or even pose a health hazard: tasks that humans would prefer not to perform themselves, or which they are physically not even able to carry out. Employees are a company's most important asset. Each of our services and every product provide added value to our customers and help them to turn their visions into reality. With our automation solutions, we support our customers and their employees in equal measure.

KUKA is one of the co-initiators of the [Good Work Charter](#) published by the European industry association EUnited Robotics in November 2020. In the charter, the European robotics industry presents its vision of good work in the future, identifying ten focus areas where action is required now. The charter addresses manufacturers and developers of robot systems as well as their users. It applies equally to industrial robots and professional service robots. It aims to open a dialog with all stakeholders, including national governments, European institutions, the education system, trade unions, international organizations, think tanks, research institutes and the financial sector. The charter argues for a transition to an age of digitalization and automation that should be actively shaped and must put people at the center.

Focus 9 “Sustainability” refers to the fact that as the world's population grows, it is becoming increasingly important to use resources efficiently. Intelligently automated production can make a decisive contribution to minimizing the consumption of energy and natural resources – moving to a largely carbon-neutral economy in the future.

In addition to the environmental benefits, there are also social opportunities that are addressed by several of the focus areas, for example through factors such as qualification (each machine needs to be operated and maintained) and the inclusion of physically disabled people – by means of robotic assistants or exoskeletons.

The ten focus areas of the Good Work Charter



Overcoming isolated solutions through cooperation

The capability of networking different machines is the basis for a successful fourth industrial revolution. KUKA is a founding and board member of the “Open Industry 4.0 Alliance”. The 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 integrated 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 or NAMUR.

The members of the Alliance contribute their core technical competencies in such a way that operating companies and end users benefit from an established, reliable and scalable overall solution – the Alliance’s “Interoperability Framework”. The focus is always on secure and simple data exchange between the partners. The alliance sees itself as an open, standardized “ecosystem” in which additional companies are always welcome.

In some cases, cooperation networks are industry-, technology- or market-specific. For this reason, KUKA is also active in other networks. KUKA sits on the advisory board of MindSphere World e. V., for example, and is a founding and board member of the Industrial Digital Twin Association e. V. MindSphere World is a worldwide user community for the Siemens product MindSphere. Due to its strong market position in the field of system control (PLC), Siemens is of particular relevance for KUKA’s line and cell business. KUKA is committed to improving these production facilities in terms of efficiency and the use of energy and resources.

Partnerships

Establishment of long-term partnerships and exchange in the field of sustainability

Goal:

Ensure and increase trust, knowledge transfer and synergies between KUKA and its partners

Goal achievement:

Continuation of partnerships, joining new initiatives

Method:

Engagement through cooperative ventures and partnerships with associations and initiatives

The Industrial Digital Twin Association is a cooperative venture that was launched jointly with the VDMA, ZVEI and the Industry 4.0 Platform. The objective is implementation of the “administrative shell”. The administrative shell is the central building block for the “digital twin”, i.e., the digital representation of a real object and thus a prerequisite for Industry 4.0. It carries information about the features and behavior of machines, sensors, etc. The aim is to present this information in a manner that is independent of the manufacturer throughout the entire life cycle. For this purpose, universal description standards must be implemented in order to achieve the required interoperability. It is therefore promising that, in addition to KUKA, other major companies and the major industry associations have joined forces to work together on the required standards.

Sustainable logistics solution

Swisslog's ACPaQ solution won the German Innovation Award 2020 in the year under review and is a data-driven robotic solution for store-friendly mixed case palletizing. The fully automated order picking solution for mixed case pallets was developed primarily for retailers with a diverse assortment of small parts and high throughputs. It combines high-end robotics from KUKA with Swisslog's expertise in logistics.

In the 2020 reporting year, the dm distribution center in Wustermark, built around the ACPaQ solution, was honored with the German Logistics Award. Together with the customer, the robotics and material flow have been fine-tuned over the last few years. With people in focus, a logistics system was developed to make the employees' jobs easier by reducing the number of packages they have to carry and pack. Thanks to the simultaneous improvement in order picking performance, around 1,000 tonnes of CO₂ can be saved through fewer truck transports alone.

Seven KUKA palletizing robots ("RowPaQs") are connected to the integrated "CycloneCarrier" shuttle system, which is used as a buffer for 265,000 cases, supplemented by a further eight manual picking stations. Equipped with a flexible picking gripper, the robots palletize up to four packs simultaneously and are thus more efficient than manual solutions. Using the "Load Build Manager", they carry out palletizing in sequential packing order – statically optimized and in a sequence that is individually adapted to the depalletizing or shelf-filling routes in each of the dm stores according to the last-in-first-out principle. Overall control of the ACPaQ system is handled by Swisslog's "SynQ" software.

SDG 9.4:
Upgrade infrastructure and retrofit industries to make them sustainable



⊕ SDG 9.5:
Enhance scientific research, upgrade industrial technologies and encourage innovation



Automation supports sustainable production. By optimizing processes through industrial digitalization, our technologies help to conserve resources. Together with partners and research institutes, we are working to make automation simpler, more intuitive and thus available to everyone in the long term.



Dr. Kristina Wagner, Vice President Corporate Research



Digitalization and data 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 and 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 Industry 4.0. KUKA is involved in various different committees to help shape digitalization and the world of Work 4.0.

Digitalization is undoubtedly 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 guideline serves to implement the product compliance requirements, including safety aspects, and centrally regulates the necessary requirements, tasks, activities and responsibilities.

The guideline 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 also sees its responsibility as an innovation leader in the protection of customer and employee data. For this purpose, a data protection management system is in place to systematically organize, implement and monitor the high data protection requirements. New data protection regulations in the European Union, China, Brazil and the USA in recent years show that KUKA is on the right track here.

In our cooperation with automotive customers, we additionally use the Trusted Information Security Assessment Exchange (TISAX), an industry-specific standard for information security, about which we hold online training courses in several languages. Our information security management system was successfully audited according to TISAX criteria at various international locations in 2020. Further locations are being prepared for TISAX certification in the coming years.

Data protection

KUKA has been working closely with many customers for a number of years and attaches great importance to protecting its customers' data. That is why KUKA has a globally uniform minimum standard in place for handling corporate and personal data.

Customer data are protected, for example, from unauthorized access and misuse, being processed in a CRM system that only a small number of authorized employees have access to. This has paid off: 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

At KUKA, we are fully aware that suppliers have a significant impact on a company's sustainability footprint. After all, a company's sustainability performance is often only as good as that of its supply chain. By instilling a common understanding of quality and responsibility between client and contractor, 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.

- › Supply chain responsibility
- › Local procurement

Supply chain responsibility

Globally oriented supply chain management that is aligned with the principles of sustainability is a key factor for success at KUKA considering the fact that qualitative, ecological and social risks taken by our suppliers can have a direct impact on our customers' satisfaction.

