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# Ladies and gentlemen,

As the leading global manufacturer of braking systems and supplier of additional sub-systems for rail and commercial vehicles with a tradition going back 112 years, we take our responsibility towards customers, employees, suppliers, the environment and society extremely seriously. Our workforce develops products and solutions designed to offer customers improved safety, quality, reliability and efficiency. As a technological pioneer we make a significant contribution towards enhancing road and rail safety. At the same time, our innovations help protect the climate and save natural resources.

In 2016 we succeeded in making further progress in the field of sustainability. Our smart, networked rail vehicle sub-systems, such as the modular iCOM, for example, offer manufacturers and fleet owners new scope for making their operations safer, low-maintenance – and above all more energy efficient, thereby helping to protect the climate. We have also developed and marketed new technologies for commercial vehicles that make road freight transportation even safer, more economical and cleaner. With our acquisition of exhaust gas recirculation valve and exhaust brake specialists GT Group, for example, we have further expanded our portfolio of sustainable products. The industrially remanufactured products that we have bundled under the new EconX brand offer significantly improved sustainability in the commercial vehicle aftermarket: Life cycle analyses of a compressor, for example, have shown that compared with the manufacture of a new unit, remanufacturing requires 75% less material, emits 79% less CO<sub>2</sub> and consumes 72% less energy.

We are making progress in conjunction with others as well: We have been raising awareness amongst our partners and suppliers for the need for more efficient and environmentally-friendly processes. For us, such constructive dialogue is an important element in developing cooperation based on mutual trust.

On Knorr-Bremse Day 2016 we were able to make our corporate value of 'Responsibility' tangible for all 25,000 employees around the world who breathe life into the company's CR strategy on a daily basis. With such an enthusiastic workforce we find it important that we should be seen as a fair and attractive employer. That is why we are particularly pleased that in 2016 we were voted top employer for engineers for the 3rd year in succession.

Our corporate responsibility complies with the principles of the UN Global Compact, which we first signed up to in 2010. This report provides some recent examples of this commitment.

Klaus Deller

Chairman of the Executive Board

of Knorr-Bremse AG



# Sustainable business.

The Knorr-Bremse Group is committed to sustainable corporate governance.

Knorr-Bremse's approach to corporate responsibility (CR) is based on the concept of sustainable development and covers not only products and production processes but also 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 Knorr-Bremse, sustainability is a strategic issue that has to be established in all operational processes. That is why the Group CR Guidelines state that environmental and social aspects are integrated into our strategic planning, management and day-to-day business activities. By doing so we are strengthening the company's future viability, and making an important contribution towards developing an economy and society based on the principle of sustainability.

Four important elements define how Knorr-Bremse views its responsibilities:

### Vision

We are the world's driving force for innovative and sustainable system solutions that make rail and commercial transport safer, more reliable and more efficient. We are driven by our ambition to create value for our customers and to have a positive impact on society.

# Corporate values

Entrepreneurship, Technological Excellence, Reliability, Passion and Responsibility are the company's five basic values that provide a foundation for responsible behavior by all our employees.

### Code of Conduct

Our Code of Conduct formulates 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.

# Corporate Responsibility Guidelines

Our CR Guidelines sum up the overarching goals of corporate responsibility and provide a basis for CR management within the Group.

We also have separate sustainability standards for individual areas within the Group. One example is purchasing, for which the existing quality guidelines are being expanded to include a Supplier Code of Conduct. The same applies to Health, Safety and Environmental (HSE) policy, HR management (leadership principles) and social commitment. The current Donation Guideline for this last area is now supplemented by new 'Principles for the Social Commitment of Knorr-Bremse' that were introduced in 2016.

Our sustainable corporate governance is based on international guidelines and conventions. External documents of importance for Knorr-Bremse include the Guiding Principles on Business and Human Rights of the UN Human Rights Council, the Charter on Sustainable Development of the International Association of Public Transport (UITP), and the UN Global Compact, which we signed up to in 2010.

# CR strategy and areas for action

In 2014, the Group Executive Board, in consultation with selected top managers, revised Knorr-Bremse's CR strategy on the basis of the results of a materiality analysis. It was decided that by the year 2020 we would establish a reputation as a company with an outstanding track record of sustainability – both internally and externally. To achieve this we aim to ensure that our economic growth takes into account environmental resources and our social responsibilities towards current and future generations. The most important CR topics are summarized in our annually updated CR roadmap.

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

# **Knorr-Bremse Day 'Responsibility'**

Every year, Knorr-Bremse Day focuses on one of our corporate values. In June 2016, employees at sites around the world looked at 'Responsibility', with some working with seriously ill children (Florence, Italy), others cleaning up garbage (Vancouver, Canada and Sakado, Japan), planting trees (Pune, India), thinking up ideas for reducing waste, car sharing, vegetarian food and energy savings (Lisieux, France) or collecting donations for charitable purposes (Wuxi, China).

# CR organization

At Knorr-Bremse the Corporate Responsibility department is responsible for the topic of sustainability and reports directly to the Executive Board. Goals and measures are discussed and decided by the Group's Corporate Responsibility Council (CR Council), which encompasses a member of the Executive Board, two representatives of top management in the two corporate divisions, the chair of the charitable association Knorr-Bremse Global Care, the Head of Corporate Responsibility and regional CR contacts. CR projects from the various specialist departments are reported directly to the CR Council.

This organizational structure ensures that the issue of sustainability is firmly established in all the top decision-making bodies within the Group and relevant issues related to day-to-day operations are incorporated into decision-making processes.

# Strategy and management

We are committed to a sustainable approach to corporate governance that incorporates environmental and social aspects into strategic planning, management and corporate processes.





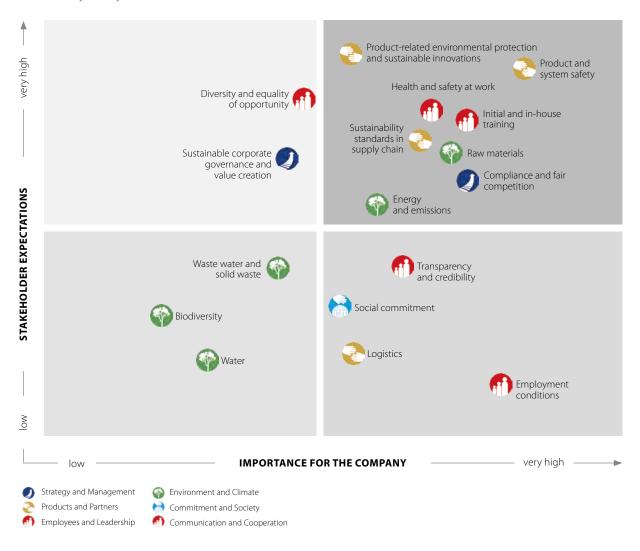
# Value Award 'Responsibility'

The Knorr-Bremse Value Awards recognize employees' contributions towards furthering Knorr-Bremse's corporate values. In 2016, Truck-Services and Internal Audit received the award for 'Responsibility'. Together they had rapidly resolved a complex compliance issue and had developed and introduced preventive measures to make it easier to avoid similar cases in future.

