

# Responsibility for sustainable success.

United Nations Global Compact Communication on Progress 2015



# At a Glance











Number of workplace accidents with days lost per 200,000 hours worked









Up to **50 (compared with new production)** 

More than

7000

industrial property rights



# Company profile

Knorr-Bremse is the world's leading manufacturer of braking systems for rail and commercial vehicles. As a technology leader, the company has been driving the development, production, sale, and servicing of state-of-the-art braking systems for more than 110 years. With its products Knorr-Bremse makes a crucial contribution to improving safety by road and rail all over the globe. Every day, more than a billion people around the world put their trust in systems made by Knorr-Bremse.

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Imprint





# Ladies and gentlemen,

As a family-owned business, taking a responsible, forward-looking approach to our activities has always been an integral part of our business model. It enables us to meet our corporate responsibilities in the interests of our customers, employees, suppliers, the environment, and society as a whole. All over the world we are helping to protect the climate, designing resource-efficient approaches to mobility, and developing solutions for safe road and rail transportation. Our activities in these areas are based on the principles of the UN Global Compact, to which we have been signatories since 2010.

Sustainability calls for a joint effort. For our customers we are reliable partners for the development of energy-efficient, environmentally compatible solutions. The energy efficiency of our products, in particular, offers huge potential for helping our customers to reduce  ${\rm CO_2}$  emissions, and enables us to make an effective joint contribution to climate protection. At the same time we are raising awareness of more efficient and environmentally compatible processes amongst our partners and suppliers. Constructive dialog is the key to trusting collaboration.

It is our employees who breathe life into our sustainability strategy on a daily basis – which makes it all the more important for us to be a fair-minded and attractive employer. External experts confirm this: For the third year running we have been named as a top employer for engineers.

In 2015 we not only marked the 110th anniversary of our Company – Knorr-Bremse Global Care also celebrated its first ten years. The fact that this charitable organization exists, and the work it is doing, are proof that Knorr-Bremse's corporate responsibility is also expressed in the form of practical aid projects. Since it was first set up, the organization has spent some EUR 14 million on 190 projects that have helped more than 625,000 people in need. With the involvement of our colleagues we have also been supporting the work of social and charitable institutions in the neighborhood of our sites around the world as part of the Local Care initiative.

Our commercial success provides the financial basis for our active commitment to sustainability. To ensure that Knorr-Bremse maintains its market and technological lead, we are constantly investing in expansion of our development and production facilities. Our new test and development center in Munich, which officially opens in 2016, creates globally unique conditions for the development and testing of new types of braking systems for the rail and truck sectors. The new building enables 350 engineers and technicians from both Company divisions to collaborate on an interdisciplinary basis in developing new products and systems that will bring lasting benefits to our customers – ensuring a safe and sustainable future.

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Klaus Deller Chairman of the Executive Board of Knorr-Bremse AG

# alues Complian Company For 110 years Knorr-Bremse has been driving the development, production, marketing, and servicing of state-of-the-art braking systems.

# Sustainable corporate governance.

"We are committed to sustainable corporate governance that includes environmental and social aspects in strategic planning, management, and corporate processes."

Excerpt from the Knorr-Bremse Corporate Responsibility guidelines

Our approach to corporate responsibility (CR) is based on the idea of sustainable development and covers products and production processes, employees, environmental and climate protection, and social commitment. Knorr-Bremse has integrated the principle of corporate responsibility into its Group strategy and developed an appropriate structure for its implementation.

For us, sustainability is a strategic issue that has to be established in all our operational processes. That is why we are determined to integrate environmental and social aspects into both our long-term business strategy and our day-to-day activities. By doing so we can make an important contribution towards ensuring the future of our Company – and at the same time help to develop an economy and society based on the principle of sustainability.

External documents of significance for Knorr-Bremse include the UN Global Compact, which we signed up to in 2010, the Guiding Principles on Business and Human Rights of the UN Human Rights Council, and the Charter on Sustainable Development of the International Association of Public Transport (UITP).

Three important elements specify how Knorr-Bremse views its responsibilities.

## Corporate values:

Entrepreneurship, Technological Excellence, Reliability, Passion, and Responsibility are the Company's five basic values. More than 100 employees from over 20 different countries participated in the process of redefining and shaping them under the motto of Growing with Values. This was followed by global rollout, with Knorr-Bremse employees all over the world being familiarized with the newly reformulated values.

## · Code of Conduct:

Based on our corporate values and the principles of the UN Global Compact, this formulates the basic principles for approaching our day-to-day activities.

# · Corporate Responsibility Guidelines:

Our CR guidelines sum up the overarching goals of corporate responsibility and provide guidance for the six fields of action in which the Group operates (see page 6).

We also have separate Group-level quality standards for purchasing, principles for our Health, Safety and Environmental (HSE) Policy, human resources management guidelines, and a guideline for social commitment. All these documents can be downloaded from our website at **www.knorr-bremse.com**.

# CR strategy and fields of action

With a view to meeting its responsibilities vis-à-vis the environment, its employees, and society in general, Knorr-Bremse sets priorities on the basis of a materiality analysis that identifies issues of particular relevance to the Company (see pages 7-8). In 2014 the Group Executive Board, together with selected top managers, used the results of the analysis as the basis for revising Knorr-Bremse's CR strategy. The overarching objective is this: By the year 2020 we aim to establish a reputation as an outstandingly sustainable company – both internally and externally. To achieve this we will ensure that our economic growth takes into account environmental resources and our responsibility for current and future generations.

The main goals, measures, and key indicators on the way to achieving this are summarized in the CR Roadmap, which is revised annually. Knorr-Bremse has set itself the following goals:

- to embed central aspects of sustainability in its operational business and supply chain to an even greater extent than hitherto,
- to put greater emphasis on sustainability aspects in its product portfolio,
- · to expand and strengthen compliance management,

# Recognition as supplier

Our customers are increasingly scrutinizing our sustainability management record – with gratifying results: In July 2015, CNH Industrial Group recognized Knorr-Bremse's corporate responsibility performance by nominating the Company 'Industrial Sustainability Supplier of the Year 2015'. The award panel was particularly impressed by two things: the degree of social involvement throughout the workforce and the ECCO<sub>2</sub> climate protection initiative.

 to establish sustainability and corporate values, as well as health and safety awareness, even more strongly as part of its corporate culture.

Operational implementation of our CR strategy takes place in six fields of action: Strategy and Management, Products and Partners, Employees and Governance, Environment and Climate, Commitment and Society, Communication and Cooperation.

# CR fields of action

		Development and organization 2008 – 2010	Structuring and implementation 2011 – 2014	Excellence 2015 – 2020
Strategy & Management	CR organization set up		CR strategy and guidelines introduced	Incorporate CR into strategic planning and operational processes
Products & Partners	•	First life cycle analyses carried out	Product portfolio evaluated for sustainability	Establish sustainability in supply chain
Employees & Leadership	<b>m</b>	Dialog initiated	Corporate and leadership culture strengthened	Increase attractiveness as an employer
Environment & Climate	•	ECCO <sub>2</sub> energy efficiency initiative launched	ECCO <sub>2</sub> target achieved and new targets set	Implement climate protection strategy
Knorr-Bremse Global Care e.V.: implementation of worldwide aid				dwide aid projects
Commitment & Society	Local Care projects initiated	Worldwide Local Care projects systematized	Strengthen employee involvement	
Communication Group-wide communication on sustainability		External sustainability communications expanded	Implement systematic stakeholder dialog	





# CR organization

At Knorr-Bremse the Corporate Responsibility department coordinates sustainability issues, and reports directly to the Executive Board. Goals and measures are discussed and approved by the Group's Corporate Responsibility Council (CR Council), which includes a member of the Executive Board, two management representatives from the two corporate divisions, the chair of the charitable organization Knorr-Bremse Global Care, and the head of Corporate Responsibility. The Council meets twice a year.

In 2011, in order to stimulate an exchange of ideas at global level, we created the Corporate Responsibility Round Table. The purpose of this network is for CR representatives to regularly discuss at supra-regional and supradivisional level the projects with which we implement the Group objectives determined by the CR Council.

In order to give recognition to successful internal projects and publicize best practice examples within the Group, Corporate Responsibility Awards were presented between 2011 in 2013 in two categories: Products/ Environment and Social Commitment. In 2014 these were replaced by Knorr-Bremse Value Awards, which are

presented at the Knorr-Bremse World Meeting and honor the commitment and success of colleagues and project teams in breathing life into our five corporate values – including the value Responsibility.