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.

We are aware that despite all sustainability measures taken in supplier management, certain risks will remain. Despite all tried-and-tested processes and precautionary measures, no management system can fully cover all risks. At KUKA, we scrutinize any areas of uncertainty with regard to the economic, ecological and social aspects of the supply chain as a matter of principle. We are committed to enforcing high standards, particularly with regard to our global growth strategy.

Ecological and social factors

The countries of origin of our direct suppliers are generally not considered to be conflict or risk areas. Nevertheless, in order to establish basic requirements for minimum standards and norms within our global supply chain network, KUKA adopted a binding [Code of Conduct for Suppliers](#) in 2020. This is aligned with KUKA's corporate values and contains, among other things, core elements relating to environmental protection, product quality/safety, data protection and information security, as well as the promotion 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. By combining our efforts in the supply chain and giving them a common direction, we contribute to a further reduction of environmental or social risks.

Segment-specific responsibility

The processes and responsibilities pertaining to supply chain management are clearly defined at KUKA. By structuring the overall business so that individual business segments have their own accountable management boards that report directly to the Executive Board, it is possible to implement segment-specific requirements within the associated functions – while 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. There is close coordination between this department and the corresponding functions of other segments, such as China, for example. This is the only way to systematically tap into opportunities at a global level while taking the local circumstances into account. The Robotics segment has procurement departments at all of its production locations. The ratio between strategic and operational contents may vary depending on the main business focus.

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 separate China segment. China is thus closely intertwined structurally with the corresponding business segments (Systems, Robotics, Swisslog and Swisslog Healthcare) as required by the products and solutions to be delivered to 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 covering all segments. However, we aim to work with regional suppliers that are based near our individual production plants whenever possible. As general rule when selecting suppliers, we place a priority on checking the quality, reliability and conditions. In China, too, the local supplier base is expanding continuously. Here, right from the outset of a project, local procurement strategies are incorporated into all new developments geared specifically towards 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 highly demanding technical specifications, it is rarely the case that our requirements can be met with standardized catalog goods. This is beneficial in terms of sustainability standards in the supply chain. For example, many special configurations entail a correspondingly high development effort, and 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 example, for the robot arms.

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



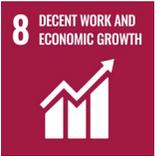
SDG 8.8:
Protect labor rights and promote safe and secure working environments



In order to ensure the customary quality standards of our components and systems, we attach the greatest importance to the selection of our suppliers. We take care to commit our suppliers to our quality, environmental and social standards. However, despite the code of conduct, there might be gaps in controls that could damage our reputation. We intend to reduce these risks still further by means of a new supplier monitoring system that we have been using since 2020.



Bruno Zingg, Head of Purchasing, Swisslog



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.

To prevent human rights violations including child labor and forced labor, suppliers attest by signing the General Terms and Conditions of KUKA Systems North America that they comply with the Fair Labor Standards Act. Similarly, suppliers in China undertake to adhere to the compliance specifications that are firmly anchored in the General Terms and Conditions of KUKA Systems China.

KUKA Systems in Europe conducts a risk analysis every two years for strategically important suppliers. Certificates for management systems are evaluated upon expiry. Random audits are performed in Europe every year. There were no anomalies in 2020.



Our key suppliers are encouraged to observe and heed KUKA's specified environmental goals. «



Auditing of suppliers at Robotics

KUKA Robotics implements a large number of measures to ensure that sustainability management extends to the supply chain. Many of our production sites have already been certified according to the international environmental management standard ISO 14001 and we are continuously pushing ahead with the certification of further locations. In accordance with the specifications of national requirements, this applies analogously to energy management and occupational health and safety management. Regular recertification procedures are carried out before existing certifications expire.

Our key suppliers are encouraged to observe and heed KUKA's specified environmental goals. In 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. Before entering into cooperation, an on-site audit is always

carried out at relevant suppliers. In addition to cost and quality aspects, this also helps to prevent environmental risks and compliance issues. Further audits can be arranged if critical performance metrics suggest that these are necessary.

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 pursuant to clearly defined priorities and cycles. In 2020, due to the coronavirus-related travel ban, more virtual solutions had to be used. Activities relating to advance quality planning for our new products were expanded. The good relationship with our partners in the supply chain contributed to the fact that supplier performance was kept stable at the previous year's level despite the restricted framework conditions, and no serious anomalies were recorded.

Among other things, our audits relating to environmental, labor and occupational health and safety standards assess how materials are stored, used and disposed of, how waste separation and cleanliness are handled and what condition the machinery is in. The focus is on avoiding risks associated with the use of so-called substances of very high concern (SVHCs) and conflict minerals in our products. These substances can be harmful to human health, have a negative impact on the environment or encourage human rights violations. The “REACH, RoHS and Conflict Minerals coordinator”, a role established in the Quality Management function, deals extensively with the use and avoidance of SVHCs and conflict minerals in the components of our robots.

We are continuously working on improving and thus increasing the efficiency of our processes by networking the departments involved in them and by adapting the corresponding systems.

Assessment procedures at Swisslog and Swisslog Healthcare

At Swisslog and Swisslog Healthcare, the Purchasing Strategy, Purchasing Governance and Supplier Management guidelines also apply in addition to the [KUKA Group guidelines on Quality, Health, Safety And Environmental Management](#).

Sustainability aspects relate to the Production Purchasing and Project Purchasing departments. At Swisslog, Project Purchasing is divided into three regions: Europe, Americas and APAC (Asia/Pacific). At Swisslog Healthcare, it is divided into four regions: Europe, Americas, China and Rest of Asia. Suppliers can thus be evaluated and further developed according to the “local for local” approach. Among other things, the requirements on sustainability, occupational health and safety and compliance are reviewed as part of the supplier selection process. These are important factors when approving suppliers.

Suppliers are evaluated using a supplier performance rating system on a quarterly basis or upon completion of a project, as appropriate. There is also a procedure for supplier audits and, specifically in the case of Swisslog Healthcare, there is a procedure for supplier quality management. In 2020, a total of only 29 supplier audits were carried out at Swisslog due to the coronavirus pandemic. Swisslog Healthcare also audited its major suppliers in 2020. There were no significant anomalies.

Since September 2020, Swisslog has been using a web-based IT tool for supplier evaluation and ongoing monitoring. At the end of the year, it covered the 200 largest suppliers and thus more than 70 percent of the procurement volume. This enables suppliers to register with all the required criteria by means of a self-declaration. If key points are missing or if the sustainability rating has deteriorated, corrective measures are agreed with the suppliers. A revised questionnaire is being put in place in the coming business year.



We are pursuing the approach “local for local”.