# Materiality analysis

Knorr-Bremse uses a materiality analysis to help decide on the areas in which the company can meet its responsibilities. In 2016, the results of the materiality analysis from 2014 were reviewed and it was confirmed that the correct thematic focus had been taken. This means that the areas of product-related environmental protection, legal conformity, product safety on rail and road and involvement of the supply chain are of particular importance.

# Materiality analysis



The weightings given to individual areas are regularly reviewed and compared with the main current trends and challenges arising for the market environment and the sectors relating to the two corporate divisions. Knorr-Bremse maintains an active exchange of information and opinions with its stakeholders on social, environmental and societal issues with a view to achieving new insights into these areas.

# CR stakeholders

Knorr-Bremse conducts an ongoing dialogue with its internal and external stakeholders. Groups of particular importance to the company are employees, new recruits, customers and suppliers, the company owners, business partners, public authorities, trade unions, industry associations, the media, policymakers, NGOs, and residents and local action groups in the neighborhood of our sites.

Knorr-Bremse also maintains a regular, structured dialogue through its membership of many regional, national and international associations.

# A selection of Knorr-Bremse's membership of organizations and associations

- American Public Transportation Association (APTA), USA
- Association of American Railroads (AAR), USA
- Automotive Industry Action Group (AIAG), USA
- Energieeffizienznetzwerk Oberbayern, D
- Fachgruppe Umwelt im Verband der Bahnindustrie in Deutschland e. V. (VDB), D
- Motor & Equipment Manufacturers Association (MEMA), USA
- New York and New Jersey Minority Supplier Development Council, USA
- Münchner Corporate Volunteering Roundtable, D
- Stifterverband der Deutschen Wissenschaft e. V., D
- Stiftung Bildungspakt Bayern des Bayerischen-Staatsministeriums für Bildung und Kultus, Wissenschaft und Kunst, D
- Sustainable Transport Committee of the Union des Industries Ferroviaires Eropéennes (UNIFE), BEL
- Environment Committee of Munich Chamber of Industry and Commerce, D
- Umweltpakt Bayern
- Sub-committee for Supply Chain Sustainability, Verband der Automobilindustrie e. V. (VDA), D

# Compliance management and integrity

We put great emphasis on integrity and responsible conduct in our dealings with business partners and employees. We comply with laws and internal regulations, and our actions adhere to our corporate values as a matter of course

The Knorr-Bremse Code of Conduct defines the basic principles for the appropriate approach to 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 that transcends 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. Each employee needs to be clear about what we mean by responsible conduct and internal company rules. To achieve this, we provide staff training on the Code of Conduct – at regional company events, training sessions and information events. 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 non-compliance. Managers' knowledge and active communication of the Code of Conduct are also tested during the course of regular audits

With effect from January 1, 2016 a new post of Chief Compliance Officer (CCO) has been created with responsibility for compliance management. He reports to the head of the Group legal department and a newly-founded Compliance Committee chaired by the Chief Financial Officer. The Compliance Committee regularly meets to discuss important compliance issues and sets the priorities for compliance management. As a further organizational measure, Knorr-Bremse has also created Compliance Officers to serve as regional contacts for local workforces. These report regularly to the CCO.

The first step towards setting up a system of compliance management involved the carrying out of a compliance risk assessment throughout the entire Group. The results of this analysis were used to identify the core compliance issues for Knorr-Bremse – preventing corruption, ensuring fair competition and avoiding conflicts of interest.

The company has already started to develop a Group-wide whistle-blower system for possible compliance infringements and this will be introduced in 2017.

In addition to the Group Code of Conduct, a Supplier Code of Conduct has also been developed and will be rolled out in 2017, with the aim of ensuring compliance with regulations in the supply chain as well.

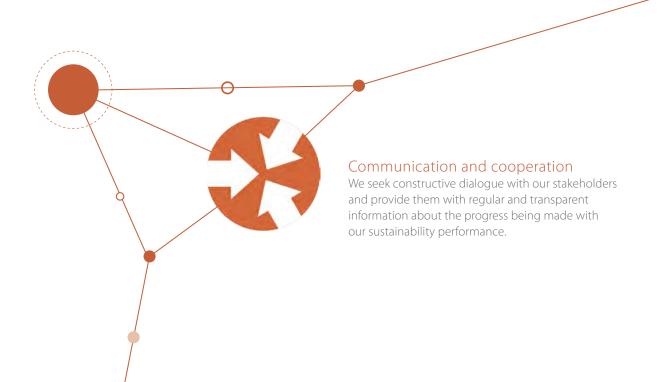
# Corporate security

In mid-2016 a new Corporate Security Department headed up by a Chief Security Officer (CSO) was created. The CSO is tasked with developing Group-wide safety strategies to reduce risks and minimize the impact of safety-critical interruptions to operations. On the basis of a system of forward-looking risk management, standards, processes and measures are derived to ensure an economically appropriate level of protection for staff, material and immaterial goods and sensitive business processes. Specifically this involves, amongst other things, an effective system for raising the alarm in the case of external threats such as terrorist attacks in the vicinity of sites, the company's duty of care and the safety of personnel on business trips, and insurance issues. The Corporate Security Department reports directly to the CFO.

By the year

2020

we aim to be perceived as an especially sustainable company both internally and externally





# Sustainable safety.

Knorr-Bremse products are safe and environmentally friendly.

As the world's leading producer of technologies for rail and commercial vehicle braking systems and sub-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, via braking and driver assistance systems, to steering and powertrain-related solutions for commercial vehicles. Our divisions regularly launch new, pioneering products and solutions for further enhancing safety and efficiency on road and rail.

# Focus on innovation

With research and development investment amounting to EUR 328 million in 2016, Knorr-Bremse ensured the long-term future of its innovative capabilities. This is reflected in the company's extensive portfolio of patents, with a current total of some 8,400 registered designs worldwide. As of 31.12.2016 the company employed more than 3,200 people in the field of R&D. Knorr-Bremse does not leave the sustainability of its innovations up to chance – it systematically integrates sustainability into the process of creating a new product, from the initial vision right through to product development, manufacture and marketing.

2014	296
2015	347
2016	328

R&D expenditure in millions of euros.

Ideas for new products are assessed using a scorecard based on sustainability criteria such as energy efficiency, emissions reduction, safety, materials, life cycle costs and ease of maintenance. This is followed by an approval process for research and development funding in which the management of the Corporate Responsibility department is involved. The outcome of this process is a product or service innovation that serves the requirements of customers and markets and at the same time offers substantial advantages in terms of sustainability.

The following examples from both divisions illustrate how our systems contribute towards making mobility future-proof, safer and more environmentally friendly.

# Products and partners

We work consistently on developing innovative products and solutions that combine maximum customer benefits with a contribution towards sustainable development. Top levels of safety are our priority.



# Transport safety

As manufacturers of rail and commercial vehicle brakes and sub-systems, we supply mechatronic systems for air treatment, brake control, vehicle stabilization, collision mitigation and assistance functions. By networking the mechatronic systems, we also develop solutions for condition-based component maintenance.

