

United Nations Global Compact  
Communication on Progress Report  
Knorr-Bremse AG 2011



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## 1/ Statement of continued support

Since it was founded in 1905, Knorr-Bremse has become the global market leader in braking and on-board systems for rail and commercial vehicles. Every day, more than a billion people across the world now rely on the safety of our products for high-speed trains, suburban, underground and light railways, trucks, buses and tractors.

This means that we have a special responsibility that extends across every single area of what we do as a business. It includes the responsibility to make safe and reliable products and technologies, as well as the need for our manufacturing processes to meet the highest safety, quality and environmental standards. As a global enterprise, we also believe that we have a duty to ensure that human rights are respected and established labor standards are observed.

As a family business, Knorr-Bremse attaches particular importance to sustainability. Sustainability for us means adopting a long-term business strategy and integrating environmental and social considerations into our management systems. In so doing, we believe that we are helping to secure the future of our company whilst at the same time contributing to sustainable economic and social development.

In conjunction with Knorr-Bremse's corporate values and the Sustainable Development Charter of the International Association of Public Transport (UITP), the ten principles of the UN Global Compact underpin all of Knorr-Bremse's activities and commitments in this area. Our corporate responsibility strategy provides a systematic framework that spells out exactly how the Knorr-Bremse Group understands its responsibility towards the environment, its employees and society, as well as the areas we plan to focus on in the future.

In this first ever Knorr-Bremse Global Compact Progress Report we document our voluntary commitment to the ten principles of the UN Global Compact and report on the measures taken and results achieved since we signed up to the Global Compact in October 2010. Knorr-Bremse undertakes to continue working towards the implementation of the ten principles.



Dr Raimund Klinkner  
Chairman of the Executive Board of Knorr-Bremse AG

## 2/ Knorr-Bremse Group Overview

The Knorr-Bremse Group is the world's leading manufacturer of braking systems for rail and commercial vehicles. For more than 100 years now, the company has pioneered the development, production, marketing and servicing of state-of-the-art braking systems. In the rail vehicle systems sector, the product portfolio also includes intelligent door systems, control components, air conditioning systems and wind-screen wiper systems, as well as platform screen doors. Knorr-Bremse also offers driving simulators and e-learning systems for optimum train crew training. In the commercial vehicle systems sector, the product range includes complete braking systems with driver assistance systems, as well as torsional vibration dampers, powertrain-related solutions and transmission control systems for enhanced energy efficiency and fuel economy.

The Knorr-Bremse Group has both a divisional and a regional structure. Knorr-Bremse AG encompasses the global rail vehicle systems and commercial vehicle systems divisions as well as the regional companies in Europe, North America, South America and Asia-Pacific. This structure allows Knorr-Bremse to respond to the specific requirements of the various regional markets while at the same time generating synergies across different locations and divisions.

## 3/ Human rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights, and

Principle 2: make sure they are not complicit in human rights abuses.

Knorr-Bremse respects the protection of human rights and makes sure that it is not complicit in human rights abuses. We are committed to respecting the principles of the internationally recognized standards contained in the UN Global Compact, the International Labor Organization (ILO) Conventions and the UN Universal Declaration of Human Rights. These voluntary commitments underpin our activities in conjunction with the relevant national legislation.

### Code of conduct

Based on our Group-wide core values and guidelines, some of the individual companies within the Group have drawn up their own codes of conduct that are binding for employees in the countries in question. These regional codes of conduct take account of local customs and stipulate how to behave in a manner that is compatible with statutory and internal company regulations. We are currently discussing the development of a single Group-wide code of conduct incorporating the key aspects of the existing local guidelines and supplementing them with additional points deemed to be relevant from the corporate perspective. This Group-wide code of conduct shall ensure that all our locations throughout the world share the same understanding of what we mean by responsible corporate behavior. It is intended that the code of conduct shall allude to the principles of the UN Global Compact and explicitly state our commitment to respect for human rights, fair working conditions and environmental protection and observance of the relevant legislation.

### Procurement guidelines

One major milestone during the year covered by this report was the integration of the UN Global Compact principles into the Group's procurement structures. Over the course of the year, we launched a review of the Commercial Vehicle Systems division's Quality Management Program for Procurement (QMPP) with a view to incorporating the additional standards that will be required to achieve implementation of the ten principles. The Quality Management Program for Procurement sets standards geared towards continuous improvement of the procurement process, quality, environmental sustainability and productivity, in close cooperation with our suppliers. It forms a binding part of our contracts with all our manufacturing materials suppliers. Should a supplier fail to comply with these standards, Knorr-Bremse reserves the right to review the relationship with the supplier for future transactions and enquiries and, where necessary, to terminate it. To support implementation of this guideline, we have augmented the relevant supplier evaluation questionnaire with a series of questions relating to the ten Global Compact

principles. This systematic audit process will enable us to verify the extent to which our suppliers are implementing the ten principles and, if necessary, make recommendations and propose measures to support improvements and implementation. In the year covered by the next report, we shall also be reviewing the Rail Vehicle Systems division's procurement principles.