Consideration of ecological and social aspects in procurement

Requirement for suppliers to comply with ecological and social standards

Goal:

Increase the share of suppliers that consider and improve ecological and social aspects

Goal achievement:

Further development, e.g., by introducing standardized tools

Method:

Supplier evaluation, certification, auditing



Responsible employer

As an automation corporation, KUKA specializes in future-oriented technologies. Our working environment is shaped by the expectations of our customers with regard to sustainability, efficiency and cost aspects, and not least also by the sales crisis suffered by our customers due to the coronavirus pandemic, which also affected KUKA. We are meeting these challenges with forward-looking human resources work, but also with painful adjustment processes. As a company in a state of continuous change, our corporate values, quality-driven training and education, and our commitment to diversity are essential constants. Additionally, given the global health crisis caused by the coronavirus pandemic, there was a particular focus in 2020 on safe workplaces and preventive health care.

- › Responsibility as an employer
- › Employees: challenges and opportunities
- › Innovative vocational training
- › 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 training and continuing education. Various measures concerning human resources are designed to secure our long-term 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.

With the outbreak of the coronavirus pandemic, KUKA took immediate precautionary measures both to protect the health of employees and their families and to cushion the impact on business development. A coronavirus task force was set up as early as January to prepare a hygiene and safety concept, initiate precautionary measures and keep employees regularly informed about current developments.

Maintaining production operations was a particular challenge due to the disruptions in global supply chains. At Robotics, for example, supplies were not interrupted thanks to the flexibilization of ordering and delivery concepts of our in-house production in Hungary and Augsburg, and the second source strategy. This enabled the robot production facility in Augsburg to remain in continuous production. At other production sites, such as in Italy and the USA, production had to be closed down temporarily, sometimes due to official orders from the authorities.

As part of our location concept in Augsburg, we have invested in a new education center as well as new offices and a new production hall in order to create a pleasant working environment for our employees. The new buildings were opened in 2020.

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. The local HR department and the 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 guidelines: in Germany, for example, through collective bargaining agreements, local works agreements and the so-called "delegation of entrepreneurial duties". We do not collect data on the proportion of employees worldwide covered by collective bargaining agreements. Moreover, the company has its own target agreements and working time regulations, Guidelines for Personnel Policy and for Quality, Health, Safety and Environmental Management. Our Integrated Management System (IMS) describes and governs principles, organizational structures, tasks, processes and responsibilities.

Broad support

KUKA is striving to further improve its attractiveness as an employer. This includes a high-level training and continuing education package, diversity and equal opportunity, measures to improve the balance between work and family life, high occupational health and safety standards, and health and sports offerings. 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 Handbook. 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 is measuring the success of these measures based on the applications we receive, especially for key and critical positions, through employee satisfaction surveys as well as our score in various employer rankings.



Employees: challenges and opportunities

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 careers at KUKA.

As an integrated and global solution provider, KUKA is working on new concepts to further develop the in-house working environment. Location concepts are used to implement modern forms of cooperation in the buildings, such as the “Denkergarten” (Thinkers’ Garden) in the Development and Technology Center in Augsburg or the new Education Center, which was opened in September. This facility unites the areas of apprenticeship, training, personnel development and continuing education in a space of around 8,000 m². We are continually advancing digital processes and training our employees accordingly.

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). In both 2020 and 2021, the “reduced full-time” model is being continued in accordance with the IGM collective bargaining agreement, which offers an entitlement to reduce working hours to as far as 28 hours per week for a period of between six months and two years and includes a right to return to the collectively

agreed full-time level of 35 hours per week. The collective agreement “Option T-ZUG” was also continued in 2020. This includes, under certain conditions, the right to choose between a collectively agreed additional payment of 27.5 percent of a monthly salary, payable once a year, or conversion thereof into six to eight additional days off for full-time employees working shifts, with children or relatives in need of care. In 2020, KUKA gave employees covered by collective bargaining agreements the option of “time instead of money” at all German locations.

A twelve-month pilot project was launched at the Augsburg site in 2020, offering both standard pay-scale and non-pay-scale managers part-time work close to full-time. Any managers interested are offered support in the form of individual consultations as well as conversation guides, checklists or training. At the end of the twelve months, the pilot project will be evaluated and the decision taken as to whether to continue it. Internal job opportunities for management positions with a part-time option of at least 32 hours per week were offered in Augsburg for the first time in 2020.

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. Vacation childcare and youth programs, as well as services such as a weekly laundry facility are also available to KUKA employees in Augsburg, albeit only in a very limited form in 2020. KUKA’s family-friendly HR policy has been

recognized with the “berufundfamilie” (work-life balance) audit seal of approval since 2010; this was once again audited and confirmed within the framework of a dialog procedure in 2020. Both mothers and fathers take advantage of parental leave.

Coronavirus pandemic and working from home

As a result of the worldwide coronavirus crisis, working from home became the norm for a large part of the workforce for a number of months in 2020, insofar as their tasks permitted this. The ability to work flexibly in terms of location has been a strong factor behind the acceptance of working from home. Human Resources Development provided many tools, aids and information online in order to make the most of the new framework conditions and to support managers in the challenge of “virtual leadership”.

As a result of the pandemic, a large portion of the administrative activities can now be carried out from home. At KUKA in Augsburg, this offer has existed in principle for more than ten years, regulated by a separate company agreement, the wording of which continues to apply almost unchanged, even in times of COVID-19.

Employees by age group and gender*

	2018	2019	2020
Under 35 years	5,602	5,442	5,164
36 to 55 years	6,827	6,707	6,633
Over 56 years	1,821	1,906	1,924
Total	14,250	14,055	13,721
thereof female	2,782	2,679	2,634
in %	19.5	19.1	19.2
thereof male	11,468	11,376	11,087
in %	80.5	80.9	80.8

* Group-wide, January 1 – December 31. Active personnel excluding casual workers, student trainees, apprentices, interns, dormant jobs and employees exempted from normal duties.

Increasing employer attractiveness

KUKA is striving to further improve its attractiveness as an employer. Success is measured on the basis of incoming applications, especially for key and critical positions. External benchmark studies have also given us good scores. In the Trendence Graduate Barometer, which is based on a survey conducted among pupils, students and young professionals on who their preferred employer is, KUKA achieved 25th place in engineering and 65th place in IT. In the Young Professionals survey, KUKA ranked 35th in the table of most popular employers in the field of engineering.

An employer branding initiative, launched at Swisslog in 2018, serves to retain talent within the company, but also to attract talented new employees by raising awareness. Use of social media channels is being intensified and a strategy is being developed for actively recruiting new employees.

Employer attractiveness

Internal and external perception as an attractive employer, measures to promote the attractiveness of locations

Goal:
Maintain and enhance employer and location attractiveness

Goal achievement:
Good results in employer rankings

Method:
Employee recruitment, engagement at the locations

Currently difficult market environment, also due to COVID-19

There is still a trend towards the automation of industrial processes. However, global uncertainties and the current difficult situation of the world economy have led many customers to be cautious in their investment activities. This also affects the largest robotics markets such as the automotive and electronics industries.