# Examples of innovations from Knorr-Bremse Rail Vehicle Systems:

- EP-60: This electro-pneumatic braking system for freight trains reduces braking distance and minimizes critical in-train forces.
- MGS3 slide protection: This system regulates braking better, ensuring shorter braking distances in conditions with very poor rail/wheel adhesion.
- Safe Sand: This smart sanding system improves braking performance on extremely slippery rails.

# Examples of innovations from Knorr-Bremse Commercial Vehicle Systems:

- Lane Departure Warning System (LDWS): A camera monitors the road in front of the truck and warns the driver if the vehicle begins to drift out of lane.
- Advanced Emergency Braking System (AEBS): This
  emergency braking assistant progressively applies the
  brakes if a truck comes closer than a pre-defined distance to the vehicle in front. A combination of radar and
  camera data ensures a high level of reliability.
- Yard Maneuvering: A networked system of sensors combined with brake, transmission and steering control enables a truck to maneuver independently and safely in the depot.
- iTAP Fleet Remote: An integrated system for monitoring tire temperature, tire pressure, distance travelled, braking patterns and error messages. The data is sent via an integrated WLAN transmitter directly to the Fleet Remote Server, where it is analyzed for critical maintenance requirements and made available to the operator online.

# **Emissions**

We are convinced that in the coming years the environmental compatibility of products will continue to gain importance when investment decisions are being made. That is why reducing noise and pollutants plays a central role for Knorr-Bremse in the development of innovative technologies.

# Examples of innovations from Knorr-Bremse Rail Vehicle Systems:

- K-pads: In addition to retrofittable organic LL-pads, Knorr-Bremse also offers organic brake pads for OEMs.
   These reduce the noise emissions from wheel-rail contact by some 10 dB(A).
- Intelligent Air Control: This system controls the compressors according to the operating situation, switching them off when appropriate. The overall weight is reduced by 30%, and noise emissions by more than 6 dB(A).
- VV 180-T: This oil-free compressor is particularly light and quiet-running thanks to its low-friction design. It also uses up to 20% less energy than its predecessors.

# Examples of innovations from Knorr-Bremse Commercial Vehicle Systems

- Prototype platooning: This promises to reduce CO<sub>2</sub> emissions by up to 10%, provided the vehicles involved can safely maintain a distance of 10 to 15 meters between each other at a speed of 80 km/h. This calls for reliable communication among the vehicles to ensure that taking into account the maximum braking capability of the individual vehicles the shortest possible distance can be calculated. The vehicles in the platoon must also be able to synchronize their braking without any time delay. Platooning represents a further developmental stage of the 'Highway-Pilot'.
- AGR valves: These offer operating-point dependent regulation of the quantity of exhaust gas recirculation in a diesel engine. Precise settings, rapid response and extreme durability mean that NOX emissions can be significantly reduced.

# Energy efficiency

Energy efficiency is already a crucial factor for competitiveness, and we are convinced that its importance is set to increase over the coming years. As a result we are working to ensure that – as far as possible – every innovation from Knorr-Bremse offers further potential for optimizing energy efficiency.

# Examples of innovations from Knorr-Bremse Rail Vehicle Systems:

- iCOM: This increases the availability of the vehicle fleet by offering networked diagnostics for all the main systems in a train. Preventive or condition-based maintenance then becomes possible.
- CFCB Light: This new, compact freight car brake weighing in at a mere 180 kg offers maximum weight savings and thereby helps reduce CO<sub>2</sub> emissions.

- LEADER (Locomotive Engineer Assist Display and Event Recorder): This driver assistance system helps the locomotive engineer to drive the train as energy-efficiently as possible and with a minimum of wear and tear. Energy consumption can be reduced by an average of 10%.
- KB HVAC: An innovative and extremely quiet-running air conditioning and ventilation system with new components and intelligent design that make it up to 400 kg lighter than its predecessor. The result is energy savings of up to 32 MWh per year per railcar.

# Examples of innovations from Knorr-Bremse Commercial Vehicle Systems

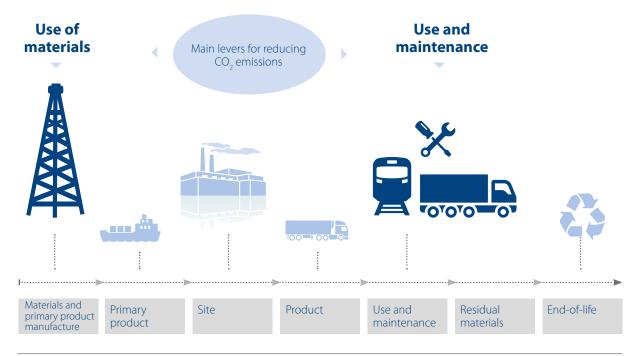
- Synact: The improved design and new combination of materials in this latest generation of disc brakes offer weight savings of 10% compared with the current SN7 series. Using Synact in a 4x2-semitrailer reduces the overall weight by 16 kg with braking torque of 30 kNm.
- Synact slack adjuster: This ensures maintenance of a pre-set low-tolerance running clearance during the entire lifetime of the brake. Active retraction of the brake shoe and pad reduces residual friction to a minimum. This easily installed innovation can save up to 1% fuel consumption and also reduces pad wear.

• Control module for automatic gearshifts: This enables the driver to anticipate gearshifts and also speeds up the shifting operation itself. Ideally combined with a fast-operating clutch, this can reduce fuel consumption and shorten interruptions to traction.

# Sustainability in the product life cycle

Our aim is to minimize the environmental impact of our products. To do this, we carry out life cycle assessments (LCAs) to examine the environmental footprint of selected products during their whole life – from initial production to final disposal. Analysis of the entire value chain generates valuable data on the use of materials and resources during production and also environmental compatibility during the product's service life. This enables us to assess which improvements are likely to result in the greatest effect. Such LCA analyses have already been successfully carried out for various product components and systems. They have included 'Product Carbon Footprints' (PCFs), which examine  $\mathrm{CO}_2$  emissions across a product's entire life cycle.

# Sustainability in the product life cycle



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

As a result we have been able to identify the use of materials and deployment of products as important levers for reducing  $\mathrm{CO}_2$  emissions. Some of Knorr-Bremse's life cycle analyses are certified by independent experts from DEKRA according to ISO 14040/14044, which covers the results of the analysis, together with the system limitations and approaches.

Industry is increasingly realizing that a product's economic viability cannot just be evaluated on the basis of the current purchase price, but rather that the Total Cost of Ownership (TCO) needs to be taken into account. This involves examining the impact that the decision to purchase a product has, for example, on a truck or a train across its entire life cycle – not just at the time of purchase. TCO analysis is an important element in any sustainable purchasing policy and an effective way of boosting competitiveness.