## **Knorr-Bremse Value Awards**

In 2015 the award for Responsibility went to the engineers in our subsidiary IFE (Innovations for Entrance Systems) in Kematen an der Ybbs, Austria, for developing an energy-efficient rail vehicle door system that is smaller, lighter, and easier to maintain

# Materiality analysis

In 2014 an internal materiality analysis was carried out with a view to structuring and prioritizing the many issues and challenges related to sustainability. The review pinpointed the issues of importance for the long-term success of Knorr-Bremse and the Company's stakeholders in view of current environmental and social challenges.

This prioritizing of issues helps us to make efficient use of the resources at our disposal. To this end the results of the materiality analysis also feed into the validation and further development of our sustainability strategy. And they have provided the basis for determining the contents of our first CR report.

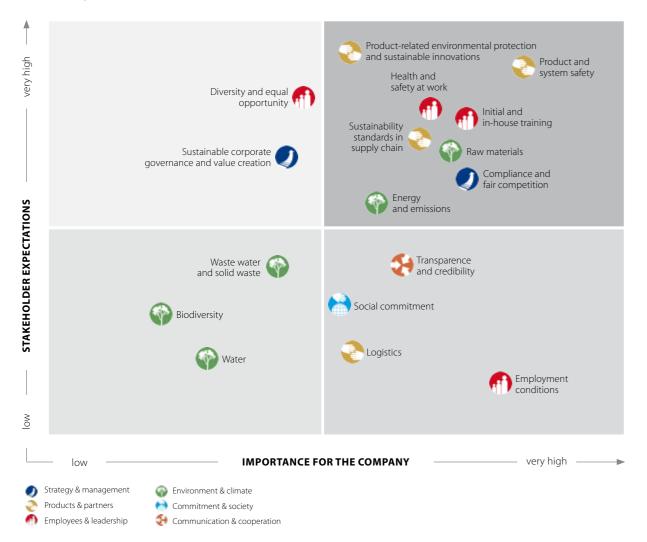
The first step involved identifying the most important areas on the basis of an evaluation of internal documents, as well as the Knorr-Bremse sustainability strategy, international studies, reports by industry experts, and the requirements of the Global Reporting Initiative (GRI) for Corporate Responsibility Reports.

The process of prioritizing issues from the point of view of stakeholders was based on quantitative and qualitative

evaluations of reports in the national and international media. The results were supplemented with investigations of the main upcoming trends and challenges facing the market and sector in which Knorr-Bremse operates.

Evaluation of the business relevance of these issues took the form of a survey carried out amongst representatives of the main corporate functions and the two divisions. They were asked to assess whether and how a particular aspect could 'contribute towards financial success' and 'retention of a license to operate'. A workshop was held to discuss the results prior to the CR Council, as the highest decision-making body, examining the assessments. This process resulted in a matrix of the most important sustainability issues for Knorr-Bremse being drawn up.

# Materiality matrix



# Knorr-Bremse's membership in organizations

We use our membership in regional and supra-regional organizations to maintain an exchange of information and opinions with other companies on environmental and social issues. These include:

- Automotive Industry Action Group (AIAG)
- Energieeffizienznetzwerk Oberbayern
- IHK Umweltausschuss
- Motor & Equipment Manufacturers Association (MEMA)
- Münchner Corporate Volunteering Roundtable
- Stifterverband der Deutschen Wissenschaft
- Umweltpakt Bayern
- UNIFE Sustainable Transport Committee
- VDB Fachgruppe Umwelt
- VDA Unterausschuss Nachhaltigkeit in der Lieferkette

## By the year

2020

WE AIM TO ESTABLISH A REPUTATION AS AN OUTSTANDINGLY SUSTAINABLE COMPANY – BOTH INTERNALLY AND EXTERNALLY.

# CR stakeholders

Knorr-Bremse conducts an ongoing dialog with its internal and external stakeholders. Groups of particular importance for the Company are employees, new recruits, customers and suppliers, the Company's owners, business partners, public authorities, trade unions, industry associations, the media, policymakers, NGOs, residents in the vicinity of our sites, and local action groups. The views of our stakeholders are taken into account in our materiality analysis and CR strategy.

# Compliance management and integrity

Integrity and responsible conduct in our dealings with business partners and employees are the principles underpinning our corporate activities. Knorr-Bremse complies with laws, internal regulations, and voluntary undertakings as a matter of course.

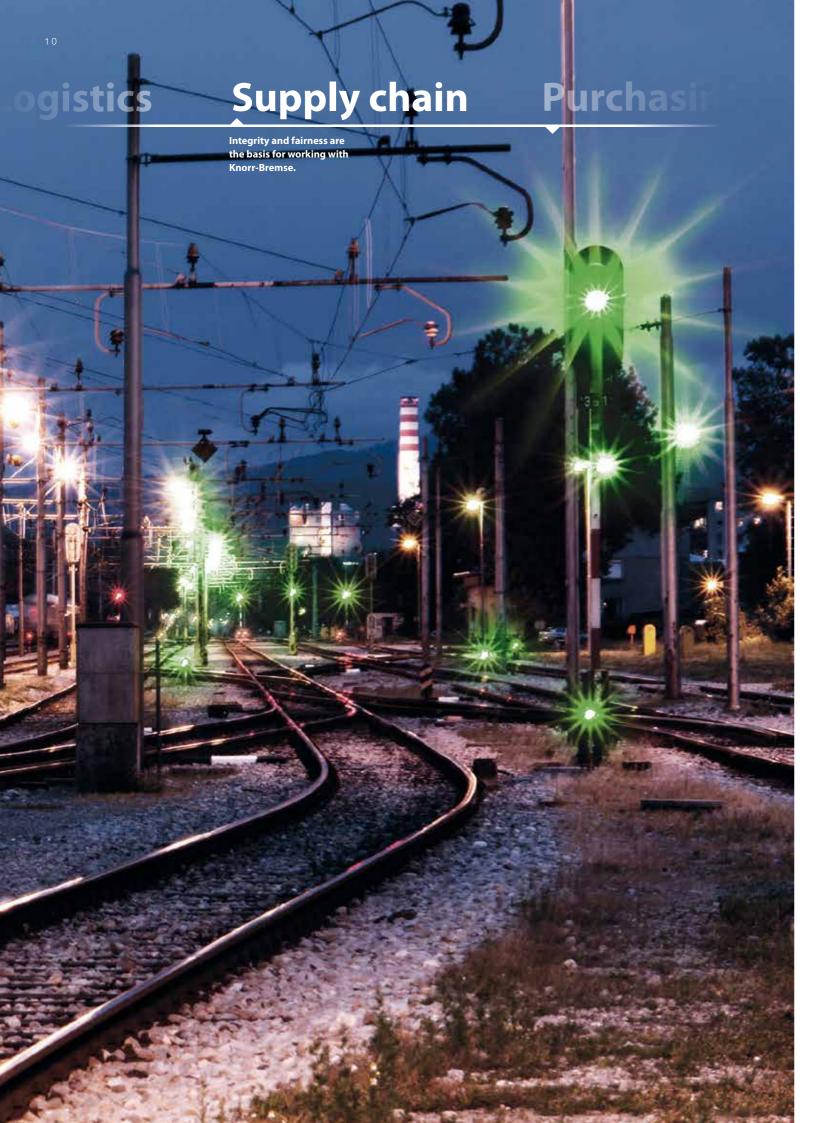
The Knorr-Bremse Code of Conduct defines the basic principles for approaching our day-to-day activities – on the basis of our corporate values and the principles of the UN Global Compact. This enables us to ensure a consistent understanding of responsible entrepreneurial conduct across national borders. Amongst other things the Code of Conduct includes a ban on corruption, including bribery and blackmail, and also covers aspects of human rights such as freedom of expression, freedom

from discrimination, and a ban on child labor and forced labor. These principles and rules are binding for all Group employees

Two key requirements for preventing corruption from the outset are transparent communications and staff training. Every employee needs to be clear about what we mean by responsible conduct and should be familiar with the rules the Company has set itself. To achieve this, we provide staff training on the Code of Conduct at regional Company events, training sessions, and information events. New employees are given a copy of the Code of Conduct when they first join the Company. We are currently also developing a systematic, Group-wide monitoring and reporting system for compliance infringements.

The internal Group Audit Department supports the Executive Board in its monitoring function by carrying out independent and objective testing aimed at improving business processes and identifying possible cases of corruption. Regular audits also review awareness of the Code of Conduct and its active communication by managers.

