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2013 Corporate responsibility report

RAUTARUUKKI CORPORATION

ruukki

Energy-efficient steel solutions for better LIVING. WORKING. MOVING.

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OVERVIEW OF 2013

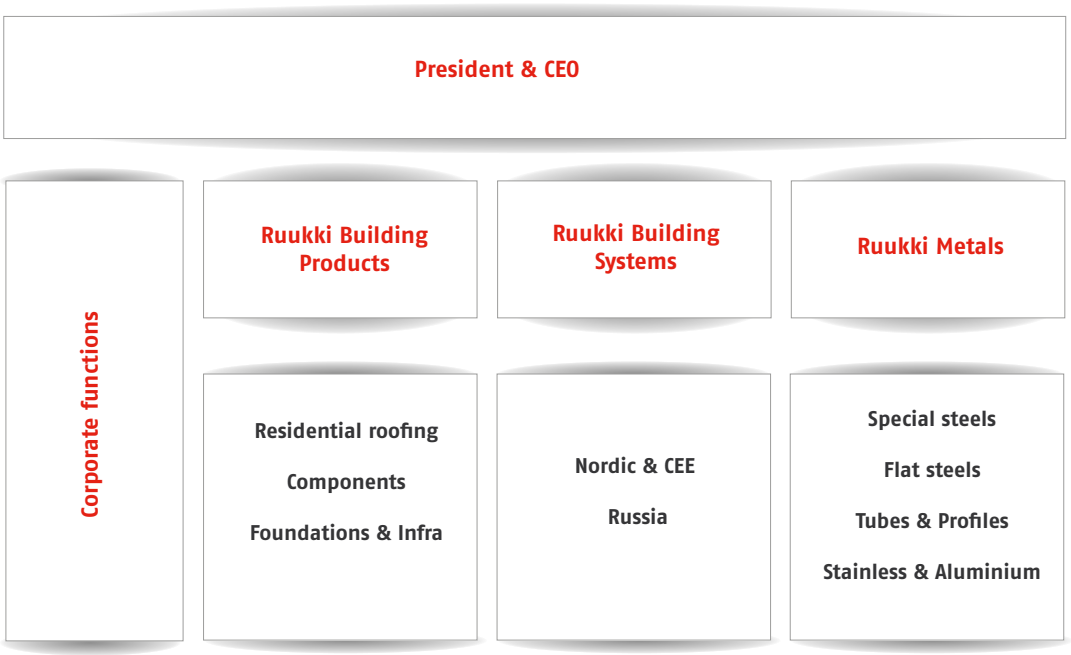
Ruukki specialises in steel and steel construction. We provide customers with energy-efficient steel solutions for better living, working and moving. We have around 8,600 employees and an extensive distribution and dealer network across some 30 countries including the Nordic countries, Russia and elsewhere in Europe and the emerging markets such as India, China and South America. Net sales in 2013 totalled €2.4 billion.

Our vision is to be an innovative and acknowledged provider of energy-efficient steel solutions to build a better living environment together with our customers.

Ruukki's strategic focus is on construction and developing the special steels business.

BUSINESS AREAS

Corporate structure



RUUKKI BUILDING PRODUCTS

Provides energy efficient envelope, roofing and foundation building components for commercial, office and industrial construction, harbour and transport infrastructure construction, residential roofing products and installation services.

Products and services

- steel roofs, rainwater and roof safety systems, and foundations for residential construction
- solutions for single- and multi-storey commercial, office and industrial construction, including foundation, roof and wall components
- building components such as sandwich panels (for example energy and life panels), load-bearing sheets and façade claddings
- safety barriers and noise barriers
- piles, retaining wall structures and foundations for harbour construction

RUUKKI BUILDING SYSTEMS

Provides energy-efficient foundation, frame and envelope structures, including design and installation, for commercial, office and industrial construction.

Products and services

- solutions for single- and multi-storey commercial, office and industrial construction, including foundation, frame, roof and wall components
- system halls

RUUKKI METALS

We provide special steel products, including high-strength, wear-resistant and special-coated products for demanding applications. Steel service centres supply steel products and related prefabrication, logistics and storage services. We also manufacture and supply standard steel products in different forms: flat, strip, tube and profile products.

Products and services

- **Special steel products**
  - high-strength structural steels (Ruukki Optim)
  - wear-resistant steels (Ruukki Raex)
  - special-coated steels (Ruukki hiarc)
  - protection steels (Ruukki Ramor)
- **Steel products**
  - hot- and cold-rolled steel products
  - metal- and colour-coated steels
  - tubes, bars, beams and profiles
- **Other products and services**
  - stainless steel and aluminium sold as trading products
  - product-related prefabrication, parts processing, logistics and storage services
  - mineral products generated as by-products in steelmaking

CEO'S REVIEW

SAKARI TAMMINEN
CEO & PRESIDENT
RAUTARUUKKI CORPORATION

Responsibility and the promotion of sustainability are key to Ruukki's operations. Energy-efficient products are one of our strategic focus areas and a growing business opportunity. Besides energy-efficient products, our work on the environmental responsibility front is centred on improving energy efficiency in our own operations and on further developing personnel competence and safety. Addressing these aspects will pave the way for profitable growth and ensure our contribution to promoting social sustainability.

Responsibility is an inherent part of our products and innovations. As in earlier years, the focus of our product development work was on developing energy-efficient components and solutions to improve a building's lifecycle efficiency and on growing our range of special steel products. Ruukki's steel construction solutions take into account increasingly stricter requirements for the energy performance of buildings. Targeting the energy performance of a building right from the investment stage to decades ahead can create added value for Ruukki's products and their combinations. Ruukki's energy panel system delivers notable savings in energy consumption compared to ordinary sandwich panels. Ruukki also guarantees the airtightness of its energy panel system. Technological product development has moved ahead with the innovation of panels designed to also produce energy. Use of Ruukki's energy panel system can improve the energy rating of a building and can result in additional credits in the LEED and BREEAM environmental certification systems.

In the steel business, we added to our special steels product portfolio so that it better responds than earlier to the needs of the mining industry, mobile vehicles and cold applications. Ruukki's special steels can reduce the weight of an end-product by enabling optimum steel thickness in, for example, the manufacture of excavator buckets and tipper bodies. This can both increase payload and cut fuel consumption, thus reducing emissions. On top of this, thanks to their mechanical properties, special steels can prolong the service life of machinery and equipment. This in turn brings cost benefits and a competitive edge to end users of a product. Not just material costs, but also processing and logistics costs are reduced. Better material efficiency is thus reflected as a positive multiplicative effect.

We have already long been working to improve energy efficiency in our own operations, to cut energy costs and reduce emissions. Our environmental investments in recent years – closure of the sinter plant and the associated change in blast furnace feedstock at the Raahe Works in Finland – have significantly reduced emissions and energy consumption in our steel production. As a result of the changes made, specific carbon dioxide emissions at the Raahe Works have decreased by 10% and energy consumption is 1 terawatt lower compared to 2011. On top of this, dust emissions are down by as much as 85%, fugitive dust from transport and storage by 18% and sulphur dioxide emissions by almost 70%.

During the report year, we recruited many new sales and technical customer support experts for sales of

special steels, especially outside Europe. We focused on developing the competence of our personnel to strengthen product development and sales expertise within special steels. Autumn saw us carry out the Employee Engagement Study, which attracted a good response rate of 74%. Continued safety improvement is a priority for our personnel. During the year, we addressed the development of a safety culture through management and personnel workshops, safety days, pro-active safety measures and intense personnel cooperation.

Market conditions continued to be challenging throughout the past year, but despite this we managed to improve profitability in all business areas. However, market uncertainty was reflected in our net sales, which were down 7%. Net sales decreased largely because of clearly lower average selling prices in weakened market conditions. The decrease in market prices of the main raw materials in steelmaking also kept selling prices low. Good progress was made with accelerating sales growth of special steels by acquiring new customers, developing new products and applications, and by expanding into new market areas. The results were seen in clearly growing delivery volumes in many market areas.

A market environment of weak demand and falling end product prices showed the necessity of the efficiency programmes initiated in 2012 to safeguard our competitiveness. Actions taken under efficiency programmes delivered an improvement totalling around EUR 70 million in earnings performance. Even though we have pursued savings by improving the efficiency of our operations and processes, we were regrettably unable to avoid workforce reductions. We sought to help the employment of those losing their jobs by working closely with local employment offices and by providing coaching in job application skills.