# TCO example: IFE E4 door drive unit

An example of the advantages of TCO-based product design is the new IFE E4 drive unit for entrance systems, which weighs 20% less than the previous series and therefore reduces energy consumption. Its compact design also cuts installation times and simplifies maintenance. The bottom line is significantly reduced life cycle costs. This, and other advantages of the system led to it being nominated by Deutsche Bahn AG for the 2016 Supplier Innovation Award.

Knorr-Bremse's products, systems and services support this trend. In addition to increasing operational reliability, they offer customers an opportunity to improve their own competitiveness and at the same time reduce negative environmental impacts. Less environmentally damaging materials in our systems and products generate cost advantages when it comes to homologation and operation; higher recyclable content also saves disposal costs; reductions in noise and CO<sub>2</sub> emissions make our customers' products more marketable; and lifetime contracts mean more efficient maintenance services and improved vehicle availability. Industrial remanufacturing is also a central element when it comes to total cost of ownership and therefore an important way of increasing sustainability.

# Industrial remanufacturing

Extending the life of a product can make an important contribution towards greater sustainability. That is why genuine remanufacturing of products is becoming increasingly important: Used products are refurbished by the manufacturer in such a way that they can be redeployed in identical functions and with identical levels of safety. Compared with a newly-created product, remanufacturing can save up to 98% of the materials required. The process also uses less energy. Aluminum components are a case in point: Remanufacturing avoids the energy-intensive process of melting down and pressure-molding a new aluminum casing. The result is that the overall life cycle assessment is considerably more positive than for production of a new component. Knorr-Bremse has demonstrated this, for example, in the case of remanufacturing of a truck compressor, which produces 79% fewer CO<sub>2</sub> emissions than a new product. Production-related energy consumption is also cut by 72%, and 75% less new material is required. In addition to this, logistic costs can be reduced by 80% as less transportation is required.



Knorr-Bremse intends to continue its investment in industrial remanufacturing over the coming years.

2014	6.6
2015	7.0
2016	7.5

Percentage of total revenues accounted for by remanufactured products

# Remanufacturing for trucks

In the commercial vehicle sector our portfolio of remanufactured products has grown by 15% and now encompasses 400 different article numbers. By 2018, the majority of our entire product range for trucks will be available in remanufactured form. At the Liberec site the environmental effect of remanufacturing is continuously monitored, evaluated and communicated to members of the workforce using a digital app. In 2016 some 878 tons of  $\mathrm{CO}_2$ , 232 tons of materials and 3,214 MWh of energy were saved.

In 2016, Knorr-Bremse Commercial Vehicle Systems launched EconX as a new brand for industrially remanufactured products. These represent a cost-effective and environmentally friendly alternative, especially for the repair of older trucks, and as such are an important element in the TruckServices portfolio. At its launch at the Automechanika trade fair in Frankfurt, the company showcased the EconX versions of the SN7 disc brake and the electronic clutch actuator, which are covered by the standard 12 month warranty and are tested to the same quality parameters and standards as new OE products. Since October, the Type SN6 and SN7 axle-mounted brakes for trucks, buses and trailers and the SK7 for trailers have also been available in EconX versions. The remanufactured actuators are assembled on the production lines for new parts before being subjected to the same end-of-line testing for more than 130 core parameters before the components are released for sale.

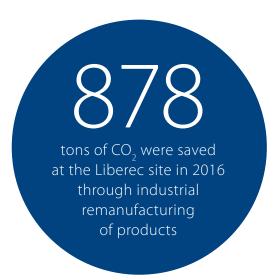


Environmental savings at the site in Liberec, Czech Republic

# Remanufacturing for rail vehicles

Remanufacturing has always played a prominent role in the Rail Vehicle Systems division. For example, when Knorr-Bremse overhauls control, load-proportional and weighing valves for freight car brakes, only those parts that are subject to actual wear are replaced, and more than 90% of the material is reused. During the year under review, the Service Center in Berlin alone overhauled a total of 45,000 products of various kinds.

In China, Knorr-Bremse has remanufactured braking and entrance system components for more than 750 high-speed trains, 4,000 locomotives and 600 metro trains since 2011. The company is expecting demand for remanufactured components to increase in the near future. In the next few months many Chinese high-speed trains will be due for regular servicing as they will have travelled a total of more than 5 million kilometers, so increased spending on maintenance and replacement of braking equipment can be expected.





# Sustainable prospects.

Knorr-Bremse creates an attractive working environment in which trust, teamwork, diversity, equality of opportunity and mutual respect are valued and practiced.

Knorr-Bremse is an attractive employer. At the end of 2016, precisely 24,565 people were employed by the Group – an increase of 1% compared with the previous year (24,275). 80% of the workforce works at sites outside Germany – a strong indication of the Group's international focus. At our sites around the world we offer young people opportunities to undergo training in a variety of technical and commercial occupations. Amongst the most popular of these are industrial technology, machining technology, electronics, mechatronics and IT. Independently of the sites where they are employed, staff are also offered a range of voluntary extra benefits such as meal allowances, subsidized travel and sport and health provisions. Within the framework of what is locally feasible, Knorr-Bremse also offers voluntary contributions to a company pension in line with statutory requirements and tax and social security legislation.

Knorr-Bremse regards it as important to establish an atmosphere of trust and co-operation 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

2015 <b>24,275</b> 2016 <b>24,565</b>	2014	23,916
2016	2015	24,275
24,303	2016	24,565

Number of employees in the Group as of 31.12.2016

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.

# 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 the success of this approach: Since 2014 we have been named 'Top Employer for Engineers in Germany' by the International Top Employers Institute (Amsterdam) three times running, with Knorr-Bremse receiving praise for providing "an outstanding employment environment and a wide range of creative initiatives, from secondary benefits and flexible working conditions to well-designed performance-management programs tailored to the corporate culture."

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 their teamwork. Under the title of 'Staff Dialogue' we have standardized our annual manager-employee meetings throughout the Group. This includes formulating individual target agreements and assessing performance and potential.

Our targeted search for the managers of the future is conducted on the basis of common standards within the Group. Following completion of the staff dialogues, employees 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 and thus ensure 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 selected from the ranks of management.
- The International Management Potential Group (IMPG) is a special development program for young executives that offers 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) enables American 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 in Mexico.

# International exchanges

For many years now, Knorr-Bremse's commitment to international exchange has resulted in improved intercultural skills, particularly among its management. The company's international locations provide ideal conditions for such exchanges to take place. Expatriates posted abroad for periods of between six months and five years are all

supported centrally by a team of specialists in the International Transfers department – from the initial preparations to their return and reintegration into their former workplace. In addition to long-term international assignments, short-term exchanges related to specific topics are another main 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.

# Diversity and equality of opportunity

We consider the cultural diversity of our workforce to be one of our key economic success factors. As a Group that operates around the world, we promote understanding and appreciation of different 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. In order to ensure the necessary proximity to 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.

No differentiation is made between men and women with regard to wages and salaries. In Germany, Knorr-Bremse's equal pay policy has been acknowledged with the award of a 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 2016 the proportion of female employees in the workforce was 19.7% (2015: 18.9%).