With effect from January 1, 2016 a Chief Compliance Officer has been appointed with responsibility for compliance management. He reports to the General Counsel and the Compliance Committee, which is chaired by the Chief Financial Officer. The Compliance Committee regularly meets to discuss the most important compliance issues such as achievement of targets, and sets the agenda for compliance management.



# Involving suppliers.

"We expect our business partners to act in accordance with the principles of this Code of Conduct and to observe all statutory requirements – in particular avoidance of corruption, respect for human rights, observance of the laws against child labor, responsibility for the health and safety of their workforce, and adherence to the relevant legislation and standards on environmental protection."

Excerpt from the Knorr-Bremse Code of Conduct

In its choice of suppliers Knorr-Bremse not only takes into account commercial criteria such as quality, price, and availability but also aspects like trusting cooperation, safety, and environmental protection. In addition our Group-wide Group Code of Conduct includes a stipulation that suppliers should take a responsible approach to their employees, the environment, and society at large.

# Purchasing management

Our purchasing management system establishes a product group strategy that is harmonized across all Group sites, develops a supplier base, and utilizes the synergies within our global network of sites. Knorr-Bremse distinguishes between two types of materials:

- Direct material materials, articles, and components that are sold to customers either directly as part of our systems, or following further processing in-house. Examples include castings and forgings, electronic and electromechanical components, and machined parts (e.g. crankshafts and gearwheels).
- Indirect material the goods and services required to operate a site; these include construction services, vehicles, hardware and software, process materials, and machine tools.

We are constantly working on improving our Group-wide supplier management. For example, in recent years the program has considerably improved the quality of the products that the Rail Vehicle Systems division receives from its suppliers. We assess our suppliers according to their competitiveness and performance, which includes factors like flexibility, delivery reliability, product quality, and sustainability.

In recent years both divisions have worked to optimize processes across the entire supply chain, and to further improve flexibility in response to the challenges posed by the growing importance of the BRIC countries (Brazil, Russia, India, and China), since supply chains in these economies are longer in terms of both physical distances and lead times.

# Integrating sustainability

The conduct of our suppliers affects our success and our reputation as a responsible company. Therefore we have made sustainability criteria an integral part of our purchasing policy. For example the cross-divisional purchasing guidelines for indirect material require sustainability criteria to be considered when selecting suppliers. In addition there are guidelines on the purchase of renewable energy and of energy-efficient products and equipment.

Suppliers of direct material must comply with the relevant quality management guidelines for the Rail Vehicle Systems and Commercial Vehicle Systems divisions, which cover aspects of responsible conduct. Both divisions expect the ten principles of the UN Global Compact to be adhered to and (if possible certified) ISO 14001 compliant environmental management systems to be in place. If suppliers do not meet these requirements, we reserve the right to terminate the business relationship with them.

Even the largest logistics providers to the Rail Vehicle Systems division must show that they conform to the principles of the UN Global Compact. In transportation and warehouse logistics, the companies that have done so account for 80% of the total volume of goods shipped by the division.

At the start of 2015 the division launched the 'Railsponsible' initiative together with Alstom Transport, Bombardier Transportation, Deutsche Bahn, Nederlandse Spoorwegen, and SNCF. The initiative is guided by the principles of the UN Global Compact and aims to encourage railroad industry customers and suppliers around the world to subscribe to ethically and socially responsible environmental and business practices.

It does this primarily by promoting a common understanding of sustainable purchasing processes, sharing knowledge and experience, and pooling relevant resources for use by member companies. An important element is a uniform assessment of suppliers' sustainability performance, and as part of this initiative we launched an international pilot project during the year under review. During the course of the year some 160 strategic suppliers were invited to undergo such an assessment, and by the end of 2015 around 20% had done so. The results will be incorporated into our supplier assessment and selection process.

50% of suppliers

TO THE COMMERCIAL VEHICLE SYSTEMS
DIVISION SIGNED OUR QUALITY MANAGEMENT
AGREEMENT (QMPP), WHICH INCLUDES A
BINDING COMMITMENT TO ADHERE TO THE
PROVISIONS OF THE UN GLOBAL COMPACT.

# Efficient logistics

We are constantly working on improving the entire supply chain – from suppliers via site production processes to final delivery of the finished product to our customers. The aim is to standardize processes and methods and to optimize them within our sites, as well as improving inter-site cooperation. The result will be better service in all distribution channels – particularly in relation to delivery reliability, quality, and lead times.

We are also continually improving product transportation by increasing the efficiency of our route planning. In a bid to minimize the environmental impact of transport activities we are working on achieving an optimum combination of road, rail, ship, and air transportation, and promoting the use of inter-modal options. This has enabled us to largely avoid the use of air freight.

In order to improve the efficiency of our transport network and reduce transport-related CO<sub>2</sub> emissions, we require our logistics partners to use modern vehicles with as low a fuel consumption as possible.

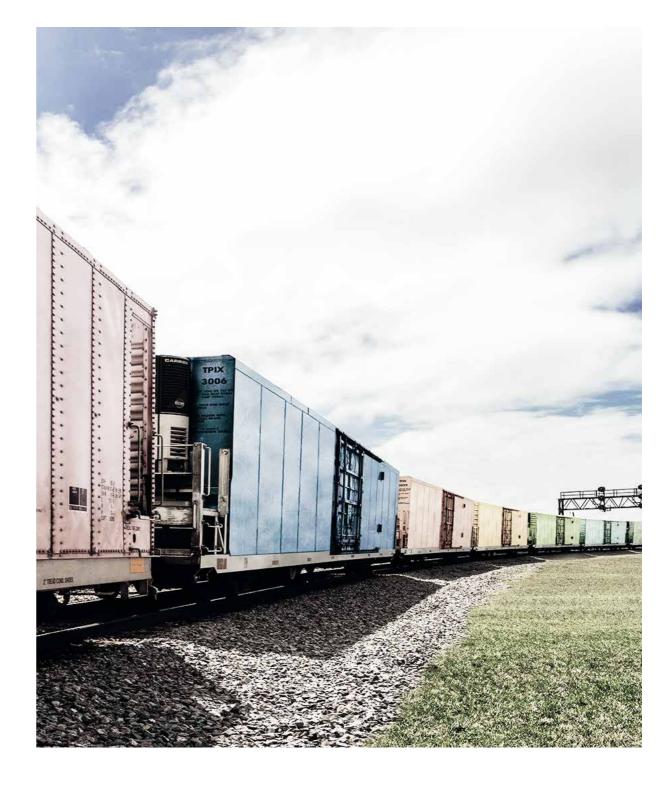
Since July 2014 the Rail Vehicle Systems division has operated a new logistics center that handles shipping for four different production facilities. As a result we have been able to cut the average transportation distance in this market segment by 10% per tonne. Knorr-Bremse uses cross-Company sales (CC sales) to sell products directly to customers from its production sites, thus eliminating unnecessary journeys via internal Knorr-Bremse warehouses. CC sales also have the advantage that the sales units remain in direct contact with the customer at all times. They enable us to cut overall distances traveled, streamline our supply chain, reduce lead times, and improve delivery performance. Since 2012 we have avoided around 430,000 unnecessary shipments in this way. In Europe, almost all of our sales organizations use CC sales, while elsewhere we continue to develop corresponding processes. In 2015 some 130,000 consignments were handled via CC sales – 16% more than the previous year.

In the commercial vehicle division we are working on making the logistics network even more effective by fully integrating suppliers into the supply chain management system. By so doing we hope to make optimum use of our production network and reduce transportation requirements to a minimum.

For example we have adopted a platform strategy that continuously optimizes transport flows. For internal transportation we have set up a hub structure that has enabled us to increase transport utilization rates by some 25%. In addition, we use several external platforms provided by logistics companies to combine goods for

transportation. This helps us make better use of vehicle capacity and reduce the number of journeys required, as well as cutting transport costs and reducing the negative impact on the environment. We are currently developing an integrated central transport management system with a view to building on the improvements already achieved.





# **Products**

# Safe and resource-saving products.

"Safety is Knorr-Bremse's main focus – we do not compromise on this. Our products and services are subject to the highest safety requirements and call for excellent quality standards in all areas and processes."

Excerpt from the Knorr-Bremse corporate values

As the world's leading producer of rail and commercial vehicle braking systems, Knorr-Bremse has a reputation for manufacturing products that offer outstanding safety, quality, reliability, customer benefits, and resource efficiency. Our product portfolio ranges from entrance systems, HVAC systems, power supply systems, control components, control technology, and platform screen doors for rail vehicles to braking systems, driver assistance systems, and powertrain-related solutions for commercial vehicles. Our divisions regularly launch new, innovative products and solutions for enhancing safety and efficiency on road and rail.