Sustainability criteria have also been incorporated into the indirect procurement guidelines.

## Health and safety management

Health and safety in the workplace are important priorities for Knorr-Bremse, and are fully integrated into the company's business processes. The Health, Safety and Environment (HSE) department is responsible for all health and safety measures and has a presence at all our sites.

Knorr-Bremse organizes a wide range of activities aimed at raising awareness of health issues amongst its employees all over the world. We hold regular "health days", carry out occupational health checks and analyses of conditions in the workplace and organize a range of other activities. Many sites even offer a comprehensive program of sporting activities at their own in-house fitness centers or run courses in team and group sports. We also encourage participation in sporting events.

Knorr-Bremse's Health, Safety and Environment policy underpins a systematic approach to managing health and safety in the workplace. Standardized processes and regular internal audits ensure that minimum standards are in place across all our operations throughout the world. The key areas addressed by our safety management system include comprehensive site, workplace and work process risk assessments, employee training and information campaigns to promote awareness of safety issues and thorough analyses of accidents followed by introduction of the relevant preventive measures. Our health and safety indicators bear witness to the results of our efforts, for example the number of lost-time accidents per 200,000 working hours has remained at a low rate.

2008		1.7
2009		1.1
2010		1.2

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Number of workplace accidents per 200.000 employee working hours

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Knorr-Bremse attaches great importance to external certification of its management systems in accordance with international standards. Almost all our European sites have been OHSAS 18001 (Occupational Health and Safety Assessment Series) certified for quite some time. Our goal is gradually to work towards achieving external certification for our non-European sites, too. In 2010, the Suzhou and Shanghai sites in China and the Westminster site in the US achieved OHSAS 18001 certification for the first time.

## 4/ Labor standards

- Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining and furthermore uphold
- Principle 4: the elimination of all forms of forced and compulsory labor
- Principle 5: the effective abolition of child labor and
- Principle 6: the elimination of discrimination in respect of employment and occupation.

Knorr-Bremse respects and protects the rights of its employees and has made its own clear commitments in this regard. Compliance with high standards for a safe and healthy working environment, fair working conditions, the right to freedom of association and active promotion of equal opportunities and equal treatment for our employees throughout the world all form a key part of our corporate responsibilities. We are categorically opposed to all forms of forced and child labor.

### General working conditions

In keeping with our stance on fair working conditions, certain minimum standards are stipulated in our employees' contracts. The basis of our employment contracts is that they should be signed voluntarily by our employees, who may exercise their right to terminate the contract unilaterally after the relevant period of time has elapsed. When we recruit a new employee we always verify their age to ensure that they are above the statutory minimum employment age.

Several sites have employee representation bodies. Company-level codetermination is enshrined in the law and the works council is an important body with which management constantly engages in a constructive dialogue based on mutual trust.

### Monitoring of the ten UN Global Compact principles

In order to monitor compliance with our voluntary commitments as well as the implementation of the Global Compact principles, we asked our manufacturing sites to provide us with information about themselves during the course of the year covered by this report. The goal of this self-assessment was to gain an insight into what stage the sites feel they are at with regard to implementation of the principles. Depending on the results, further measures may be taken to support implementation. In addition, internal audits regarding implementation of the Global Compact principles were carried out at selected sites in China, India and Russia.

This internal monitoring system will be continuously expanded and developed over the coming years.

## Supply chain

In order to ensure that our suppliers' behavior is consistent with our principles and commitments, in the year covered by this report we began incorporating the UN Global Compact principles into our Commercial Vehicle Systems division's Quality Management Program for Procurement as an integral part of our contracts with suppliers. Going forward, we shall be performing regular supplier audits to assess whether and to what extent our suppliers are observing the standards contained in this guideline and implementing the ten Global Compact principles.

## Diversity and equal opportunities

Knorr-Bremse supports equal opportunities and equal treatment for all its employees, irrespective of the color of their skin, their national or social origins, any disability they may have, their sexual orientation, political or religious beliefs, gender or age. We employ a variety of measures and programs to promote diversity and equal opportunities.