On 22 January 2014, Swedish steel company SSAB and Rautaruukki announced a plan to combine the two companies. SSAB is to make a public share exchange offer to Rautaruukki's shareholders recommended by the Board of Directors of Rautaruukki. Solidium Oy, Rautaruukki's largest owner, has given its full support for the combination and has undertaken to accept the share exchange. I believe that the combination of Ruukki and SSAB gives an excellent opportunity to continue the rationalisation of the cost base of the companies and build a new Nordic steel producer that is able to transit the steel business towards a global special steel company. There is also a good synergy potential in the construction business which offers profitable growth potential on top of the synergy benefits.

CORPORATE RESPONSIBILITY HIGHLIGHTS 2013

January

- Ylivieska unit in Finland celebrates milestone of 1000 zero-accident days
- Unicef's "Clean water for India" campaign was the charity receiving most stakeholder votes as the recipient of Ruukki's annual Christmas donation. Ruukki donated 75% of the sum allocated to the campaign and shared the remaining 25% between other charities receiving votes.

February

- Publication of Ruukki's Corporate Responsibility Report 2012
- The first phase of Itella's new logistics centre at Pennala in Orimattila, Finland became operative. The walls of the building were made using Ruukki energy panels. Calculations indicate that the energy panel system will result in annual savings of around 15% in energy costs.
- Ruukki is included again in the Forum Ethibel Excellence Investment Register. Selection for inclusion in the register indicates that Ruukki performs better than average in its sector in terms of corporate social responsibility (CSR).

March

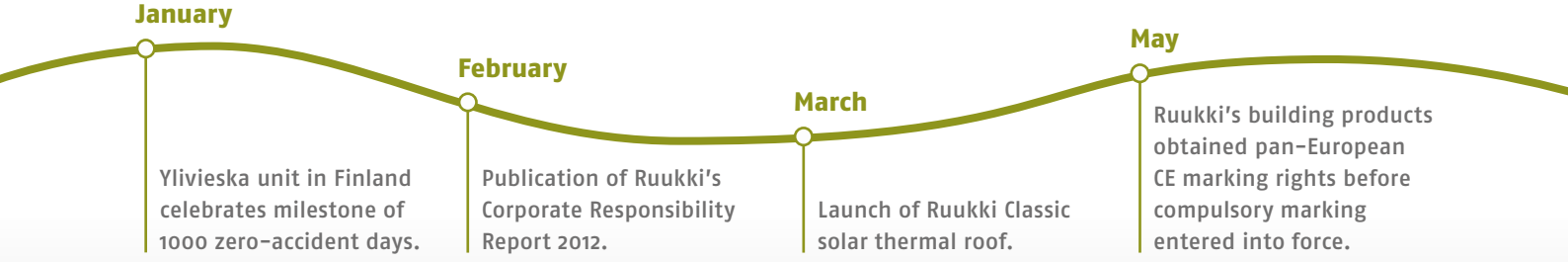
- Ruukki launched a service to recycle as a raw material the sandwich panel waste arising during the panel installation stage.
- Ruukki is the first company in the world to launch an integrated roof, Ruukki Classic solar thermal roof, designed for an ordinary single-family home to harness solar thermal energy. The roof generates energy to heat domestic hot water and to heat the building itself.
- Ruukki's Hämeenlinna Works in Finland took part in a study conducted by Eurofer, IndustriAll, Eurofound and ConsultingEuropa to establish how practices in the steel industry affect occupational health and safety relating to psychosocial factors at work. The study at the Hämeenlinna Works received positive feedback for different levels of cooperation taking place between the personnel and supervisors and the employer.

April

- Ruukki delivered energy-saving panels for the new Krambua Shopping Centre in Sarpsborg, Norway. Ruukki energy panel is airtight and results in considerable savings in heating costs and significantly reduces a building's carbon dioxide emissions.
- Ruukki's steel service centre in Oborniki, Poland improved safety by assessing risks and hazards, updating safety instructions and by developing warehouse operations. Risk analyses and instructions can be seen near each workstation. Acquisition of a side loader truck for the warehouse ensures the fast, safe handling of products.

May

- In 2013, Ruukki applied for its energy panel system to be certified by VTT Technical Research Centre of Finland. Certification ensures the thermal insulation and airtightness properties Ruukki promises for the product. Ruukki was the first company in Finland to apply for such certification.
- Ruukki's building products obtained pan-European CE marking rights before compulsory marking entered into force on 1 July 2013. In building systems, Ruukki has CE marking rights for welded steel structures.
- Ruukki received worldsteel's Climate Action membership certificate for the fifth time for active annual participation in the Climate Action recognition programme.



- Ruukki launched a new Raex wear-resistant steel for the mining industry. Raex special steel is made in a range of thicknesses from 2 mm to 80 mm. The use of thick wear-resistant steels can reduce the maintenance frequency of mining industry equipment, increase energy efficiency and thus improve the cost efficiency of operations.

June

- Ruukki Classic solar thermal roof was installed on the roof of a prototype school building in the Science Park Galilei at Heureka – the Finnish Science Centre, in Vantaa to produce hot water for the building.
- Ruukki launched Ruukki solar panel, which produces solar power. Part of Ruukki's energy panel system, the panel is installed on walls and converts sunlight into electricity.
- Ruukki's steel service centres in Finland certified operations in accordance with EN 1090 ahead of time. CE marking will become compulsory from 1 July 2014 onwards for steel structures and products to which the standard applies.
- Ruukki supplied Litec and Form special steels for the Biofore Concept Car. Ruukki is participating in the development of the Biofore Concept Car being built by UPM and Helsinki Metropolia University of Applied Sciences. The main aim of the project is to test the use of renewable biomaterials in the automotive industry.

July

- More than 800 summer workers were employed by Ruukki. Judging by the results of the summer employee feedback study, summer workers greatly enjoyed their time at Ruukki: roughly 98% of them were ready to come and work for Ruukki again and 97% would recommend Ruukki to colleagues as a workplace.

August

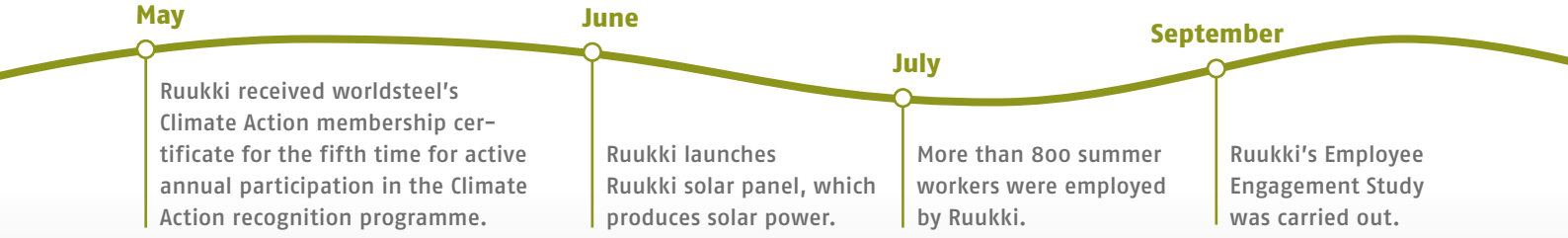
- Ruukki launched a new polyurethane-based Ruukki Pural farm colour-coated steel formulated especially for agricultural buildings, where resistance to corrosion and chemicals is required.

September

- Ruukki's Employee Engagement Study was carried out.
- Ruukki's sponsored dog Jitra completed dog training and began work when she began to give Iitu, a 20-year-old wheelchair-bound student, a helping paw. Assistance dogs are trained to help mobility impaired persons. Ruukki has sponsored Jitra's training.
- Ruukki expanded its range of high-strength Optim steels to serve the heavy lifting equipment and mining industries. Thanks to its excellent weldability, high strength and good impact strength, Optim 700 QL steel is well-suited for, among other things, the load-bearing structures of heavy earth-moving and mining equipment as well as offshore cranes.
- A safety information briefing for Ruukki's most important subcontractors. The briefing dealt with the latest safety topics, provided feedback on the safety development of suppliers, told about the safety targets and made an award to the supplier who had best taken safety aspects into account.