# Focus on innovation

Our consistently high expenditure on research and development (see graph) ensures our long-term innovative capabilities. This is reflected in our extensive portfolio of patents, with a current total of over 7,000 industrial property rights worldwide. On December 31, 2015 we employed more than 3,500 people in research and development.

2013	253	
2014	296	
2015	347	

R&D expenditure in EUR millions

We have adopted a systematic approach to the quality of our products. For more than ten years Knorr-Bremse has defined the measures required to ensure top quality for every component that we develop and produce. Regular process and project audits ensure that safety requirements are taken into account at the development stage of each product. In the early stages we analyze the anticipated energy consumption and materials required for a product's usage or the noise emissions that this will generate. The head of Corporate Responsibility is involved in the approval process for innovations. Examples from both divisions illustrate how our products contribute towards meeting future mobility needs, improving safety and reducing environmental impact. You can find further information on the topics of innovation and sustainability at Knorr-Bremse by consulting the Knorr-Bremse AG 2015 Annual Report (pages 53 et sqq.).

# Safety-critical products and systems

Safety, cost-effectiveness, and reliability are priorities when we are developing our products. As demand for greater mobility grows all over the world, so, too, vehicle and road safety requirements are becoming stricter. As the world's leading manufacturer of braking systems for rail and commercial vehicles we further develop tried-and-tested technologies, offering electronic systems for avoiding collisions and stabilizing vehicles as well as solutions for networking mechatronic systems. A particular feature of our brake and chassis components, includ-

ing ABS and EBS, driver assistance systems, air suspension, and pneumatic valves, is that they require virtually no maintenance.

# Environmental protection

Knorr-Bremse puts great emphasis on environmental compatibility and resource efficiency when groundbreaking technologies are under development. For example we do our utmost to reduce noise emissions and use environmentally acceptable materials wherever possible. We are convinced that climate change will mean that energy-efficient products are going to become increasingly important over the coming years – which is why we also give this issue high priority during the development process.

# Product examples Rail Vehicle Systems

- We were the first company in the rail vehicle industry to market a compressor that operates completely without oil – increasing user comfort and making it more economical and environmentally friendly than traditional compressors.
- The BPLE (Brake Pipe Length Estimation) system enables locomotive engineers on freight trains to check the functioning of all the brakes without leaving the cab.
- The iCOM Assist (LEADER) driver assistance system helps locomotive engineers to drive their vehicles in a manner that minimizes environmental impact, reduces wear, cuts fuel consumption, and still maintains punctuality. iCOM Assist reduces energy requirements by an average of 10%.
- The LL composite brake block is used for so-called 'whisper brakes'. LL stands for 'Low Friction, Low Noise'

   the blocks smooth the surface of the wheel during braking, reducing noise emissions from freight trains by some 10 dB(A), which the human ear perceives as a halving of the noise.
- The modular IFE Generation 4 entrance system is 20% lighter than its predecessor and requires 25% less energy. New materials for the door leaves have improved their noise and thermal insulation properties.

# Product examples Commercial Vehicle Systems

- Our electrically powered screw compressor for commercial vehicles with hybrid or electric drive not only reduces operating noise when a vehicle's combustion engine is switched off, but also saves energy – reducing diesel consumption by up to 1,700 liters a year.
- Rear-end collisions in traffic queues are one of the commonest causes of truck accidents resulting in injury. Our Advanced Emergency Brake System automatically applies the brakes if the truck fails to maintain a certain set distance from the vehicle in front – and does so in stages, ending with full emergency braking. This helps avoid accidents, or at least reduces the force of the collision.
- Tire pressure and temperature monitoring systems warn the driver if the pressure drops below a certain level or the temperature of the tire rises excessively. This enhances safety and prevents unnecessary fuel consumption caused by underinflated tires.
- Our pneumatic disc brakes (SL7, SM7, ST7) are significantly lighter than their predecessors and increase the efficiency of commercial vehicles. And we have reduced their environmental impact by avoiding the use of harmful materials for coatings and pads.
- Our compressor with clutch disengages from the truck's engine when maximum torque is required, for example for uphill driving or overtaking. On downhill gradients, on the other hand, it re-engages and uses surplus engine energy to produce compressed air and help brake the vehicle without wear and tear. The result is fuel savings of up to 1,300 liters per year.

# Sustainability in the product life cycle

Our aim is to continuously improve our products and reduce their environmental footprint to a minimum. To do this we carry out life cycle assessments (LCA) to examine the environmental impact of selected products during their entire life from production to final disposal. By analyzing the entire value chain we can gather valuable data on the use of materials and resources during production and also on environmental compatibility during a product's service life.

We have piloted LCA analyses on various products and systems, including the pneumatic disc brake and one of our control valves. The analysis included 'Product Carbon Footprints' (PCFs), which examine CO<sub>2</sub> emissions across a product's entire life cycle. As a result we were able to identify the use of materials and deployment of products as important levers for reducing CO<sub>2</sub> emissions.

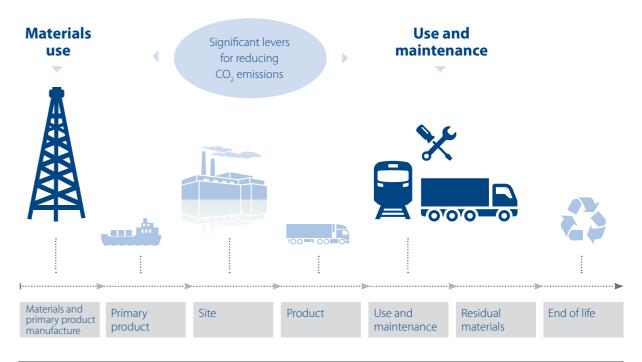
In the Rail division we have incorporated further measures into our 'ECO Design' project. This involves examining our

products to ensure that they do not contain any banned or restricted materials and also carrying out recycling analyses. As a basis we use our expanded ECO Design database, which includes information on REACH (EU system for Registration, Evaluation, Authorization and Restriction of Chemicals), materials use, and recyclability. This ensures that banned or restricted materials do not find their way into our products at any stage. With the help of the database we also aim to incorporate a new design standard for sustainability into the management system of the Rail Vehicle Systems division.

# Remanufacturing

In recent years Knorr-Bremse has massively expanded its remanufacturing operations for products originating in the rail and truck divisions. Remanufacturing saves resources and reduces environmental impact to an even greater degree than material recycling alone. Aluminum components are a good example: Remanufacturing does not involve the

Environmental impact during the product life cycle



Production steps throughout the value chain – from material procurement to final disposal

energy-intensive process of melting down and pressure-molding a new aluminum casing. Compared with a newly created product, it can therefore save up to 98% of the materials required and significantly improve the overall eco-balance of the product compared with manufacturing a new casing.

We regularly carry out life cycle analyses with a view to calculating the environmental advantages of product remanufacturing compared with producing new ones. An analysis of the  $\rm CO_2$  footprint of our EAC 1 electronic air treatment system revealed that remanufacturing of the unit saved emissions of 13.6 kilograms of  $\rm CO_2$  compared with the manufacture of a new product. The analysis included the input and logistics of all the suppliers concerned.

In the Rail Vehicle Systems division, remanufacturing has always played a prominent role. For example, Knorr-Bremse overhauls control, load-proportional, and weighing valves for freight car brakes, only replacing those parts that are subject to actual wear. Well over 90% of the material is reused. During the year under review, the Service Center in Berlin alone overhauled some 45,000 products of different types.

In the Commercial Vehicle Systems division, used products are returned by customers for remanufacturing. These are dismantled and the individual components are first cleaned and then inspected to see whether they can be reused. Reassembly and testing of the overhauled products involve the same processes and approval stages as for new products. The portfolio of remanufactured products in the commercial vehicle division already contains 300 individual article numbers. Remanufactured versions of our compressors, for example, offer aftermarket customers a viable alternative to buying a new product - and one that is not only appropriate to the age of the vehicle but also saves energy and resources. In terms of function, a remanufactured air compressor for the braking system is as good as a new product. Our declared aim is to offer remanufacturing for the majority of our entire product range for commercial vehicles by the year 2018.