The world-wide proportion of women in top management in 2016 was 11.6% (2015: 11.0%). In our own Management Evolution Program, 42.0% of participants are women (2015: 42.0%). Knorr-Bremse supports the government's aim of increasing the proportion of women in top management positions. In view of current demographic developments and a predicted 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 teleworking.



# Employees and leadership

We create an attractive working environment in which trust, teamwork, diversity, equality of opportunity and mutual respect are valued and practiced.

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 traditionally perceived to be an attractive employer above all by male applicants. Many management positions at Knorr-Bremse call for technical training in which women are still under-represented. You can find further information on the topic of women in management positions at Knorr-Bremse, together with details of the targets we have set, in the Knorr-Bremse AG 2016 Annual Report.

As part of a joint initiative with the Technical University of Munich, we provide support for female students of scientific and technical subjects. In a program entitled mentor-ING, the female students are provided with mentors who help them to build up their first networks relevant to their studies and future professions. The program also includes seminars and training courses tailored to specific target groups. Knorr-Bremse has extended this joint program for a further year to September 2017.

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

Severely disabled employees and those with serious health conditions receive special protection and assistance at Knorr-Bremse. The disabled employees' representative helps to find the right workplace for them within the company. The proportion of severely disabled employees at our German locations in 2016 was 5.1% (2015: 5.0%).

One of the aims of our HR policy is to promote 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 bringing up their offspring, 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
- Support for the family (e.g. assistance in finding child-care and nursing care for dependents)

In 2016 Knorr-Bremse underwent a re-audit under the 'Beruf und Familie' program. Receipt of the prestigious 'Audit Beruf und Familie' certificate in 2013 had been a confirmation of the company's family-friendly personnel policy. The award was made on the basis of detailed assessments by the auditing company berufundfamilie gGmbH.

# **Encouraging girls to explore technology**

The MINT4Girls team at Munich University of Technology consists of students and professors who want to encourage more girls to consider training in a technological profession. As a partner, Knorr-Bremse supports the project and introduces participants to the life of female engineers in the company. Knorr-Bremse is also involved in the 'Girls for Technology' camp organized by the Bavarian Industrial Training Institute (bbw) and the nation-wide 'Girls' Day', which aims to introduce young women to occupations such as industrial technology and mechatronics that are usually dominated by men.

# Health and safety at work

We ensure a safe and healthy working environment by promoting the prevention of injuries and impairment to health. This principle is laid down in our Group-wide Health, Safety and Environmental (HSE) policy. Key aspects are risk assessments of machinery, workplaces and work processes, the promotion of safety awareness in the workforce through training courses and information 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. 37 global production and service sites in our Rail Vehicle Systems division are already certified according to OHSAS 18001.

Using standardized processes, we record and analyze the key indicators for occupational safety, and derive appropriate measures from these. In order to maintain and further improve our high standards of health and safety at work, we provide internal training at regular intervals and offer those responsible for HSE the opportunity to take part in international congresses, conferences and projects. Awareness is also increased by internal work safety campaigns such as 'Bendix Stars' in the USA. All work teams are called on to undertake training in awareness of workplace safety issues, and the best teams are rewarded on a monthly basis.

# Accident rate

2014	1.0
2015	0.7
2016	0.8

Number of accidents resulting in absence from work per 200,000 hours worked

An extensive range of measures aimed at maintaining and promoting our employees' long-term health and tailored to the local needs of individual sites is available throughout the Group. Workplace design is a particular focus, and in 2016 low-vibration electric machines for assembly work were introduced in Wolverton, UK, and there was advance planning of assembly processes to take economic aspects into account in Nankou, China. Further measures include health advice, stress management seminars, fitness programs and medical examinations. In-house medical care is available to our employees at all our sites, in addition to important preventive check-ups, vaccinations and pre-travel consultations. 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.









# Sustainable protection.

Knorr-Bremse makes responsible use of resources, constantly endeavors to reduce CO<sub>2</sub> emissions, and minimizes – and where possible completely avoids – undesirable impacts on nature.

Knorr-Bremse is committed to integrated, preventive environmental protection in its production processes and through the development of resource-saving products and services. We are continually improving our environmental protection measures, collecting and analyzing key environmental 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 minimize the negative environmental impact of our operations. At the same time, we promote environmental awareness and appropriate conduct amongst our employees through a range of communication measures and training courses, annually assessing the need for these on a site-by-site basis.

# Environmental management

Knorr-Bremse's environmental principles are set out in our Health, Safety and Environmental (HSE) policy, which was revised in 2015, and now includes regulations on the use of energy. In our HSE policy we commit ourselves to preventing 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. In 2016 Knorr-Bremse also set up an HSE Board to ensure maximum coordination and

standardization of HSE work in both divisions and encourage the use of synergies.

Since 2015, a Group-wide HSE reporting system has provided regular information from production sites worldwide on the most important health and safety and environmental protection data and events. Since 2001 we have also been driving a step-by-step process of Group-wide certification of all sites under the international environmental management standard ISO 14001. By the end of 2016, 50 production sites had achieved certification.

# Climate protection targets 2020

Our measures to reduce carbon dioxide emissions (Scope 1 and Scope 2 as defined in the Greenhouse Gas Protocol) are grouped together under the Efficient Cut of CO<sub>3</sub> (ECCO<sub>2</sub>) initiative, which 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. However we had already achieved this by the end of 2014, so we now have a new target: climate-neutral organic growth up to the year 2020. In specific terms this means that in 2020 – despite a sharp increase in production capacity – CO<sub>2</sub> emissions from operations at our current sites will not exceed the figure for 2015. In a Group-wide analysis, Knorr-Bremse identified the biggest generators of CO<sub>2</sub> emissions within the company in 2016. A list of short, medium and longterm measures aimed at reducing CO<sub>2</sub> emissions was



drawn up, and implementation started. Another target – which includes new sites added to the Group as a result of acquisitions – involves energy efficiency being improved by a further 10% by 2020 compared with 2015.

Knorr-Bremse also aims to implement an energy management system according to the international ISO 50001 standard at its most energy-intensive production facilities. By the end of 2016, 30 European legal entities within the Group had a certified ISO 50001 energy management system.

In 2015 we also introduced a global guideline for the purchasing of electricity, with the aim of increasing the proportion derived from renewable sources provided by external companies.

# **Munich Climate Pact**



Together with 14 other major companies, Knorr-Bremse has signed up to the 'Klimapakt Münchner Wirtschaft' ('Munich Business Climate Pact') under the patronage of the City of Munich. The signatories have undertaken to reduce greenhouse gas emissions in the city by 40,000 tons of CO<sub>2</sub> by the end of 2018. Knorr-Bremse is contributing, for example, by using waste heat from the test rigs in its newly-built Development Center. By participating in this energy efficiency network, the company is also contributing to achieving the climate and energy policy aims of the Federal Republic of Germany.