In addition to this, the outbreak of the coronavirus pandemic in the year under review 2020 has caused the order situation to deteriorate. As an important measure for safeguarding jobs, KUKA introduced short-time working in April. With the help of this furlough scheme, temporary relief was achieved for operations in Augsburg. Similar models were also adopted in other countries.

The difficult economic conditions have already impacted negatively on business development since 2018. In 2020, the coronavirus pandemic put additional pressure on the markets. The sharp decline in business results made it necessary for KUKA to make personnel adjustments. Altogether, the company cut about 300 jobs worldwide in 2020. In such cases, the workforce is informed at an early stage and in accordance with legal requirements.

In 2021, global uncertainties remain high. In the medium term, KUKA anticipates increased demand – particularly for robotic and automation solutions – as a result of the experiences made during the coronavirus crisis. Furthermore, catch-up effects from deferred investments are expected.

Employees by region and employee turnover *

	2018	2019	2020
Europe/Middle East/Africa	9,357	8,999	8,585
Americas	2,722	2,935	2,794
Asia/Pacific	2,171	2,121	2,342
Total	14,250	14,055	13,721
New hires	2,395	1,710	1,497
Employee departures	2,222	2,110	2,852

* Group-wide, January 1 – December 31. Active personnel excluding casual workers, student trainees, apprentices, interns, dormant jobs and employees exempted from normal duties.

Innovative vocational training

Vocational training and continuing education in the fields of robotics and automation turn junior KUKA talent and employees into responsible participants in shaping Industry 4.0. Vocational training is offered at the German sites in Augsburg, Obernburg 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, warehouse logistics specialist and specialist for forwarding and logistics services to the commercial sector with occupations such as industrial clerk, IT specialist and technical product designer. KUKA apprentice graduates are consistently top of the class at vocational schools and at Chamber of Industry and Commerce final examinations.

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.

At KUKA College, KUKA also trains “robot trainers” who in turn instruct customers on handling robots. 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 as well as 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. They are given an opportunity to gain experience abroad at other company locations each year, such as in China and the USA.

New education center inaugurated

In September 2020, the newly-built education center in Augsburg was put into operation. In addition to conventional training on two floors, other functional areas related to education have also moved in there. These include KUKA College, which is responsible for internal training of employees on robots and controllers, and KUKA Academy, which offers language courses, PC courses and other further training topics.

Thanks to the new building, KUKA's educational programs can be offered centrally at a single location and no longer have to be held in a wide variety of premises around the site, as was previously the case. This results in significantly increased efficiency in the training and further education processes. In the course of the redesign, KUKA has thought about how future generations will learn. In 2019, a new training tool was introduced that has since supported both apprentices and trainers and made work easier during the coronavirus pandemic. The so-called “Apprentice Cockpit” can now also be controlled via a smartphone app, thus providing those involved with a faster and better overview of the training status.



Offerings with external partners

In addition to the traditional apprenticeships, KUKA offers a dual, training-integrated degree course at the University of Augsburg with the aim of attaining a Bachelor's degree. In addition to the dual integrated study 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.

With regard to continuing education, KUKA cooperates with renowned universities in Germany such as the Technical University of Munich. We also work together with universities, such as the Massachusetts Institute of Technology (MIT) in the USA or the University of Twente in the Netherlands, in various international research and development projects. Since 2017, KUKA has been a business partner in the Finance & Information Management (FIM) program of the Universities of Augsburg, Bayreuth and Munich (TU). The Master's program is part of the Elite Network Bavaria and combines information technology, business information systems, operations research and financial mathematics. As a business partner, KUKA is not only involved in the selection process of the students, but the company also offers individual, practice-oriented research projects, mentoring and internships.

Collaborating with educational institutions is important to KUKA as an employer. KUKA normally attends numerous university contact fairs each year and appears at many graduate fairs. Additionally, there are around 50 company tours for students each year, and some 200 internships as well as robotics courses and practical days for school classes. All these activities had to be canceled in 2020 due to COVID-19. Thanks in part to the "Fair Company" seal, KUKA enjoys a good reputation among interns.

Employee development

Personal and professional development of employees by means of talent management, training and continuing education, personnel development

Goal:

Maintain and expand cross-location continuing education and development of employees

Goal achievement:

"Best apprentices" award again

Method:

Talent management, personnel development, employee recruitment, training and continuing education programs

In 2020, at the Augsburg location alone, KUKA trained around 200 apprentices and dual degree students. Throughout Germany, the total was around 260. This number also includes the apprentices of our external partners. KUKA offers bookable training modules for these partners. In the year under review, around 160 people also took part in internships or completed their theses at KUKA. The popular taster placements had to be canceled in 2020 because of the pandemic.



Best in year

In 2020, three KUKA apprentices were once again among the best at the Swabian Chamber of Industry and Commerce, including the best in mechanical and systems engineering, the best in production and manufacturing automation, and the best in automation technology.

Continuing education in many areas

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 standardized seminars such as IT training and language courses as well as special technical training for a wide variety of areas in the company. Seminars to promote personal and social skills, in particular communication and intercultural training, as well as global leadership circles complement our continuing education measures which we offer internationally, taking decentralized requirements into account.

In 2020, due to restrictions related to the coronavirus pandemic, the focus of the seminars offered by the Academy was on online programs. New e-learning courses, in particular, have created extra added value for employees. In Germany, 3,636 employees took advantage of 298 in-house continuing education events in 2020, resulting in a total of 2,795 participant days. In addition to that, 169 persons took part in 14 workshops within our global leadership programs.

At Swisslog, the second global trainee program "Controls Software" got underway in May 2020. The coronavirus pandemic made it necessary to switch to virtual training. In the twelve-month program, the trainees explore the life cycle of control software at Swisslog – from the concept to implementation and customer service. The Automation Academy at Swisslog Healthcare in the USA has a "Solutions Experience" facility, consisting of hardware, software applications and analytics, which facilitates training, continuing education and detailed evaluation. The training rooms provide an attractive environment that is also open to customers, field technicians, service and support staff.

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 a common understanding of fundamental values, principles and corporate culture, and we place great importance on our managers serving as an example in this respect. Managers thus have great responsibility and influence corporate culture and in-house interaction to a large extent.

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. A global feedback initiative for senior management was launched in connection with this at the end of 2019/beginning of 2020. In the course of this survey, employees were able to provide their managers with feedback on their “Leadership Behavior” and, if necessary, provide the impetus for targeted development measures. The “Leadership Behavior” principles thus have a high level of visibility and form the basis for the global talent management system. In 2020, 37 new employees were added to the global talent pool, comprising 118 talents worldwide, as part of a structured identification process. Individual development plans are concluded with all talents, and specific measures for personal and professional skills development are agreed. As part of the talent management system, the opportunity for virtual individual coaching was also created in 2020 and piloted very successfully with 67 employees through collaboration with the company CoachHub.