Over the next few years we intend to continue our global investment in remanufacturing. During the year under review, for example, we expanded a manufacturing facility at our site in Liberec, Czech Republic, with a view to bundling our remanufacturing activities in the European market. In addition to Europe, Knorr-Bremse also markets a portfolio of remanufactured products on the American continent: In Itupeva, Brazil, 250,000 parts have been remanufactured within the space of ten years, saving 700 tonnes of raw materials. And the Bendix Brake Shoe Remanufacturing Center in Huntington, Indiana/USA, remanufactured three million brake shoes during the same period.

Up to

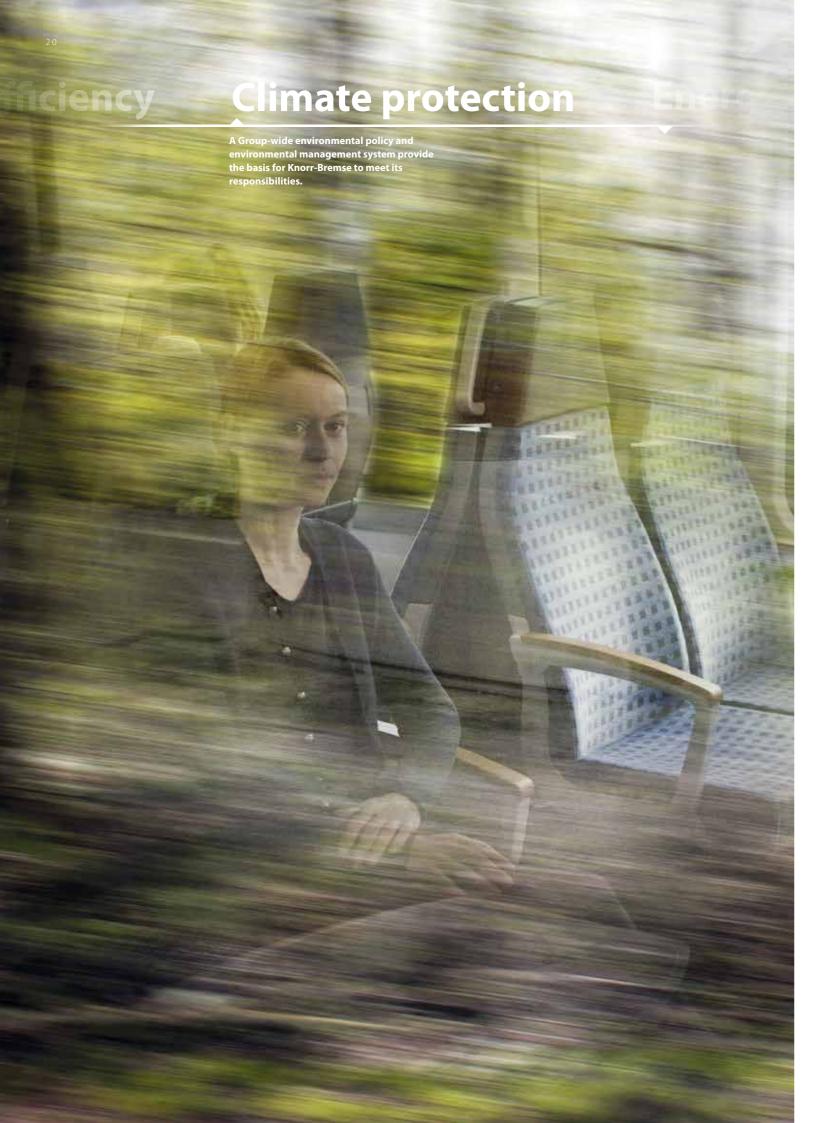
75% less CO, emissions

FROM REMANUFACTURED PRODUCTS

COMPARED WITH NEW ONES.







# Precautionary approach to environmental and climate protection.

"We have set ourselves the goal of handling resources in a responsible manner, consistently reducing CO<sub>2</sub> emissions, minimizing and where possible avoiding undesirable impact on nature and the environment."

Excerpt from Knorr-Bremse's Corporate Responsibility guidelines

Knorr-Bremse is committed to integrated, precautionary environmental protection – in its production processes and through the development of resource-saving products and services. We are continually upgrading our measures, collecting and analyzing key performance data, and setting environmental targets at Group and site level. By regularly inspecting and servicing our plant and machinery and carrying out preventive maintenance and repairs on the entire infrastructure, we are minimizing the negative impact of our operations on the environment. At the same time, we are promoting environmental awareness and appropriate conduct amongst our em-ployees through a number of communication measures and train-ing courses. Every year we assess the need for these on a site-by-site basis.

# Environmental management

Knorr-Bremse's environmental principles are set out in the Health, Safety and Environmental Policy that was updated in 2015. As part of this we commit ourselves to prevent-ing or minimizing the impact of our processes, services, and products on the environment and our fellow human beings. In order to achieve this aim, the Group has introduced an environmental management system at all its production sites. This is coordinated by central HSE departments for the Rail Vehicle Systems and Commercial Vehicle Systems divisions. During the year under review a Group-wide HSE report was introduced in which we reg-ularly record the most important HSE performance

data and events, drawing on information from all our major production sites worldwide. Since 2001 we have been driving a step-by-step process of certification of our sites under the international environmental management standard ISO 14001. By the end of 2015, 47 production sites had achieved certification.

# Climate protection targets 2020

In order to reduce our CO<sub>2</sub> emissions, we have developed a climate protection strategy that has established Groupwide targets for the year 2020. The main focus is on three areas: energy (optimizing building design and processes), logistics, and products.

Our measures to reduce greenhouse gas emissions (Scope 1 and Scope 2 as defined in the Greenhouse Gas Protocol) are grouped together in Efficient Cut of CO<sub>2</sub> (ECCO<sub>2</sub>), an initiative that was launched in 2009. Our original aim was to achieve a 20% reduction in our specific CO<sub>2</sub> emissions by 2020 and to increase our specific energy efficiency by the same amount. We had already achieved this target by the end of 2014; therefore, we are planning to decide on new targets in 2016. Knorr-Bremse also aims to introduce an energy management system according to the international ISO 50001 standard at all its production sites. By the end of 2015, 21 production sites within Europe had a certified energy management system according to ISO 50001 or had carried out energy audits according to ESOS (Energy Savings Opportunity Scheme, UK).

2015 also saw the Company produce global guidelines on the purchase of renewable energy with the aim of increasing Group-wide use of energy from such sources.

In the field of logistics we also aim to achieve further reductions in transport-related CO<sub>2</sub> emissions, for example, by optimizing warehouse structures and route planning and by ensuring that logistics service providers use more efficient vehicles (see page 12).

We use life cycle assessments (LCAs) and impact analyses of substitute materials to assess the environmental and climate impact of our products and systems with a view to expanding our portfolio of environmentally friendly products (see page 17).

# **Sponsoring Eco Performance Award**

Since 2013 Knorr-Bremse has been a Premium Partner for the Eco Performance Award. The initiator of this top award for sustainability in freight transportation in Europe is DKV Euro Service, one of the leading service providers for the logistics and transport industry.

# Energy consumption

2013	208,426	
2014	225,177	
2015	310,921	

Absolute energy consumption in MWh



Specific energy consumption in MWh per TEUR sales

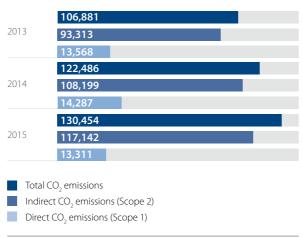
# Energy efficiency

Through our ECCO<sub>2</sub> initiative, we identify potential energy savings in all areas of the Company and share local examples of best practice. In 2015 our focus was again on buildings, plants, and production processes. We installed energy-saving lighting and waste heat recovery systems at a number of sites, improved assembly lines and motivated staff to save energy. At some sites we also installed sub-meters that give a detailed breakdown of our energy consumption, helping us to identify areas for potential savings and to develop measures for reducing energy consumption. During the year under review we also further improved the generation of compressed air at some of our German production sites: This resulted in our being able to reduce the pressure of the air centrally produced for all our production processes by 1 bar, bringing energy savings of around 10% per standard cubic meter.

In Asia we ran a pilot training project for employees at several sites with a view to further embedding awareness of energy management issues at all levels within the Company.

