KUKA

Smart & Responsible

Sustainability Report 2017

Contents

About this report

In its first Sustainability Report 2017, “Smart & Responsible”, KUKA comments on its impacts and measures regarding ecological, economic and societal issues. This report is aimed at our stakeholders: our customers and employees as well as analysts and investors, suppliers, non-governmental organizations, politicians and authorities, and interested members of the public. We want to inform all of them about our corporate responsibility and tell them what we are doing to promote sustainability in our processes, our products and our supply chain.

This report follows the GRI Standards of the Global Reporting Initiative (GRI) and was prepared in accordance with the standard GRI option “Core”. To this end, we determined the key sustainability topics for KUKA in a materiality analysis. We report on these topics in this publication. This report was submitted to the GRI for auditing by the GRI Materiality Disclosures Service. The correct positioning of the materiality disclosures (102-40 – 102-49) was confirmed by the GRI.

This report also follows the requirements of German law to strengthen non-financial reporting by companies. It was submitted to the Supervisory Board of KUKA AG for examination and was approved.

The reporting period corresponds to the 2017 fiscal year (January 1 to December 31). The information relates to all affiliated companies of KUKA AG that are included in the KUKA Annual Report. Any deviations have been identified as such.

Editorial note
This report is available in German and English and was published on April 30, 2018. In the future, it will be published annually in April. For the sake of simplicity, any references to employees, customers, etc. should be understood as referring to persons of all genders.

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.

Foreword by the Executive Board

Dr. Till Reuter

Dear Readers,

The first KUKA Sustainability Report is the result of significant developments: our company has grown rapidly in recent years. More than 14,000 employees work for KUKA worldwide. We have reached a size that gives us a certain standing in society, which entails us having an impact on our environment. We want to take responsibility in terms of our products and our employees, but also in our role towards society and ecology – and we strive to get better at it all the time.

This is why we aim to relate our impact on society more strongly to our daily activities. Sustainability is becoming an integral part of our corporate strategy. Automation is currently experiencing an unprecedented push through digitization. Our customers are facing new challenges, because the demands on industrial production are complex and require swift action. Consumers are long accustomed to speed and flexibility from the Internet, and they have the same expectations of manufacturing companies. Products must be orderable and deliverable overnight, with individual wishes being fulfilled.

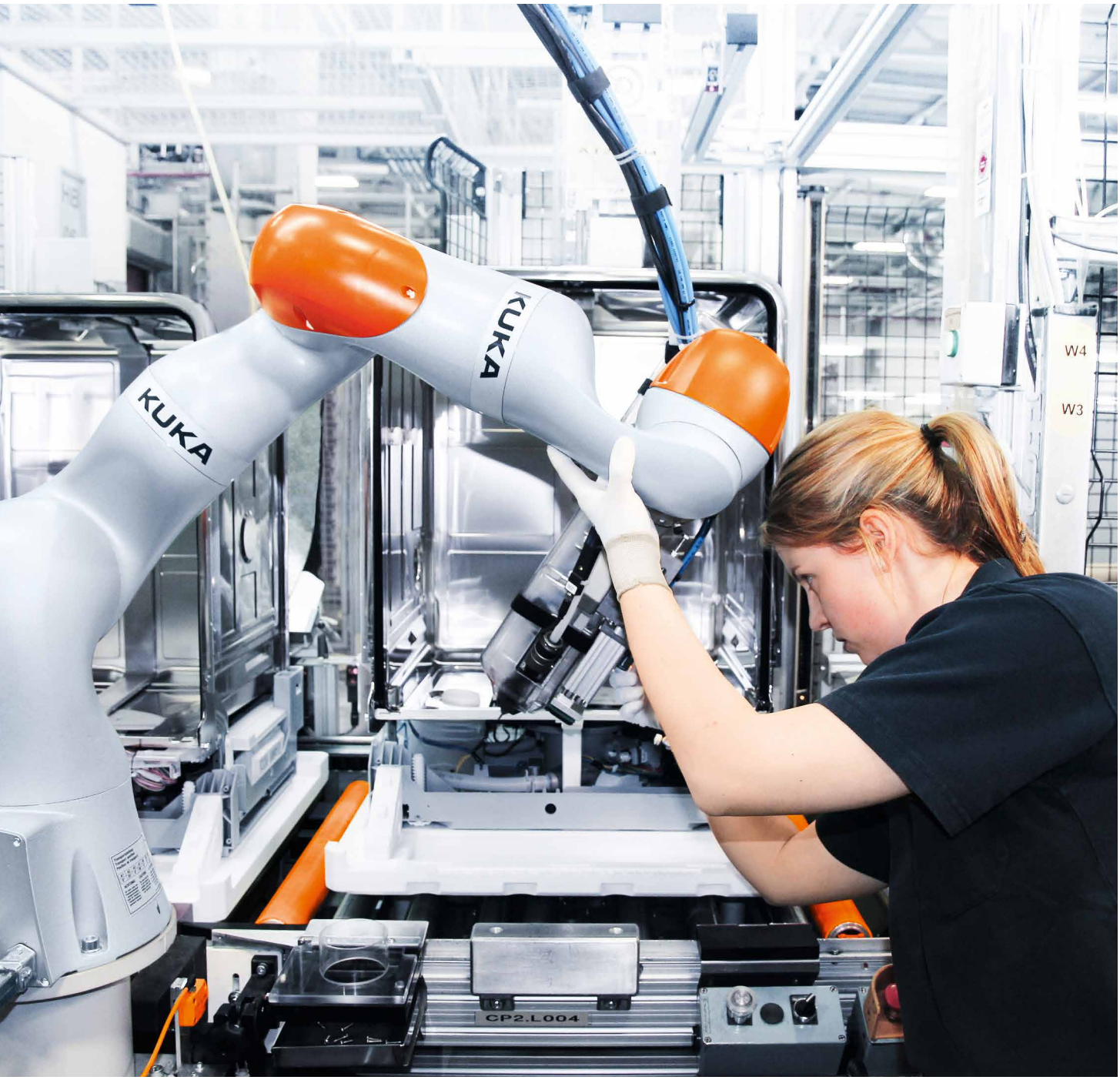
KUKA is a driving force behind this development – and we take responsibility in this role too. We address questions like these: What does the automation of the future look like? How can artificial intelligence benefit humans, and what do these developments mean for jobs of the future? We strive to contribute sustainable answers in the form of our products and services.

We are convinced that sustainability in business will become increasingly important and necessary for our success in the future. Responsible corporate actions will strengthen our growth, improve our efficiency and reduce risks for our environment, our customers and our employees.

People are our main focus. Our technologies, our innovations and our business models are intended to help people in their work and in everyday life. This is our credo. And our employees around the world give their all to achieve this.

Find out in this very first Sustainability Report what progress we have made thus far and what we have in mind for the future. Our goal is to keep our stakeholders informed transparently and comprehensively. Please join us in this discussion – we are looking forward to it.

Sincerely,



Industrie 4.0 “made in Germany”

KUKA: custom-tailored automation solutions

KUKA at a glance

KUKA is a global automation corporation with sales of around 3.5 billion euro and roughly 14,200 employees. As a leading global supplier of intelligent automation solutions, KUKA offers its customers in the automotive, electronics, metalworking, consumer goods, e-commerce and healthcare industries everything they need from a single source: from components and cells to fully automated systems. The Group is headquartered in Augsburg, Germany.

The company operates in more than 100 locations worldwide in Europe, the Americas and Asia. KUKA has set up regional hubs in the largest markets where central functions are pooled, such as IT, accounting and payroll, which are managed uniformly for the region. The hubs are located in Germany, Hungary, the USA and China.

"KUKA stands for innovations in automation and is a driving force of Industrie 4.0 'made in Germany'."

KUKA Group consists of KUKA Aktiengesellschaft and the Robotics, Systems and Swisslog divisions. KUKA Aktiengesellschaft, headquartered in Augsburg, is the Group's holding company and is responsible for managing corporate activities within the group of companies. The management of the individual divisions coordinates the operational business activities in the respective segments. The divisions operate globally and are supported by their regional subsidiaries in both their sales efforts and their assembly and field service work. In the year under review, KUKA laid the groundwork for a customer-oriented divisional structure.

KUKA Robotics

The core component for automating manufacturing processes is provided by the Robotics division, which produces industrial robots together with controllers and software. The broad product portfolio covers payload ranges from 3 to 1,300 kg. This enables KUKA to meet the various requirements of its customers optimally. Most robot models are developed, assembled, tested and shipped in Augsburg. The control cabinets are produced in two Hungarian plants, in Taksony and Füzesgyarmat. For the Asian market, KUKA also produces robots and control cabinets at its Chinese plant in Shanghai. The KUKA Colleges provide technical training courses for customers at more than 30 sites worldwide.

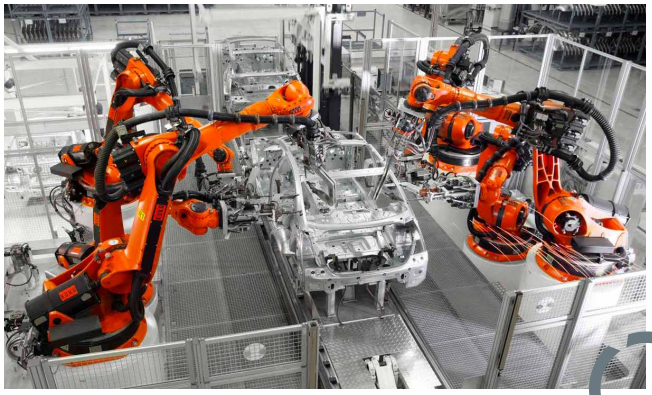
KUKA Robotics is continuously expanding its range of products so as to offer customers from all kinds of sectors the solutions that are appropriate for them and to allow even small and medium enterprises to use robots economically. Research and development has an important role to play here. KUKA's new products and technologies open up additional markets and create new applications for robot-based automation.

Open networking and collaboration are the core ideas of Industrie 4.0, the production of the future. This paradigm shift is already underway today, indeed the company is consciously forcing the pace. After all, robots will play the 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. Industrie 4.0 is neither a Big Bang nor a buzzword that is devoid of meaning; instead, it is a sustainable investment in our future.

With a focus on digital business transformation, the KUKA Marketplace offers customers a zero touch IoT solution for smart production – KUKA Connect. KUKA Connect is a cloud-based software solution, enabling users to access and analyze their KUKA robots at any time and from anywhere. KUKA Connect allows customers to bring their product to market faster, adapt to regulatory requirements, increase efficiency and, even more importantly, introduce innovations quickly. The KUKA Marketplace enables customers to not only search for and buy the latest KUKA products, it also makes available user manuals and videos for additional information.

KUKA Systems

The Systems division offers customers complete tailor-made solutions for automating manufacturing processes. It plans, designs and builds automated production systems. The range covers the entire value chain of a system: from individual system components, tools and fixtures to automated production cells and even complete turnkey systems. The division's expertise lies in automating individual production processes such as welding and joining, processing various materials and integrating different production stages to form a fully automatic system.



The Systems division supplies large-scale automated lines principally to the automotive industry for body-in-white production as well as assembling engines and transmissions. Markets in Germany and elsewhere in Europe are served from Augsburg, while the Greater Detroit area in the USA is responsible for the North/South America region and Shanghai in China handles the Asian market. Automated assembly lines and test rigs for engines and transmissions are designed at and supplied from the Systems sites in Bremen, Greater Detroit/USA and Shanghai/China. Systems also operates a production plant for the entire body of Chrysler's Jeep Wrangler (KTPO) in Toledo/USA. As well as the automotive industry, more and more other sectors are coming to rely on the expertise that Systems has acquired over many years in the automation business.

KUKA bundles this expertise of cell business and in-depth process know-how within the KUKA Industries business unit, which forms part of the Systems division. At its sites worldwide, KUKA Industries offers its customers innovative joining and machining technologies, laser welding and special welding processes, as well as all the process steps in the foundry sector and in photovoltaic and battery production. KUKA Industries is an expert in process- and customer-oriented cells and solutions, from the initial idea to production support, for customers in the automotive, consumer goods, energy & storage and electronics industries as well as many other sectors.

Swisslog

With its Swisslog division, KUKA is opening up the growth markets of e-commerce, consumer goods and healthcare in the field of intralogistics. Based in Buchs, Aarau/Switzerland, Swisslog serves customers in over 50 countries worldwide. From planning and design, through to implementation and service over the whole life cycle of the solutions, Swisslog provides integrated systems and services from a single source.

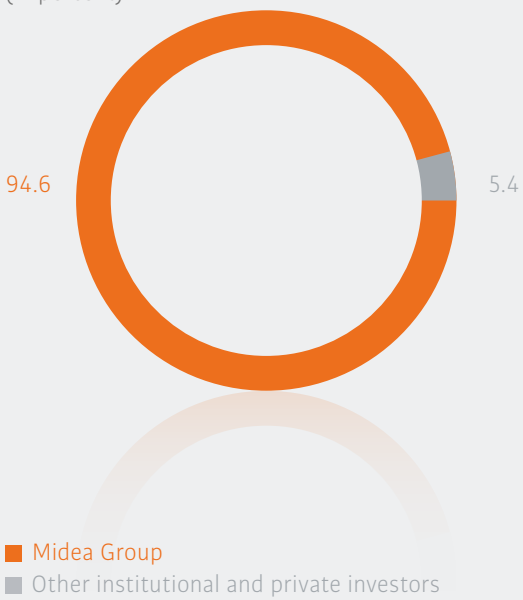
The Healthcare Solutions (HCS) unit provides automation solutions for forward-looking hospitals in order to increase efficiency in a sustained manner and improve patient care. The solutions optimize work procedures in the areas of material transport and medication management. The hospital staff can thus dedicate more of their time to personal patient care. At the same time, medication errors in the medical field are demonstrably reduced through automation.

The Warehouse and Distribution Solutions (WDS) unit implements integrated automation solutions for forward-looking warehouses and distribution centers. As a general contractor, WDS offers complete turnkey solutions, from planning through to implementation and service, employing data-controlled and robot-based automation in particular. Swisslog has an Industrie 4.0 portfolio comprising the latest intralogistics technologies, innovative software and a variety of services tailored to customers, covering all aspects of warehouse operation.

Shareholders

KUKA AG has a market capitalization of around 4.8 billion euro (2017). Its shareholders are institutional and private investors. At the end of 2017, 94.6 percent of the shares were held by Midea Group and 5.4 percent by other institutional and private investors. Furthermore, KUKA is also financed through debt capital.

Shareholders
(in percent)



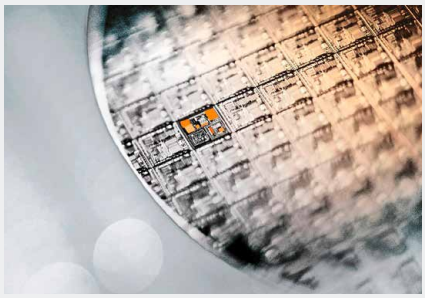
Our markets

KUKA has customers in a wide range of future-oriented industries. Our most important markets are in Europe, the Americas and Asia.

KUKA has the right technologies for every market.

Automotive

The automotive industry has always been of great significance for KUKA. It is a very important driver of technology and innovation. The German premium brands in particular play a key role here. The automotive segment currently accounts for about 50% of revenues. KUKA will continue to grow around the world with its automotive customers and support them as a partner in automation and digitization.



Electronics

The electronics industry is one of the most varied sectors in modern industry. It encompasses the production of electrical household appliances, cutting-edge technologies such as 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). The electronics industry will experience a significant rise in the number of new robots deployed in the coming years. The trend of recent years will thus continue unabated.

Metal industry

KUKA can draw on many years of experience in the metalworking industry. In arc welding or laser welding, but also in the foundry industry, customers benefit from KUKA's expertise.

E-commerce

Electronic commerce results in large quantities of varied goods being sent to consumers via goods distribution centers – volumes which in the long term can only be catered for through automation. The e-commerce segment is therefore an important sales market for smart logistics concepts combined with innovative, robot-based automation.

Consumer goods

Robots have been efficiently and successfully supporting the production of fast-moving consumer goods (FMCG) for many years, especially in the food and beverage industry, but also in shoe 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, are opening up new applications along the process chain.

Healthcare

Automation solutions ensure greater efficiency in hospitals and improve work procedures. The workload on nursing staff is thus reduced, enabling them to concentrate more on patient care in the future. Solutions from Swisslog help modern hospitals and other healthcare facilities with efficient material transport and management of medicines.

The Executive Board of KUKA AG: CEO Dr. Till Reuter and CFO Peter Mohnen (from right to left).