## Working with society through Knorr-Bremse Global Care

In order to contribute to the prevention of child labor, Knorr-Bremse, through the Knorr-Bremse Global Care organization, actively supports education initiatives and projects in countries where child labor is still widespread. Knorr-Bremse Global Care seeks to bring about a lasting improvement in children's lives by promoting opportunities for them to receive schooling and vocational training. One example is the project we are carrying out in Malaysia (Sabah, Borneo) in conjunction with our partner organization the Borneo Child Aid Society. Knorr-Bremse Global Care is supporting the construction of two learning centers and a floating classroom that will enable education to be made available to children who live in such remote areas that going to school every day would otherwise be impossible. The project will not only ensure that 450 children receive a primary school education – it will also protect them against being exploited as labor and from becoming involved in illegal activities like dynamite fishing.

For further information and examples of some of our other projects, visit our web site at <http://www.global-care.knorr-bremse.com/en/>.



## 5/ Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges,

Principle 8: undertake initiatives to promote greater environmental responsibility and

Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Knorr-Bremse supports environmental protection through a precautionary approach and undertakes initiatives to promote greater environmental responsibility among its employees and suppliers. We consistently encourage the development and diffusion of environmentally friendly technologies, among other things by expanding our business into technologies that benefit the environment and save natural resources and by improving the energy efficiency of our products and reducing the amount of energy required to manufacture them.

### One vision, one set of guidelines

Our actions are guided by our Group-wide Health, Safety and Environment policy. This voluntary commitment encapsulates our responsibilities as a company and goes beyond mere compliance with national legislation. Responsibility for the communication and implementation of the relevant measures rests with our divisional managers and our employees across all areas of our business.

### Environmental management in accordance with international standards

Knorr-Bremse complies with all the environmental regulations and standards that apply to its different sites and has introduced corresponding environmental management systems across all its sites. Our goal is to use natural resources responsibly and sustainably in order to minimize our impact on the environment and continuously improve our environmental performance. Environmental hazards and risks are routinely assessed in internal Health, Safety and Environment audits, and appropriate measures are subsequently introduced to reduce these risks.

Since 2001, we have been working towards achieving ISO 14001 certification for all our rail vehicle and commercial vehicle sites across the Group, and we are gradually moving towards achieving world-wide certification. In 2010, our Johannesburg site in South Africa and our Guangzhou site in China both successfully obtained certification.

## Promoting environmental awareness

We use internal training and communication measures to increase our employees' awareness of environmental issues. Individual sites carry out regular assessments of our employees' training needs and put together the relevant in-service training programs.

We also run a variety of awareness-raising campaigns and initiatives. In the year covered by this report, for example, we included an "Environment" category in our internal CSR awards. The prize was won by Knorr-Bremse's Aldersbach plant for energy efficiency improvements to an assembly line. At our Group headquarters in Munich, we raise awareness of environmental issues in various different ways, for example by holding briefings on energy and climate change or by providing financial support to employees who travel to work by public transport instead of by car.

## Climate change targets

Knorr-Bremse has launched a Group-wide energy-efficiency campaign that sets ambitious targets for the company. The aim of ECCO<sub>2</sub> (Efficient Cut in CO<sub>2</sub>) is to achieve a 20% increase in energy efficiency by the year 2020 and thus also a 20% reduction in CO<sub>2</sub> emissions. To do this, we shall be systematically identifying and exploiting potential energy savings across all areas of our business. Appropriate measures will be standardized and incorporated into company processes.

In order to encourage sharing of best practices, successful projects are communicated and transferred to other sites. In the year covered by this report, the ECCO<sub>2</sub> campaign focused on optimization of compressed air and lighting systems. Further measures were taken with regard to heating of buildings and heat recovery as well as awareness-raising and training actions related to responsible energy use. These activities helped us achieve a 10% year-on-year increase in energy efficiency and a 10% cut in CO<sub>2</sub> emissions in 2010 alone.

## Incorporation of environmental and social considerations into plans for new sites

In order to keep the environmental impact and energy consumption of new sites to a minimum right from the outset, Knorr-Bremse has developed a construction guideline setting out construction standards for factory and office buildings. We aim to use intelligent planning to minimize the environmental impact and resource consumption of new buildings from the outset, while at the same time creating a pleasant and healthy working environment for our employees.


## Environmental performance in production

Continuous improvement of our environmental performance is a priority that is deeply embedded in the Knorr-Bremse Group's corporate culture. It includes efficient use of energy and natural resources, keeping emissions and waste to a minimum and increasing the amount of environmentally friendly products and materials that we use.

We regularly record our quantitative environmental performance so that we can set operational targets at site level.