The talent management system also provides a foundation for structured succession planning for key positions in the company.

Worldwide objective

The KUKA “Leadership Behavior” principles are also part of the management 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, at which all KUKA managers exchange experiences and develop concepts together. Due to the coronavirus pandemic, this meeting was held virtually in 2020.

A Global Exchange Program promotes intercultural exchange and offers the opportunity to work on projects at the exchange location. The program enables employees to spend a period of between three and six months abroad, subject to the existence of concrete project ideas. It applies to an exchange between Germany and China and between the USA and China. The project ideas are expected to contribute to the corporate strategy and are examined by a commission consisting of people from the home country and the host country. In 2020, it was only possible for one candidate to participate in the program instead of the ten selected due to global travel restrictions caused by the coronavirus pandemic.



118

employees in the global talent pool

Living values at Swisslog Healthcare

Due to their specific field of business, certain company values and the way they are lived out may differ in individual KUKA business segments. At Swisslog Healthcare, for example, commitment, clarity, competence and collaboration are considered to be the four core values worldwide. As elsewhere in the KUKA world, managers are required to set an example regarding these values and to explicitly encourage their employees to participate in forums where the values are communicated and put into practice.

One strategic focus of the Human Resources department at Swisslog Healthcare is on linking the onboarding program and performance management to the personal development of employees. The four core values of the company are closely linked to this. The objectives include enabling employees to gain new perspectives, to place individual strengths in the context of the company, to discover potential for themselves and to initiate new ways of thinking. As a first initiative, a workbook published in five languages was developed – a long-term companion with food for thought and tasks for self-reflection.

Diversity as a success factor

Leveraging and promoting the diversity of our workforce is an important cornerstone of our business success. It is a source of creativity and innovation. KUKA benefits from different experiences and talents. That is why it is also part of our corporate culture to live and promote diversity. The appreciation of our diversity has a positive effect on KUKA as a company, on how we deal with our customers and on our role in society.

Regardless of their origin, gender, age, disability, religious views or sexual orientation, KUKA employees are valued equally. Our aim is to create a work environment that is characterized by acceptance and tolerance and is free of prejudice. Equality also means that our compensation system makes no distinction between genders, with employees being paid based solely on their performance and expertise.

Global KUKA diversity principles and diversity action week

As a signatory to the Diversity Charter, KUKA has also anchored the topic within the structure of the company. Diversity and appreciation are included in the Group guideline “Principles of cooperation within the KUKA Group” as part of the Corporate Compliance Manual. Diversity aspects are taken into account when new guidelines and processes are created.

Diversity principles that are valid worldwide were adopted in 2020. They emphasize KUKA's positive attitude toward diversity within the company, as well as clear expectations on the part of the Executive Board, Group Human Resources and the management of all segments. The principles are intended to promote understanding and acceptance of diversity in the global working environment and to create a transparent basis for action in dealing with diversity. They are intended to ensure equal rights, equal opportunities and respect for all, and help to prevent discrimination. Any violations will be rigorously sanctioned. A diversity manager coordinates the relevant issues.

On the occasion of the 8th German Diversity Day of the “Diversity Charter” on May 26, 2020, KUKA drew attention to the topic of “unconscious bias” with various activities as part of a diversity week. This refers to unconscious thought patterns that can lead to distortions in perception, stereotypes or prejudices.



Through a worldwide internal communication campaign, KUKA employees were made aware of the issue of unconscious biases in order to be able to recognize them more quickly and learn how to deal with them. The campaign was received very positively by the workforce.

Additionally, KUKA has produced a digital brochure for employees in German-speaking countries with tips and recommendations on respectful communication. It points out specific patterns of language and representation that are generally used unconsciously, but which can reinforce discriminatory stereotypes. Employees are thus invited to question the way they habitually speak with numerous practical tips and examples.

More female employees

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

As at December 31, 2020, the proportion of women on the Executive Board and Management Boards of the three German companies (KUKA AG, KUKA Systems GmbH and KUKA Deutschland GmbH) was cumulatively 0 percent (2019: 0 percent). The first management level below that had 10 percent women for all three companies (2019: 16 percent), and the second level of management a cumulative 14 percent (2019: 15 percent). The general proportion of women in the workforce in these three companies was 18 percent as at the reporting date (2019: 18 percent).

Worldwide, the general share of women in KUKA Group was 19 percent in 2020 (2019: 19 percent). For the first management level the share was 15 percent (2019: 19 percent) and at the second level it was 14 percent (2019: 17 percent).

The share of female apprentices for industrial and technical occupations at the Augsburg location was again 13 percent in 2020 (2019: 13 percent). Once again, there were fewer female applicants overall than in previous years. With our annual events such as participation in Girls' Day and with work experience placements for girls, practical days, robot days and our cooperation with

girls' schools, our intention is to appeal to more female students in order to increase their share once again. However, these events were severely restricted in 2020 due to the coronavirus pandemic. We are also consciously focusing on a continual increase in the proportion of women in the Global Talent Program and in succession planning.



Diversity and equal opportunity

Diversity in the company, promotion of equal opportunities, fair remuneration, inclusion, measures to improve work-life balance

Goal:

Promotion of diversity and equal opportunities in the company (see annual report for targets)

Goal achievement:

Target percentage of women by March 31, 2022: 20 percent for the first management level below the Executive Board (as at December 31, 2020: 15 percent) and likewise 20 percent for the second management level below the Executive Board (as at December 31, 2020: 19 percent)

Method:

Succession planning, pilot project "Leadership in Part Time", diversity principles, Diversity Charter with annual action days and weeks

Networking and support

The internal women's network orangeWIN, which is under the patronage of KUKA CEO Peter Mohnen, promotes women in the company and identifies female talent. Unfortunately, the coronavirus pandemic had a noticeable impact on regular events such as business lunches on interdepartmental specialist topics. In addition to an exchange of information on specialist topics, these events normally also provide an opportunity to network. In 2020, due to COVID-19, orangeWIN was able to organize five events (with two of them from October onwards being held virtually) with around 60 participants. An internal mentoring program initiated by orangeWIN for the exchange of experiences and the targeted further development of individual strengths was joined by four new pairings from different hierarchical levels in 2020 (2019: 23). This means that a total of 61 pairs have so far participated in the program, which was launched in April 2017.

The local branch of the women's network in the USA, established in 2019, was also severely restricted by the coronavirus pandemic. It was only towards the end of the year that two virtual events could be held and a digital handout produced, aimed at around 150 participants.