October

- Switching to LED lights halved lighting energy consumption at Ruukki's Presteel unit in Raahe, Finland.
- A student competition on energy efficient projects started in Poland, where students at Warsaw University were invited to take up the challenge. The design competition



was for an energy-efficient building using Ruukki's solutions, such as energy panels.
- Ruukki energy panel system will cut energy costs at the Ikaalinen Shopping Centre in Finland by up to 20%.
- Ruukki launched a new Z600 metal coating which can significantly extend the lifespan of products. Typical applications for the Z600 coating include silos, culverts, traffic sign poles, crash barriers, electrical cabinets, frame structures and cable trays.

November

- A joint campaign, "A better roof over your head", launched in Poland by Ruukki and Radio Zet Foundation radio station ended. A Finnera roof was installed on the three foster family homes most in need of a new roof and who had registered for the campaign.
- Ruukki received an award as the best Nordic Mid Cap company in the 2013 Nordic IR Awards competition.
- Ruukki challenged all students in the field to take part in worldsteel's Virtual Steelmaking Challenge and invited entrants to visit the Raahe Works. Ruukki's young engineers Juha Erkkilä and Veli Vuorenmaa were announced as the European-CIS Regional Champions, and Juho Moilanen and Hannu Tolonen from the University of Oulu came second and Sanna Pikkupeura, also from the University of Oulu, came fourth in the Student category in Europe.
- Ruukki launched a new service to collect steel waste and further improve recycling. Europress, the leading manufacturer of waste handling equipment in the Nordic countries, has focused recycling operations on Ruukki. Ruukki has long collected steel waste at its own sites and returned it to steel mill. Now the service has been expanded for customers. Scrap steel is delivered to the steel plant at the Raahe Works in Finland, where it re-enters the steelmaking process.

December

- Ruukki Building Systems' unit in Gargždai, Lithuania received ISO 9001 quality management and ISO 14001 environmental management certification. All Ruukki Building Products and Ruukki Building Systems production sites now have ISO 9001 and ISO 14001 certification.
- The framework agreement for a Steel Construction Excellence Center was signed in December in Hämeenlinna, Finland, to further promote steel construction research and development. Ruukki will contribute around €2.5 million to the project during 2014–2017 in addition to other development investments. The agreement will strengthen 15 years of partnership between Ruukki, Tampere University of Technology and HAMK University of Applied Sciences in the product development of coated steel sheets and in the research and testing of steel structures. The other parties to the agreement are Tavastia Vocational College, the City of Hämeenlinna and Häme Development Centre Ltd.
- Ruukki entered into partnership to supply steel for the new Saab cars. Among other things, Ruukki will supply Litec, an ultra-high-strength formable steel, for body-in-white manufacture. With ultra-high-strength steel, the material thickness can be reduced, thus resulting in lighter, more fuel-efficient cars that retain the same safety factor.

September
Ruukki expanded its range of high-strength Optim steels to serve the heavy lifting equipment and mining industries.

September
Safety information briefing for Ruukki's most important subcontractors.

November
Ruukki launched a new service to collect steel waste and further improve recycling.

November
Ruukki received an award as the best Nordic Mid Cap company in the 2013 Nordic IR Awards competition.

December
All Ruukki production sites now have ISO 9001 and ISO 14001 certification.

KEY FIGURES

The table below shows Ruukki's corporate responsibility key figures.

Economic responsibility	2013	2012	2011
Comparable net sales, €m	2,404	2,597	2,620
Comparable operating profit, €m	39	-50	78
Comparable operating profit as % of net sales	1.6	-1.9	3.0
Comparable result before income tax, €m	-1	-88	44
Net cash from operating activities, €m	184	172	114
Capital employed, €m	1,699	1,853	2,175
Equity, €m	1,013	1,074	1,278
Net interest-bearing liabilities, €m	693	765	770
Return on capital employed, %	1.8	-4.9	1.3
Return on equity, %	-1.3	-10.0	-0.8
Gearing ratio, %	68.5	71.2	60.3
Cost of goods, materials and services purchased, €m	-1,822	-2,243	-2,145
Wages, salaries and social security contributions, €m	-422	-504	-489
Dividends paid, €m	-28	-69	-83
Net finance costs, €m	-36	-40	-37
Income tax, €m	-8	22	1
Investments in tangible and intangible assets, €m	-90	-97	-179
Environmental investments, €m	-23	-15	-29

Environmental responsibility	2013	2012	2011
Energy consumption, TWh	11.6	12	13
Carbon dioxide emissions, Mt	3.8	3.8	4.1
Particulate emissions, t	215	225	1,500
Avoided carbon dioxide emissions by recycling and utilisation of mineral products, 1000 t	600	600	600
Avoided carbon dioxide emissions by energy recovery, Mt	1.9	1.4	1.4
Percentage of production sites with ISO14001 certification	100	99	99
Production sites where environmental permit limits were exceeded, number of sites	1	3	4

Social responsibility	2013	2012	2011
Employee churn*, %	7.9	5.2	6.1
Average number of training days per employee	1.62	2.20	1.76
Sickness absenteeism, %	3.83	4.20	4.00
Lost workday injury frequency, number of injuries resulting in absence of more than one day per million hour worked	7	7	8

* excluding workforce reductions

CORPORATE RESPONSIBILITY AT RUUKKI

Responsibility is an inherent part of business competence and everyday work at Ruukki. This is reflected in, among other things, Ruukki's vision, strategy, values, Code of Conduct, policies and management system.

Our vision is to be an innovative and acknowledged provider of energy-efficient steel solutions to build a better living environment together with our customers.

Ruukki's values describe the way we work and reflect the things that are important to Ruukki people. Our values guide our choices and the decisions we make. Ruukki's values are: we take responsibility, we succeed together and we challenge tomorrow. We strive continuously to improve our operations in line with Ruukki's values. Our success is based on active cooperation with key stakeholders.

Corporate responsibility as part of strategy

Responsible operations are a key element of Ruukki's strategic focus areas. Ruukki's strategy is to focus on construction and developing the special steels business. We are pursuing growth from specialisation and the emerging markets. Responsible business from the economic, social and environmental aspects is a requirement for sustainable competitiveness. Profitable business is built on responsible operations. Expert people and well-managed human resources, environmental and safety affairs create the foundation for profitability.

The focus areas of corporate responsibility at Ruukki are energy-efficient products, energy-efficient operations and the development of competence and safety. Climate change and scant energy resources will mean energy efficiency becomes increasingly important. Energy-efficient products form the focus area of Ruukki's strategy and are a growing business opportunity. We want to provide customers with solutions that consume less energy. This imposes high standards on the development of energy-efficient products and the competence of our people.

Ruukki has developed direct quenching technology, where it is the leader in its field, to enable the energy-efficient manufacture of special and ultra-high-strength steels. Use of high-strength steels enables Ruukki's customers to make energy-efficient products, i.e. to lift more, carry greater payloads and to save fuel and energy in the process. To illustrate this point, the use of high-strength steels can make heavy vehicles up to 20–30% lighter, which in turn translates into 4–7% higher payloads together with fuel savings.

Buildings account for a significant share of total energy consumption. Ruukki's steel construction solutions take into account stricter requirements for the energy performance of buildings, with a choice of product solutions readily available for low- and zero-energy construction. Heating, cooling, lighting and air-conditioning account for roughly half the energy a building uses. This is why ventilation heat recovery and the external structure of a building are the most important factors improving a building's energy performance. In Finnish climatic conditions, airtight Ruukki energy panels can cut annual energy costs by 20%. Ruukki provides customers with solutions for renewable energy production and better resource and energy efficiency for buildings. Structural solutions based on recyclable and re-usable materials such steel help to cut energy consumption and carbon dioxide emissions throughout a building's lifecycle.

FOCUS AREAS AND OBJECTIVES

Ruukki has specified the main objectives for each focus area of corporate responsibility. In the focus area of **energy efficiency**, the objective is to support customers' business by providing energy-efficient solutions that reduce lifecycle costs and to improve the energy efficiency of our own operations. In the focus area of **competence**, the objective is to increase product development and manufacturing technology competence in special steels, to strengthen sales skills, especially in Russia and new market areas, and to develop competence in the roofing business. In the focus area of **safety**, the objective is to reduce the total number of injuries, to increase awareness to eliminate human errors and to create a safety culture.