### Energy consumption

Efficient energy use makes an important contribution to saving natural resources. We continue to strive to further reduce our specific energy consumption through numerous systems engineering and process selection optimizations, as well as by introducing comprehensive modernization measures at our sites.

2008		78.5
2009		87.3
2010		75.7
Energy consumption (kWh/1,000 EUR sales)		

### Water consumption

Modern production processes and methods enable water consumption to be reduced significantly, while the latest waste water treatment technologies also help us save water. In 2010, Knorr-Bremse achieved a cut in its specific fresh water consumption.

2008		105
2009		124
2010		107
Water consumption (l/1,000 EUR sales)		

## Waste

We achieved significant successes in waste reduction through optimization of material cycles, targeted waste prevention and sorting measures and materials recycling. Knorr-Bremse's consistent approach to waste management allows us to achieve a continuous reduction in the specific amount of waste we generate. Our recycling rate now stands at approximately 70%.

2008		7.8	2008		68
2009		7.5	2009		70
2010		6.9	2010		72
Waste generated (kg/1,000 EUR sales)			Recycling rate (%)		

## Sustainable product design

Environmental performance is a key consideration when Knorr-Bremse develops its innovative technologies. The Group was the first company in the rail vehicle industry to market an oil-free compressor. A more recent example is the new HVAC system developed by Knorr-Bremse's subsidiary Merak, which uses the low global warming potential refrigerant HFO1234yf. In recent years, climate change and cost pressures have created a significantly greater need for energy-efficient technologies in the Commercial Vehicle Systems sector. Knorr-Bremse has been prioritizing the development of fuel-saving technologies in both of its divisions for several years now and has unveiled energy-efficient solutions at various trade fairs. These include the LEADER driver information system that enables rail vehicles' energy consumption to be cut by as much as 15%, or, in the case of commercial vehicles, the Pneumatic Booster System (PBS), which boosts engine power and eliminates turbo lag, thereby achieving 2%-3% fuel savings – or even more if the engine is downsized. At the same time, the vehicle's weight and resource consumption are drastically reduced. We have also launched a new version of our Electronic Air Control System (EAC2) which, unlike conventional commercial vehicle systems, switches the compressor on and off according to the driving situation, thus reducing annual CO<sub>2</sub> emissions by up to 2.5 tons per vehicle.

## Transport

During the year covered by this report, we carried out a detailed study of our supplier relationships and logistics between the different Knorr-Bremse sites as part of our Supply Chain Excellence Initiative (SCE). By optimizing our transport network and route planning, we were able to increase our logistics chain efficiency and cut CO<sub>2</sub> emissions by 16%. Our efforts were recognized by the German Automotive Industry Association (VDA) which awarded our SCE Initiative the 2011 VDA Logistics Award in February 2011. This is a highly respected award within the industry that rewards innovative logistics concepts in the automotive supply chain.

## 6/ Anti-corruption

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Integrity and responsible behavior in our dealings with both business partners and our employees are fundamental values that underpin everything we do as a business. Knorr-Bremse complies with the relevant legislation and regulations as a matter of course. Knorr-Bremse is categorically opposed to all forms of corruption, including extortion, bribery and any illegal or immoral behavior.

### Code of conduct

We are currently discussing the introduction of a Group-wide code of conduct that will bring together existing local guidelines and will be based on the Global Compact principles (see page 5). It is intended that this code of conduct should also include a ban on corruption, including extortion and bribery, as well as stipulating additional ethical behaviors and values. It is hoped that it will act as a guideline for our employees and is intended to promote integrity and responsible behavior.

### Internal review system

Internal reviews support the Board in its monitoring role through independent and objective inspections geared towards enhancing business processes and uncovering corruption. No cases of corruption were discovered in the year covered by this report.

### Risk management

We routinely identify risks to our business and implement measures to reduce or prevent them or settle on an approach to dealing with them. The effectiveness of our risk management system is ensured by the use of common standards and processes. As part of the risk assessment process, business units are regularly investigated in order to identify any potential risk of corruption.