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 currently includes 21 companies whose representatives meet once

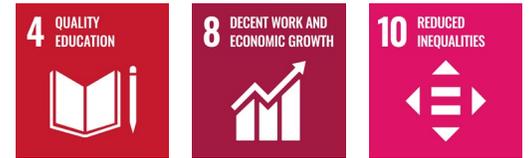
SDG 4.3:
Equal access to affordable technical, vocational and higher education

SDG 10.3:
Ensure equal opportunities and eliminate discrimination

a quarter (only virtually in 2020). 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. With the start of the tenth round in the summer of 2020, a new target group was addressed in addition to the established mentee target group (women and men in their first management positions or in the decision-making phase between specialist and management careers). Together with the business development department of the city of Augsburg, the initiative

"Start-ups in Cross-Mentoring Augsburg" was launched. A mentor from KUKA accompanies two founders of an innovative start-up for the period of one program year. KUKA is also involved in the mentoring partnership MigraNet, which is committed to the professional integration of people with a migrant background. In 2020, one KUKA employee was involved here as a mentor. Due to the coronavirus pandemic, only one round was held instead of the usual two.



SDG 8.8:
Protect labor rights and promote safe and secure working environments

As an apprentice-training company and due to the complexity of our products, the topic of vocational and continuing education has a high priority at KUKA. Because the success of our company on all continents depends to a large extent on the dedication and abilities of our employees. Accidents are to be avoided 100%, and occupational health and safety is the top priority. Our employees are our most valuable asset. We therefore encourage creativity and innovation to boost the success of the company. Diversity and equal opportunity are part of our company culture and are firmly anchored by means of specific diversity principles and in the Corporate Compliance Manual. These and other factors are intended not least to ensure that we remain an attractive employer.



Dr. Frank Weinand,
Group Head of Human Resources

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 is therefore firmly embedded in management systems at KUKA Group's major production locations, with certifications in some cases. In 2020, the major locations in Augsburg, Obernburg and Füzesgyarmat (Hungary) were successfully certified according to the international occupational health and safety standard ISO 45001. In the coming years, further locations are to follow. Since 2009, the largest production location, Augsburg, has additionally been certified to OHRIS (Occupational Health & Risk Management) – a Bavarian state management system. As a result, approximately 50 percent of the company workforce was employed at safety-certified locations at the end of 2020.

The safety performance indicators (SPI) recorded across the Group include the LTIR (lost time injury rate). The worldwide figure was 0.6 in 2020 (2019: 0.7). Even in terms of reportable accidents at work per 1,000 full-time equivalent employees, which is a common measure in Germany, we were also better in the 2020 reporting year (5.7) than in the previous year (9.7) and below the industry average. There have been no fatal industrial accidents across the Group in the last few years.

Occupational health and safety training courses

Internal and external training courses on occupational health and safety are regularly held at the Augsburg location. All parties are involved, such as the responsible persons at service providers regularly working for KUKA.

We see employee participation and consultation as a key success factor. Our employees are actively involved in the adaptation and drafting 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 the area of occupational health and safety, for example by actively participating in safety inspections, work committee meetings or helping to design new workplaces.

One of the major areas of focus in the year under review was the implementation of priority campaigns to raise awareness of occupational health and safety. Regular campaigns are carried out to keep the topic in focus and make employees more sensitive to it. Beyond this, a training room has been set up in Augsburg. Above all, however, we have expanded the reporting system to register 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 the latter, an immediate incident reporting system needs to be put in place as quickly as possible. The immediate reports will be distributed to all responsible persons at

the Augsburg location and in the Robotics operation and communicated to the employees affected. A systematic cause analysis will then be carried out for such incidents and appropriate measures will be derived from it. If necessary, new safety standards or a "best practice procedure" will be drafted or adapted to the new findings.

Occupational health and safety

Compliance with occupational safety regulations for preventing occupational accidents and work-related illnesses and promoting the health of employees

Goal:
Continuous improvement of occupational safety and health protection

Goal achievement:
Regular training courses for managers and employees

Method:
Safety training, ISO 45001

Preventive healthcare dominated by COVID-19

In 2020, corporate health management at KUKA was dominated by the COVID-19 pandemic – worldwide. At the same time as setting up home workplaces, it was also necessary to ensure safe working conditions in the offices and production facilities. Additional alternative workplaces were created in electrical assembly, for example, in order to maintain the safety distances required to protect against infections. This solution made it possible to dispense with shift work in the electrical department, which resulted in both cost savings and improved the exchange of information among employees, enabling them to work together more effectively.

At KUKA in China, a team of volunteers took care of the safety of employees and visitors. Measures included the provision of masks, protective clothing and sterilization materials, checking of body temperature at plant entrances, sterilization of offices and workshops, etc.

Sporting activities

The preventive healthcare approach at KUKA includes a wide range of sporting activities. In Germany, for example, this includes participation in the Augsburg Corporate Challenge Run, which was held virtually in 2020. KUKA was able to take part via an app and win a number of first places. In “normal years”, these activities also include the city cycling event in Augsburg as well as Taekwondo courses and various other sports groups, some of which receive financial support from KUKA. KUKA employees in Bremen also took part in a company run (“B2Run”), and the nationwide Qualitrain corporate fitness program was used. A health day in Bremen shed light on various health risks and measures to prevent them.

In the USA, KUKA offers employees a health program that rewards them for leading a healthy lifestyle. Participating employees can also receive subsidies for preventive healthcare. Throughout the year, there were numerous health improvement events, including virtual health workshops and physical activities.

For example, employees were offered support as part of a stress and health management scheme. It was not possible to hold the usual community events in 2020.

In the Asia/Pacific region, KUKA offers country-specific benefits that go beyond the legal requirements. These include annual health checks, health insurance, travel insurance and additional vacation entitlements.





Social engagement

As a company operating in an innovative sector, we also want to contribute to the sustainability of society. Empowering others is a key aspect of this. This is why we are committed to supporting children, young people and the disadvantaged in our society in a number of different ways. Recognizing the opportunities and risks for our own business, we 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. In the communities near our sites, the non-profit association Orange Care e. V. founded by KUKA employees supports social and charitable causes. The main focus of the charitable work is to support projects in the area in which the company is located. First and foremost, Orange Care supports local projects or projects in which our employees are involved.

Support for local partnerships

Active exchange with local communities, associations

Goal:

Maintain and expand collaborative engagement with local institutions and partners

Goal achievement:

Support for local communities, support programs and associations

Method:

Assessment of needs at location level

Support for children, young people and families

[Orange Care e. V.](#), which was founded by KUKA employees in Augsburg, supports people in need, especially in terms of helping young people and families. The non-profit association has also sponsored a children's daycare center since 2013, which helps to improve the work-life balance of our employees as well as other families in Augsburg. Due to the coronavirus pandemic, maintaining regular services at the daycare center in 2020 was particularly challenging. With the implementation of a strict hygiene plan and the great commitment of the staff, it proved possible to keep the restrictions for the children and their parents to a minimum.