The table below describes the main objectives of corporate responsibility at Ruukki, the actions taken to implement them and our achievements on this front in 2013.

Focus areas of corporate responsibility	Main objectives	Some of the actions taken and achievements made in 2013
Energy efficiency	• Supporting customer business by providing energy-efficient solutions that reduce lifecycle costs	• Ruukki solar panel, which produces solar power. Part of Ruukki's energy panel system, the panel is installed on walls and converts sunlight into electricity. • Airtight Ruukki energy panels can cut annual energy costs by 20% in Finnish climatic conditions. • Wear-resistant Raex special steels designed for the needs of the mining industry can reduce the maintenance frequency of mining industry equipment, increase energy efficiency and thus improve cost efficiency. • Ruukki entered into partnership to supply steel for the new Saab. Ruukki is supplying, among other things, Litec ultra-high-strength formable steel for body-in-white manufacture. This enables a reduction in the material thickness and therefore lighter, more fuel-efficient cars that retain the same safety factor. • Ruukki Classic solar thermal roof for installation on single-family homes. Harnessing solar thermal energy, the roof generates energy to heat domestic hot water and to heat the building itself.
	• Improved energy efficiency in own operations	• Ruukki achieved ahead of time the target to attain energy savings, compared to 2005 levels, of 9% by 2016, in the energy efficiency agreements hammered out by the Finnish Ministry of Employment and the Economy Confederation of Finnish Industries EK and sector organisations. • Energy efficiency management at all Ruukki's production sites is being systematically promoted as part of ISO 14001 environmental management systems which, since 2013, cover all production sites. • Energy efficiency measures and rationalisation of processes at Ruukki sites resulted in savings totalling 41 GWh during the year.
Competence	• Increased product development and manufacturing technology competence in special steels	• Around 1,550 Ruukki people from 27 countries took part in training online in accordance with Ruukki Metals' updated product training concept.

Focus areas of corporate responsibility	Main objectives	Some of the actions taken and achievements made in 2013
Competence	• Increased product development and manufacturing technology competence in special steels	• Ruukki experts received a number of recognitions and competition prizes including awards from the Association of Finnish Steel and Metal Producers, the Swedish Institute of Steel Construction and the World Steel Association.
	• Strengthening sales skills, especially in Russia and in new markets	• A sales skills development programme was completed in Russia. • A new induction model was deployed in global sales.
	• Sales skills development in the roofing business	• In Poland, roofing products salespersons from Ruukki Express outlets participated in training aimed at improving customer service.
Safety	• Decrease in total number of injuries	• More proactive safety actions were implemented than during previous years. Safety action frequency was 3,997 per million working hours. Over 23,000 safety rounds were made. • A start was made on keeping closer track of contractor injuries by including them in the company's monthly safety reports. • At plants, such as Oborniki in Poland and Pärnu in Estonia, the focus was on practical safety actions. This was effected by, among other things, investing in new equipment to enable increasingly safer operations or by rewarding employees with a bonus for improvement suggestions that are translated into action.
	• Increasing awareness to eliminate human errors and to create a safety culture	• Among other things, a training course, Human factors in safety, was held for production people at five sites. • At Ruukki Metals' occupational safety day, Ruukki people working with safety management in the steel business got together with senior management to consider how to build an increasingly safer work environment.

MATERIALITY ANALYSIS

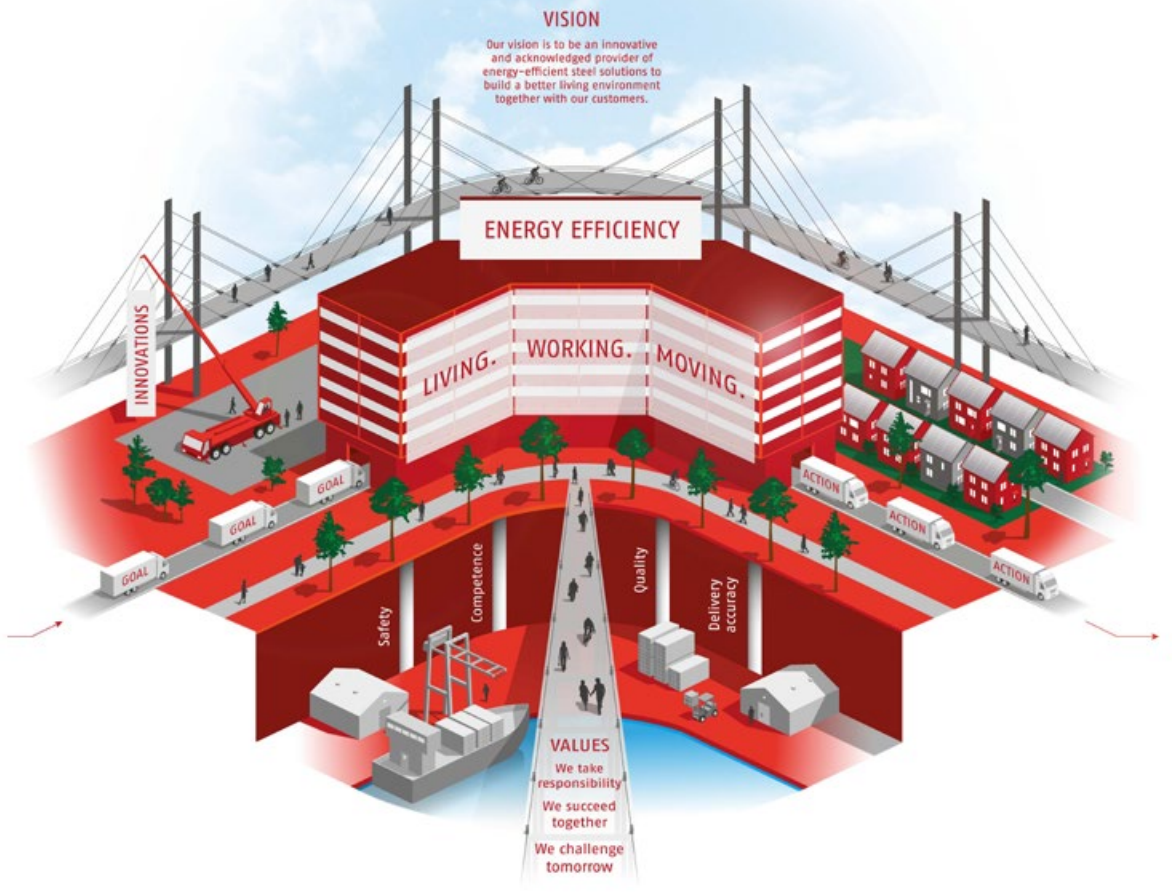
The focus areas of Ruukki's corporate responsibility are based on a materiality analysis.

Ruukki's materiality analysis is based on

- stakeholder feedback about the themes of responsibility they considered to be most important
- changes in the operating environment
- sustainability trends and challenges
- Ruukki's values. Taking responsibility in all operations and as individuals is one of our core values
- Ruukki's vision and strategy, which are also based on strongly promoting sustainability with a strategic focus on energy-efficient steel construction and special steels

Based on the materiality analysis, we identified the aspects of economic, social and environmental responsibility of corporate responsibility of relevance to Ruukki and its stakeholders. The table below shows these aspects, from which energy efficiency, competence and safety were chosen as the three most important.