# Climate protection at Knorr-Bremse Focus on 3 areas

# FOCUS ON PRODUCTS

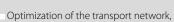
(SCOPE 3\*\*)

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

# **ECCO, PHASE II** (2015 – 2020)

- Emissions reduction target:
  -10 % of relative CO<sub>2</sub> emissions
  (CO emissions/thousands of euros)
- Aim: Climate-neutral organic growth
- Energy efficiency target: Improving energy efficiency
- Sustainable energy management target:
   Introduction of an internal energy management system according to ISO 50001





- Optimization of the transport network, warehousing structures and route planning
- Use of fuel-efficient vehicles by logistics service providers
- Reduction of transport-related CO<sub>2</sub> emissions



<sup>\*</sup> Direct and indirect emissions from the use of natural gas, heating oil (Scope 1) and electricity, district heating (Scope 2)

<sup>\*\*</sup> Indirect emissions from use of fuel and from product manufacturing and use (Scope 3)

# Energy efficiency

Knorr-Bremse identifies potential for energy savings throughout the company, with a main focus on buildings, plants and production processes. At some of our sites we have installed sub-meters to provide a detailed breakdown of energy consumption that helps us to identify areas where savings can be made and to develop measures to reduce energy consumption. Examples of local best practice are publicized via internal media throughout the Group. Some examples follow:

### Suzhou, China

Following a 2014 energy audit that identified potential for improving energy efficiency, a number of measures were taken that resulted in a reduction in energy consumption of 743,000 kWh per year. These included the installation of new compressed air equipment, solar panels on the roof of the production hall and the use of energy-efficient lighting. New daylight reflectors mean that in many areas there is no need for any artificial lighting at all.

### Tinqueux, France

During the modernization of an existing building for the new site, Knorr-Bremse was able to introduce a number of energy efficiency measures ranging from the selection of regional suppliers in order to reduce transport-related emissions to on-demand LED lighting, improved heating control and charging stations for electric vehicles.

### Palwal, India

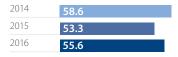
A large-scale photovoltaic array at this Knorr-Bremse site generates some 105,000 kWh of electricity per year, and the existing lighting has been replaced with modern, energy-efficient LED lights. Altogether the site is set to save some 100 tons of  $\mathrm{CO}_2$  emissions per year.



# Energy consumption

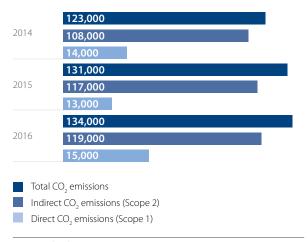


Absolute energy consumption in MWh

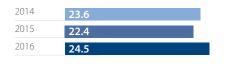


Specific energy consumption in kWh per thousand euros turnover

# **Emissions**



Direct and indirect  ${\rm CO_2}$  emissions in tons



Specific CO<sub>2</sub> emissions in kg per thousand euros turnover

# 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. In the product development process there is therefore a growing focus on the scope for using environmentally-friendly, resource-saving materials. The aim is to continuously increase the proportion of such safe, environmentally friendly materials used.



Waste generated at Knorr-Bremse consists primarily of scrap metal, paper, and packaging as well as residual waste. In addition, surface treatment of our products results in electro-plating sludge. Measures are being taken to steadily reduce waste and improve material cycles. Smart utilization of waste offers considerable potential for reducing the use of resources. In 2016, for example, various projects for composting production waste – for example filter residues from waste water purification – were launched at the Huntington site in the USA. A total of 200 tons of landfill waste were saved as a result.

# Water consumption

2014	88.5
2015	80.0
2016	75.1

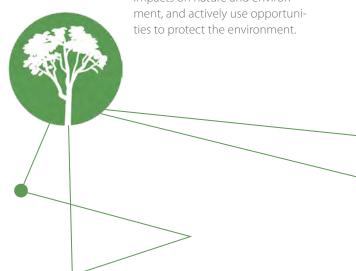
Specific use of freshwater in liters per thousand euros turnover

# Ecological building design world-wide

As part of our determination to design all new sites and buildings to be as environmentally-friendly as possible, Knorr-Bremse has formulated building guidelines containing extensive ecological criteria for the planning of facilities and buildings. These cover requirements related to the energy concept,  $\mathrm{CO}_2$  -neutral energy generation and calculation of life cycle costs, as well as the systematic collection of data on energy use. We also take into account local conditions, for example by selecting suitable building materials for particular climate zones.

The water we consume is used primarily for 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 as often as possible. In 2016 we reduced our specific fresh water consumption (in relation to turnover) by 6.1% compared with 2015. In order to save drinking water, some of our sites use rainwater for cleaning, in their sanitary facilities and for watering green spaces.

# Environment and climate Our aim is to use resources responsibly, consistently reduce $\mathrm{CO}_2$ emissions, minimize – and where possible avoid – undesirable impacts on nature and environment, and actively use opportunities to protect the environment.







# Working together for sustainability.

Knorr-Bremse actively involved it suppliers in shaping sustainable growth.

In its choice of suppliers Knorr-Bremse not only takes into account commercial criteria such as quality, price and availability but also aspects such as trust, cooperation, safety and environmental protection. In addition, our Group Code of Conduct includes a stipulation that suppliers should take a responsible approach towards their employees, the environment, and society at large. With its supplier management system, Knorr-Bremse is constantly working on optimizing the sustainability of its supply chain.

# Purchasing management

In the field of purchasing Knorr-Bremse distinguishes between two types of materials:

# · Direct materials

Materials, articles and components that are sold to customers as part of our systems, either directly or following further in-house processing. Examples include castings and forgings, electronic and electromechanical components, and machined parts (e.g. crankshafts and gearwheels).

# Indirect materials

The goods and services required to operate a site; these include construction services, vehicles, hardware and software, process materials, and machine tools.

For these areas, Central Purchasing at Knorr-Bremse pursues a product group strategy for all sites, develops a supplier base and uses the synergies within our global net-

work. In 2016, both divisions increased their flexibility and further optimized processes across the entire supply chain.

# Integrating sustainability

Sustainability criteria are an integral part of Knorr-Bremse's purchasing policy. The cross-divisional purchasing guidelines for indirect materials require sustainability criteria to be taken into account when selecting suppliers. In addition there are precise guidelines on the purchasing of renewable energy and of energy-efficient products, equipment and services.

Suppliers of direct material must comply with the relevant quality management guidelines for the business unit concerned. Both divisions expect the ten principles of the UN Global Compact to be adhered to, and ISO 14001-compliant environmental management systems to be in place (and if possible, certified). If suppliers do not meet these requirements, we reserve the right to terminate the business relationship with them. More than 75% of our purchases come from suppliers that have subscribed to the principles of the UN Global Compact – a year-on-year increase of 10%.

To this will be added a Supplier Code of Conduct due to be rolled out in 2017, which will further define the Knorr-Bremse Group's requirements of its suppliers with regard to sustainability. An internal guideline for colleagues involved in the purchasing process is also being developed. This will contain clear information on the correct handling of suppliers and raise awareness of the need for compliance in purchasing.