Responsible corporate governance

As a German stock corporation, the statutory rules impose on KUKA AG a dual management system comprising an Executive Board and a Supervisory Board. The Executive Board is responsible for managing the company. The members of the Executive Board share this responsibility for company management. The Chairman of the Executive Board and Chief Executive Officer coordinates the work of the entire 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 two people: the Chief Executive Officer (CEO) and the Chief Financial Officer (CFO). There are currently no women represented on the Executive Board. For information on the compensation of the Executive Board, see Annual Report, starting on page 18.

14,256

employees in the Group

KUKA AG's Supervisory Board consists of twelve members as per the Articles of Association, of which six represent the shareholders and six the employees. Four Supervisory Board mandates are currently held by women. This puts the share of women at 33 percent. Supervisory Board elections take place every five years. The Supervisory Board decides on the appointment of members of the Executive Board. It also monitors and advises the Executive Board. The Chairman of the Supervisory Board coordinates the work of the Supervisory Board. Furthermore, the Supervisory Board and the Executive Board regularly inform themselves about key topics. The remuneration of the Supervisory Board is also outlined in the Annual Report, page 22.

The Supervisory Board has formed five committees. An overview of them is provided in the Annual Report. Environmental and social issues impact many topics, and these are dealt with by the Supervisory Board, both in the Planning Committee and in the individual committees responsible, as necessary. An explanation of the diversity concept is described in the Annual Report, starting on page 14.

Sustainability management

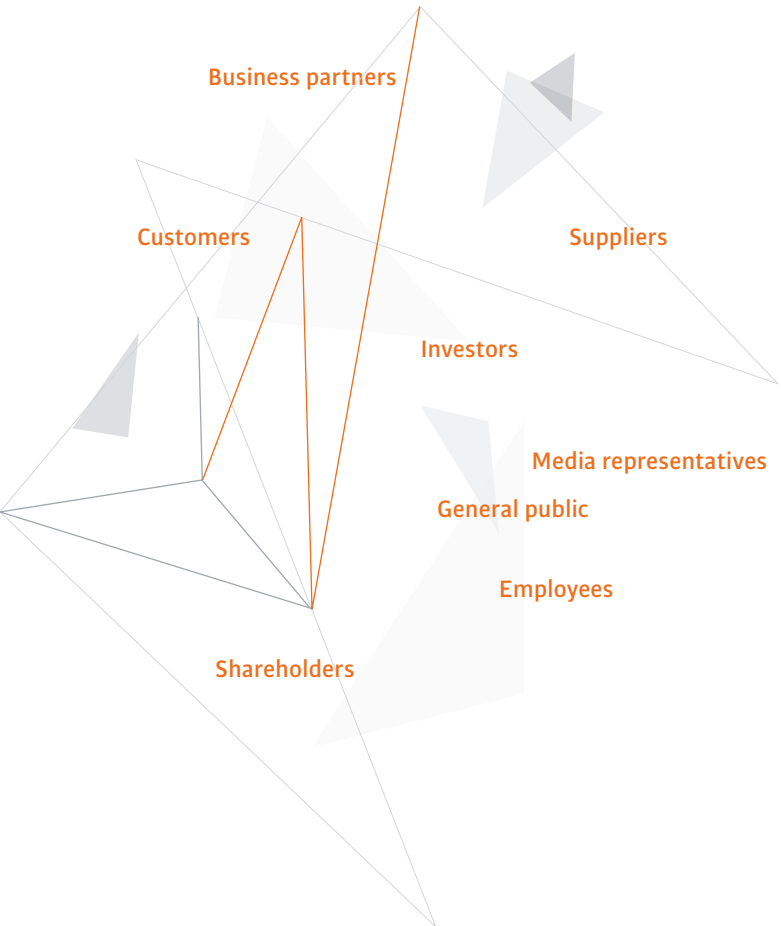
At KUKA, sustainability is an integral part of the corporate culture and stands for responsible business practices to protect the environment and resources. KUKA carries responsibility for its employees, customers, investors, society and the environment. That is why we work hard to ensure that the company continues to develop sustainably. Monitoring and analyzing the ecological and social impact of the company is an important aspect of this.

Societal, ecological and economic challenges are addressed by various departments in KUKA Group. Sustainability management is accomplished by Procurement, Human Resources or Facility Management, depending on the issue. Beyond that, other areas of the company are entrusted with individual sustainability issues.

The goal of our sustainability management is to identify opportunities and risks at an early stage in order to develop and implement appropriate strategies and measures. Changes to the legal framework conditions that affect the sustainability factors are monitored and appropriate measures are taken as required. Sustainability issues are regularly presented to the Executive Board and the divisions during management reviews in order to follow through on the goals and to initiate appropriate measures as required. The Sustainability Report is prepared on behalf of the Executive Board and approved at an Executive Board meeting. After a preliminary review by the Audit Committee of the Supervisory Board, the final review is carried out by the Supervisory Board.

Stakeholders

KUKA is in regular contact with various social groups. These may at times place quite different demands or requirements on the company and may impact the company'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. We have been collaborating closely with various customers for many years, for example implementing technical innovations in industrial production within the scope of joint projects. The table shows how the added value in KUKA Group is distributed to the key stakeholders.



Value added of KUKA Group

	2016	2017
Sales revenues	2,948.9	3,479.1
Cost of materials	1,486.2	1,979.0
Other expenses and income	285.2	279.5
Other interest and similar income	8.1	6.2
Depreciation and amortization	81.7	79.5
	1,103.9	**1,147.3**

Distribution (in € millions)

	2016	2017
Employees	968.6	1,038.2
State	36.1	5.3
Lenders	13.0	15.2
Company	66.9	68.7
Shareholders	19.3	19.9
	1,103.9	**1,147.3**

Communicating with stakeholders is important to KUKA, because an open exchange of thoughts is the basis for mutual understanding and acceptance of business decisions. The respective divisions are responsible for communication with the various stakeholders: for example, Purchasing is the 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. KUKA AG has been involved in the Carbon Disclosure Project (CDP) since 2008, an organization that analyzes information relating to environmental risks on a yearly basis. We are additionally involved in a number of organizations and initiatives, including:

- EUnited – European Engineering Industries Association AISBL
- euRobotics AISBL
- IEEE Robotics & Automation Society
- IFR International Federation of Robotics
- Industrie 4.0 Platform
- Verband Deutscher Maschinen- und Anlagenbau e. V.
- Verband der Elektrotechnik, Elektronik und Informationstechnik e.V.

Risk management

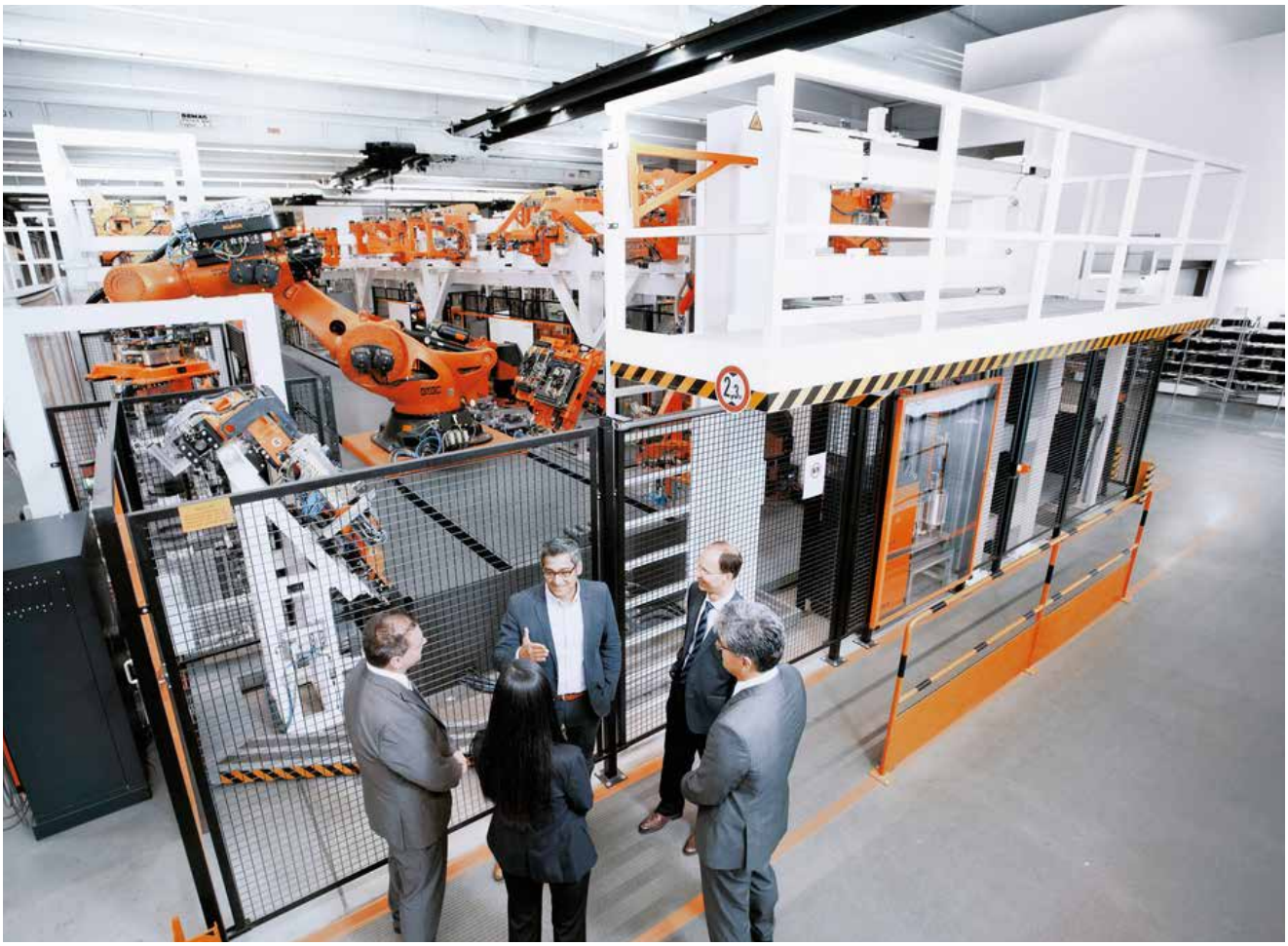
The Executive Board has implemented a comprehensive corporate risk management system to systematically and continuously identify, evaluate, manage, monitor and report the internal and external risks to which its divisions and subsidiaries are exposed.

Group management regularly assesses the likelihood that identified risks, and thus also risks resulting from sustainability issues, will occur and their potential impact on expected earnings (EBIT). 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 that has been collected in this way is summarized in a risk report that is also prepared each month and addressed to the Executive Board of KUKA Group.

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

Changes to the legal framework conditions that affect the sustainability factors are monitored and appropriate measures are taken as required.

KUKA helps its customers to fully exploit the potential of Industrie 4.0



KUKA's impacts on the economy, environment and society

With its products, services and the associated activities, KUKA makes an important contribution to economic growth and technological progress, and towards improving working conditions at our customers' facilities. We are a partner to our customers as well as our employees and their families, we ensure that the environment is protected through the careful use of natural resources and an effective environmental management system, we comply with applicable laws and regulations at all times, and, as a reliable employer and good neighbor, we offer support where needed. We take our responsibility seriously. Which is why we are aware that our activities may also have negative implications, which could entail serious consequences for the economy, environment and society as well as our company and its employees.

Society

With our products, we are a driving force behind automation and technological progress and are an innovation leader in Industrie 4.0. The global megatrends of digitization and automation are transforming the world of work and thus the required job qualifications. Some occupations will become less important and new ones will evolve. Employees at our own company and also at our customers will have to be appropriately prepared for this. KUKA is involved in various different committees to help shape the world of Work 4.0. For us, after all, this development is centered on humans, who are supported by robots.

Employees

We are directly responsible for more than 14,000 employees worldwide. In order to minimize health risks, we place great importance on high safety standards in all activities within the company and in handling our products, and we are committed to responsible economic activities. This also ensures that we remain an attractive employer, thereby counteracting a shortage of skilled personnel in our company.

Environment

The most significant impacts are primarily CO_2 emissions as a result of the consumption of electricity and heat, and to a lesser extent through business travel. These contribute to climate change. As a manufacturing company, KUKA generates waste that is disposed of and recycled in accordance with the law, yet this may still impact the soil and groundwater. Accidents too could lead to the contamination of soil, water or air, for example through fire, leakages or natural disasters. KUKA is therefore taking measures to minimize its environmental impact worldwide.

Fight against corruption

Corruption and bribery fuel poverty and social inequality throughout the world, stifling economic development. Cases of corruption involve reputational risks for our company and may entail fines, damages or exclusion from public tendering procedures. That is why we pay particular attention to compliance with all relevant laws, and we take rigorous action when needed.

Human rights

Our supply chain extends partly to countries in which adherence to human rights still cannot be fully guaranteed. Violations can lead to legal consequences and may tarnish our reputation. KUKA does not accept any violation of basic human rights. We expect all of our employees and business partners to heed our guidelines for the preservation of human rights; these therefore also apply to the entire integrated chain of suppliers. KUKA has recognized the need to explicitly address the many aspects of human rights and will bring this risk to the fore with an increased level of commitment.

_The topics identified in this overview form the basis for selection of the key issues covered in the current report.

Challenges and opportunities

Materiality matters

Focus on what matters most

Sustainability – the equal consideration of economic, ecological, and social or societal aspects – is a generally accepted theorem. But it is often also vague. In order to reconcile this with a corporate strategy, the issues relevant to the industry and the individual company must be identified. What matters here is not only what is important to us, but what is important to our environment.

In the year under review, we intensively discussed these issues which are key for KUKA and created a corresponding list. We followed the recommendations of the Global Reporting Initiative (GRI Standards) and at the same time took into account the requirements of EU Directive 2014/95/EU "as regards disclosure of non-financial and diversity information". The impacts of our business on the environment, society, employees, human rights and in the fight against corruption, which we described on the previous page, also had an effect on the choice of topics. 13 KUKA executives from various departments and business divisions took part in the process and contributed their expert knowledge. The point of view of external stakeholders was incorporated through pertinent standards and relevant studies. Decisive for assessing the materiality of a topic were the questions:

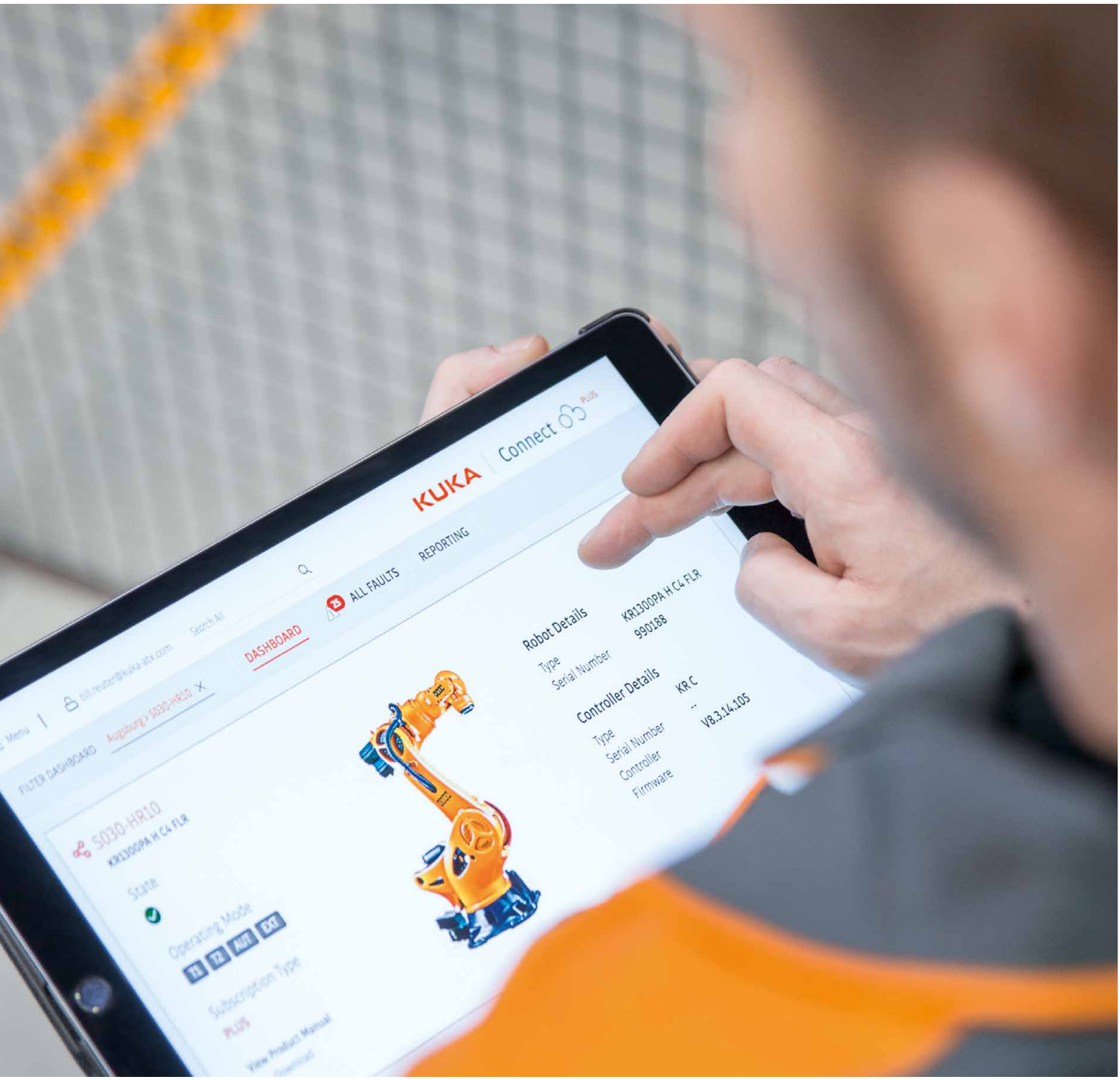
1. How significant are the impacts of the topic on the environment, society, employees, human rights and the fight against corruption?
2. How relevant are the topics for external stakeholders?
3. How relevant are they for the future course of business at KUKA?