The energy requirements of our IT systems are having a growing impact on our ecological balance sheet. As part of its 'Green IT' project, Knorr-Bremse has modernized its

# **Emissions**



Direct and indirect CO<sub>2</sub> emissions Knorr-Bremse in tonnes



Specific CO<sub>2</sub> emissions in tonnes per TEUR sales

# Climate protection at Knorr-Bremse Focus on three areas

# **FOCUS ON PRODUCTS**

- Assessment of environmentally friendly product portfolio
- Implementation of life cycle assessments
- Analysis of environmental impact of alternative materials

**FOCUS ON ENERGY** 

**ECCO, PHASE II** (2014 – 2020)

■ Emissions reduction target:



23

# **FOCUS ON LOGISTICS**

Optimization of transport network, warehouse structure, and route planning

- Use of fuel-efficient vehicles by logistics
- Reduction of transport-related CO,
- \* Direct and indirect emissions from the use of natural gas, heating oil (Scope 1) and electricity, district heating (Scope 2)
- \*\* Indirect emissions from fuel use and from product manufacture and use (Scope 3)

biggest IT and server center at its headquarters in Munich. By halving the cooling requirements in the server rooms, we achieved a reduction in energy consumption for this purpose of around 30%. In addition, central standards for hardware and software and measures to change employee behavior are reducing the environmental impact associated with the procurement, use, and disposal of IT equipment.

# 'Train to Paris' - special climate-friendly train at the UN Climate Conference

On the occasion of the 21st LIN Climate Conference in Paris at the end of 2015, Knorr-Bremse showcased its environmentally friendly rail innovations in the form of a special 'Train to Paris'.

Amongst the technologies on display were the iCOM Assist driver assistance system, which helps locomotive engineers save fuel, state-of-the-art HVAC systems from Merak and Sigma, which have a sophisticated control system that saves energy, and Knorr-Bremse Power Tech power converters that efficiently distribute energy throughout the train.

# Resource efficiency

Knorr-Bremse endeavors to make sparing and efficient use of materials in its production processes. In particular this applies to steel and iron materials, light metals, polymers, fuels and lubricants, and packaging materials. We are working on increasing the proportion of non-hazardous materials and on using more environmentally friendly alternatives wherever possible.

Waste generated at Knorr-Bremse consists primarily of scrap metal, paper, packaging, and residual waste. In addition, surface treatment of our products results in electroplating sludge. Measures are being taken to steadily reduce waste and improve material cycles.

The water we consume is used primarily in the surface treatment and cleaning of our products, for test applications, and for drinking water and sanitary purposes. We obtain our water from local authority suppliers and dispose of our waste water via public sewage systems.

It is our aim to use water as efficiently as possible and to recycle it wherever feasible. In 2015 we reduced our specific fresh water consumption (in relation to sales revenues) by 9.6% compared with 2014.

In order to save drinking water some of our sites use rainwater for cleaning, in their sanitary facilities, and for watering green spaces.

In St. Petersburg, Russia, on the other hand, we introduced a new dry-ice process last year which replaces high-pressure water cleaning at our Service Center. This has proved highly effective and saves resources, as it replaces the use of high-pressure water and the need to dispose of contaminated water. Furthermore it does not gen-erate secondary waste – dry ice is a by-product of other industrial processes – and therefore avoids additional production-related CO<sub>2</sub> emissions.

# Water consumption

2013	122.2
2014	88.5
2015	80.0

Specific fresh water use in liters per TEUR sales

# Ecological building design worldwide



We want our new sites and buildings to be as environmentally friendly as possible. In 2014, Knorr-Bremse produced a construction guideline for production facilities and buildings that includes comprehensive environmental criteria related to the basic energy concept, carbon-neutral energy production, life cycle cost calculations, and energy monitoring. In addition, we take local conditions into account, e.g. by ensuring we select the best construction materials for the particular climatic conditions.

2015 saw the completion of the new test and development center in Munich, which is scheduled for opening in the summer of 2016. It has been designed to the highest standards of energy efficiency and sustainability: The main source of heating is waste heat from the test rigs, but this is backed up with ambient heat

drawn from the groundwater. The process heat is used directly as far as possible, but heat pumps are also available to raise the temperature if required. The heat pump function of the cooling systems and the available ambient heat also enable the indoor parking facility to be heated.

During the year under review our rail vehicle systems production site in Palwal, India, achieved Silver certification from the Indian Green Building Council (IGBC). Certification is awarded for sparing use of resources, energy efficiency and maintenance of a healthy working environment. The entire building in Palwal is well insulated and has prismatic skylights to direct daylight into the rooms. It also has its own water recycling system that considerably reduces fresh water requirements.

We achieved a

9%

CUT IN SPECIFIC ENERGY
CONSUMPTION IN 2015 COMPARED
WITH THE PREVIOUS YEAR.

The Knorr-Bremse construction manual lays down a range of environmental criteria for the planning of production facilities and buildings.





# Attractive working environment for employees.

"We create an attractive working environment in which the principles of mutual trust, teamwork, diversity, and equality of opportunity as well as fair and respectful treatment of each other are recognized and practiced."

Excerpt from the Knorr-Bremse Corporate Responsibility guidelines

At the end of 2015 the Knorr-Bremse Group had a global workforce of 24,275 – an increase of 1.5% over the previous year (23,916). Just how international our Company is can be seen from the fact that in 2015 around 80% of all employees were working at sites outside Germany.

At our international sites we offer young people opportunities to undergo training in a variety of technical and commercial skills. Amongst the most popular are industrial technology, machining, electronics, mechatronics, and IT.

Independently of the sites where they are employed, employees are also offered a range of voluntary extra benefits such as meal allowances, mobility allowances, and sport and health provisions. Within the framework of what is locally feasible, Knorr-Bremse also offers voluntary additional contributions to a Company pension in line with statutory requirements and tax and social security legislation.

2014 <b>23,916</b> 2015 <b>24,275</b>	
2015	
24,275	

Size of workforce

# Recognition as top employer



Our HR policy puts great emphasis on the Group's attractiveness as an employer in the eyes of the public at large and in particular in the perception of highly qualified potential recruits, who are crucial for our future. Several awards have confirmed this: In 2014, 2015, and 2016 we were named 'Top Employer for Engineers in Germany' by the International Top Employers Institute (Amsterdam). Knorr-Bremse was praised for providing "an outstanding employment environment and a wide range of attractive incentives, from secondary benefits and flexible working conditions to well-designed performance management programs tailored to the corporate culture."

A reliable indicator for levels of satisfaction within the work-force is provided by our regular employee surveys. The latest survey took place in 2014 and elicited responses from more than 80% of Knorr-Bremse's total workforce. The results paint a similar picture to the previous survey in 2011: Many employees appreciate the good relations that they have with their managers and are proud to be part of the Company. The scope for improvement identified was examined in subsequent workshops and appropriate measures were drawn up.

Knorr-Bremse attaches importance to establishing an atmosphere of trust and cooperation across all levels of the hierarchy. This includes a constructive exchange with established employee representation bodies such as the Group Works Council. We respect employees' freedom of association and assembly and their right to collective bargaining, inasmuch as this is possible and legally permissible in the country concerned. Members of employee organizations or trade unions are neither disadvantaged nor given preferential treatment.

# Leadership and personnel development

Personnel development is an important task for leadership, and Knorr-Bremse has formulated guidelines to ensure that day-to-day leadership is aligned with our corporate values. The guidelines cover the five core elements 'Reflect', 'Step ahead', 'Engage', 'Develop' and 'Execute' and describe the manner in which leadership should be exercised. The guidelines were developed in workshops attended by more than 100 managers at our locations in America, Asia, and Europe.

One expression of our culture of open dialogue is the Leadership Feedback instrument, which enables managers to receive feedback from their staff regarding their style of leadership. The results are used as a basis for jointly drawing up measures to optimize teamwork. Under the title of 'Staff Dialogue' we have standardized our annual manager-employee meetings throughout the Group and have further developed our appraisal criteria and management of leadership potential. This includes formulating individual target agreements and assessing performance and potential. The result is greater clarity for both sides regarding each employee's performance and potential, as well as tailored individual development plans. In 2014 we completed Group-wide introduction of the software tool created for this purpose.

The targeted search for future managers is also conducted according to common standards within the Group. Following completion of the Staff Dialogues, employees

## People Excellence at Knorr-Bremse Asia

In Asia Knorr-Bremse offers a wide range of further training measures and programs. In 2015, employees in the region clocked up a total of over 300,000 training hours.

with high potential are invited to attend internal assessment centers at which they are scrutinized by experienced managers and outside experts. These measures enable Knorr-Bremse to prepare junior employees for future responsibilities, thus ensuring staff continuity.