# Railsponsible

At the start of 2015, the Rail Vehicle Systems division launched the 'Railsponsible' initiative together with Alstom Transport, Bombardier Transportation, Deutsche Bahn, Nederlandse Spoorwegen, and SNCF, with a view to achieving sustainable purchasing within the rail industry. The initiative also aims to encourage railway industry customers and suppliers around the world to subscribe to ethically and socially responsible environmental and business practices. In 2016 the company SKF (Svenska Kugellagerfabriken AB) joined the initiative, and talks are currently underway with two further potential new members.

Both divisions have launched campaigns aimed at increasing sustainability in the supply chain. They include a sustainability assessment of the company's strategic and preferred suppliers, which is being phased in with the help of external service providers. By the end of 2016, 37% of strategic suppliers in the Rail Vehicle Systems division had been evaluated and their sustainability performance assessed. In the Commercial Vehicle Systems division, a similar analysis will be launched in 2017.

CR audits of risk suppliers are also being planned. Audits of two selected suppliers will be piloted in 2017 in order to test their effectiveness and feasibility. Assessments and audit results will in future be incorporated into supplier assessments carried out by both divisions. The newly-created position of Sustainable Purchasing Specialist ensures that sustainability in the field of purchasing is also strengthened in organizational terms.

# Efficient logistics

In both divisions, Knorr-Bremse is working on improving logistics along the entire supply chain – from suppliers via the production processes at all our sites to delivery of the finished product to customers . The aim is to standardize and optimize processes and methods at our sites, and improve inter-site co-operation. The result will be better service quality in all distribution channels – particularly in relation to delivery reliability, quality, and lead times.

# Knorr-Bremse honors sustainable suppliers

In December 2016, Harting AG & Co. KG was named 'Supplier of the Year 2016' in the 'Sustainability' category by the Rail Vehicle Systems division. During the course of Knorr-Bremse's supplier evaluation the company demonstrated that it had improved considerably and made significant progress compared with the previous year, demonstrating genuine commitment to sustainability and corporate responsibility.



We make full use of the scope offered by rail, road and water transport to minimize the environmental impact of moving our products. For intercontinental transportation we try as far as possible to make use of rail or sea freight and avoid airfreight. Consolidation of deliveries also reduces the number of freight movements and cuts  $\mathrm{CO}_2$  emissions.

37%
of strategic suppliers
of rail vehicle systems
have been assessed for
their sustainability

Knorr-Bremse is working on optimizing operational transport management with the support of external service providers who look after planning, consolidation and implementation of deliveries to Knorr-Bremse as well as shipping of products to our customers. Optimum coordination of the various transport modes has enabled Knorr-Bremse to further improve the sustainability of its logistics operations. Logistics service providers also bundle incoming material flows at strategically-positioned consolidation hubs within Europe.

Another important part of our global transport strategy involves making optimum use of existing container capacity. To improve the environmental impact of logistics we largely avoid break bulk transportation. In 2016 we achieved 70% utilization of our own containers on main routes, and we are continuing to adjust quantities and packaging concepts to make even better utilization of the weight and volume limits of shipping containers.

In order to improve the efficiency of our transport network and reduce transport-related  $\mathrm{CO}_2$  emissions, we require our logistics partners to use modern vehicles with as low fuel consumption as possible. The current European emissions standards for trucks are compulsory. In 2014, Knorr-Bremse introduced a contractually agreed reporting system according to DIN ISO 16258 in order to monitor transport-related pollutants. This obliges transport service providers not only to adhere to the statutory emissions standards but also to take the most direct route for their deliveries. Knorr-Bremse is also continuously improving its internal logistics.

# Warehouses merged for greater efficiency

At our Suzhou site in China, the merging of three separate storage facilities into a single warehouse within easy walking distance of the factory has enabled us to avoid some 1,000 internal shipments per year. Processing costs have also been reduced, as goods from different facilities no longer have to be consolidated into a single delivery. This not only results in cost savings and reduced throughput times but also cuts  $\mathrm{CO}_2$  emissions by some 7.4 tons per year.

# **ECO Performance Award**

The ECO Performance Award – the leading European sustainability award in the transport and logistics sector – is made to companies that have achieved a balance between economic, environmental and social aspects. Knorr-Bremse serves on the jury for this award.



# Products and partners

We consistently work on developing innovative products and solutions that combine maximum customer benefits with a contribution towards sustainable development. Top levels of safety are our priority.





Knorr-Bremse supports social projects and plays an active role worldwide as a good corporate citizen.

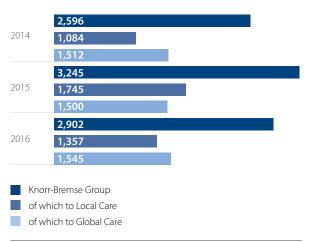
'Responsibility' is a Knorr-Bremse corporate value and one that the Group lives by, day after day – not only through its products, which make global mobility safer, and through its climate-friendly, resource-efficient production methods, but also through its active involvement in community projects. Taking part in the life of the community, having a positive impact in the areas around our sites, and playing a constructive role in shaping them are a key part of our company's identity.

Our social commitment covers both local and global issues. In 2016, Knorr-Bremse invested a total of around EUR 2.9 million for these purposes (some 11% less than the previous year). In 2015, to mark the tenth anniversary of Knorr-Bremse Global Care, Knorr-Bremse created a special budget to support the 'Get involved' initiative that promotes personal volunteering by its employees.

Knorr-Bremse's social commitment is based on two pillars: Local Care and Global Care. Local Care covers all the local community activities at Knorr-Bremse sites. Knorr-Bremse Global Care is a charitable organization that promotes longer-term projects with bigger financial implications all over the world – both in countries with Knorr-Bremse sites and in developing countries. Both pillars offer our employees a wide range of opportunities to become involved in community projects in the area around their workplace.

A recent example of effective networking between Local Care and Knorr-Bremse Global Care was an aid project carried out by employees at Bendix Commercial Vehicle Systems in Acuña in Mexico. 80 employees from the site, which has been working in the local community for years through the Local Care program, played an active role in implementing a project financed by Knorr-Bremse Global Care. As part of global Knorr-Bremse Day, they spent four days building a house for a family that had been made homeless by a tornado in 2015. In addition to the work carried out by employees, Knorr-Bremse Global Care donated EUR 150,000 to finance the construction of another 20 houses. Three of them will also be built by Bendix staff during corporate volunteering days.

# Donations



Donations made by the Knorr-Bremse Group in EUR thousands

In 2016, Knorr-Bremse refined its social commitment strategy. Working together, Local Care teams and Knorr-Bremse Global Care used best-practice checks, questionnaires and a workshop to fine tune the Local Care strategy in particular. Knorr-Bremse's Social Commitment principles create a clearer organizational separation between the two pillars and a clear focus on the individual support categories. The Local Care Donation Guidelines define the standard principles governing site donations. Together, the two documents form the foundation for social commitment in the vicinity of our sites, and for cooperation with local external partners. The two pillars continue to complement one another in terms of their content and exploit synergies for the benefit of society.

# Local Care:

# Site involvement

Local Care is the name given to the community activities carried out by our sites and their employees all over the world. Local Care covers donations, projects and activities that are selected, financed and supervised autonomously by the sites in question.