Basis for management and reporting

The discussions ultimately resulted in a list of 13 essential topics, which were subsequently prioritized and assigned to the relevant aspects of the EU Directive. This is the basis not only for our future sustainability management but also for this Sustainability Report. It is structured according to the topics of the materiality analysis.

One important topic we identified, for example, is the increasing digitization and automation of the business world. The impacts of this topic on ecological and social issues are considerable – positive in terms of the environment (because it conserves resources), while from a social perspective we are aware that robot-based automation is transforming the challenges facing employers and employees alike. We collect and act on feedback from our stakeholders in this context.

Material topics prioritized by order of importance	Material impacts internal and external to the company	GRI topics
Digitization/automation	Internal & external	**GRI 203** Indirect Economic Impact, **GRI 418** Customer Privacy
Management and values	Internal	**GRI 402** Labor/Management Relations
Training and further education	Internal	**GRI 404** Training and Education
Diversity	Internal	**GRI 405** Diversity and Equal Opportunity
Product safety	External	**GRI 416** Customer Health and Safety, **GRI 417** Marketing und Labeling
Employment	Internal	**GRI 401** Employment
Procurement	Internal & external	**GRI 204** Procurement Practices, **GRI 308** Supplier Environmental Assessment, **GRI 414** Supplier Social Assessment
Anti-corruption and fair competition	Internal	**GRI 205** Anti-Corruption, **GRI 206** Anti-competitive Behavior
Sustainable/efficient products	External	**GRI 302** Energy
Human rights	External	**GRI 407** Freedom of Association and Collective Bargaining, **GRI 408** Child Labor, **GRI 409** Forced or Compulsory Labor
Occupational health and safety	Internal	**GRI 403** Occupational Health and Safety
Saving resources in production	Internal	**GRI 302** Energy, **GRI 303** Water, **GRI 306** Effluents and Waste, **GRI 307** Environmental Compliance
Social commitment	External	**GRI 413** Local Communities



New opportunities through Industrie 4.0

Megatrend of digitization

Pioneer in a highly dynamic environment

The digital transformation is a key issue for KUKA. The company operates in a dynamic, innovation-driven market environment, which is continuously changing and is now redefining itself under the influence of digitization. KUKA has the technologies and the know-how to shape and to implement Industrie 4.0.

KUKA plays a leading role in the automation and digitization of the industrial world and is aware of the corporate responsibility that this role entails. The company is working intensively with researchers, politicians and customers to steer these developments. It is all about shaping industry and the future world of work, which is why Industrie 4.0 is also a societal issue.

Shaping the future of work

Every industrial revolution has led to debate in society. Technical advances such as steam engines, electrification/assembly lines and information technology have always fueled concerns over job security. It is true that the world of work has changed with every advance. Many manual occupations no longer play such a key economic role as before, while some have disappeared completely. At the same time, these developments have significantly contributed to the economic strength of industrialized countries and to people's welfare and have created fields of employment that were previously unknown.

At KUKA, we are convinced that this also applies to the fourth industrial revolution, which involves the networking of production processes, the merging of hardware and software, and hence the offering of individualized production at mass production prices. Just as in the case of past developments, certain occupations will become less important, but new ones will arise to take their place, such as where IT and engineering meet. In high-wage economies such as Germany, robots protect productivity and thus safeguard jobs. Digitization and automation also offer opportunities for small and medium-sized companies – including opportunities to bring jobs back to Germany. The high level of occupational health and safety is a further consequence of automation in industry.

To make the German economy fit for the future and prepare workers for the requirements of Industrie 4.0, businesses and politicians must work together. KUKA is using the Industrie 4.0 platform, set up by the Federal Ministry for Economic Affairs and Energy and the Federal Ministry for Education, to work alongside trade union representatives in order to support as many societal forces as possible in the changing world of industry and work. Training and continuing education must also be promoted continuously and curricula must be revised regularly to ensure that they keep up with changing practical requirements.

The sensitive LBR iiwa lightweight robot supports humans through direct collaboration.

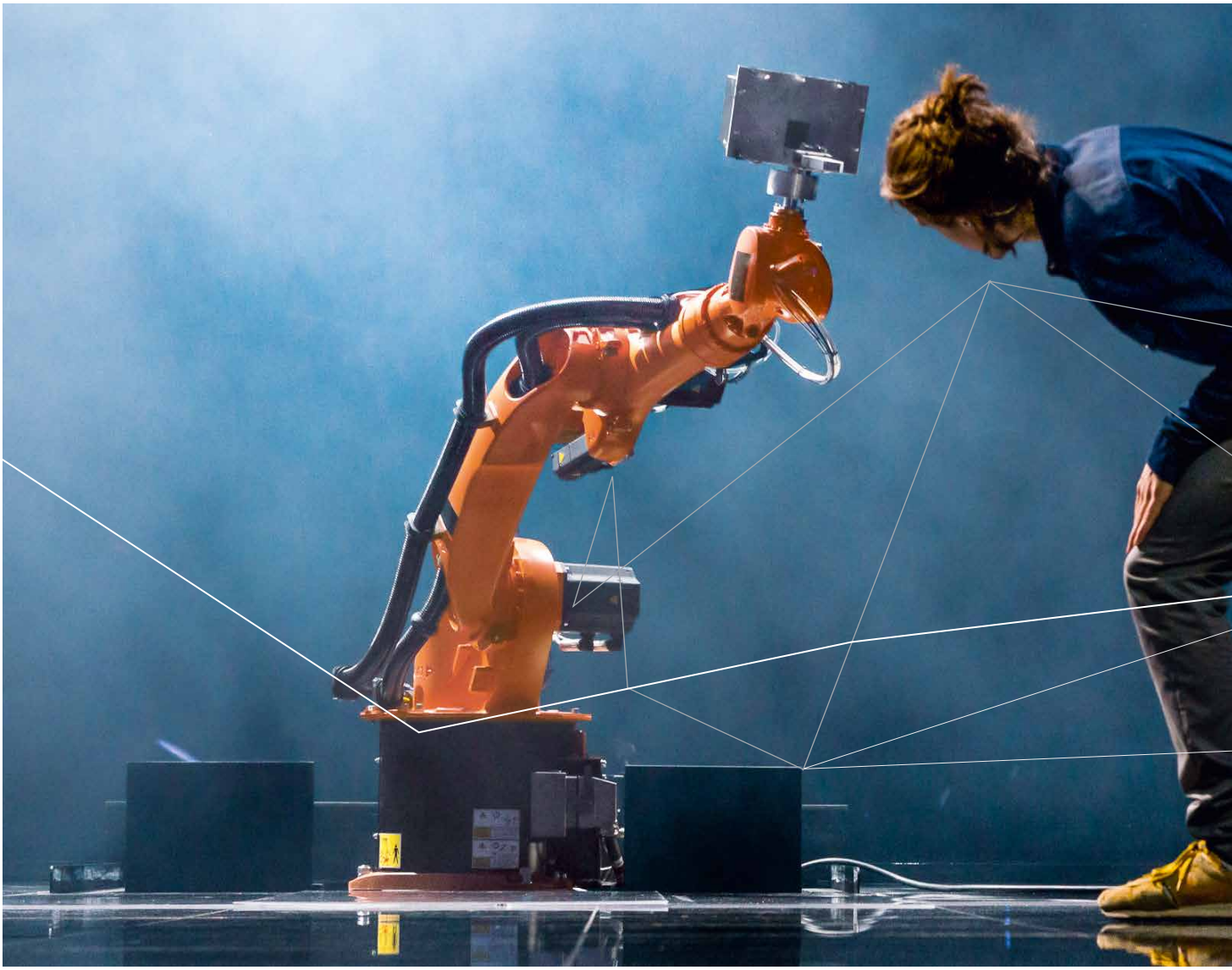
Approach to resolving demographic change

Automation also helps solve one of the most pressing societal problems of our time: demographic change. Aging populations and ensuing skills shortages are already a major societal challenge, especially in industrialized nations. The generation of baby boomers will be entering retirement in the next few years. This development can be partly offset through automation. Robots can take over many activities, above all dangerous and physically demanding work, playing a role in protecting the health of valuable skilled workers and preserving their working capacity.

Demographic change has already led to a higher proportion of older people and people in need of care. Developments in recent years have shown that shortages of caregivers may increase and possibly lead to a healthcare crisis that will be difficult to resolve. Service robots will be able to assist with care activities and take over logistics tasks such as disposing of medical waste, sorting food trays or managing medication. This will give nursing staff more time to look after their patients. Sensitive service robots will also become more prominent in households in the future. Elderly people will be able to live longer in their usual surroundings, with robots providing flexible assistance to help them get up or fetching and carrying for them.

In the future, robots will increasingly support people in their daily lives. Today they are used primarily in industrial environments. But future applications will also involve service and consumer robotics. For the generations to come, robots will be part of everyday life, like smartphones and the internet are today.

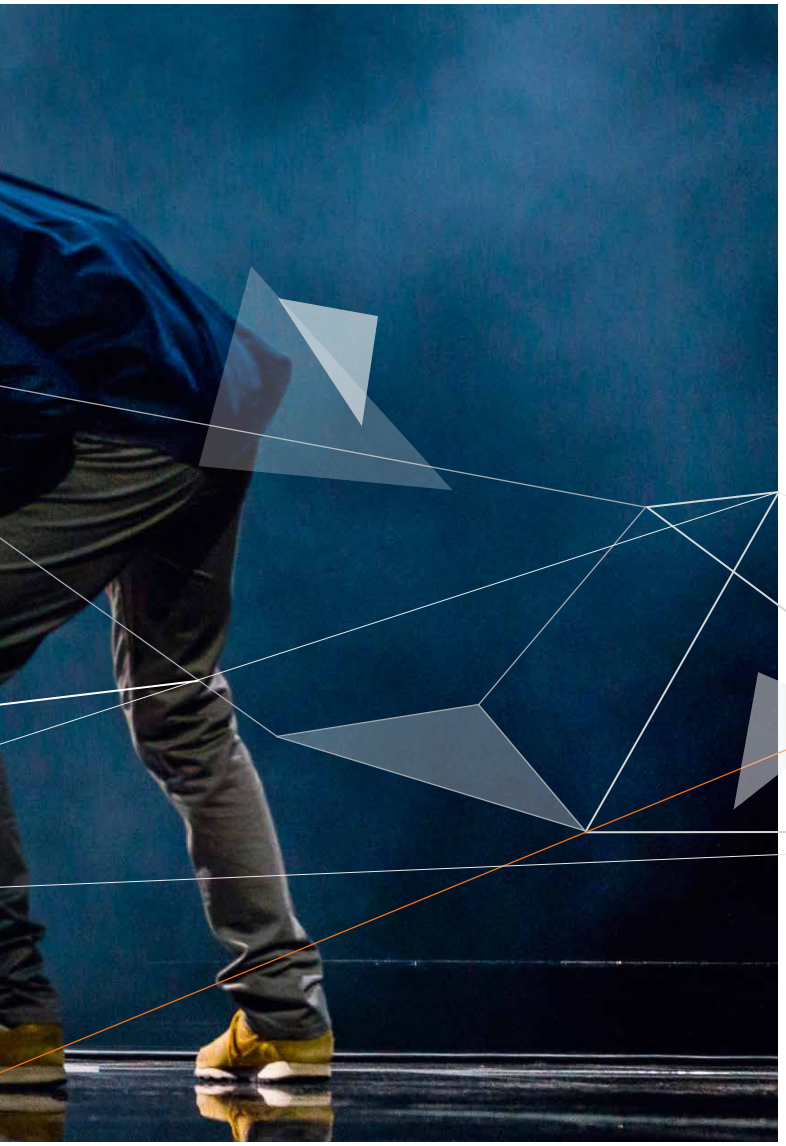
Robots of the KR QUANTEC series teamed up with human dancers to entertain the audience at the second semi-final of the Eurovision Song Contest.



_International cooperation

Digital transformation is a key issue for KUKA as a globally active automation company. In order to remain globally competitive, companies need new manufacturing concepts and business models. By digitizing the manufacturing process, companies can respond more flexibly to changing market conditions, such as smaller batch sizes and increasing product diversity, and meet individual customer requirements.

KUKA is working intensively with researchers, politicians and customers to shape these developments. KUKA is a partner of leading global research communities and associations such as the Industrie 4.0 platform, the Industrial Internet Consortium and the OPC Foundation. The aim is to develop recommendations for action and to initiate appropriate standards.



"In the future, robots will increasingly support people in their daily lives."

From machines via employees to customers

In industry, new robot systems that are sensitive and mobile, and thus able to work hand in hand with humans, are opening up new possibilities in production. The trend is towards robots that are simple to program, flexible to deploy and easily integrated and networked. This simpler operation will become more important as automation increases, when more and more people work with robots.

As a flexible production element, the robot is increasingly able to collect data in the production facility and exchange these data with the IT systems. This networking of automated processes with the IT world is characteristic of Industrie 4.0. Production processes will become more efficient and systems will be able to respond quickly to individual customer requirements. After all, KUKA's customers too are faced with consumer demands resulting from the speed of the Internet.

KUKA already has a number of important elements for the implementation of Industrie 4.0: safe systems for human-robot collaboration, mobility with integrated navigation and modular controllers for connection to the world of IT. Furthermore, KUKA is working with customers and partners on business models for the utilization and implementation of Industrie 4.0. Through the start-up connyun, KUKA is working with partners on a complete ecosystem to support customers with completely new business models.

_Data security – in the interest of customers

Through its close collaboration with customers over many years, KUKA sometimes has access to sensitive information on protected products and production processes. KUKA therefore places great importance on protecting customer data.

KUKA is committed to providing not only safe and secure automation solutions, but also to setting standards in terms of data protection and information security. KUKA therefore ensures a uniform standard worldwide in its handling of corporate and personal data. These 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 year under review, no infringements of customer privacy or loss of customer data were reported to us.

For many years, KUKA has been ISO/IEC 27001 certified in compliance with IT baseline protection. In order to continue to meet our customers' requirements in the future and address new challenges of the Internet of Things and Industrie 4.0, KUKA plans to achieve TISAX certification (Trusted Information Security Assessment Exchange) as of 2018, a mutually recognized auditing standard regarded by many original equipment manufacturers (OEMs) as a prerequisite for close and trusting cooperation.

"KUKA already has a number of important elements for the implementation of Industrie 4.0: safe systems for human-robot collaboration, mobility with integrated navigation and modular controllers for connection to the world of IT."

KUKA is well prepared

KUKA has set itself the goal of supporting its customers in the holistic optimization of their added value by providing comprehensive automation and digitization know-how. Therefore KUKA is supplementing its automation expertise with know-how in cloud-based networking of machines and systems as well as data analytics. For this reason, a team is researching cloud-based big data applications at the US development site in Austin, Texas.