In 2020, as in previous years, the association [Kinderweihnachtswunsch](#) (Christmas wish association for children) was again supported with a donation in kind. Kinderweihnachtswunsch e. V. provides support for children and young people who live in and are cared for by social institutions in the Augsburg area. The donation was used to fulfill two group wishes. One group had the wish to visit Legoland in Günzburg. Another group wanted to spend a day together at a spa.

KUKA employees worldwide show their commitment to social issues beyond the scope of the Orange Care program in Germany. Employees in the USA, for example, are involved in the KUKACARES Foundation, which was established by KUKA Systems together with eight of its suppliers.

Events such as charity dinners and golf tournaments raise funds that are made available to people in need and vulnerable families. Suggestions can also be submitted on the foundation's website as to how the funds should be spent.

Although the coronavirus crisis prevented the foundation from coordinating all of the usual annual fundraising events in 2020, it was possible to hold a golf event in early fall to raise funds for the foundation. In 2020, 14 people in need received donations. The KUKACARES Foundation provides support directly to the heart of the community, covering everything from mounting medical bills arising from a terminal illness, or accommodation costs during a hospital stay, to a dream vacation for children with cancer.

Coronavirus has also proved to be the mother of invention: KUKA Assembly and Test Corp. in the USA, together with General Motors and the Ford Motor Company, provided its manufacturing and design expertise for the production of test systems for ventilators, which are urgently needed for COVID patients.

Bringing robotics and automation closer to the public

In November 2020, KUKA took part in [European Robotics Week](#) – initiated by the European robotics association euRobotics – for the tenth time. During this week of events, KUKA employees have the opportunity to get involved in raising awareness of robotics and automation in the general public and in allaying reservations and fears. Another aim is to arouse the interest of young people in technology and scientific subjects.

On account of the coronavirus pandemic, it was not possible to organize as many in-person events as usual in 2020. The topic of the children’s art competition was

“How can robots help us when we are ill?”. A digital presentation by a representative of KUKA Healthcare Robotics on medical robotics explained how robots are used in areas ranging from cancer diagnostics to rehabilitation applications and minimally invasive surgery. The coronavirus pandemic has further intensified discussion of issues such as digitalization and automation in the healthcare sector. This year, once again, some KUKA employees were able to visit schools and kindergartens despite the restrictions imposed by the pandemic. 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. Scientific and technical activities on offer to children and young people range from “Girls Robotics” and go-karts with fuel cells to a Space Academy. The aim of this non-profit association is to familiarize children – and especially girls – with applied robotics and programming at an early age. They are introduced to technical topics and research in STEM subjects not through isolated activities, but via long-term and individual support in group work – and some have won the “Jugend Forscht” (Young Researchers) competition. KUKA is also a coach and sponsor of the anniversary initiative [Effect to the Power of 100](#) (“Wirkung hoch 100”) of the Stifterverband für die Deutsche Wissenschaft (Donors’ Association for the Promotion of Humanities and Sciences in Germany).

100 outstanding ideas for better education, science and innovation are networked with experts and partners to ensure sustainable funding and implementation.

At the end of September 2020, KUKA participated in a [study](#) conducted jointly with the German Federal Ministry of Research and the Sport University in Cologne. This investigated the psychosocial effects of human-robot collaboration. The motivation for KUKA is that we are changing the world of work with our products and must therefore look into how this transformation affects people.

At the beginning of December, KUKA supported the virtual award ceremony of the German National Mathematics Competition.

Innovation Award for medical technology

With the KUKA Innovation Award, we raise awareness of innovation through automation and robotics in new fields of activity. In November 2020, the 20,000-euro prize, which has been awarded each year since 2014, was presented for the development of a non-invasive surgical procedure based on focused high-intensity ultrasound and the KUKA LBR Med lightweight robot. The method developed by the Scuola Superiore Sant’Anna in Italy can be used for new treatments of pathological tissues such as cancer. Entries in the field of Artificial Intelligence have been invited for the next Innovation Award in 2021.





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 investors, policymakers, capital markets and the general public.

- › GRI Content Index
- › Imprint and contact

GRI Content Index

For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report. The service was performed on the German version of the report.



**MATERIALITY
DISCLOSURES SERVICE**

2021

GRI Standards	Page	Omissions
GRI 101: Foundation 2016		
GRI 102: General disclosures 2016		
Organisational profile		
GRI 102-1: Name of the organisation	3	
GRI 102-2: Activities, brands, products and services	6 – 11	
GRI 102-3: Location of headquarters	7	
GRI 102-4: Location of operations	7 – 11	
GRI 102-5: Ownership and legal form	10	
GRI 102-6: Markets served	6 – 11	
GRI 102-7: Scale of the organisation	7	See Annual Report 2020 , pp. 58 ff
GRI 102-8: Information on employees and other Workers	45	
GRI 102-9: Supply chain	39 – 41	
GRI 102-10: Significant changes to the organisation and its supply chain		There were no significant changes.
GRI 102-11: Precautionary Principle or approach	15, 38	
GRI 102-12: External initiatives	12, 14, 34, 43	
GRI 102-13: Membership of associations	14, 29, 34	
Strategy		
GRI 102-14: Statement from senior decision-maker	4, 5	
GRI 102-15: Key impacts, risks, and opportunities	13 – 16	
Ethics and integrity		
GRI 102-16: Values, principles, standards, and norms of behaviour	18, 19, 38, 43, 48	
GRI 102-17: Mechanisms for advice and concerns about ethics	19 – 21	

GRI Standards	Page	Omissions
Governance		
GRI 102-18: Governance structure	12, 13	
GRI 102-19: Delegating authority	12, 13, 18, 23, 43	
GRI 102-20: Executive-level responsibility for economic, environmental, and social topics	12 – 15, 18, 23, 43	
GRI 102-21: Consulting stakeholders on economic, environmental, and social topics	14	
GRI 102-22: Composition of the highest governance body and its committees	12	See Corporate Governance Statement and Supervisory Board of KUKA AG
GRI 102-23: Chair of the highest governance body	12	See Corporate Governance Statement and Executive Board of KUKA AG
GRI 102-24: Nominating and selecting the highest governance body	12	
GRI 102-25: Conflicts of interest		See Annual Report 2020 , p. 9
GRI 102-26: Role of highest governance body in setting purpose, values, and strategy	12	
GRI 102-27: Collective knowledge of highest governance body		See Corporate Governance Statement
GRI 102-28: Evaluating the highest governance body's performance		See Annual Report 2020 , pp. 48 ff
GRI 102-29: Identifying and managing economic, environmental, and social impacts	15	
GRI 102-31: Review of economic, environmental, and social topics	13, 15	
GRI 102-32: Highest governance body's role in sustainability reporting	3, 13	
GRI 102-35: Remuneration policies		Details of Executive Board and Supervisory Board remuneration can be found in the Annual Report starting on page 48. KUKA only reports on the remuneration of the Executive Board. Information on the remuneration of other executives is not recorded at a global level, as the effort involved in obtaining the information is not reasonably proportionate to its value.
GRI 102-36: Process for determining remuneration		See Annual Report 2020 , pp. 48 ff
GRI 102-37: Stakeholders' involvement in remuneration		See Annual Report 2020 , pp. 48 ff