Aspect	Focus area	Importance to business and stakeholders
Economic responsibility	• Achievement of financial targets	• The achievement of financial targets and profitability enable business continuity and development. They form the foundation on which all activities are built.
	• Remuneration and good corporate citizenship	• At Ruukki, fair, competitive and motivating remuneration for excellent performance is not only tangible, but also includes active promotion of work ability, extensive opportunities for competence development and good human resources management. • The economic wellbeing we create is shared by various stakeholders in society in the form of wages, salaries and bonuses, taxes, purchases and dividends. Responsibility is also visible in business risk management.
	• Compliance with good business practices	• Compliance with good business practices respects our stakeholders and, among other things, means compliance with laws and regulations and practicing ethical business activities.
Social responsibility	• High-level expertise	• A competent personnel and well-managed human resources create the foundation for economic sustainability. We are revisiting and improving the efficiency of our ways of working to enable us to continue responding to our customers' needs. This is possible through a high level of expertise, motivated and committed people and good supervisory work. We strive to ensure that Ruukki people are competent, happy in their work and motivated to participate in taking our business further.
	• Occupational safety	• At Ruukki, the focus of safety improvement is on proactive safety work. Our relentless drive to reduce injuries is reflected in improved operational quality for our customers and forms the basis for personnel wellbeing.
	• Leadership culture	• Good leadership creates the conditions for economic prosperity and for employees to be successful in their work. Supervisory work is being developed in line with Ruukki's values through goal-oriented career planning, development discussions and leadership coaching.
Environmental responsibility	• Energy-efficient products	• Ruukki's energy-efficient products help enable customers to improve efficient use of energy and reduce the environmental impacts of their products in, among other things, construction, transportation and mobile machines.
	• Operational eco-efficiency	• Ruukki's efficiency of energy and resources in its own production is testimony to customers that we operate responsibly. The energy and mineral products created as a by-product in the production process are used as a substitute for virgin natural resources.
	• Steel lifecycle and recycling	• As a material, fully-recyclable steel is a good base for energy-efficient building solutions. Our recyclable, wear-resistant and high-strength special steel products improve the material efficiency of lifting, handling and transportation equipment, and reduce energy consumption over the product's lifecycle.
	• Environmental management and conformity	• A certified ISO 14001 environmental management system is in place at 100% of our production sites and shows our stakeholders our commitment to the continuous improvement of environmental matters. The system helps us to monitor the achievement of targets set, any non-compliances and compliance with statutory requirements and environmental permits.



HOW RESPONSIBILITY IS MANAGED

Ruukki works on the corporate responsibility front at its sites, in business support functions and in business activities as an inherent part of everyday business activities. Besides this, a corporate responsibility taskforce coordinates corporate responsibility reporting and development. This task force is made up of representatives from the human resources, legal, marketing & communications, finance and the corporate responsibility & environmental organisations.

On Ruukki's Corporate Executive Board, the chief strategy officer is responsible for corporate responsibility and also chairs the corporate responsibility task force.

The company's production sites operate in compliance with certified ISO 14001:2004 environmental management and ISO 9001:2000 quality management systems, which cover 100% of production.

VALUES, CODE OF CONDUCT AND COMMITMENTS

Our responsible operations are guided by:

- Ruukki's values
- Corporate strategy
- Code of Conduct
- Corporate governance
- Integrated management system covering quality, safety, energy and environmental aspects

In practice, all our different business areas, support functions and sites are involved in corporate responsibility at Ruukki. This ensures that corporate responsibility is an actual and inherent part of Ruukki's everyday business activities.

› Read more about ruukki's certified management system

Ruukki's values

Ruukki's values describe our way to work, the things that are important to us and guide our choices and decision-making.

We take responsibility

- We are worth our customers' trust
- We keep our promises
- We work safely and responsibly
- We work safely and responsibly as individuals

We succeed together

- We succeed together with our customers
- We deliver results
- We trust each other
- We benefit from our multicultural expertise

We challenge tomorrow

- We understand our customers' future needs
- We are curious about new things
- We quickly take action
- We encourage continual renewal and learning

Code of Conduct

Ruukki complies with the laws and regulations in force, good practices and with the Code of Conduct in all its operations. The purpose of the Code of Conduct adopted by Rautaruukki's Board of Directors is to highlight the company's ethical values and to create for the personnel a consistent way to act responsibly around the world. The Code of Conduct applies to all Ruukki companies. Each Ruukki employee is required to be familiar with the legislation and policies applying to his or her own area of responsibility and, without exception, to comply with them.

The Code of Conduct is made known to all newcomers to Ruukki during induction and through continuous training and internal communication. New employment contracts include a condition about compliance with the Code of Conduct. In addition, employees taking part in training held in different countries sign to confirm that they have studied the Code of Conduct and that they undertake to comply with it.

A Code of Conduct learning module has been published online in LEAP, Ruukki's e-training portal. Each Ruukki employee must study this module and complete the test in conjunction with it. Successful completion of the course is documented in the personal training history of the employee concerned. Code of Conduct training has been translated into six different languages. The most important country- and site-specific principles applying to the personnel have been published and posted on local intranet pages.

Each of the company's business areas is responsible for ensuring compliance with the Code of Conduct and laws and regulations in force. In conjunction with internal audits, the company seeks to ensure that control has been properly organised and works effectively.

Generally accepted ethical principles and compliance with laws are the basis of good business practice. Ethical and legal issues concerning the company's operations as well as human rights, employment and environmental issues are to be recognised and resolved according to these principles.

Responsible operations support the company's success and competitiveness. Therefore Ruukki requires its business partners, suppliers and subcontractors to comply with its Code of Conduct.

Policies

Corporate policies applying to different areas of the business reinforce the commitment to achieving corporate financial and other targets and to minimising business risks within the company. The personnel have access to all the policies on the company's intranet pages.

Reporting misconduct

One of the aims of internal control is to prevent misconduct. Ruukki has instructions about how to report any suspected misconduct. Ruukki people are encouraged to report suspected misconduct either to their own supervisor, to their supervisor's supervisor or directly to the internal audit unit or legal department. Reports can also be sent through the post or by email (compliance@ruukki.com).

Each and every Ruukki employee is responsible for reporting any misconduct or procedure contrary to the Code of Conduct. Suspected misconduct is investigated immediately and confidentially. Proven misconduct is reported to the Board of Directors' Audit Committee.

› Code of Conduct (pdf, 43KB)

Corporate governance

Rautaruukki Corporation is a Finnish limited liability company and the responsibilities and obligations of its management bodies are provided by the law of Finland, the company's Articles of Association and the principles of corporate governance determined by the company's Board of Directors. In addition to the aforementioned, corporate governance and decision-making at Rautaruukki are in compliance with other rules applying to listed companies and with rules and regulations applying to listed companies issued by NASDAQ OMX Helsinki Ltd and the Financial Supervisory Authority (FIN-FSA).

Rautaruukki has published a corporate governance statement in accordance with the Finnish Corporate Governance Code 2010 and with the Securities Markets Act (746/2012 as amended). The statement also covers other core areas of governance and is issued separately from the report of the company's Board of Directors.

› Corporate governance statement 2013 (pdf, 0.53MB)
› Remuneration statement
› Board of Directors
› Corporate Executive Board
› Risk management

An unofficial English translation of the Finnish Corporate Governance Code may be viewed on the Securities Market Association website at www.cgfinland.fi.

Commitments

Ruukki has signed the UN Global Compact initiative and is committed to its ten universally accepted principles in the areas of human rights, labour, the environment and anti-corruption. UN Global Compact is a strategic policy initiative for businesses that are committed to enhancing good corporate citizenship. By signing the initiative in 2011, Ruukki is committed to promoting sustainable solutions in its operations.

The principles are derived from:

- The Universal Declaration of Human Rights
- The International Labour Organization's Declaration on Fundamental Principles and Rights at Work
- The Rio Declaration on Environment and Development
- The United Nations Convention Against Corruption

ECONOMIC RESPONSIBILITY

We aim to create and distribute economic added value to customers and other stakeholders whilst minimising the adverse impacts of our operations. This requires us to continuously improve our operations and competitiveness and to operate profitably in a changing market environment. Good profitability and a good financial position are a foundation on which to develop and successfully deliver in the other aspects of corporate responsibility – social and environmental responsibility.