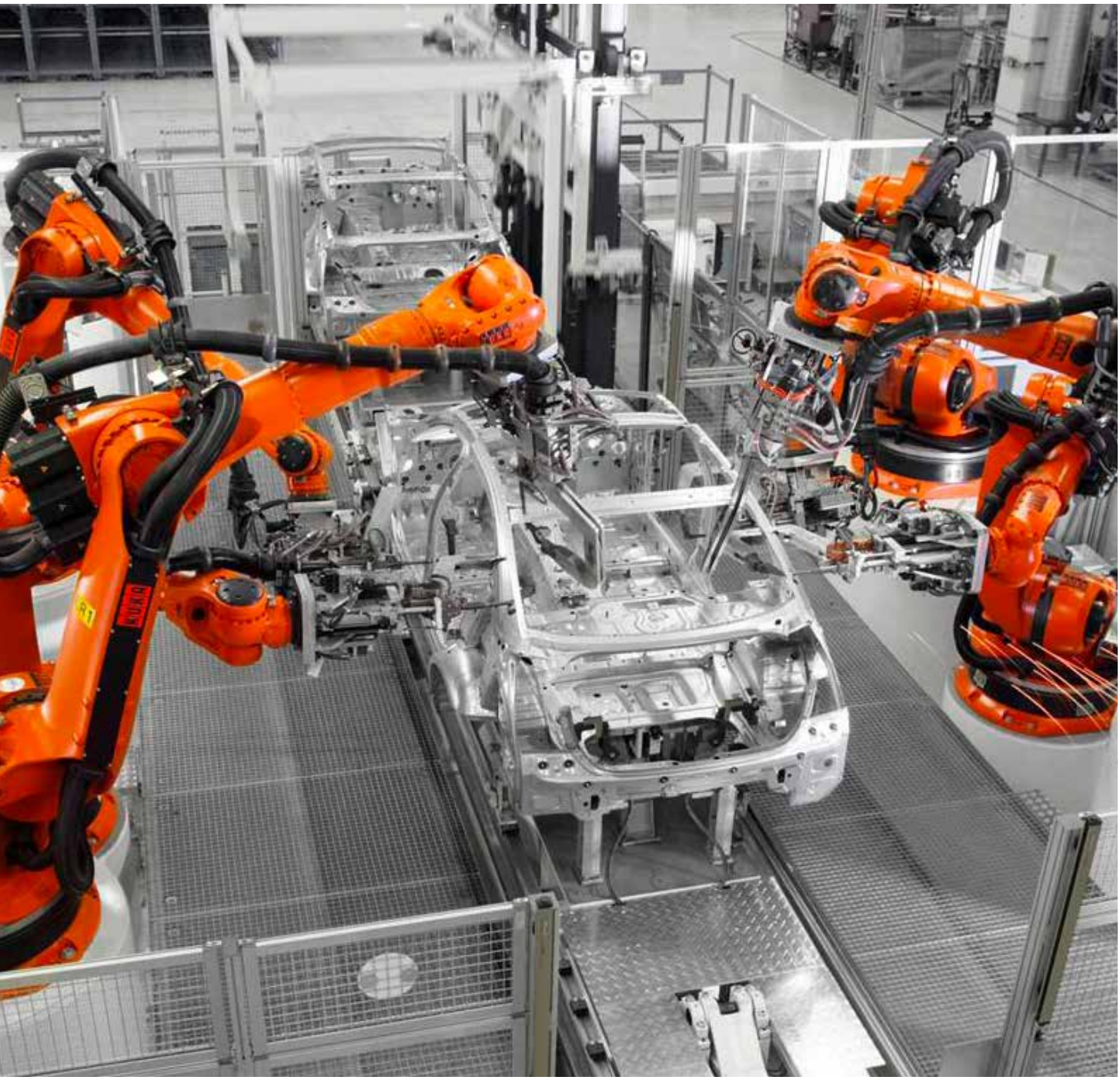
An important aspect of this is also working on new business models. These will fundamentally and permanently transform not only production in the future, but also the value creation process as a whole, also at KUKA itself. A central Industrie 4.0 team is intensively addressing the potential of digitization as a business model.

But first and foremost, Industrie 4.0 starts within our own company. Various projects have been initiated under the KUKA 2020 program, aimed at making corporate structures and employees fit for digitization. For example, the company now features a standard IT structure for the purpose of harmonizing processes worldwide.

KUKA is implementing the concepts of Industrie 4.0 in its own production, in part to optimize processes under real conditions from which customers will later benefit. By networking all components involved in the production process in the KUKA Cloud, data-based analyses can be drawn up, for example to keep track of energy consumption or maintenance intervals in production. The corporate culture has also been further enhanced. KUKA employees communicate via the digital social business platform “Chatter” across all divisions and national borders, and are networked in work groups. This promotes global collaboration.

A new website allows customers and visitors to enter the digital world of KUKA. Via the KUKA Marketplace, customers set out on their own “customer journey”.

In the framework of our “KUKA 2020” program, we are positioning the company to address megatrends such as globalization and digitization.



At KUKA, sustainability also applies to the fine print

Responsibility throughout

Suppliers impact the sustainability performance

Sustainability is a joint effort. It cannot be decreed from above. Rather, everyone must pull in the same direction. And “everyone” refers not only to KUKA employees but also to our suppliers. It is very important to us to have a clear overview of our supply chain. We maintain close contact with our suppliers to minimize potential risks within the supply chain.

When the percentage of purchased parts and products is high, it also means that the supply chain has a decisive impact on sustainability performance. Depending on the KUKA location, some production operations involve a high proportion of purchased parts. Comprising up to 70 percent at Group level, the procurement volume is of great significance for sustainability at KUKA.

Materials are sourced regionally where possible

Sustainability in procurement becomes an important issue when weighing the environmental and social impacts of the supply chain. At KUKA, these risks are relatively low compared to many other sectors, because the required components originate from countries which are not among listed conflict or risk regions. Furthermore, our purchasing requirements often cannot be satisfied by standard goods on account of the high product complexity and often technically sophisticated specifications. We therefore address special configurations with a correspondingly high development effort coupled with component transparency. For example, Robotics purchases specialized transmissions and motors, as well as castings and structural parts for the robot arms, in addition to sheet metal, electronic components, cables and hoses.

KUKA Robotics has more than 3,600 suppliers worldwide, KUKA Systems approximately 4,800 and Swisslog around 2,300. Their regional distribution corresponds to KUKA’s plants and production sites, meaning it is subject to the “local for local” principle. Regional suppliers located near our sites are preferred as far as possible. This prevents unnecessary transport routes and the associated negative environmental impacts, and it further strengthens the local economic environment near the sites.

In the year under review, for example, the Robotics division pursued a number of strategic goals that are relevant to sustainability management. One of the focal points was on improving the company’s transport-related ecological balance sheet by further increasing the share of local suppliers in Asia and exploiting regional synergies.

In the case of new suppliers, all Group divisions cooperate with local companies in order to keep transport routes short.

“We prevent unnecessary transport routes and the associated negative environmental impacts, and further strengthen the local economic environment near the sites.”

Ensuring sustainability …

KUKA implements a large number of measures to ensure that sustainability management extends all the way into the supply chain. Many of our production sites have already been certified according to the international environmental management standard ISO 14001. Additional production sites are scheduled for certification. Our key suppliers are also encouraged to observe and heed the environmental goals stipulated in the certification. In the contractually agreed performance requirements, for instance, they are obliged to use environmentally friendly products and processes both for their own services and for ancillary services provided by third parties, to the extent that is economically and technically feasible for them in the context of deliveries to Robotics.

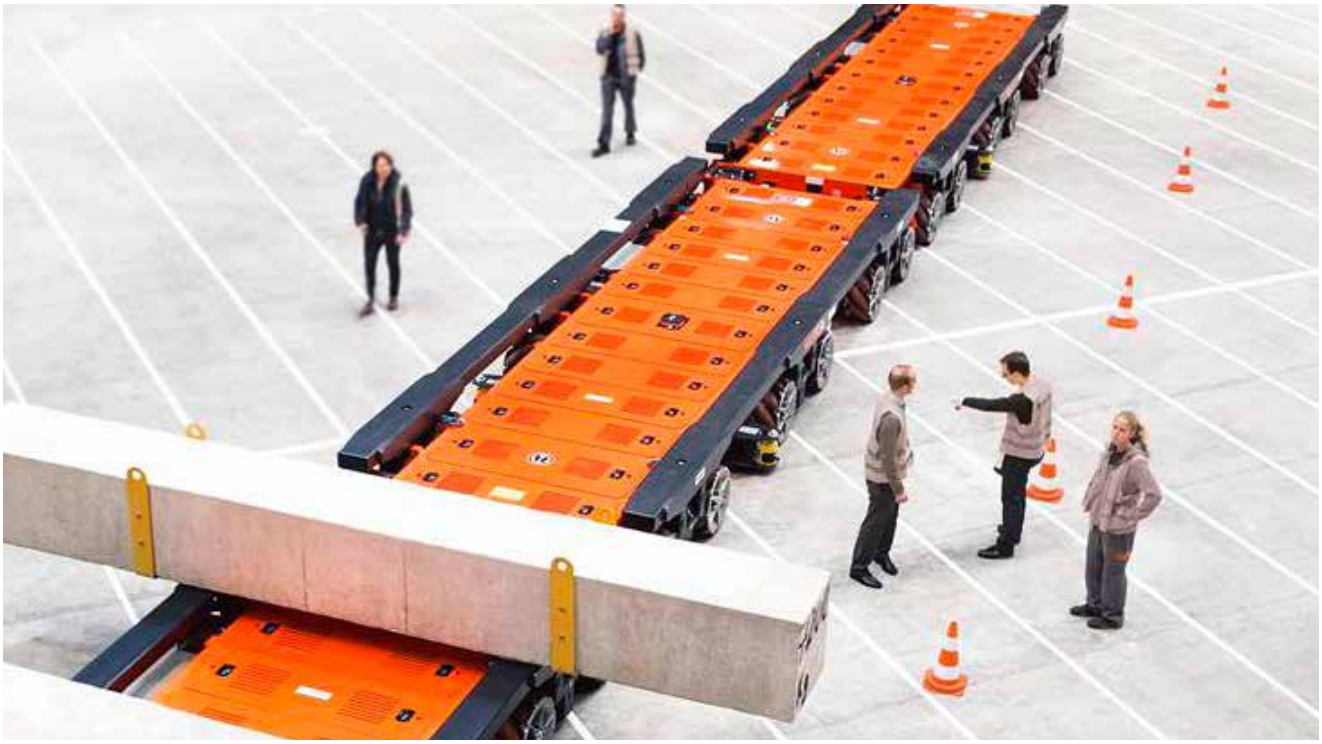
As a rule, all major suppliers are audited prior to starting cooperation. In addition to cost and quality aspects, on-site supplier audits also help to prevent environmental risks and compliance issues. Sustainability at KUKA is therefore not just an abstract corporate goal, but a firmly rooted concept.

Particularly in parts of Asia, where sometimes unethical employment practices cannot be completely ruled out, we take our due diligence especially seriously. This is why Robotics audits the production facilities and manufacturing processes of potential key suppliers through its own quality management team in cooperation with the Procurement department. These audits also include internationally recognized occupational health and safety standards.

… and precluding human rights violations

To our knowledge, human rights violations such as child and forced labor or the failure to observe international working standards do not exist in our supply chain. On top of our on-site supplier audits, the main reason for this assessment is that the complexity of purchased goods and technologies requires a high level of knowledge and skills as well as a keen awareness of quality on the part of the employees who are involved. These tasks cannot be carried out by untrained workers, those who are most likely to face the highest risk of human rights violations in Asia. KUKA and its suppliers produce primarily in OECD countries and in industries where no significant human rights violations have been identified. Nonetheless, our compliance requirements for our suppliers stipulate compliance with human rights, and we thus clearly communicate our stance.

“As a rule, all major suppliers are audited prior to starting cooperation.”



KUKA's mobile omniMove platforms can move XXL components, navigating autonomously in their environment.

Regulated processes ensure safety

The processes and responsibilities pertaining to supply chain management are clearly defined at KUKA. At Robotics, the Operations division is responsible for all procurement processes. The divisional director reports to the Chief Operations Officer, who in turn reports to the Executive Board.

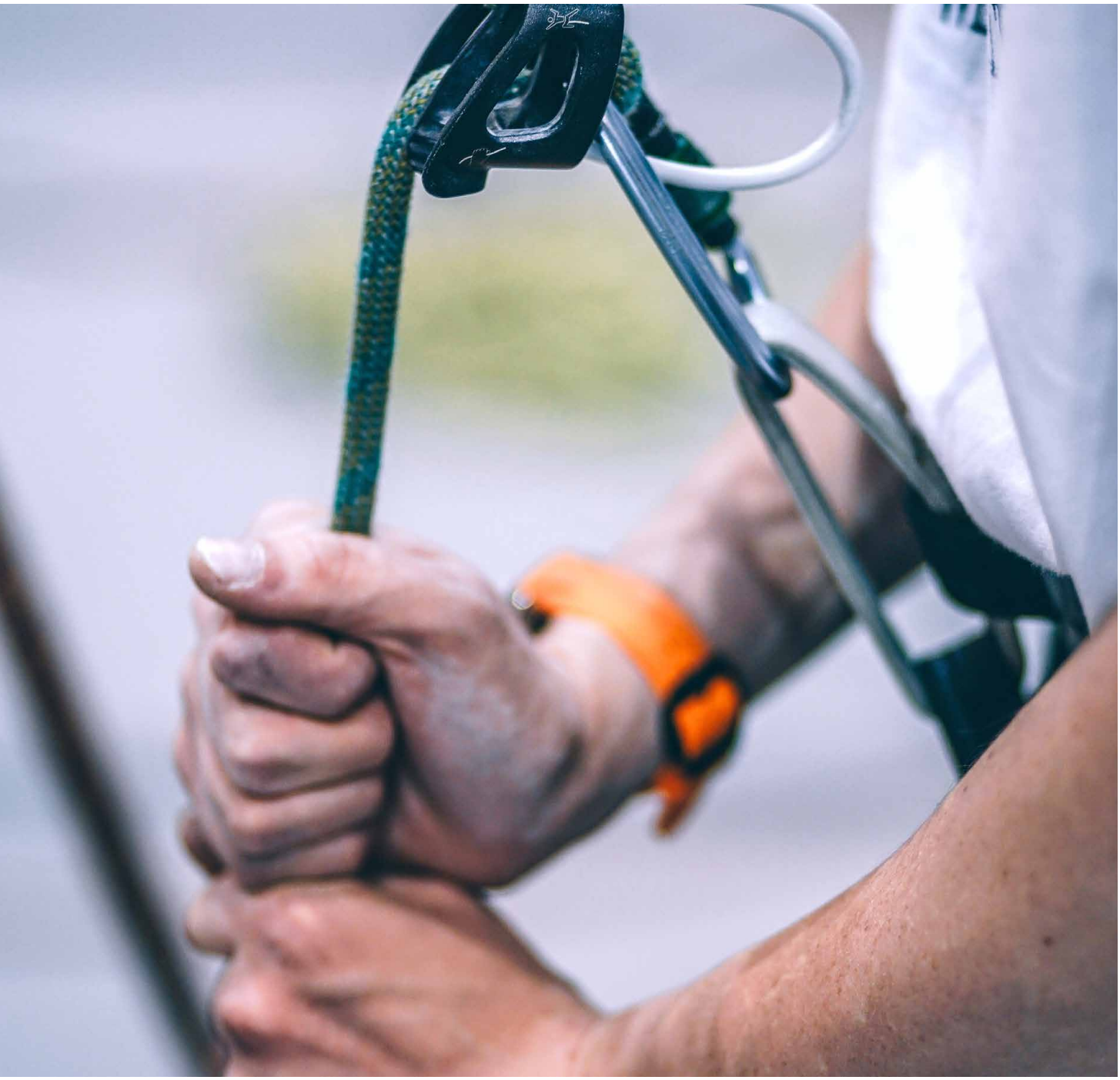
The Operations division is divided into the topics Global Planning, Global Order Management, Production Engineering and Global Sourcing in the three production countries Germany, Hungary and China. The continuous enhancement of the supply chain with regard to process optimization and the quality of suppliers and subcontractors takes place in close cooperation with quality, environmental and energy experts such as the Supplier Quality Management of the Quality department. Findings from audits, such as corrective and preventive actions, are regularly analyzed and processed.