### Local Care instruments include

- Voluntary donations of time and money in aid of charitable causes and for projects in our main funding categories: education, health, environment and social cohesion;
- Corporate volunteering, in which employees are allowed time off work to support charitable organizations:
- The 'Get involved' initiative, which provides donations to support the personal voluntary work carried out by employees in their free time for charitable organizations and projects in the support categories mentioned above;
- 'Matched giving' programs, in which donations from the workforce are topped up by the company, which matches or multiplies every donation made by employees.

As part of a Local Care project in Asia, for instance, 20 employees from Knorr-Bremse Asia Pacific are supporting a social integration project in Hong Kong. The project, organized by TREATS, an initiative established in 1979, is aimed at children with physical, mental or social challenges. Through a range of joint activities with Knorr-Bremse Asia Pacific staff, including cooking, crafts and outdoor events, the children and young people and their families gain experience of a respectful community free from prejudice. This helps them to develop trust and to continue through life with new self-esteem.

# Global Care:

# Supporting people worldwide

Global Care refers to the work of Knorr-Bremse Global Care e.V., an autonomous charitable organization set up by employees of the Knorr-Bremse Group at the beginning of 2005 in the aftermath of the tsunami that had hit South-East Asia a few months previously. The headquarters of the organization are in Munich. Knorr-Bremse Global Care is financed by an annual donation from the Knorr-Bremse Group.

One of Global Care's main support areas is water, sanitation and hygiene (WASH). Through its work, the organization aims to bring about long-term improvements to clean water supplies and hygiene conditions, especially in developing countries and emerging economies. Another focus area is education. Through vocational training in particular, Knorr-Bremse Global Care aims to give young people prospects and a chance to support themselves and play an active part in society. Independently of these two areas, Knorr-Bremse Global Care also supports aid organizations that provide emergency relief, for instance in the wake of natural disasters.

Since January 2016, Knorr-Bremse Global Care has been concentrating its work on a select group of countries. This includes all 30 countries with Knorr-Bremse sites and another ten focus countries where Global Care has been heavily involved since it was first set up in 2005: Ethiopia, Ghana, Cambodia, Kenya, Colombia, Myanmar, Peru, Sri Lanka, Tanzania and Ukraine. The decision to concentrate on these countries was based on the recognition that where Knorr-Bremse is represented, projects can make use of the Group structure, communicate in the local language and, use dedicated helpers on site, enabling staff to become involved in projects. Many of these projects start life as Local Care projects – Knorr-Bremse employees who are familiar with the circumstances recognize a need, and ask Global Care to provide further assistance and resources. In future, the majority of available funds will be invested in projects in countries with Knorr-Bremse sites.

Since it was set up in 2005, Knorr-Bremse Global Care has worked with partner organizations to improve the living conditions of more than 633,000 people in 56 countries through around 218 projects. Funds totaling around EUR 16 million have been made available. In 2016, Global Care supported 63 projects in 28 countries with expenditure of around EUR 1.9 million, reaching more than 52,000 people.

Further information on the activities of Knorr-Bremse Global Care can be found on www.global-care.eu and in the Knorr-Bremse Global Care 2016 Annual Report.

# 633,000

people have been supported directly by Knorr-Bremse Global Care since 2005, at a total cost of EUR 16 million.

# Commitment and Society

As a member of society, we support social projects and play an active role worldwide as a good corporate citizen.



Knorr-Bremse employees built the first of 20 houses for tornado victims in Acuña, Mexico.

# Implementation of the ten UN Global Compact principles

Knorr-Bremse has been a signatory to the UN Global Compact since 2010, and we report annually on how we implement the Global Compact's ten principles in our company. The following table provides an overview of the voluntary commitments, guidelines and manage-

ment systems that help us integrate the principles of the UN Global Compact into our business processes. The index also provides references to the relevant content regarding the Global Compact and its implementation in 2016

### PRINCIPI F KNORR-BREMSE GUIDELINES. PAGES / SECTIONS **REGULATIONS AND** MANAGEMENT SYSTEMS **HUMAN RIGHTS** Businesses should support and Knorr-Bremse Code of Conduct **5 Sustainable business** PRINCIPLE 1 respect the protection of interna-(p. 5, 8) 8 Compliance management tionally proclaimed human rights Corporate Responsibility and integrity Guidelines (p. 5) Health, Safety and Environmental 17 Sustainable prospects Businesses should make sure PRINCIPLE 2 Policy (p. 5, 20, 23) they are not complicit in human 20 Health and safety at work UITP Charter for Sustainable rights abuses Development (p. 6) 29 Working together for Compliance Management System sustainability and Organization (p. 8) Integrating sustainability Knorr-Bremse Supplier Code of Conduct (p. 9) **WORK STANDARDS** Knorr-Bremse Code PRINCIPLE 3 Businesses should uphold the **5 Sustainable business** of Conduct (p. 5, 8) freedom of association and the 8 Compliance management effective recognition of the right and integrity Corporate Responsibility to collective bargaining Guidelines (p. 5) 17 Sustainable prospects and furthermore uphold the PRINCIPLE 4 17 Leadership and personell elimination of all forms of forced Compliance Management development and compulsory labor, System and Organization (p. 8) 18 Diversity and equality Leadership principles PRINCIPLE 5 the effective abolition of child labor of opportunity (p. 5, 17) and the elimination of PRINCIPLE 6 29 Working together discrimination in respect of for sustainability employment and occupation. Integrating sustainability



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.

### **PROTECTION**

PRINCIPLE 7 Knorr-Bremse Code of Conduct 5 Sustainable business Businesses should support a precautionary approach to (p. 5, 8) 11 Sustainable safety environmental challenges, Knorr-Bremse Supplier Code of Focus on innovation Conduct (p. 9) 12 Emissions, energy efficiency PRINCIPLE 8 undertake initiatives to promote Climate protection strategy with 13 Sustainability in the product greater environmental responsi-Group-wide targets (p. 23) lifecycle 14 Industrial remanufacturing bility and Health, Safety and Environmental policy (p. 5, 20, 23) 20 Sustainable prospects PRINCIPLE 9 encourage the development Group-wide Environmental Health and safety at work and diffusion of environmentally Management System (p. 23) 23 Sustainable protection friendly technologies. Energy Management System (p. 24) 23 Environmental management Guideline for planning of facilities 23 Climate protection targets 2020 and buildings with extensive 25 Energy efficiency environmental criteria (p. 26) 26 Resource efficiency 29 Working together for sustainability Integrating sustainability 30 Efficient logistics 33 Supporting communities – globally and locally 34 Global Care

# **CORRUPTION PREVENTION**

PRINCIPLE 10	Businesses should work against corruption in all its forms, including extortion and bribery.	Knorr-Bremse Code of Conduct (p. 5, 9) Compliance Management System and Organization (p. 8) Knorr-Bremse Supplier Code of Conduct (p. 8)	5 Sustainable business 8 Compliance management and integrity 29 Working together for sustainability Integrating sustainability





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# **English translation**

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