Financial performance in 2013

Market conditions continued to be very challenging during 2013. The recession and a lack of market confidence in Europe impacted on demand from Ruukki's customers. Despite this, profitability improved clearly in all

Financial targets	Target	2013	2012	2011
Growth in comparable net sales, %	>10%	-7.4	-0.9	15.2
Comparable operating profit of net sales, %	>15%	1.6	-1.9	3
Return on capital employed, %	>20%	1.8	-4.9	1.3
Gearing ratio, %	~60%	68.5	71.2	60.3

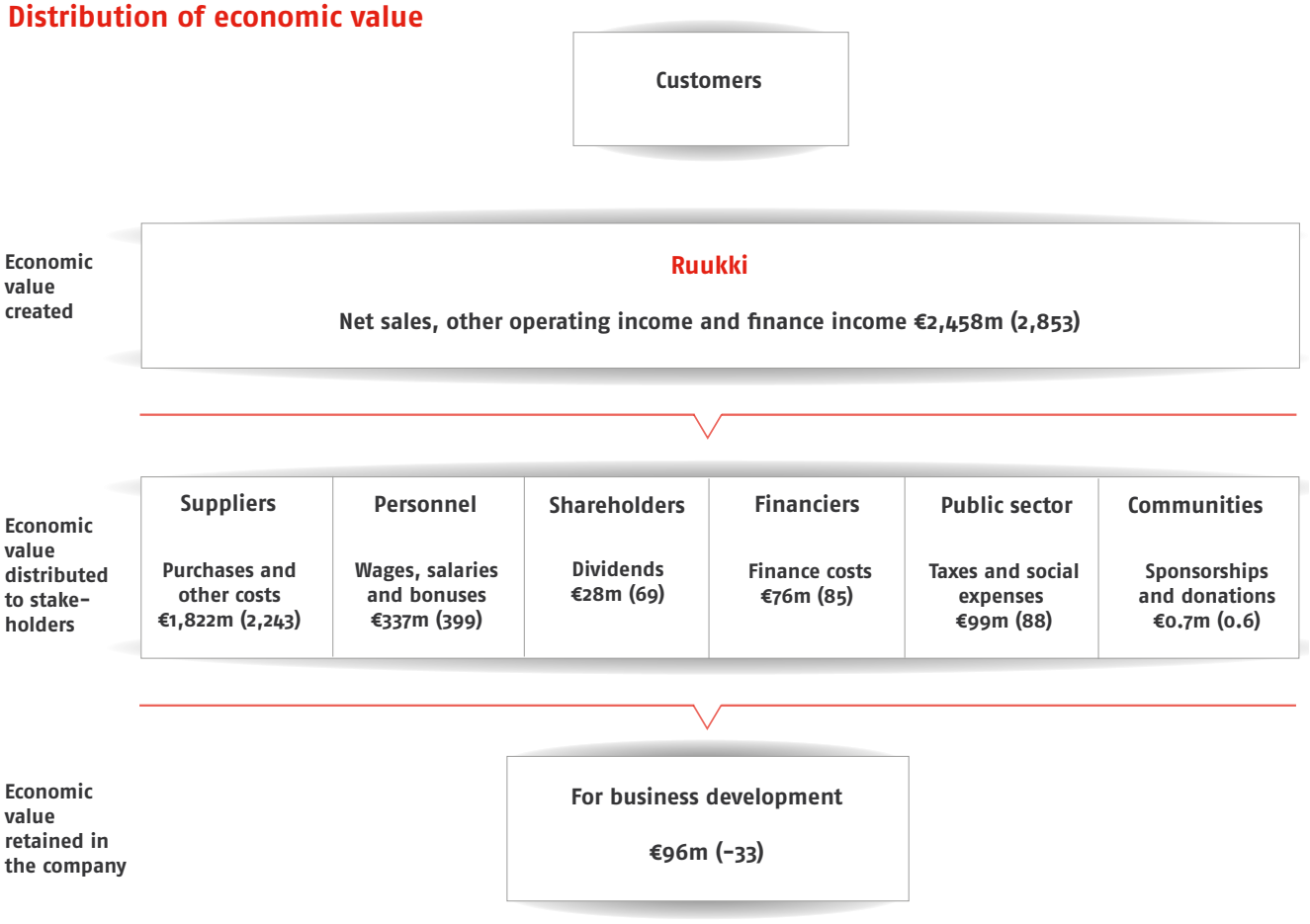
business areas. Comparable operating profit improved by €89 million to €39 million, which equates to 1.6% of comparable net sales. Efficiency programmes initiated at Ruukki in 2012 resulted in earnings improvement totalling around €70 million in 2013. Nevertheless, market uncertainty was reflected in net sales and comparable net sales were down 7% year on year at €2,404 million. The decrease in net sales was due largely to weaker market conditions and to clearly lower average selling prices of steel products, which the decrease in market prices of the main raw materials also kept low. Good progress was made with accelerating sales growth of special steels by acquiring new customers, developing new products and applications, and by expanding into new market areas. The results were seen in clearly growing delivery volumes in many market areas. The consolidated comparable result before income taxes improved year on year to -€1 million (-88), equating to -0.0% of net sales (-3.4). The gearing ratio decreased to 68.5% (71.2) at year-end 2013 and the equity ratio was 45.0% (45.6).

› Read more about Ruukki's financial performance in 2013 annual report

DISTRIBUTION OF ECONOMIC ADDED VALUE

The economic added value we create is distributed to various stakeholders in society such as our owners, financiers, suppliers, personnel, the public sector and communities. Ruukki is a major local and regional influence in many places where it has production sites. This is reflected in Ruukki's role as an employer, buyer of regional goods and services and as a benefactor to local communities, for example. The table below illustrates how the economic added value created by Ruukki was distributed among various stakeholders in 2013 (2012).

Distribution of economic value



SUPPLIERS

Ruukki is a major buyer of raw materials, products and services in most of the countries in which it operates. The company seeks to enter into long-term contracts with suppliers and to develop cooperation with them. Taking into account cost factors, Ruukki values delivery flexibility, reliability and delivery accuracy, as well as the quality of goods and services in sourcing. The general terms and conditions of sourcing contracts take into account the company's Code of Conduct. Ethical values and environmental aspects are also taken into consideration when choosing suppliers.

In 2013, Ruukki sourced products, materials and services worth an estimated €1,822 million (2,243). Raw materials account for Ruukki's most significant purchases. The manufacturing process and feedstock base at Ruukki's Raahe Works in Finland underwent a significant change in 2012 when iron ore pellets began to be used as blast furnace feedstock.

Sourcing from different countries, 10 largest

%-share	2013	2012	2011
Finland	41	41	41
Sweden	21	23	21
Russia	11	8	5
USA	3	3	3
Poland	3	4	3
Canada	3	3	4
Germany	3	3	4
Norway	2	1	1
Belgium	1	1	1
Rest of Europe	10	10	12

› Read more about responsible supply chain management and sourcing in the Stakeholder -section "Suppliers and subcontractors".

Ruukki sources around 80% of the iron ore pellets it needs from Sweden and the remainder from Russia. Ruukki buys coking coal on the global market from the United States, Canada, Australia and Russia.

In 2013, Ruukki sourced 41% of the value of the materials, supplies and services it purchased from Finland, with Sweden and Russia accounting for other major sourcing countries.

PERSONNEL

In 2013, Ruukki employed an average of 8,955 people across some 30 countries (11,214). Ruukki is a major employer and payer of wages and salaries in many places in Finland and outside Finland. We aim to provide our people with good, safe working conditions, opportunities for continuous competence development and competitive compensation for their work contribution in all the countries where we have a presence. Competence development of the personnel and improved occupational safety are key areas of corporate responsibility at Ruukki.

Ruukki paid wages, salaries and benefits totalling €422 million (504) to its personnel in 2013. Pensions and other indirect employee costs accounted for €85 (104) of this figure.

Share-based incentive plan for key employees

Ruukki had a share-based incentive plan for 2011–2013 to reward key employees. The plan included three one-year earning periods and one three-year earning period. Expenses of €0.1 million (0.6) were booked in respect of the incentive plans valid in 2013. At year-end 2013, 100 members of management or other key personnel were covered by the share-based incentive plan. Ruukki has operated share-based incentive plans since the year 2000.

Employee profit sharing scheme

Almost all of the company's personnel belong to the employee profit sharing scheme. No expenses in respect of the profit sharing scheme were booked for 2013 (2012: no expenses).

Pension cover

The pension cover of Ruukki's employees is based on the legislation and agreements in force in each country. In Finland, most of the pension obligations are covered through the Employee Pensions system (TyEL). In Finland, the company has defined supplementary benefit pension plans arranged through Rautaruukki's Pension Fund and insurance companies, as well as statutory defined contribution TyEL pension cover arranged through insurance companies. In addition, the company has defined benefit pension plans in Norway and Germany. More information about Ruukki's pension obligations can be found in Note 24 Pension obligations in the notes to Rautaruukki's financial statements for 2013.