At Swisslog, procurement consists of the Corporate Purchasing, Production Purchasing and Project Purchasing departments. The umbrella is formed by Corporate Purchasing, whose director reports to the Chief Executive Officer of Warehouse and Distribution Solutions (WDS) – one of the two operational units of the division. Swisslog distinguishes between Production and Project Purchasing, the sustainability aspects primarily pertaining to the material-intensive Production Purchasing. Within the WDS unit, there are departments for the three production regions. The most important purchasing guidelines at Swisslog are the Purchasing Strategy as well as the Purchasing Governance and Supplier Management Policy. Suppliers are evaluated on a quarterly basis pursuant to a standardized supplier performance rating. There is also a standardized procedure for supplier audits.

At Systems, the regional companies in North and Central America (USA and Mexico) and China use their own purchasing processes and corresponding reporting lines. In both regions, the compliance-related requirements for suppliers are firmly rooted in the "Purchasing Terms and Conditions", which also pertain to human rights issues.

Goal-oriented risk avoidance

In all measures taken with regard to supplier management, KUKA aims to sustainably mitigate any potential risks to the environment, people and the companies and business divisions involved, and to further optimize the supply chain in terms of sustainability. However, despite all tried-and-tested processes and precautionary measures, no management system can fully cover all sustainability-related risks. Subsequently, there is always some degree of uncertainty in respect of the economic, ecological and social aspects of the supply chain, which we at KUKA always keep under close scrutiny.



Compliance program successful against corruption

Fair play in the market

"KUKA promotes a corporate culture that is characterized by ethical and law-abiding behavior."

Ethical principles in the market

KUKA operates in a dynamic market environment. Global megatrends such as demographic change and increasing digitization are ushering in fundamental changes worldwide. KUKA is playing a decisive role in shaping this transformation with intelligent robot-based solutions. Despite changing markets, our internal rules and ethical values remain unaltered. Our core values form the foundation for all of our business activities. They are impervious to both everyday trends and changed market conditions, as well as temporal or situational factors. We have anchored our core values in rules that form part of our compliance structure. This includes:

- Honesty and respect for ethical principles as a core element of business,
- Compliance with applicable laws and regulations along with our core values and internal guidelines,
- Effective use of resources and dealing with risks of the company, as well as
- Responsibility of each individual for his or her actions.

These are the core elements of our corporate culture. They are part of the corporate compliance program and thus an integral part of our daily business decisions and processes. The compliance program is intended to ensure that all employees and authorized representatives of KUKA are familiar with and abide by all relevant laws, regulations and provisions as well as internal guidelines in accordance with our core values.

KUKA promotes a corporate culture that is characterized by ethical and law-abiding behavior. We establish clear and concise corporate policies and procedures and convey these through training programs. Compliance with legal requirements and internal guidelines is reviewed regularly.

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. KUKA's pricing policy is geared to the market and based on the price-performance ratio and high quality of its innovative products and services.

Responsible management and supervision of the company are cornerstones of long-term success. Our guiding principle is the current version of the German Corporate Governance Code which was originally introduced in 2002. We fully comply with the recommendations of the Code – and through this strengthen the confidence which our investors, customers, employees and the public instill in us.

Compliance Management System and Compliance Program

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. He reports directly to the CEO of KUKA Aktiengesellschaft. Moreover, the senior executives are involved in the operational implementation as part of their leadership responsibility (“tone from the top”); 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).

Compliance with legal framework conditions and internal guidelines is firmly rooted in the corporate compliance program. The content of this program is laid out in our Corporate Compliance Handbook. This comprises our company’s core values, basic information on corporate compliance and a description of the program’s objectives. It also contains the most important points of contact as well as 16 corporate policies which currently establish the framework for KUKA’s business operations by stipulating rules of conduct, cooperation and personal commitment. Compliance with the rules of fair competition and the fight against corruption and bribery are additionally laid down in the corporate policies.

The Corporate Compliance Handbook is an integral element 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.

In order to instruct employees concerning the corporate compliance program, training measures have been made an inherent feature of the CMS. These measures are offered in several different forms, including computer-assisted learning methods that incorporate electronic and digital media to present training contents (e-learning) as well as worldwide classroom training for selected topics. E-learning programs are used to teach the core values as well as fundamental compliance skills and codes of conduct. Participation is mandatory for all employees, which is confirmed with a certificate after successful completion. New employees are invited to participate in e-learning at regular intervals. Periodic refresher courses are also mandatory for all employees. All new employees receive a copy of the Corporate Compliance Handbook. If significant changes are made to the compliance program, an updated issue of the manual will be redistributed to all employees worldwide. The current issue is from 2016.

Compliance Handbook: every new employee receives a copy on joining the company.

“It is important to us that employees can report suspected compliance violations without fear of negative consequences.”

Open 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 supervisor, 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 compliance matter directly to the Compliance Officer violation without revealing the whistleblower’s identity.

The communication channels which are currently in place proved effective in 2017. Suspicions of corruption and/or unfair competition were evaluated extensively and with utmost diligence by the Compliance department, and the Compliance Management System was adapted where necessary.

There were no pending proceedings relating to unfair competition or allegations of corruption known to KUKA Group in 2017.

Ecological responsibility and intelligent automation technology

Saving resources in production

Quality matters

KUKA products and systems stand for innovation and quality. That is the result of high standards in our own production processes. KUKA contributes to protecting the environment by minimizing pollution and the use of raw materials. Even KUKA's mission statement contains the tag line: "We are socially and ecologically responsible" – and we mean it.

Most of our production locations work according to internationally recognized standards in the areas of quality (ISO 9001), environment (ISO 14001), energy (ISO 50001) and other industry-specific regulations in order to create high-quality and environmentally compatible standards. These standardized management approaches are implemented in accordance with the specific circumstances at the individual plants. The "KUKA guidelines for health, safety, sustainability and quality" serve as an umbrella policy. This applies to both the KUKA Group and our suppliers.

> "We aim to get the maximum use out of a minimum amount of resources. We avoid effects that are detrimental to our environment. When this is not attainable, we reduce the impact as much as possible."

From the KUKA guidelines for health, safety, sustainability and quality

The individual sites are responsible for local environmental management. Group-wide environmental management as part of an integrated management system is currently being rolled out, which lies within the responsibility of the Group's Executive Board. External certifications according to ISO 14001 are already performed on a regular basis by an accredited certification body at several locations. We are currently working on preparations for certification to the environmental standard ISO 14001 at other locations such as in China.

Our commitment is paying off: no violations of environmental protection laws and regulations were reported to us in the year under review.

Conserving energy

The Swisslog and Systems divisions are primarily active in systems engineering without their own significant energy-intensive production. The topic of environmental protection in terms of energy savings in production therefore mainly affects the Robotics division. Our production locations for robot systems are in Augsburg (Germany), in Füzesgyarmat and Taksony (both Hungary) and in Shanghai (China).

Energy consumption represents our greatest impact on the environment. Our consumption of electricity throughout Germany is regularly evaluated by means of a software tool. Detailed analyses, for example of the paint shop or individual assembly areas, help us to initiate improvements according to our requirements. The data are collected by means of a meter installation that currently has 450 measurement points and will be further expanded. The data are collected centrally by KUKA AG and made available to the locations for further optimization. This allows us to identify approaches for further enhancement of the underlying processes.

Further measures for reducing our power consumption include:

- Ongoing conversion of lighting to LED
- Automatic switch-off of machines and lighting in defined breaks and idle times
- Modern, energy-efficient air compressors and cooling systems
- Annual generation of an average of 35,000 kWh of solar power at the Augsburg site.

In a first step, "Strategic energy targets 2020" have been agreed for the locations in Germany and France.

_Strategic energy targets 2020[1]

E1 Reduction of final energy consumption in relation to revenues by 7.5 percent
E2 Reduction of CO_2 emissions in relation to revenues by 20 percent
E3 Raising of energy awareness and employee commitment through initiatives and information campaigns at least every six months
E4 Expansion of energy consumption recording and analysis for each location with presentation of relevant energy performance indicators (EnPIs) at least every quarter

[1] Baseline: December 31, 2014. Applies to KUKA Germany.

Motivated employees are imperative for the achievement of these targets. Newly designed energy and environmental training courses are intended to improve the environmental awareness of our employees.

In terms of environmentally sound heating, we have made significant strides at the Augsburg location by switching to district heating. This has allowed us to reduce our CO_2 emissions by 18 percent. Also beneficial was the partial conversion of the air heating to more efficient radiant ceiling panels. CO_2 emissions at our largest production locations totaled 35,165 tonnes in 2017 (2016: 34,476 tonnes). The increase is primarily attributable to the higher production volume as compared to the previous year.

Our environmentally oriented approach is also reflected in other production areas. For example, KUKA paints the robot arms with an eco-friendly water-based standard paint, which contains only about 5 percent solvent. The solvent consumption thus lies far below the maximum permissible annual value.

Energy consumption (in MWh)

	2016	2017
Electricity	55,195	56,369
Heat	46,295	40,443
Total	**101,490**	**96,812**

18%

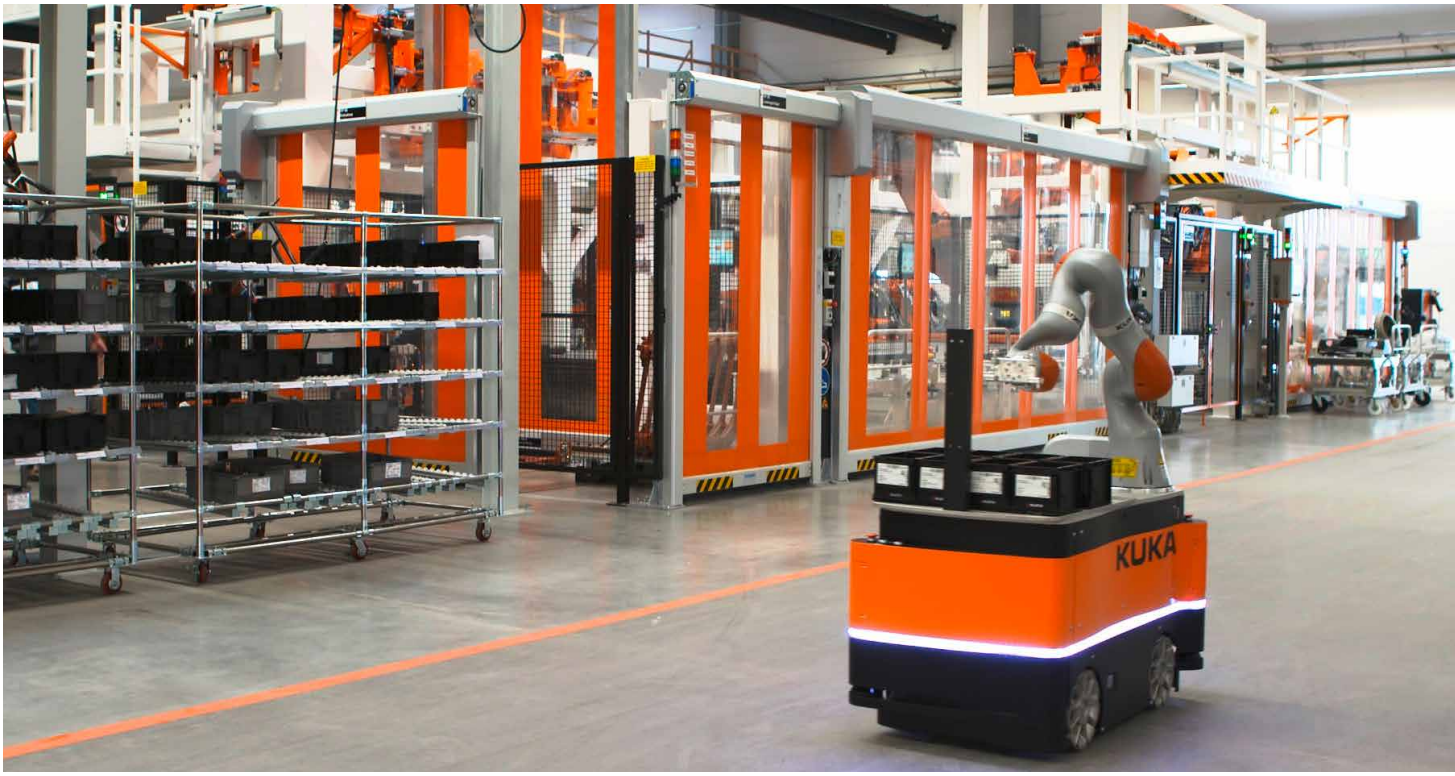
reduction of CO_2 emissions through conversion to district heating at the Augsburg site.

Environmentally friendly logistics

Logistics concepts such as kanban scheduling (in other words, no large material warehouses) for the production facilities in Augsburg, allow for internal transport routes as well as shipments from and to suppliers to be sustainably reduced, thereby lowering CO_2 emissions. The optimized layout of the production hall, including on-site parts supply results in short transport routes. The efficient flow of parts is facilitated by automation solutions similar to those we implement in our customers' systems. Replacing our forklifts with a tugger train in the hall has also promoted energy efficiency.

_Obernburg plant

KUKA's objective is to minimize its environmental impact worldwide. At our site in Obernburg, for example, the "Used Machines" business model has been introduced in customer service. Old systems are bought back and refurbished. This saves resources and preserves the environment, for example by reducing the CO_2 footprint. A further positive environmental aspect is achieved through the use of state-of-the-art technology, such as energy-efficient motors and controller variants. Depending on the scope and extent of a system overhaul, the new service life of the equipment is extended by another full life cycle. Obernburg is also working on improving its energy balance by gradually converting entire floors to LED lighting. In 2017, this saved around 20 percent of energy in the office facilities. Production was also made more eco-friendly by replacing old equipment with new, more energy-efficient systems and converting the paint shop to more environmentally compatible water-based paints. In addition to that, fewer cleaning agents are used in the paint shop through the use of cleaning machines.



Mobile assistant in screw logistics: the KMR iiwa navigates autonomously through the robot production shop.

Reducing environmental impacts

Every form of industrial activity impacts the environment in one way or another through either energy consumption or the consequences of production such as emissions, waste and effluents. With our certified environmental management systems, we are ensuring that these impacts are kept as low as possible.

We also consider the development of emissions and the volume of waste and effluents to be components of the environmental management system, even if they are less significant than energy consumption. At the Augsburg site, an employee is responsible for waste management. Production waste is separated 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 pursuant to the applicable legal regulations. When packaging our products and components, we use eco-friendly returnable packaging instead of disposable packaging in order to reduce packaging waste.

The waste generated at our largest production locations in 2017 amounted to 13,174 tonnes. That corresponds to 1.3 tonnes per capita.