## 7/ Overview of implementation of the ten Global Compact principles

Human rights and Labor standards (Principles 1-6)		
Knorr-Bremse standards and systems	Measures	Performance
<ul style="list-style-type: none"> <li>• By signing up to the UN Global Compact we undertake to implement the ten principles.</li> <li>• As signatories to the UITP Sustainable Development Charter, we view the achievement of a balance between financial, social and environmental goals as a strategic imperative.</li> <li>• In both our corporate values and local codes of conduct we undertake to respect human rights and uphold core labor standards.</li> <li>• Our health, safety and environmental standards establish clear guidelines for how we should behave with regard to health and safety in the workplace.</li> <li>• Our Quality Management Program for Procurement ensures that our principles are also complied with by our suppliers.</li> <li>• Promoting equal opportunities and diversity forms an integral part of our corporate philosophy.</li> </ul>	<ul style="list-style-type: none"> <li>• Establishment of a working group to draw up a Group-wide code of conduct based on the UN Global Compact principles.</li> <li>• Self-assessments undertaken at all sites, internal audits carried out at selected sites (China, India, Russia) to assess implementation status of the ten UN Global Compact principles.</li> <li>• Integration of the Global Compact principles into the commercial vehicle division's Quality Management Program for Procurement.</li> <li>• Increase in the number of supplier audits in the commercial vehicle division in order to assess implementation of the ten principles.</li> <li>• Local health management actions.</li> <li>• Active communication of the Global Compact principles within the Group.</li> <li>• Project to promote a corporate culture based on diversity.</li> </ul>	<ul style="list-style-type: none"> <li>• In the year covered by this report, our manufacturing sites have carried out a self-assessment of their progress towards implementing the ten UN Global Compact principles.</li> <li>• Almost all European sites have achieved OHSAS 18001 (Occupational Health and Safety Assessment Series) certification.</li> <li>• The number of workplace accidents per 200,000 man-hours stood at 1.2 in 2010 (2009: 1.1).</li> </ul>

Environment (Principles 7-9)		
Knorr-Bremse standards and systems	Measures	Performance
<ul style="list-style-type: none"> <li>• Our responsibility to protect the environment and prevent climate change is set out in our health, safety and environment policy. This includes a range of topics, such as efficient use of natural resources, awareness-raising, environmental management and product responsibility.</li> <li>• Our environmental management system based on ISO 14001 ensures that our processes and products are designed in accordance with the precautionary principle.</li> <li>• Part of our approach to environmental management involves raising awareness of environmental and climate issues among our employees.</li> <li>• Our construction guideline sets out our standards with regard to environmental and social criteria for new factory and office buildings.</li> <li>• As members of and active participants in a number of environmental initiatives, we promote and support discussion of environmental issues.</li> <li>• Our products and innovative solutions help our customers to cut their CO<sub>2</sub> emissions and lower their life cycle costs.</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in the number of ISO 14001 certified sites.</li> <li>• Implementation of measures derived from our ECCO<sub>2</sub> energy efficiency initiative geared towards achieving our goal of a 20% increase in energy efficiency and a 20% cut in CO<sub>2</sub> emissions by 2020.</li> <li>• Various measures to help achieve site-specific environmental targets with regard to water, waste and hazardous substances.</li> <li>• A range of internal communication measures have contributed to greater awareness of our environmental responsibilities.</li> <li>• Development of a Group-wide standard governing the environmental and social aspects of the planning and construction of new sites.</li> <li>• Carrying out of internal and external environmental audits.</li> <li>• Development of an environmentally friendly logistics model.</li> <li>• Cooperation with external service providers to identify potential energy savings and development of the relevant measures as part of the energy audits process.</li> <li>• Exchange of best practices between sites.</li> </ul>	<ul style="list-style-type: none"> <li>• Our ECCO<sub>2</sub> energy efficiency initiative enabled us to achieve a 10% increase in energy efficiency and a 10% cut in CO<sub>2</sub> emissions in 2010 compared to the previous year.</li> <li>• The vast majority of our sites have achieved ISO 14001 certification.</li> <li>• Efficiency improvements compared to previous year: <ul style="list-style-type: none"> <li>- % change in specific energy consumption (kWh/1,000 EUR sales) compared to 2009: -13.3%</li> <li>- % change in specific amount of waste generated (kg /1,000 EUR sales) compared to 2009: -8%</li> <li>- % change in specific water consumption (l /1,000 EUR sales) compared to 2009: -13.7%</li> </ul> </li> <li>• Our products also help protect the environment when they are in use, e.g. our PBS achieves fuel savings of up to 4.3%, a 6% cut in NOx emissions and 20% fewer particulates.</li> </ul>

Anti-corruption (Principle 10)		
Knorr-Bremse standards and systems	Measures	Performance
<ul style="list-style-type: none"> <li>• Our local codes of conduct contain a ban on corruption.</li> <li>• As part of our risk assessment procedures, business units are investigated in order to identify corruption risks.</li> <li>• Internal review system.</li> </ul>	<ul style="list-style-type: none"> <li>• As part of our internal review audits, sites are investigated for any possible cases of corruption.</li> <li>• Analysis of corruption risks as part of risk assessment process.</li> </ul>	<ul style="list-style-type: none"> <li>• No cases of corruption were discovered in the year covered by this report.</li> </ul>



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