GRI Standards	Page	Omissions
GRI 102-38: Annual total compensation ratio		KUKA only reports on the remuneration of the Executive Board. We do not report on the ratio of the annual total compensation to the median annual total compensation for all employees as the data are not available on a consolidated basis. We do not plan to collect these data in the future either, as the effort involved in obtaining the information is not reasonably proportionate to its value.
GRI 102-39: Percentage increase in annual total compensation ratio		See GRI 102-38
Stakeholder engagement		
GRI 102-40: List of stakeholder groups	3, 14	
GRI 102-41: Collective bargaining agreements	43	
GRI 102-42: Identifying and selecting stakeholders	14	
GRI 102-43: Approach to stakeholder engagement	14, 15	
GRI 102-44: Key topics and concerns raised	15	We include the most important issues raised by our stakeholders in our materiality analysis.
Reporting practice		
GRI 102-45: Entities included in the consolidated financial statements	3	
GRI 102-46: Defining report content and topic boundaries	3, 15, 16	
GRI 102-47: List of material topics	16	
GRI 102-48: Restatements of information		There were no new formulations of information in relation to the previous year's report.
GRI 102-49: Changes in reporting	16	
GRI 102-50: Reporting period	3	
GRI 102-51: Date of most recent report		April 2020
GRI 102-52: Reporting cycle		Yearly
GRI 102-53: Contact point for questions regarding the report	64	
GRI 102-54: Claims of reporting in accordance with the GRI Standards	3	
GRI 102-55: GRI Content index	58 – 64	
GRI 102-56: External assurance		There was no external audit on the information in this report.

GRI Standards	Page	Omissions
Material topics		
GRI 203: Indirect economic impacts 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	33, 34, 36	
GRI 203-2: Significant indirect economic impacts	33, 34, 36	
GRI 204: Procurement practices 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	37 – 41	
GRI 204-1: Proportion of spending on local suppliers	39	We do not record the proportion of procurement spending on local suppliers, as the effort involved in obtaining the information is not reasonably proportionate to its value.
GRI 205: Anti-corruption 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	17 – 20	
GRI 205-2: Communication and training about anti-corruption policies and procedures	19 – 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.
GRI 206: Anti-competitive behavior 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	17 – 20	
GRI 206-1: Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	18	There were no legal actions in the period under review.
GRI 302: Energy 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	22 – 25, 27	
GRI 302-1: Energy consumption within the organisation	25	
GRI 302-5: Reductions in energy requirements of products and services	29 – 31	
GRI 303: Water and effluents 2018		
GRI 103: Management Approach 2016 (including 103-1, 103-2, 103-3)	22, 23, 26, 27	
GRI 303-1: Interactions with water as a shared resource	27	
GRI 303-2: Management of water discharge-related impacts	27	
GRI 303-3: Water withdrawal	27	

GRI Standards	Page	Omissions
GRI 306: Effluents and waste 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	22, 23, 26, 27	
GRI 306-2: Waste by type and disposal method	26	
GRI 307: Environmental compliance 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	18, 19, 23	
GRI 307-1: Non-compliance with environmental laws and regulations		No such incidents were reported in the year under review. Furthermore, there were no lawsuits pending with regard to non-compliance with environmental laws and regulations.
GRI 308: Supplier environmental assessment 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	19, 37 – 41	
GRI 308-1: New suppliers that were screened using environmental criteria	40, 41	
GRI 308-2: Negative environmental impacts in the supply chain and actions taken	40, 41	
GRI 401: Employment 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	42 – 45, 48	
GRI 401-1: New employee hires and employee turnover	45	We do not currently report on new hires by age group and gender at a global level, but plan to do so in the future.
GRI 402: Labour/Management relations 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	43, 45	
GRI 402-1: Minimum notice periods regarding operational changes	45	KUKA complies with the applicable legal requirements with regard to notice periods.
GRI 403: Occupational health and safety 2018		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	42 – 44, 52, 53	
GRI 403-1: Occupational health and safety management system	52	
GRI 403-2: Hazard identification, risk assessment, and incident investigation	52, 53	
GRI 403-3: Occupational health services	52, 53	
GRI 403-4: Worker participation, consultation, and communication on occupational health and safety	52	
GRI 403-5: Worker training on occupational health and safety	52	
GRI 403-6: Promotion of worker health	53	

GRI Standards	Page	Omissions
GRI 403-7: Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	20, 21, 52, 53	
GRI 403-8: Workers covered by an occupational health and safety management system	52	
GRI 403-9: Work-related injuries	52	We do not currently collect data on injuries with serious consequences, nor do we intend to do so in the future, as the effort involved in obtaining the information is not reasonably proportionate to its value.
GRI 404: Training and education 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	42 – 44, 46 – 48	
GRI 404-2: Programmes for upgrading employee skills and transition assistance programmes	46, 47	
GRI 405: Diversity and equal opportunity 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	42, 43, 49 – 51	
GRI 405-1: Diversity of governance bodies and employees	12, 44, 50	For corresponding information on the Supervisory Board, see Annual Report 2020 , pp. 110 ff
GRI 407: Freedom of association and collective bargaining 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	19, 37 – 43	
GRI 407-1: Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		We are not aware of any of our business locations where the right to freedom of association and collective bargaining could be threatened. Our suppliers are subjected to extensive reviews before entering into business relationships.
GRI 408: Child labor 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	19, 37 – 41	
GRI 408-1: Operations and suppliers at significant risk for incidents of child labor	38 – 41	
GRI 409: Forced or compulsory labor 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	19, 37 – 41	
GRI 409-1: Operations and suppliers at significant risk for incidents of forced or compulsory labor	38 – 41	

GRI Standards	Page	Omissions
GRI 413: Local communities 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	54 – 56	
GRI 413-1: Operations with local community engagement, impact assessments, and development programmes	54 – 56	
GRI 414: Supplier social assessment 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	19, 36 – 41	
GRI 414-1: New suppliers that were screened using social criteria	40, 41	
GRI 416: Customer health and safety 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	18, 20, 21, 36	
GRI 416-2: Incidents of non-compliance concerning the health and safety impacts of products and services		In 2020 there were no legal proceedings with fines for breach of customer safety.
GRI 417: Marketing and labelling 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	21	
GRI 417-1: Requirements for product and service information and labelling	21	
GRI 418: Customer privacy 2016		
GRI 103: Management approach 2016 (including 103-1, 103-2, 103-3)	21, 36	
GRI 418-1: Substantiated complaints concerning breaches of customer privacy and losses of customer data	36	

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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.

The German version is legally binding in cases of doubt.

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