Personnel costs by country

€m	2013	2012	2011
Finland	321	377	360
Russia	26	28	27
Sweden	23	26	24
Norway	17	21	21
Poland	11	17	18
Ukraine	3	4	4
Estonia	3	3	3
Romania	3	3	4
Lithuania	2	2	2
Germany	2	3	3
Other countries	9	21	22
Yhteensä	422	504	489

OWNERS AND FINANCIERS

Ruukki aims to be an attractive investment and to create added value for its owners in the form of dividends and any increase in share value. For its lenders, Ruukki is a reliable repayer of borrowings.

Shareholders and shareholder value

Rautaruukki's Finnish ownership base grew in 2013. The number of shareholders decreased slightly year on year and was 47,031 (49,549) at year-end. International investors and nominee registered shareholders held 12.8% (14.7) of the outstanding shares at year-end 2013. The Finnish state (Solidium Oy) owns 39.7% of Rautaruukki's shares.

› More information about Ruukki's shareholders is available on Ruukki's website

Share performance

The main trading place for Rautaruukki Oyj's share (RTRKS) is NASDAQ OMX Helsinki. Rautaruukki's share was up 13% during 2013. Rautaruukki had a market capitalisation of €946 million (836) at year-end 2013.

› Read more information about share performance on Ruukki's website.

Dividends

Under its dividend policy, Ruukki aims to pay 40–60% of profit for the year as dividend. In addition, the aim is a steadily growing dividend taking into account the needs of business growth. The company paid out dividends totalling €28 million (69) in 2013.

The company's profitability in 2013 improved compared to 2012 and earnings per share (EPS) were -€0.10 (-0.85). The Board of Directors proposes that no dividend be paid for the year ended 31 December 2013 (0.20 per share).

Debt financing

Net interest-bearing liabilities decreased year on year to €693 million (765) at year-end 2013. Most of the company's interest-bearing liabilities are loans from financial institutions, bonds and corporate papers. Ruukki has no official credit rating from any credit rating agency.

The company's net finance costs for 2013 totalled €36 million (40). Net interest costs were €27 million (35). During 2013, a total of €35 million (65) in long-term financing agreements were concluded for the purposes of research and product development investments. Repayments of long-term loans in 2014 total €207 million.

PUBLIC SECTOR

Ruukki and taxation

It is Ruukki's principle to be a responsible taxpayer in all countries where the company operates. Ruukki complies with local taxation practices and tax legislation in all countries where it is registered for tax.

Ruukki applies the arm's length transfer pricing principles according to OECD recommendations in all intra-group product, service IPR and financing transactions. Transfer prices are defined based on arm's length transfer pricing methods taking into account functions, risks and assets in group companies.

Ruukki does not operate in tax haven countries as defined by the OECD for taxation purposes. For actuarial reasons, Ruukki has a wholly-owned captive insurance company in Guernsey. The revenue of this company is taxed in Finland under the Act on the Taxation of Shareholders in Controlled Foreign Companies (1217/1994 as amended).

Due to weak financial performance in recent years, the company has paid little taxes. Ruukki paid taxes totalling €1 million (12) in 2013. Income tax expenses were €8 million (income €22 million). Besides income tax, Ruukki pays other public charges such as real estate, energy and landfill taxes, as well as port charges. Group companies also remit value added tax, withholding tax and tax at source.

Public funding

The company received public funding totalling €1.5 million (2.1) for product development projects. Tekes – the Finnish Funding Agency for Technology and Innovation – contributed €1.2 million (2.0) of this figure and €0.2 million (0.1) came from the EU.

COMMUNITY SUPPORT

The aim is long-term partnership

Our main sponsor efforts in 2013 were research, training and other long-standing cooperation with communities that are important to Ruukki. We supported efforts relating to our strategy and core competence. At the local level, we mainly sponsored sports associations and their activities for juniors.

In 2013, Ruukki's spent a total of €0.7 (0.6) on sponsorship. The biggest single beneficiary was the Technology Industries of Finland Centennial Foundation Fund for the Association of Finnish Steel and Metal Producers. The purpose of the Fund is to promote metals-related teaching, scientific research and studies. Sports associations and their activities for juniors were the second largest group of sponsorship beneficiaries.

Case: New roofs for three Polish foster family homes

In Poland, Ruukki ran a campaign to find deserving roof renovation causes. Ruukki chose three of the foster family homes registering for the campaign to install a new roof. The children and young people in the foster family homes were particularly excited about the renovation projects and watched closely each stage in the process.

Main charitable causes – young people and the environment

Ruukki donated to various charitable causes in 2013. We donated funds earmarked for traditional Christmas cards to three international projects based on voting by our customers and stakeholders. The idea behind these projects was to use training and information sharing to get people to work for a better environment.

In addition to this, we also contributed to various projects promoting the know-how and welfare of children and young people. We seek to support young people studying the steel sector by providing information about steelmaking and steel construction through works visits and within the framework of partnership and research projects.

ENVIRONMENTAL RESPONSIBILITY

Environmental responsibility at Ruukki 2013

Ruukki's focus areas on the environmental responsibility front are to strengthen product-related energy efficiency and lifecycle know-how, to develop energy efficient production, to increase recycling and material efficiency and to maintain responsible operations. We are responding to the growing interest of our customers on this front by innovating and producing energy-efficient steel solutions that cut energy costs throughout the lifecycle of an end-user product or solution. In keeping with Ruukki's environmental policy, we are also committed to reducing environmental impacts arising from production. Ruukki has already been working for a number of years to improve the energy efficiency of its own operations, lower energy costs and reduce emissions and will continue working towards further improvements. Environmental investments in production in 2013 totalled €23 million (15).

Environmental objectives and targets support Ruukki's vision of being an innovative and acknowledged provider of energy-efficient steel solutions to build a better living environment together with our customers. In 2013, Ruukki revisited the company's environmental objectives and targets for 2013–2015 and the focus areas were defined as being: to provide customers with solutions where the energy and environmental aspect creates added value, to further improve Ruukki's energy and material efficiency and to strengthen open and continuous interaction. Achievement of these objectives is regularly tracked. Production sites operate in compliance with certified ISO 14001 environmental management and ISO 9001 quality management systems. In 2013, 100% (99) of our production had certified systems.

Energy efficiency is a common feature of Ruukki's products and solutions. Ruukki has developed high-strength and wear-resistant grades of steel that translate into increasingly lighter structures and lower energy costs and emissions for the customer. Ruukki's construction solutions combine energy efficiency and competitive costs during their life cycle. During 2013, Ruukki continued to address further development of energy-efficient products and production, as well as the potential of integrating renewable energy generation into steel building solutions. Our work on this front resulted in the launch of among other things Ruukki solar panel, an add-on product converting sunlight into electricity, and Ruukki Classic thermal solar roof, an integrated solution designed for installation on single-family homes to harness thermal energy. In addition, the range of Ruukki Raex special steel was

expanded to also include the thicker wear-resistant steels needed in the mining industry. Choice of the optimum thickness of Raex wear-resistant steel in the manufacture of buckets and tipper bodies, for instance, can help to reduce the overall weight of the equipment itself and thus increase the payload, which in turn cuts fuel consumption.

Environmental investments made in previous years and the change in blast furnace feedstock made in conjunction with closure of the sinter plant at the Raahe Works have significantly reduced emissions into the air and lowered energy consumption. These changes have resulted in a decrease of 10% in specific carbon dioxide emissions and a fall of more than one terawatt hour in energy consumption at the works compared to 2011. Dust emissions have decreased by as much as 85%, fugitive dust from transport and storage by 18% and sulphur dioxide emissions by almost 70%. By recycling steel and mineral products, we avoided carbon dioxide emissions in production by 580,000 tonnes compared to using raw materials from iron making.

It is very important to respond to global environmental challenges such as climate change and higher energy costs, especially with regard to living and moving, which are heavily dependent on energy. The table below shows some of the actions Ruukki took in 2013 in response to these challenges.