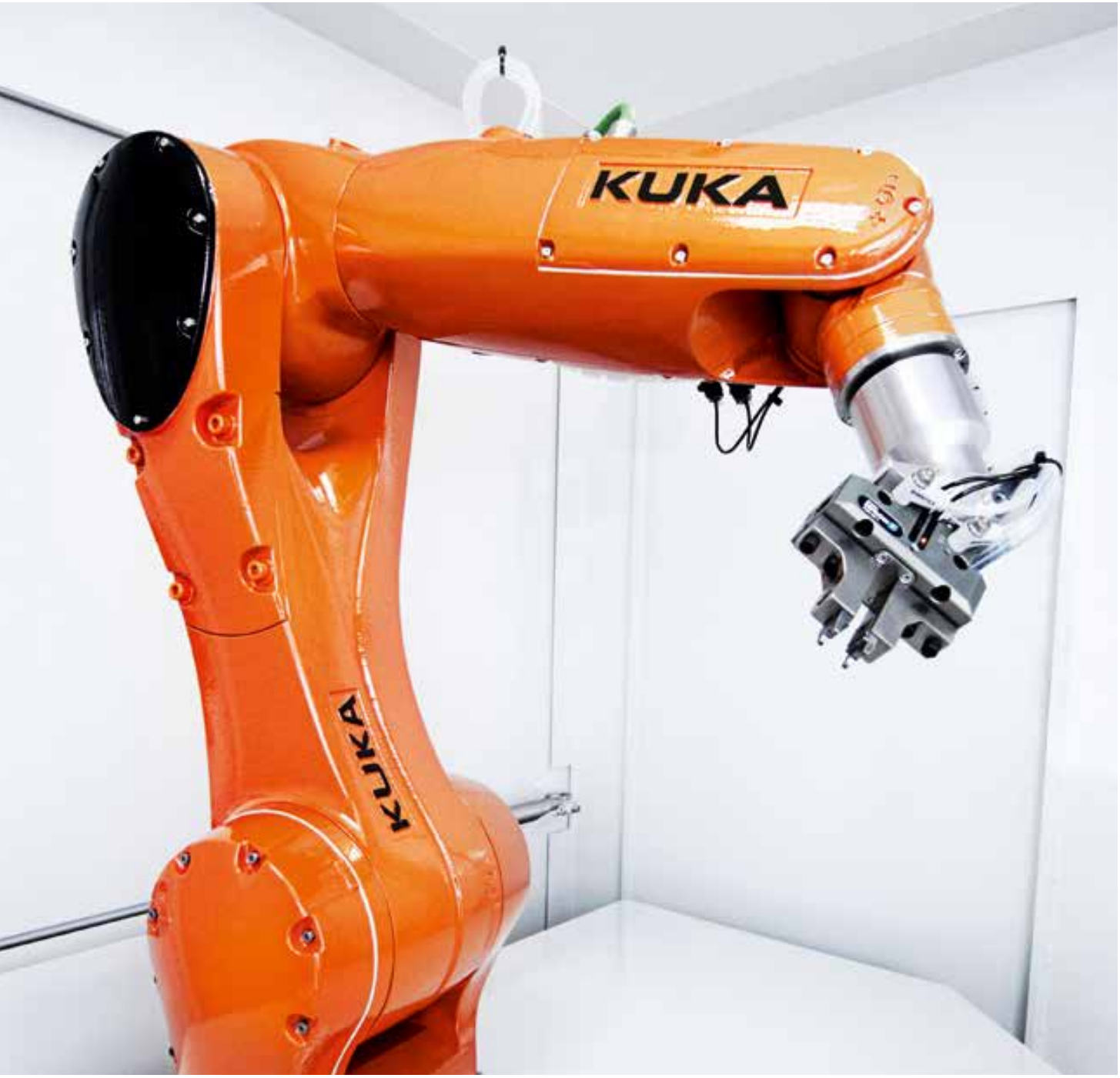
Waste generation and disposal (in tonnes)[1]

Type of waste	2017	2016
Hazardous Waste	665	670
Non-hazardous waste	12,509	11,164
Total waste	**13,174**	**11,834**

[1] KUKA's largest production sites in Europe, North America and Asia (Augsburg, Obernburg, Bremen, Chomutov, Sibiu, Taksony, Sterling Heights, Toledo, Kunshan, Shanghai)

At KUKA Robotics, water is only used to a limited extent in the paint shop and in cooling processes. Water consumption is measured according to environmental management specifications; for this purpose, various saving measures have been implemented in the production halls and office buildings. As a general rule, we use tap water from municipal networks. KUKA determines the water consumption per employee as a key indicator. At our largest production locations, the overall water consumption amounted to 104,211 m³ in 2017 (2016: 109,035 m³). This equals to a water consumption of 10.6 m³ (2016: 11.4 m³) per capita[2]. At the Füzesgyarmat (Hungary) location, we operate a cleaning system specifically for the effluent from the powder coating shop.

[2] In FTE.



Saving costs and protecting the environment

Efficient products

Energy efficiency in focus

Energy is a significant cost driver in many industries. 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.

KUKA offers energy-efficient solutions for all customers to whom sustainable economic management is important from an ecological and economic standpoint. Through energy efficiency, we help our customers save costs and at the same time contribute significantly to conserving resources and combating climate change.

In order to further develop our approach and convince more customers to operate energy-efficiently, we have joined the "Blue Competence" initiative, the sustainability initiative of the VDMA and the European engineering sector. As part of this, we have committed ourselves to the twelve guiding principles for sustainable conduct, and we participate in corresponding events. And as a member of the International Federation of Robotics (IFR), we also contribute to a working group on energy efficiency and sustainability. Furthermore, KUKA is involved with the European Commission's public-private partnership in the non-profit organization euRobotics, which will be active until 2020, and is a partner of the European Factories of the Future Research Association (EFFRA).

_Customers save through energy-efficient systems

What makes a production system more affordable? A lower purchase price or operating it cost-efficiently? For KUKA, the answer is obvious: we offer our customers alternatives for this reason and calculate systems that pay off in just a few years and recoup additional costs thanks to their low energy consumption and reduced wear. The reason for this is that about 70 percent of the total cost of ownership (TCO) pertains to energy.

Efficiency is a customer requirement

For many customers, the energy efficiency of our products is an important prerequisite for doing business with us. Our R&D thus pays special heed to this issue. This is most noticeable in automobile production, where all brand manufacturers strive for sustainability.

KUKA's KR QUANTEC product family, which is in particularly high demand in the automotive sector, today uses 30 percent less energy on average than its predecessor model eight years ago, and it weighs 150 kg less while offering the same performance, which means that it uses less steel. The new MagnetAr 620A weld power source uses 20 percent less energy. Energy and material efficiency data such as these are part of the CO_2 footprint analysis which we adopted in 2017 as a fixed process in our product development. It is the result of a multi-year EU-funded research project on energy-efficient body-in-white production, in which automakers and universities were involved. Our robots are also equipped with energy-saving and standby modes for breaks and weekends, which save up to 90 percent energy during downtime.

For the manufacture of our robots, we use recycled materials whenever possible. This protects the environment and valuable resources and also makes economic sense. However, this is not possible with all material groups. The steel we use, an important material, generally has a high recycled content. In the case of other materials, the use of secondary raw materials is not possible for quality reasons.

We offer our customers a retooling service for older robots. We also provide the option of recycling or disposing of used robots. Robots that are no longer in use are taken back by KUKA and refurbished. They are sold again as used machines. Together with our customers, we thus strive to achieve a closed-loop materials cycle.

20%

less energy consumed by the new MagnetAr 620A weld power source.

Our industrial robots meet the highest standards and offer solutions for a wide range of industries.

"For the manufacture of our robots, we use recycled materials whenever possible. This protects the environment and valuable resources and also makes economic sense."

Energy efficiency in systems engineering

As system integrators, the Systems and Swisslog divisions are also committed to improving energy efficiency, thus benefiting customers through lower power consumption and cost reductions. One of the corporate goals of KUKA Systems in Augsburg for 2017 is to increase the energy efficiency in our customers' production lines, for example.

_Innovative energy calculation tool

KUKA production systems, consisting of multiple robots with various functions, conveyor systems, pneumatic equipment, etc., are modular concepts whose overall energy consumption is often not very transparent, especially if the system comprises products from several manufacturers. For this purpose, KUKA has developed an energy calculation tool that can be used both in the planning phase of a new system and to optimize existing systems. With the tool, the consumption of electrical energy, compressed air, cooling water, lighting and air conditioning can be continuously monitored and, if necessary, optimized in terms of consumption, CO_2 emissions and operating costs. The tool can compare the actual consumption with average values stored in the software. Our trained specialists thus have an instrument for achieving targeted optimization. For internal process optimization, we review the use of the tool and measure how much energy has been saved on a quarterly basis. KUKA Systems is currently the only system manufacturer to offer such a tool.

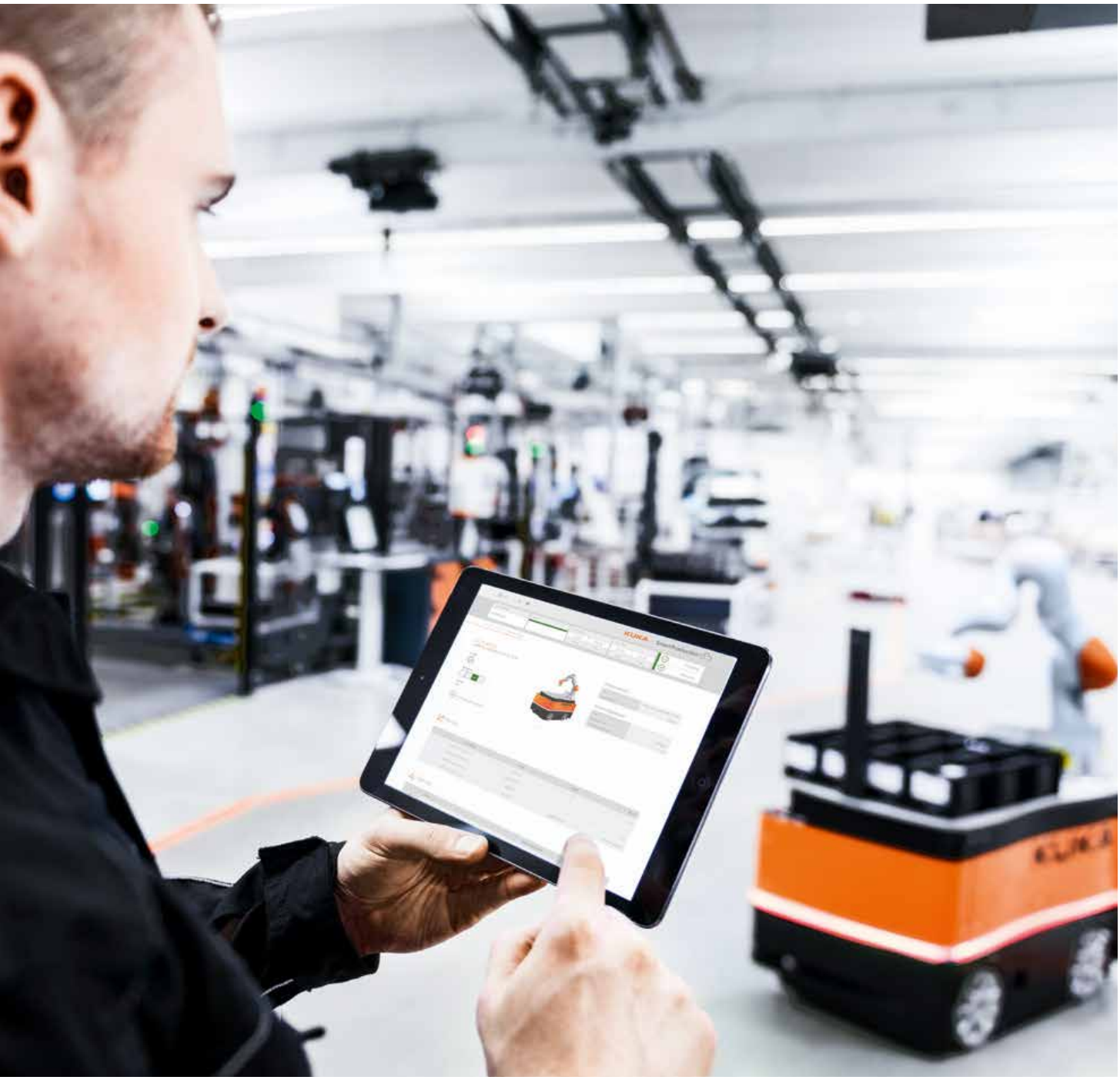
System optimization at Swisslog

For KUKA logistics specialist Swisslog, sustainability is firmly anchored in the corporate culture. In business, this is manifested in an evident focus on material reduction and energy-efficient project engineering. By using "green" technologies and products, we contribute to saving energy and reducing CO_2 emissions. The starting point was the recovery of braking energy from mobile machines several years ago by feeding this energy back into the power circuit. This is now the core of our own energy efficiency label GreenLog.

Swisslog product solutions focus on the engineering of a system both in research and development activities and in the sales phase. For instance, we optimize our systems with regard to weight and the use of drive energy, among other things. Using condition monitoring, we provide a management tool for monitoring energy consumption.

The exact configuration of a system depends on the customer's wishes. For example, we integrate solar cells on the roof of a warehouse into the power supply of the transport system, we establish the basis for optimal material management and waste disposal through appropriate sorting equipment, and we enhance fire protection by reducing the oxygen content in automated warehouses.

In addition to customer projects, we also use our efficient solutions ourselves. Other factors such as productivity, Cost of Poor Quality (CoPQ) and process performance are important internal control parameters.



KUKA is adapting to changes in the market

Together into the digital future

Globalization and digitization

KUKA operates in a highly dynamic market environment and is helping to architect the working environment of the future with its technologies. 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 on committed and creative employees. This is why issues that concern our employees are particularly important to us.

Much like our customers, we are faced with the challenges of digitization. Various measures concerning human resources are designed to secure our long-term viability as an automation specialist. From the coming year onwards, we intend our organization to be even more focused on the customers and their needs in the age of digitization. This new structure is being introduced in conjunction with a comprehensive change program which also pertains to human resources. We are continually advancing digital processes and training our employees accordingly.

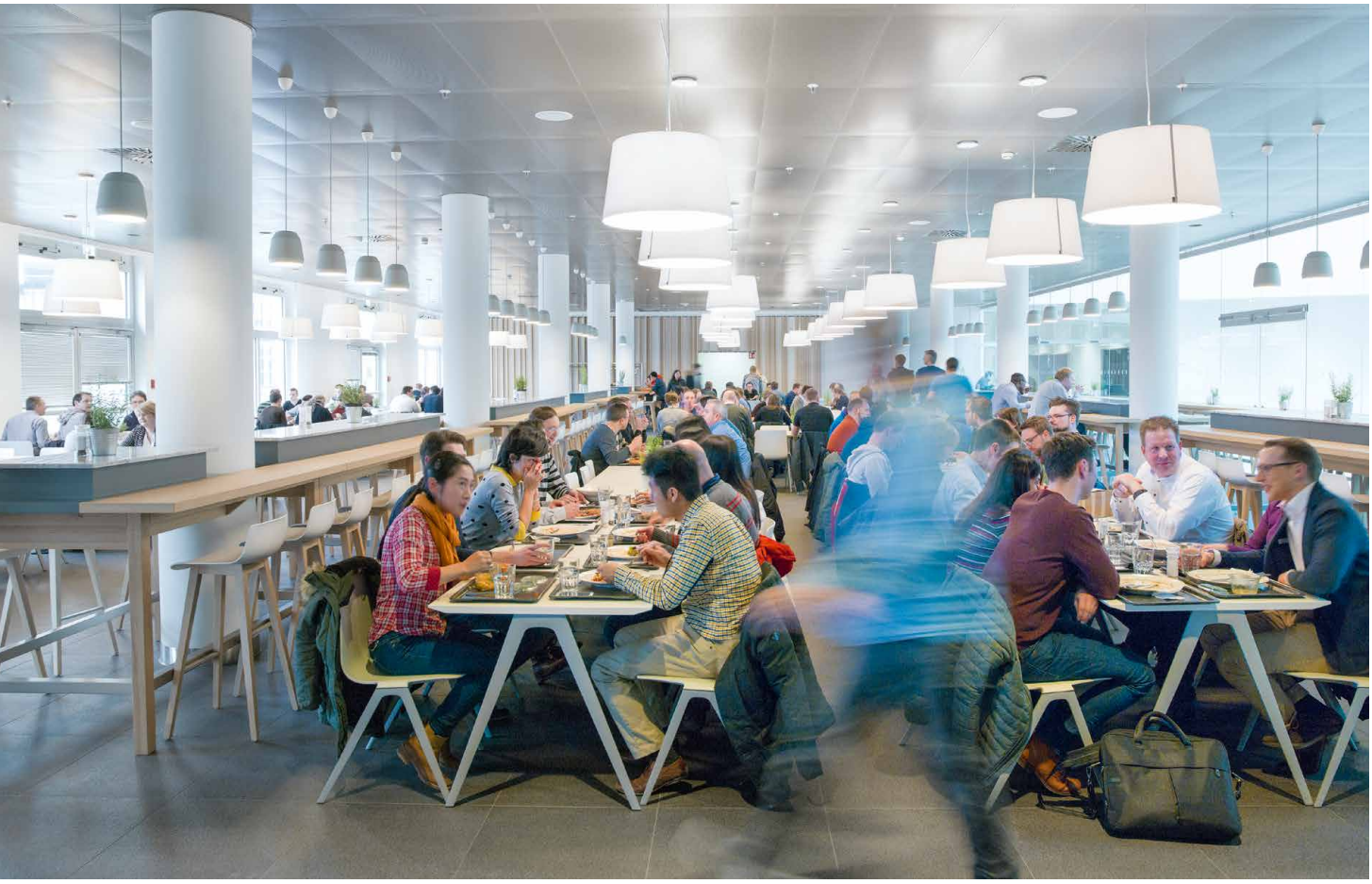
These change processes are embedded in the framework of our "KUKA 2020" strategy. In this way, we are focusing more strongly on the global megatrends such as globalization, automation and digitization and positioning ourselves as a "Global Automation Powerhouse" for Industrie 4.0 in industrialized nations and emerging markets. High-performing and motivated employees are key to this. They make it possible to respond better to changes in established customer markets and to open up new markets for robot-based automation. This is how we are striving to maintain and further expand our technological leadership in a dynamically competitive environment.

Our employees [1]

Under 35 years old	5,344
36 to 55 years old	7,189
Over 56 years old	1,602
Total	**14,135**
Female	2,686
Male	11,449

[1] Group-wide, January 1 – December 31, 2017. Active personnel excluding casual workers, student trainees, apprentices, interns, dormant jobs and employees exempted from normal duties.