Other important personnel development programs and measures are as follows:

- The Management Evolution Program (MEP) enables trainees to familiarize themselves with three different departments over a period of 18 months, during which they gather experience in international projects and work at a foreign location for six months. The trainees receive support from mentors chosen from the management ranks.
- The International Management Potential Group (IMPG) is a special development program for young executives that gives participants from our sites around the world an opportunity to develop their talents further in training courses and projects, to strengthen their leadership skills, and to expand their personal networks internationally.
- The Engineering Development Program (EDP) in America enables college graduates with degrees in technical subjects to receive two years of further training in mechatronics for example, through cross-divisional transfers to other departments or through work experience abroad in Mexico.

# International exchange

For many years now, Knorr-Bremse's commitment to international exchange has resulted in improved intercultural skills, particularly among its managers. The Company's international locations provide ideal conditions for this to take place. Expatriates are posted abroad for periods of between six months and five years. All are supported centrally by a team of specialists from the International Transfers department – from the initial preparations to their return and reintegration into their former work-places. In addition to long-term international assignments, short-term exchanges related to specific issues are

# 110 years of Knorr-Bremse

110 years ago, Knorr-Bremse was founded in Berlin by the inventor Georg Knorr. Inspired by a spirit of inventiveness and technological competence, the Knorr-Bremse Group developed into the world's leading manufacturer of braking systems for rail and commercial vehicles.

The Company's success is based to no small degree on the hard work of its employees. In 2015 we celebrated employees' commitment to the Company at anniversary events held at our sites and declared the corporate value 'Entrepreneurship' to be value of the year. On the annual Global Knorr-Bremse Day, employees all over the world considered entrepreneurship as a value – in the sense of encouraging a more entrepreneurial approach to their daily work. A variety of workshops, talks, discussions, and sporting events were held at sites around the world:

Colleagues in Suzhou demonstrated their collective skills in a boat-building competition, and in Faridabad team events were organized and prizes awarded for creative slogans, pictures, and backstories illustrating corporate values.

another main area of focus at Knorr-Bremse. By frequently giving employees project-specific assignments around the world, we help ensure skills acquisition, sharing of specialist knowledge, and transfer of expertise. An international job market is available to all employees on the Intranet. This makes intersite exchange more attractive and simpler than ever and provides our employees with early information about interesting positions and projects across the Group.

# Diversity and equal opportunity

We consider the cultural diversity of our workforce to be one of the key factors in our economic success. As a global group, we promote understanding and appreciation of other cultures and lifestyles and actively promote the integration of employees from other countries. We support this with intercultural training, language courses, and periods spent working abroad. To maintain a close relationship with our markets and customers and make use of country-specific language skills and cultural competence, we attach particular importance to employing local executives at our international sites.

When it comes to pay, no difference is made between men and women. In Germany, Knorr-Bremse's equal pay policy has been acknowledged with the award of the Logib-D certificate by the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth. Vacant posts and management positions are filled irrespective of gender – all that counts is qualifications, performance, and the candidate's personality. In 2015 the proportion of female employees in the workforce was 18.9%. The global figure for women in management positions within the Group is 11%.

In March 2015 a law was passed in Germany to ensure that men and women have an equal share of top management positions in industry and administrations. It obliges employers to give greater consideration to the under-represented gender – usually women. Stock exchange-listed companies, and enterprises subject to co-determination regulations, have to establish their own flexible women's quotas for their executive board, supervisory board, and upper and middle management and report on progress made.

Knorr-Bremse supports the intention of this legislation to increase the proportion of women in top management positions. Moreover, in view of current demographic developments and the potential shortage of skilled workers, particularly in technical occupations, it is also important for Knorr-Bremse to recruit more well-trained and highly qualified women. Appropriate initiatives and programs already exist – one example being a trainee program specifically designed for young female recruits. At Knorr-Bremse the scope for balancing family and professional life has also been increased by the introduction of flexible working time models and tele-working.

However, increasing the proportion of women in management positions takes time. As Knorr-Bremse is a technological company operating in the B2B sector, it is mainly male applicants who perceive it to be an attractive place to work. Many management positions at Knorr-Bremse also call for technical training in which women are still underrepresented. You can find further information on details of the targets we have set in the Knorr-Bremse AG 2015 Annual Report (page 60).

In a joint initiative with the Technical University of Munich, we provide support for female students of scientific and technical subjects preparing to enter professional life. In a program called mentorING, they are provided with mentors who help them to build up networks relevant to their studies and future professions. Seminars and training courses tailored to specific target groups round off the program.

In North America, our Bendix subsidiary offers female managers the opportunity to attend a training program focusing on women in management positions. Over a period of six months there are regular workshops, an important aspect of which is the opportunity to exchange ideas with women in management positions in other companies within the sector.

Employees with disabilities or serious health conditions receive special protection and assistance at Knorr-Bremse. The disability officer helps to find the right work-place for them within the Company. The proportion of employees in this category at our German locations in 2015 was 5.0% (2014: 4.9%).

One of the aims of our HR policy is to promote a better work-life balance – especially in countries which, like Germany, face major challenges as a result of demographic change. To help employees reconcile the demands of work and family – from highly qualified women wishing to stay at work despite having children, or fathers wanting to play a bigger part in their children's upbringing, to those with dependents requiring care – Knorr-Bremse offers the following assistance, as required:

- flexible working hours and working time accounts
- · part-time employment
- leave lasting several months (sabbaticals)
- teleworking
- care support for the family (e.g. assistance in finding child care and nursing care for dependents)

# **Encouraging girls to explore technology**

In order to encourage more girls to consider training in a technological profession, Knorr-Bremse's Munich headquarters is involved in the 'Girls for Technology' camp organized by the Bavarian Industrial Training Institute (bbw).

## www.tezba.de

Knorr-Bremse has also been involved for several years in the nation-wide 'Girls' Day', which aims to introduce young women to occupations such as engineering, industrial technology, and mechatronics, which are usually dominated by men. 2015 again saw schoolgirls given an opportunity to gain practical experience of the training on offer at Knorr-Bremse and to try their hand at assembling a compressor. www.girls-day.de

In 2013 for the first time, Knorr-Bremse was awarded the prestigious 'Audit Beruf und Familie' certificate in acknowledgement of the Company's family-friendly personnel policy. The award followed detailed assessments by the auditing company berufundfamilie gGmbH. We are hoping to undergo re-auditing in 2016.

# Health and safety at work

Our Health, Safety and Environmental Policy, which applies to the entire Group, commits us to ensuring a safe and healthy working environment by promoting the prevention of injuries and impairment to health. Important components in our preventive safety management system include analysis of incidents and accidents and Group-wide safety reporting. Other key aspects are risk assessments of machinery, workplaces and work processes, the promotion of safety consciousness in the workforce through training courses and awareness campaigns, the analysis of accidents, and subsequent introduction of accident-prevention measures.

Our occupational health and safety management system meets the requirements of the international standard OHSAS 18001 (Occupational Health and Safety Assessment Series) and we conduct internal audits at regular intervals. Worldwide, 32 production and service sites in our Rail Vehicle Systems division are certified according to OHSAS 18001. Using standardized processes, we record and analyze the key indicators on occupational safety and base appropriate measures on these. In order to maintain and further improve our high standards of health and safety at work, we provide internal specialist training courses at regular intervals and offer those responsible the opportunity to take part in international congresses, conferences, and projects. The success of our occupational safety management system is also reflected in our key performance indicators. The injury rate per 200,000 hours worked fell to 0.7 in the year under review.

An extensive range of measures is available throughout the Group with a view to maintaining and promoting our employees' long-term health. These are tailored to the regional needs of our individual sites and include ergonomic workplace design, stress management seminars, fitness programs, and medical examinations. In-house medical care is available to employees at all our sites. In addition to important preventive check-ups, vaccinations and pre-travel consultations are also offered. In the USA, our Bendix subsidiary offers its employees an extensive range of activities and information on subjects such as breast cancer prevention, healthy nutrition, and physical fitness as part of its 'Bendix Be Healthy' program.

# Occupational Health Award from Qingdao City Administration of Work Safety

In 2014, our Chinese subsidiary IFE Victall in Qingdao installed an integrated dust extraction system for its grinding workplaces. The system prevents the grinding dust from entering the air breathed by the employees and significantly reduces the risk of dust explosions. In 2015, the system received the Occupational Health Award from Qingdao City Administration of Work Safety.

### Accident rate

2013 0.	).9
2014 1.	0.0
2015 0.	).7

Number of accidents resulting in lost working days per 200,000 hours worked





# Involvement in local and global community projects.

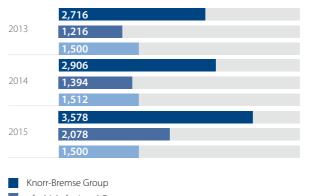
"We are involved, as a member of society, in social issues and are engaged worldwide as a good corporate citizen."