"Our success is founded on committed and creative employees."



KUKA attaches great importance to offering its employees a work environment in which they feel comfortable.

Employee benefits

It is important to KUKA to offer its employees a work environment that allows them to achieve a comfortable work-life balance. For example, our employees at the German locations benefit from flextime arrangements and are allowed to work from home. At our largest German site in Augsburg, the non-profit association Orange Care e. V. founded by KUKA employees offers a daycare center with a capacity for 30 children. In addition to that, KUKA in Augsburg offers its employees a vacation childcare program and perks such as a weekly laundry service.

A pleasant working environment is fostered by offering a diverse range of sporting activities, such as participation in the Augsburg Corporate Challenge Run, the Bavarian Beach Cup or city cycling.

We also want our employees at the international locations to enjoy their work. Which is why we are supporting them with various offers. Our US colleagues, for example, can participate in numerous sports activities. This includes hiking or cycling tours as a group. As part of "KUKA Cares", annual family picnics and various cultural events are offered. In China, KUKA employees receive far more benefits than required by law. This includes not only additional holidays, but also paid vacation and sick days.

Fluctuation [1]

New hires	3,418
Employee departures	2,322

[1] Group-wide, January 1 – December 31, 2017. Active personnel excluding casual workers, student trainees, apprentices, interns, dormant jobs and employees exempted from normal duties.

KUKA as an attractive employer

A good working atmosphere and job security are important employee issues for KUKA and are viewed as a basic prerequisite for good moral within the company. KUKA regularly evaluates the satisfaction and motivation of its staff through employee surveys. The most recent employee survey was conducted in 2015.

KUKA is striving to further improve its attractiveness as an employer. KUKA measures how successful it is in this area on the basis of incoming applications, especially for key and critical positions. External benchmark studies also reflect the success of our measures. For example, in the 2017 trendence Graduate Barometer, which is based on a survey conducted among pupils, students and young professionals about their preferred employer, KUKA moved up from 27th place to 22nd place in the Engineering field. In a survey of young professionals, KUKA was able to advance from 60th to 57th place.

And when engineering students were questioned with regard to the world's most attractive employers in a Universum survey, KUKA was able to improve from 32nd to 30th place; for young professionals, KUKA rose from 25th place in 2016 to 24th in 2017.

The number of applications in 2017 was very high at more than 24,000. In comparison, KUKA received 15,600 applications in the previous year.

Central guidelines, local implementation

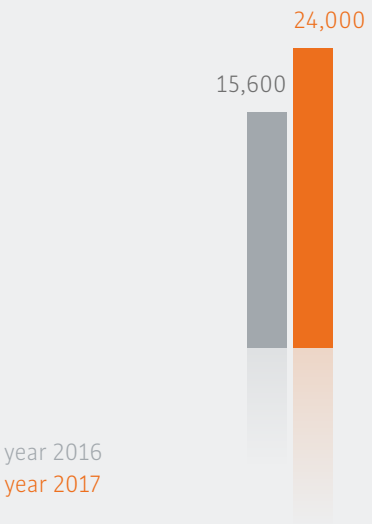
The Corporate Human Resources (CHR) department answers directly to the Chief Executive Officer and is responsible for all strategic HR processes worldwide. Country-specific personnel topics are handled by the companies themselves within the framework of global guidelines. Since 2015, we have been steering these processes via hubs in the APAC, Americas, EMEA and DACH regions. They are responsible for the implementation of standards and for harmonization processes within the relevant region.

We have embedded shared values in twelve uniform leadership principles. These include, for example, fairness and the compatibility of work and family life.

Local agreements include, for example, collective company-wide agreements, local company agreements, in Germany the so-called "delegation of employers' duties", target agreements, working time regulations, management systems and various guidelines on health, safety, environment, sustainability and quality.

Our specifications for the Integrated Management System (IMS) describe principles and procedures within KUKA Group and govern organizational structures, tasks, processes and responsibilities. This ensures that the company and its employees meet the requirements of our stakeholders. These specifications are binding for all employees.

Number of applications



_Digitization of the working world

KUKA is a global leader in the digitization of production processes. Merging the real industrial world with the digital world will transform the production environment. But advancing digitization will also entail changes in the working environment. This is why KUKA is working on new concepts in order to further develop the in-house working environment. The internal "Digital Workplace" pilot project was launched in 2017 to address the digital transformation of the workplace. In 2017, 20 project participants from different departments worked on a total of 60 use cases. The project participants tested new digital working methods through the use of new hardware, software and conferencing solutions and analyzed the results. The project, initiated by the HR and IT departments, is scheduled to be rolled out worldwide after successful completion of the test phase.

Sharing values

Leadership and corporate culture

Managers as role models

KUKA is an automation company that sets international standards when it comes to linking the world of IT to industry – in short, Industrie 4.0. The company owes its successful development in recent years first and foremost to the outstanding performance of its global team. The commitment and innovative capacity of the employees is directly linked to our leadership culture.

KUKA operates in a highly dynamic and innovation-driven market environment. The trend towards digitization is particularly significant for robot-based automation. This represents both an opportunity and a challenge for us. Sensitive mobile systems and rapid developments in the IT world are creating new technical opportunities. To avail of these, employees need a clear and uniform vision of the company's future. We are convinced that we can only continue our success if all employees share the same understanding of values, principles and culture.

Therefore, our corporate culture is a key building block in the company's success. It is strongly characterized by leadership. Change processes are only supported by employees if they trust their managers. Managers have the responsibility and influence corporate culture and in-house interaction to a large extent.

Worldwide leadership principles

KUKA has had Group-wide, global leadership principles since 2014. They were developed by around 250 managers over the course of various workshops. Management behavior was examined from four perspectives: a) What is management's attitude to itself and to other people? b) What is the common basic understanding of management tasks? c) How is this reflected in managers' own behavior? and d) What is the common understanding on issues regarding the general orientation of the company?

Three guiding principles were formulated for each of the four perspectives, describing the orientation and expectations for all managers. Twelve guiding principles thus define a framework that can be filled according to the location and level within the company. This enables different cultural aspects to be taken into account.

A series of internal workshops were organized in 2017 with the aim of further consolidating the shared understanding of KUKA values and principles worldwide. In addition to the programs for new managers, additional Group-wide leadership, team development and team strengthening programs as well as change management schemes were designed and introduced. These programs have been established at all management levels and focus on successful implementation of the corporate strategy based on values. They support the managers worldwide in implementing and communicating positive changes and creating the framework conditions for accomplishing them. In the period under review, 28 leadership workshops were held with a total of 293 participants.

Regular exchanges across national borders are another important aspect of our leadership culture. In addition to regular management calls, a global management meeting is held at least once a year, at which all KUKA managers meet, exchange experiences and develop concepts together.

"We are convinced that we can only continue our success if all employees share the same understanding of values, principles and culture."

A corporate culture that is lived and cultivated

KUKA's corporate culture includes a range of firmly established events and celebrations, including a family day when employees can show their families around the company, and an annual Christmas party for children.

To strengthen and promote our corporate culture, we run the "KUKA inside" event several times a year, which is a town hall meeting followed by a get-together. Relevant contents are transmitted to our companies in Germany and abroad. Regular employee information events with a local focus also take place at our locations worldwide.

In November 2017, KUKA took part in European Robotics Week for the seventh time, which was initiated by the European robotics association euRobotics. During this week of events, KUKA employees have the opportunity to get involved in raising awareness of robotics and automation in the general public and in allaying reservations and fears. Another aim is to arouse the interest of young people in technology and scientific subjects. Employees visited schools and kindergartens during Robotics Week, delivering presentations on robotics. We also raise awareness among children and adolescents of the topic of robotics during children's lectures and guided tours of the KUKA site. In 2017, two courses on working with robots were held for school groups in KUKA College. Talks aimed at children were offered on two days and 83 students took part.

We promote internal communications within the company using a wide spectrum of communication platforms from noticeboards through e-mail newsletters, social business platforms such as Microsoft Team or Chatter to our well-established and popular employee magazine, which is now available in three languages.

Participating in joint events is an important element of our corporate culture.

“This strategic realignment is aimed at securing the global success of the company and thus protecting jobs in the long term.”

Challenges at KUKA Systems Augsburg

The KUKA Group is a global success story. However, the Systems division in Augsburg is facing challenges. This is because Systems operates in a difficult and fiercely competitive market environment, in which customer contracts are awarded mostly on the basis of price.

In 2017, there were delays and additional costs in several customer projects. To strengthen its competitiveness in a sustainable manner, KUKA Systems in Augsburg is thus faced with a reorganization involving structural changes which will also affect a certain portion of the Systems workforce in Augsburg. Employees were informed of this situation at an early stage and have been kept up to date on further developments.

Around 250 employees who work at Systems in Augsburg will be affected by this restructuring. In this regard, management is working closely with the works council to develop a socially acceptable concept. First and foremost, the opportunity for employees to transfer to other divisions within the company will be considered and full use will be made of natural fluctuation. It is anticipated that the restructuring of KUKA Systems at the Augsburg site will extend over a period of two years, that is until December 2019. This strategic realignment is aimed at securing the global success of the company and thus protecting jobs in the long term.

Initial measures have been initiated and further action is being prepared. It is important to set the right course and focus on the right priorities in order to achieve sustainable success and thus safeguard jobs in the long term.

High quality in education and training

Securing the future through education

"KUKA is ensuring the long-term availability of skilled workers and thus its ability to compete and innovate by offering a wide range of training and further education opportunities."

Professional training

When it comes to the professional training of young people in Germany, KUKA offers apprentices not only specialist know-how in robotics and automation, 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 the chance to gain experience abroad at other company locations each year, such as in China and the USA. KUKA maintains a high standard in the quality of training and the level of performance. Time and again, KUKA apprentice graduates finish best in class in their respective training occupation. The training yields a high degree of identification with the company as well as an understanding for operational matters. For us, good training is a prerequisite for good work and the company's success. The level of training required is determined in coordination with the companies and the works council. After completing their training, apprentices are generally offered jobs in the companies.

Continuing education programs

As part of our continuing education programs, we accompany and support KUKA employees in their personal and professional development. At our KUKA Academy, we offer all of our employees an extensive and varied range of technical/methodical and personal further education courses. We support our employees in various ways in dealing with the challenges of an increasingly fast-paced working environment. Because only through shared knowledge and everyone's performance can we continue to grow and further expand our market position as a technology corporation.

Cooperation with universities

KUKA cooperates with renowned universities with regard to further education. One of these is the Technical University of Munich. KUKA is also working together with notable universities, such as Aschaffenburg University of Applied Sciences and the universities in Augsburg and Kempten, in several international research and development projects.

University-level work

The university-level work also helps to increase our attractiveness as an employer. KUKA attends numerous university contact fairs every year, including Campus Career organized by Aschaffenburg University of Applied Sciences, a trade fair for school and university students. Open House events for university visits are organized on a regular basis at our locations in Augsburg and Shanghai. The visits include factory tours for students to familiarize themselves with robot-based automation and KUKA. Last year in Shanghai, the China Europe International Business School, East China Institute of Science & Technology and Zhejiang University participated.

Sharing expert knowledge

KUKA offers training in line with its requirements and provided 50 apprenticeships in Germany in 2017. 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. Moreover, KUKA offers partner companies from the Augsburg area an opportunity to book training modules for their own needs.

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.

We offer all employees a wide range of courses within the framework of the technical/methodical and personal professional development in the KUKA Academy. These include standard courses, such as computer and language courses, specific professional courses from the fields of sales, purchasing, business administration, strategic implementation and project management, along with seminars for leadership, communication and change management.

Demand is high

Professional training is offered at the German sites in Augsburg, Obernburg and Bremen as well as in Austria and Switzerland. The training program is managed centrally by the Corporate Human Resources (CHR) department.

Professional development is strategically handled by the Transformation & People Development department as part of CHR. The CHR management reports directly to the CEO. Our professional development measures are offered internationally based on local requirements.

In 2017 in Germany alone, 5,856 employees took advantage of 597 in-house standard training events as well as training offered in the context of the major strategic project Power ON. This represented 6,088 participant days in total. In addition to that, 305 employees took part in 34 workshops within our global leadership programs. We plan to collect the relevant data compiled worldwide in the future.

5,856

employees in Germany took advantage of continuing professional development measures.

KUKA has maintained high quality standards in apprenticeship training for many years.

Helping young people learn more about technology

KUKA is also committed to social issues beyond the charitable initiatives. The main focus here is on promoting young talent in the fields of robotics and automation. In 2017, for instance, research and technology institutions were supported, including Starkstrom e. V. at Augsburg University or the Aerospace LAB (Jugendforschungszentrum Herrenberg Gäu e. V.).

European Robotics Week was initiated by the European robotics association euRobotics and takes place every year in November. KUKA employees increase the public's awareness of robotics over the course of this week. For example, the program includes children's lectures on robotics in schools and kindergartens, as well as guided tours for school classes through KUKA's production facilities.

KUKA Robotics also invited interested children in China to learn more about future technologies such as human-robot interaction and robotics.

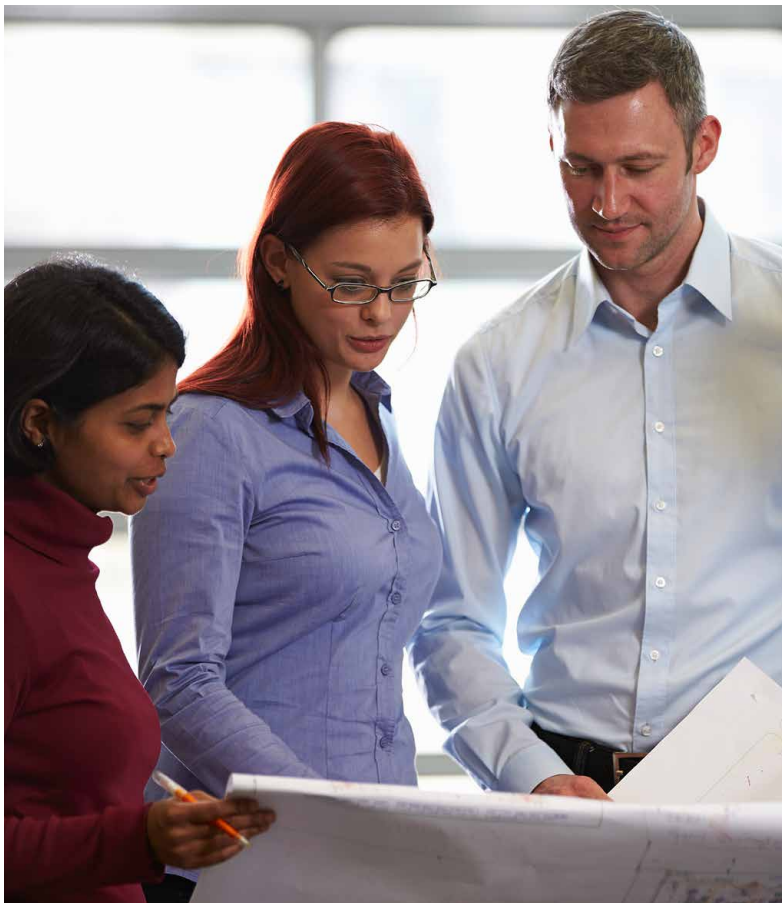
KUKA stands for diversity and tolerance

Appreciation for diversity

Important aspect of the corporate culture

At KUKA, diversity involves promoting and benefiting from the diversity of our employees as a source of creativity, innovation and business success. We need a larger talent pool and are working on further increasing our appeal for employees, especially with a view to the skills shortage forecast for the future. In this regard, we take into account individual life concepts as well as social changes and the zeitgeist. Our employees are given the opportunity to develop on a personal level through flexible and mobile working conditions and models. Living and promoting diversity and benefiting from different experiences and talents is part of the corporate culture at KUKA. We are convinced that 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.

Our aim is to create a working environment that is free of prejudice and characterized by acceptance and tolerance. All employees should be valued – regardless of their ethnicity, origin, gender, religion or religious views, disability, age and sexual orientation. To guarantee equal treatment for everybody, it is also important that there is no distinction between males and females in our remuneration system. Remuneration at KUKA is based exclusively on skills and performance.



At KUKA, every employee is important. Diversity is lived throughout the company.

"Our aim is to create a working environment that is free of prejudice and characterized by acceptance and tolerance."

Firmly rooted in management

With the aim of increasing the number of women in managerial positions, targets were established for the first time in 2015 for the proportion of women on the Executive Board, management boards and the two subsequent management levels for KUKA AG, Systems GmbH and Roboter GmbH at the German locations.[1] The time frame for achieving these targets was also defined. The targets are reviewed regularly. The current objective is to increase the total share of women in managerial positions from 19 percent at present to 20 percent in the medium term. At the two management levels below the management boards, the share of women is also slated to increase to 20 percent in the medium term. As of today, the proportion of women on the Executive Board and management boards is 11 percent. At the first level below that, the proportion of women is also 11 percent. The share of women at the second level amounts to 10 percent. Because Group-wide restructuring is scheduled for 2018, the targets will be reviewed after introducing the new organizational structure and redefined if necessary. The data will be collected on a global scale in the future.

The share of female apprentices in technical professions at KUKA has remained constant over the last few years at around 20 percent. We strive to further increase this percentage, in particular through the company's participation in the annual Girls' Day program, the offer of work experience placements for girls and cooperative partnerships with girls' schools.

Diversity within the company is governed, among other things, by the Group guideline "Principles of cooperation within the KUKA Group" as part of the Corporate Compliance Handbook. One of these principles is "diversity and appreciation".

Currently, KUKA is working on firmly anchoring diversity aspects into the processes. Worldwide diversity guidelines are being developed for this purpose. In April 2017, the newly created position of Diversity Manager at KUKA was filled. This manager is responsible for the topic of diversity, coordinating related matters including a semi-annual exchange between the relevant committees in the Group. At the end of 2017, KUKA additionally signed the "Charta der Vielfalt" (diversity charter) in Germany, making a clear commitment to diversity.

A new reporting system is due to be introduced in 2018, enabling national and international reviews for the purpose of increasing transparency and achieving more efficiency in developing measures.

[1] Pursuant to section 76, para. 4 AktG (German Stock Corporation Act)

Enthusiastic participation in orangeWIN's opening event in 2017.

"The orangeWIN women's network organized 21 different event formats during the year under review with some 360 women taking part."

Promoting networks

These measures reflect a long-established understanding of diversity, which is manifested in our involvement in various networks and initiatives among other things. For instance, we support the internal KUKA women's network orangeWIN that helps to identify and promote female talents, we have been involved in the Augsburg cross mentoring program since 2011, which is committed to gender equality at work, and we participate in MigraNet with the aim of achieving the professional integration of people from a migrant background.

The orangeWIN women's network organized 21 different event formats during the year under review with some 360 women taking part. An internal mentoring program initiated by orangeWIN to support the professional and personal development of all employees facilitates a regular exchange of experiences and helps to further develop self-reflection with regard to skills and strengths. In 2017, a total of 16 mentoring tandems participated in this program. Due to the positive experiences, it is planned to expand the program internationally to the entire KUKA Group. Since 2011, 13 mentors (77 percent women) and 14 mentees (71 percent women) from various KUKA companies have additionally participated in cross mentoring in Augsburg.

What does our road map for the year look like? The goals and measures were worked out in group sessions at the start of the year.

Occupational health and safety further advanced

Health and safety

Important for our company's success

Occupational health and safety are an essential requirement for ensuring that business operations run smoothly 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 are therefore firmly embedded in management systems and supported in some cases by external certifications at the major locations of KUKA Group. The largest location, Augsburg, is certified to OHRIS (Occupational Health & Risk Management) – a Bavarian state management system. Four employees are responsible for occupational health and safety, and the industrial safety committee meets every quarter, attended by decision-makers from production, occupational health and safety, occupational medicine and employee representatives. Other locations are geared to the international management standard OHSAS 18001, which also plays an important role in supplier audits. The responsible employees are subject to individual annual agreed targets regarding the avoidance of industrial accidents.

Occupational and employee health and safety have high priority at smaller locations too, even though uniform management relating to occupational health and safety issues is still often in the development phase. The Group Executive Board and the CEOs at the locations are kept regularly informed on the status of occupational health and safety on the basis of performance indicators.

We want our employees to have a safe working environment. This is why we are committed to promoting occupational health and safety and intend to advance this topic further in the future. We began to introduce Group-wide safety performance indicators (SPIs) in 2017. These include the LTIR (lost time injury rate). LTIR worldwide was 5.0 in 2017. There have been no fatal industrial accidents across the Group in recent years.

The awareness of employees is also enhanced by means of specific campaigns. For example, a special campaign on preventing accidents caused by stumbling and falling was launched at the Augsburg location. The campaign "Für deine Sicherheit_Gib acht" (pay attention to your safety) raised employees' awareness on how best to reduce frequent causes of accidents.

In 2017, various measures relating to occupational health and safety and environmental protection were implemented in the USA. These included in particular the Safety Recognition Program, monthly safety talks with employees, special personnel training courses such as how to handle compressed gas safely, and the purchase of new safety clothing and equipment.

"We want our employees to have a safe working environment."

Product safety is a social obligation

Working safely with KUKA

“Maximum safety of our products has always been one of our declared goals.”

High level of safety

Nowadays, products are expected to be safe for use and not to endanger the users. The legislature has nonetheless stipulated that all manufacturers must do everything they can to ensure that their products are safe and that the users are protected. We support this actively and successfully: there has never been a single instance of a personal injury through the use of a KUKA product for which we as the manufacturer have been responsible in the company’s entire history. We aim to maintain this high standard.

KUKA’s robot-based automation solutions and systems are technologically sophisticated. It is all the more important that our products are also safe even when used in countries with lower technical standards and legal requirements than in the Western world. It is therefore our duty as a company to place only flawless and compliant products on the market, in order to ensure safety for all users of our products at all times.

Humans and robots as a team

Wherever our customers’ employees work with our machines, a reliable level of safety must be assured at all times. We place the highest demands on ourselves and our products in this regard. To ensure that our products can be used safely, it takes more than just advanced technology in the products themselves. We also offer training for the users. At our KUKA College, our customers and partners learn how to work safely with the robots and program them. This prevents accidents, increases work safety at the customer’s facility and ensures proper use of all machinery and components.

Uniform standards

Maximum safety of our products has always been one of our declared goals. Upon delivery, our products and services must meet more than just the demanding criteria for quality. It must also be ensured that the products can be safely used at all times in accordance with their purpose. That is why we work proactively, intensively focused on preventing faults from occurring in the first place during the development and design of our products. We are also committed to safety in production, purchasing, quality management, service and sales, even after our products have been delivered. The KUKA “Product Safety” guideline centrally governs the necessary requirements, tasks, activities and responsibilities. Previously, the individual Group companies were responsible for this. Worldwide product monitoring allows us to identify early on whether measures need to be implemented. The processes and procedures for suitable corrective measures are clearly defined. We also hold our suppliers of products or components responsible. Thus, we can ensure that all Group companies worldwide achieve the same standard in the market.

_Safe technology – KUKA LBR iiwa

We make sure that our products are safe for their users. Particularly when humans and machines work together, human safety is paramount. Here we make no compromises.

KUKA has developed the first robot to be approved for human-robot collaboration (HRC): the KUKA LBR iiwa ("lightweight robot", "intelligent industrial work assistant"). It is the first series-produced sensitive robot that works directly with humans and supports them in their tasks. It uses intelligent control technology, high-performance sensors and state-of-the-art software technologies – and thus enables completely new collaborative solutions in production engineering.

The safety requirements for HRC-capable robots are extremely high. Various technical functions have to be safely implemented. To permit contact between humans and robots, the robot must be able to restrict its velocity in order to limit the kinetic energy stored in the system, for example. It must reliably detect collisions and limit the forces which it could exert on a human to a safe level. For this purpose, KUKA has equipped the LBR iiwa with safe sensors, enabling it to "feel" its surroundings.

Over and above the safety of the robot, we ensure that the workplace shared by robots and humans conforms to the necessary requirements to ensure low-risk collaboration. We invest a lot of time and money on these complex technologies. Because the safety of our products has always been our number one priority.

Organizational and legal security

The Product Safety guideline is part of the corporate compliance program and is managed by the central Product Compliance department, which reports to the Chief Compliance Officer. The focus of this department, with three full-time employees and a worldwide network of multipliers in the divisions, is on prevention. The objective is to identify possible risks early on and to develop corrective measures together with the individual divisions. Compliance with the Product Safety guideline is monitored by audits.

KUKA is subject to a variety of product labeling requirements, which are playing an increasingly important role in opening up new markets and eliminating trade obstacles for globalized customer-supplier relationships. Thus the process for developing new products stipulates that the applicable legal and customer specifications must be determined and fulfilled before the product can be made available on the market. 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.

We ensure effective fulfillment of these requirements through the continuous education and training of employees, adequate deployment of internal and external specialists, as well as cross-departmental reviews at various times during product realization and prior to putting our products on the market. In 2017, there were neither legal proceedings nor fines for violation of customer safety.

“The LBR iiwa is the first series-produced sensitive robot that works directly with humans and supports them in their tasks.”

Help where help is needed

Social commitment

Commitment in relation to KUKA

As a future-oriented company, KUKA accepts social responsibility worldwide. KUKA employees in Germany have established the non-profit association Orange Care e. V. Orange Care supports people in need, especially by rendering assistance to young people and families. In particular, the organization has established a childcare center. The center was created in 2014 with the aim of helping working parents faced with an unsatisfactory availability of childcare facilities in Augsburg.

The focus of the charitable work is on supporting projects in the company's environment. Primarily, projects are sponsored that are either located at a KUKA site or have originated through the involvement of KUKA employees.

Social commitment of Orange Care e. V.

Orange Care was actively involved in a wide range of initiatives in 2017. One example is the financial support provided to KlinikClowns e. V. The KlinikClowns visit the pediatric ward in the Josefinum Hospital in Augsburg once a week and help children and their families deal with their illness by distracting them from their worries. The activities of the KlinikClowns in hospitals, care and therapy facilities are based on the scientific finding that laughter and humor can have a positive effect on a person's general outlook and health, and promote healing. Never before has a similar project been in place in Augsburg.

In the past year, the organization was also involved with the Regens Wagner Foundation in Holzhausen, one of eight church foundations of the same name in Bavaria. The foundation offers people with disabilities broad support for school, training, employment and daycare. With their work for the Landsberg Musical School, the organization is also helping to bring music to the lives of severely disabled people. Another KUKA employee has also initiated the project "Children helping children in Kosovo". This initiative supports the country's only workshop for the handicapped, in addition to training young people.

For the coming year, Orange Care plans to further step up its involvement in social projects. For one, the organization aims to double the number of supported projects.

Outside of the organization in Augsburg, KUKA is promoting social involvement worldwide with the aim of living out its social responsibility. One example of this is the KUKA Cares Foundation, which KUKA Systems founded in the US together with ten partner companies. One of the core missions of the foundation is to support people in distress and families in need, for example in terms of health, their financial situation or educational projects.

In the US, the KUKA Cares Foundation supported a relief project that was initiated by a staff member based in Austin, Texas. With a large grill trailer in tow, KUKA employees drove to the disaster area in Texas after the devastating Hurricane Harvey. Over the course of two weekends, they handed out more than 4,000 meals free of charge to the needy, volunteers and workers.

"The focus of the charitable work is on supporting projects in the company's environment."

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GRI 102-27: Collective knowledge of highest governance body		See annual report 2017, page 15.
GRI 102-28: Evaluating the highest governance body's performance		See annual report 2017, page 15.
GRI 102-29: Identifying and managing economic, environmental, and social impacts	12, 13	
GRI 102-31: Review of economic, environmental, and social topics	13	
GRI 102-32: Highest governance body's role in sustainability reporting	4, 13	
GRI 102-35: Remuneration policies		KUKA reports only on the Executive Board's compensation. Information on the compensation of other management levels is subject to non-disclosure agreements and can therefore not be reported.
GRI 102-36: Process for determining remuneration		See annual report 2017, page 18, 22.
GRI 102-37: Stakeholders' involvement in remuneration		See annual report 2017, page 22.
GRI 102-38: Annual total compensation ratio		KUKA reports only on the Executive Board's compensation. Information on the compensation of other management levels is subject to non-disclosure agreements and can therefore not be reported.
GRI 102-39: Percentage increase in annual total compensation ratio		KUKA reports only on the Executive Board's compensation. Information on the compensation of other management levels is subject to non-disclosure agreements and can therefore not be reported.
Stakeholder Engagement		
GRI 102-40: List of stakeholder groups	4, 13	
GRI 102-41: Collective bargaining agreements	43	
GRI 102-42: Identifying and selecting stakeholders	13, 14	
GRI 102-43: Approach to stakeholder engagement	4, 13, 14, 46	
GRI 102-44: Key topics and concerns raised	16	We address the most important topics raised by our stakeholders in our materiality analysis.
Reporting practice		
GRI 102-45: Entities included in the consolidated financial statements	4	
GRI 102-46: Defining report content and topic Boundaries	4, 15, 16	

Disclosures	Page	Answer/Comment
GRI 102-47: List of material topics	17	
GRI 102-48: Restatements of information		First report.
GRI 102-49: Changes in reporting		First report.
GRI 102-50: Reporting period	4	
GRI 102-51: Date of most recent report		First report.
GRI 102-52: Reporting cycle	4	
GRI 102-53: Contact point for questions regarding the report	69	
GRI 102-54: Claims of reporting in accordance with the GRI Standards	4	
GRI 102-55: GRI content index	64–68	
GRI 102-56: External assurance		No external audit was carried out on the information in this report.
Material Topics		
GRI 203: Indirect Economic Impact 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 19, 25	
GRI 203-2: Significant indirect economic impacts	19, 25	
GRI 204: Procurement Practices 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 25, 27	
GRI 204-1: Proportion of spending on local suppliers	25	
GRI 205: Anti-Corruption 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 29–31	
GRI 205-2: Communication and training about anti-corruption policies and procedures	31	
GRI 206: Anti-competitive Behavior 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 29–31	
GRI 206-1: Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	31	
GRI 302: Energy 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 23, 25, 33, 34, 37	
GRI 302-1: Energy consumption within the organization	33, 34	
GRI 302-5: Reductions in energy requirements of products and services	37–39	
GRI 303: Water 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 25, 33, 35	
GRI 303-1: Water withdrawal by source	35	We do not collect information on the overall volume of water withdrawals but plan to do so in the future.

Disclosures	Page	Answer/Comment
GRI 306: Effluents and Waste 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 25, 33–35, 37	
GRI 306-2: Waste by type and disposal method	35	
GRI 307: Environmental Compliance 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 25, 33	
GRI 307-1: Non-compliance with environmental laws and regulations	33	
GRI 308: Supplier Environmental Assessment 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 26, 27	
GRI 308-1: New suppliers that were screened using environmental criteria	27	
GRI 401: Employment 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 41–43	
GRI 401-1: New employee hires and employee turnover	42	We currently do not collect information on new hires according to age group and gender at a global level. We are planning to collect these data on a global scale as well.
GRI 402: Labor/Management Relations 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 45, 46	
GRI 402-1: Minimum notice periods regarding operational changes	45, 46	
GRI 403: Occupational Health and Safety 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 33, 43, 57	
GRI 403-2: Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	57	
GRI 404: Training and Education 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 41, 43, 49	
GRI 404-2: Programs for upgrading employee skills and transition assistance programs	8, 33, 45, 46, 49–51	
GRI 405: Diversity and Equal Opportunity 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 43, 53–55	See annual report 2017, page 127.
GRI 405-1: Diversity of governance bodies and employees		For corresponding information on management bodies, see Annual Report, page 116, 117.
GRI 407: Freedom of Association and Collective Bargaining 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 43	
GRI 407-1: Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	17, 43	

Disclosures	Page	Answer/Comment
GRI 408: Child Labor 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 26	
GRI 408-1: Operations and suppliers at significant risk for incidents of child labor	26	
GRI 409: Forced or Compulsory Labor 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 26	
GRI 409-1: Operations and suppliers at significant risk for incidents of forced or compulsory labor	26	
GRI 413: Local communities 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 46, 50, 51, 63	
GRI 413-1: Operations with local community engagement, impact assessments, and development programs	46, 47, 50, 51, 63	
GRI 414: Supplier Social Assessment 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 25–27	
GRI 414-1: New suppliers that were screened using social criteria	26, 27	
GRI 416: Customer Health and Safety 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 22, 33, 59, 60	
GRI 416-2: Incidents of non-compliance concerning the health and safety impacts of products and services	59	
GRI 417: Marketing und Labeling 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 60	
GRI 417-1: Requirements for product and service information and labeling	60	
GRI 418: Customer Privacy 2016		
GRI 103: Management Approach 2016 (including GRI 103-1, 103-2, 103-3)	17, 22	
GRI 418-1: Substantiated complaints concerning breaches of customer privacy and losses of customer data	22	

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