Excerpt from Knorr-Bremse's Corporate Responsibility guidelines

Knorr-Bremse is a socially responsible company. Taking part in the life of the community, having a positive impact on the areas in which we operate, and playing a constructive role in shaping them are a key part of our Company's identity. With this in mind, the Knorr-Bremse Group has for many years been involved in community projects.

Our involvement covers social issues (both local and global), culture, and sports. In 2015, Knorr-Bremse invested a total of around EUR 3.6 million for these purposes (2014: EUR 2.9 million).

Expenditure on donations and sponsoring



of which, for Local Care
of which, for Global Care

Donations and sponsoring by Knorr-Bremse Group in TEUR

# Local Care: Involvement at local sites

'Local Care' is the name we give to community involvement by our sites. This includes financial support for social initiatives and projects (donations, sponsoring) and voluntary support provided by our employees (corporate volunteering). In 2015 we supported more than 260 projects in 13 countries. The Local Care guidelines set out aims and standards and provide our site management teams with recommendations concerning support areas, criteria, and resources (both time and money). We keep central records on all local projects so that we can share transferable best practice examples internally. Projects that enable us to contribute our own expertise are considered particularly good examples of best practice.

In addition, we encourage our employees to become involved in voluntary work. At our headquarters in Munich they can take part in one of three corporate volunteering projects, with the hours invested being counted as working time. In 2015 a total of more than 30 employees took up this option. They supported the Münchner Tafel food bank organization in processing food donations, organized the opening ceremony for the 'Family House' (a play and teaching facility for the children of refugees organized by the 'Bayernkaserne'), and helped the Innere Mission organization to sort through donated clothing for refugees.

## **Award for Knorr-Bremse Asia Pacific**



Every year, the Hong Kong Council of Social Service (HKCSS) awards the Caring Company logo to companies that support the community and their employees. At the awards ceremony in March 2015, Knorr-Bremse Asia Pacific received the award for the first time, alongside around 3,000 other companies. The 'Caring Company' title is awarded to companies for outstanding services to employees, the environment, and the community. Through the awards, the Council supports socially responsible companies and hopes to promote strategic partnerships between them and non-profit organizations. For example, employees at Knorr-Bremse Asia Pacific volunteered to work with young offenders, opening their eyes to new prospects and opportunities. www.caringcompany.org.hk/index.php

Many of our employees also do voluntary work in their spare time. To mark the tenth anniversary of Knorr-Bremse Global Care we supported a special initiative: We asked employees at our sites all over the world to submit suggestions for projects that support people in need. Project teams at the sites then decided how the funds were to be distributed. As a result of the initiative, more than 220 projects worldwide were supported and implemented – including help for children, the disadvantaged, and the elderly, food banks and voluntary fire brigades, renovation of schools and kindergartens, language teaching, environmental campaigns, and integration projects for refugees. In 2015 a total of some EUR 500,000 was made available for these purposes.

# Global Care: Helping people worldwide

Global Care is the name given to our worldwide efforts to help people in need. Global Care projects are officially managed by Knorr-Bremse Global Care, an organization set up in January 2005 in the wake of the devastating tsunami in South-East Asia. It focuses both on mediumand long-term education and infrastructure projects and on providing emergency relief following disasters. The majority of the donations it receives are provided in equal parts by the Rail Vehicle Systems and Commercial Vehicle Systems divisions of the Knorr-Bremse Group.

Since it was first set up in 2005, Knorr-Bremse Global Care, together with its project partners, has succeeded in improving the living conditions of over 625,000 people in 52 countries through around 190 projects; a total of some EUR 14 million has been made available. In 2015 the organization supported around 60 projects in 29 countries at a cost of some EUR 2 million. More than 120,000 people benefited as a result. You can find further information about the activities of Global Care at www.global-care.eu and in the Knorr-Bremse Global Care report for 2015.

Since 2013, a key focus of Knorr-Bremse Global Care projects has been on water, sanitation, and hygiene (WASH). Through its work, the organization aims to bring about long-term improvements to water supplies and hygiene conditions, especially in developing countries and emerging economies.

During 2015 Knorr-Bremse Global Care helped the aid organization World Vision in the Krachi East region, Ghana, to fund the construction of 20 drinking water wells, five disabled-friendly sanitary facilities at primary schools, and 20 clothes washing facilities. Following completion of the building work, villagers also received instruction in carrying out basic repairs. By setting up a local water committee that charges a small fee for usage with a view to covering the cost of maintenance and possible extension work, the village community has been enabled to independently operate its water supply in the long term. Hygiene lessons for school children have also been funded.

In addition, Knorr-Bremse Global Care supports vocational training to give young people prospects and a chance to support themselves and play an active part in society. The SKILL project run by the Stadtteilarbeit neighborhood association in Milbertshofen (Munich) helps young people from low-income families, teaching them important social skills that facilitate their transition from school to work, e.g. by enabling them to take school leaving exams or by finding them an apprenticeship. Knorr-Bremse Global Care funded the project from 2013 to 2015 and supported around 150 young people.

Together with the Knorr-Bremse site in Itupeva, Brazil, Knorr-Bremse Global Care is supporting young people from low-income families who live in the vicinity of the Company plant. While they are still at school they are being given technical training that improves their career prospects and their chances of gaining a place at university. During the training at the Knorr-Bremse site they not only gain practical knowledge in the fields of mechatronics, mechanical engineering or working with computer-controlled machine tools but also get to know the Company itself.

Many of the organization's projects also involve our local sites. In Krakow, Poland, for example the Knorr-Bremse site supported an initiative launched by employees to renovate the pediatric department of Zeromski Hospital. 40 children and infants, together with their parents, now have access to better care during their stay in hospital.

# Supporting culture and sports

As well as supporting social projects, the Group headquarters in particular also funds cultural organizations and sports clubs in Germany. An example of this kind of work is the fact that the Company is a founding member of the initiative to modernize the Deutsches Museum in Munich, the world's biggest technology museum, and is donating a total of EUR 5 million for this purpose up to 2018.

120,000 people

BENEFITED FROM
GLOBAL CARE PROJECTS IN 2015.



# Implementation of the ten Global Compact principles.

Knorr-Bremse has supported the UN Global Compact since 2010, and every year we produce a progress report on how we are implementing the ten principles. The following table provides an overview of the voluntary undertakings, guiding principles, and management

systems that help us to incorporate the Global Compact into our corporate processes. It also contains references to the relevant parts of this report on the Global Compact and its implementation during 2015.





This is our Communication on Progress in implementing the principles of the United Nations Global Compact and supporting broader UN goals.

We welcome feedback on its contents.

## **ENVIRONMENTAL PROTECTION**

EIVVIICONIVIEIVIAETIC	TECHON				
PRINCIPLE 7  PRINCIPLE 8  PRINCIPLE 9	Businesses should support a precautionary approach to environmental challenges; undertake initiatives to promote greater environmental responsibility; and encourage the development	Knorr-Bremse Code of Conduct (p. 5) Climate protection strategy with Group-wide goals up to 2020 (p. 21) Health, Safety and Environmental Policy (pp. 5, 21, 30) Group-wide environmental	5 Sustainable corporate governance 11 Involving suppliers 11 Integrating sustainability 12 Efficient logistics 15 Safe and resource-saving products 15 Focus on innovation 16 Environmental protection		
PKINCIPLE 9	and diffusion of environmentally friendly technologies.	management system at production and service sites (p. 21) Construction manual with wide range of environmental criteria p. 24)	<ul> <li>17 Sustainability in the product life cycle</li> <li>17 Remanufacturing</li> <li>21 Precautionary approach to environmental and climate protection</li> <li>21 Environmental management</li> <li>21 Climate protection targets 2020</li> <li>22 Energy efficiency</li> <li>23 Resource efficiency</li> <li>30 Attractive working environment for employees, Health and safety at work</li> <li>34 Involvement in local and global projects, Global Care</li> </ul>		
CORRUPTION PREVENTION					
PRINCIPLE 10	Businesses should work against corruption in all its forms, including extortion and bribery.	Knorr-Bremse Code of Conduct (pp. 5, 9)	<ul> <li>5 Sustainable corporate governance</li> <li>9 Compliance management and integrity</li> <li>11 Involving suppliers</li> <li>11 Integrating sustainability</li> </ul>		



# **Imprint**

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