Global challenges	Ruukki's objectives	Examples of Ruukki's actions in 2013
Growing importance of energy efficiency driven by climate change and scant energy resources.	• To strengthen product-related energy efficiency and lifecycle know-how in sales, marketing and product development.	• Ruukki's vision is to be an innovative and acknowledged provider of energy-efficient products. • In 2013, Ruukki launched the integrated Ruukki Classic solar thermal roof and Ruukki solar panels to utilise solar energy, Raex and Optim special steels for the mining industry to improve the energy efficiency of equipment and the Z600 metal coating, which can considerably prolong the useful life of products.
The world population is forecast to grow from 7 billion to 9 billion by 2050. As the standard of living continues to improve, energy consumption and carbon dioxide emissions are also growing.	• To lessen the impacts of climate change by increasing energy efficiency.	• In 2013, Ruukki's environmental investments totalled €23 million. • Energy efficiency actions at Ruukki's sites helped to save 41 GWh during the year. • Most of the energy consumption of products arises during their use. Ruukki's solutions can be used to reduce energy consumption and thus cut costs and carbon dioxide emissions.
Natural resources are becoming scarcer. There is growing emphasis on taking into account the environmental aspects of product lifecycle.	• To increase material efficiency and improve cost efficiency by utilising opportunities to recycle.	• In 2013, Ruukki avoided 580,000 tonnes of carbon dioxide emissions by recycling steel and mineral products. • Ruukki launched a recycling collection service for steel leftovers to make steel recycling more effective. • Ruukki launched a recycling collection service to collect panel waste at the installation stage for recycling as a new raw material.
Stricter legislation and permit conditions.	• To comply with the requirements of the environmental system and environment permits.	• In autumn 2013, Ruukki Building Systems' unit in Gargždai, Lithuania received ISO 14001 environmental management certification. All our production sites are now certified. • The Raahe, Kankaanpää and Lappohja works in Finland, the Kiev plant in Ukraine and the Obninsk and Balabanova plants in Russia submitted applications to review their environmental permits.

ENVIRONMENTAL MANAGEMENT

Environmental work at Ruukki is an important part of our everyday work. Our environmental management is based on maintaining and developing the ISO 14001 environmental management system, anticipating and complying with regulations and other environmental requirements affecting Ruukki, and minimising the environmental risks arising from industrial operations. Ruukki takes thorough steps to actively track and anticipate future changes in environmental legislation. All Ruukki's production sites have certified management systems. Internal and external audits ensure working practices comply with our environmental management systems.

The corporate environmental policy defined by senior management governs the environmental management of all Ruukki's operations. In keeping with our environmental policy, we take into account the environmental impacts of products throughout their lifecycle. The continuous development of environmental matters is ensured through environmental objectives and targets, which are set at the corporate level. The different business functions and sites set their own environmental targets in line with corporate objectives and targets. Management reviews regularly track achievement of environmental objectives.

Ruukki uses the Sofi+ environmental reporting system to assist with environmental reporting, information management and analysis. Sofi+ features the tools for analyses and internal reporting for all corporate production sites. Sustainability is based on the availability of reliable, revised information.

Sites and business functions are responsible for putting environmental protection into place. Each site has environmental managers, specialists and/or contact persons. Each and every Ruukki employee is responsible for environmental matters relating to their own job. The corporate environmental function coordinates and supports the development of environmental management together with environmental functions within the business areas. In-house training provides employees with the means to manage the environmental impacts of their own jobs. We also require our subcontractors to take environmental aspects into account.

Management of environmental risks

Environmental risks are managed by systematically taking environmental matters into account in planning and implementing operations and products. Environmental risks are taken into account as part of the corporate risk management process. Risk management seeks to underpin the company's strategy, achievement of targets and to ensure business continuity. Risk management at Ruukki is an integrated part of the management system.

Ruukki has normal emissions originating in production and subject to environmental permits well under control, and regular risk analyses take into consideration the possibility of fugitive emissions in the event of disruption or accident. The results of these analyses serve as the basis for preventive changes and corrective actions at various levels: both in the management system and at the level of underlying causes.

The environmental permit for each site sets out necessary information about the risk assessments relating to operations, the actions planned to prevent accidents and actions to be taken during disruptions to scrubbing devices or other processes. All environmental damage and emissions exceeding permit limits are reported to the regulators immediately and are dealt with in accordance with the environmental management system both by local site management and by Ruukki's Corporate Executive Board.

› Read more about risk management at Ruukki


Photo: A. Aunola

ENVIRONMENTAL OBJECTIVES AND TARGETS

Ruukki's environmental objectives and targets for 2013–15 were adopted in 2013. The environmental objectives and targets support Ruukki's vision of energy efficiency, the company's strategy and the development of environmental management. Corporate objectives and targets steer the setting of environmental objectives and targets at the sites and in business support functions. In keeping with the company's environmental policy, environmental impacts are taken into account throughout the lifecycle of products. Our objective is to provide customers with solutions where the energy and environmental aspect creates added value. Besides addressing the energy efficiency of our products, material efficiency and energy efficiency remain high on the agenda.

Focus areas in environmental work at Ruukki over 2013 – 2015:

To provide customers with solutions where the energy and environmental aspect creates added value	
Target	**Action**
To strengthen product-related energy efficiency and lifecycle know-how	To generate new business opportunities from special steels, energy-efficient construction and environmental know-how in cooperation with customers and in joint research projects To increase the lifecycle know-how of costs and environmental impacts in sales, marketing and development projects

To further improve Ruukki's energy and material efficiency	
Target	**Action**
To further improve energy efficiency	Implementation of cost-effective energy efficiency measures
To increase recycling and material efficiency	Improved cost effectiveness by utilising opportunities for recycling

To strengthen open and continuous interaction	
Target	**Action**
To maintain responsible operations in environmental matters	Compliance with the requirements of the environmental management system and environmental permits Foreseeing the changes in environmental legislation and environmental trends and taking these into account in cooperation with stakeholders

ACHIEVEMENTS 2013

Good results were achieved through the actions carried out in 2013 to achieve environmental objectives and targets.

Target: To strengthen product-related energy-efficiency and lifecycle know-how

Energy efficiency is at the heart of Ruukki's brand and vision. We provide customers with energy-efficient steel solutions for better living, working and moving. Ruukki's vision was given a further boost in 2013, with the launch of new energy-efficient products. In addition, increasingly stricter energy efficiency regulations create opportunities for new solutions.

Ruukki launched Ruukki solar panel, which produces solar power. Part of Ruukki's energy panel system, the panel is installed on walls and converts sunlight into electricity. Besides this, Ruukki was the first company in the world to launch a flexibly designed roof for an ordinary single-family home to harness solar thermal energy. Known as Ruukki Classic solar thermal roof, it has been designed to generate energy both for domestic hot water and for heating. It is estimated that projects completed in 2013 using the Ruukki energy panel system will achieve annual savings of around 15-20% in energy costs. Ruukki's energy panel system was the first in Finland to receive VTT Technical Research Centre of Finland certification. This ensures the thermal installation and air tightness properties Ruukki guarantees for the product.

› Calculate your savings in heating costs

Ruukki is a forerunner in the development and manufacture of wear-resistant and high-strength steel products. Special steels launched by Ruukki include the new Raex product family for the mining industry. Wear-resistant Raex special steel is made in a range of thicknesses from 2 mm to 80 mm. Use of thick wear-resistant steels can reduce the maintenance frequency of mining industry machinery and equipment, enhance energy efficiency and thus boost cost efficiency.

› Energy efficiency calculator

Ruukki aims to increase the lifecycle know-how of costs and environmental impacts in sales, marketing and project development. Environmental training organised during 2013 included training for project salespeople in environmental certification systems.

In 2013, Ruukki spent €21 million (26) on research and development. This sum equates to around 1% of net sales (1%). Ruukki participates in many research programmes working together with research organisations, universities and other companies to increase environmental competence and awareness.

Target: To further improve energy efficiency

Ruukki takes energy efficiency into account in investments, product development, product and process design and when acquiring equipment that consumes energy. In 2013, work continued on promoting energy efficiency in accordance with the ISO 14001 environmental management system. We used energy reviews and analyses to map energy savings areas and energy efficiency actions at Ruukki's sites resulted in annual energy savings totalling 41 GWh.

Ruukki is signatory to energy agreements for 2008-2016 by the Ministry of Employment and the Economy, Confederation of Finnish Industries EK and organisations in the sector and aimed at achieving energy savings of 9%, compared to 2005 levels, by 2016. Ruukki has already achieved the 2016 target. Raahe steel mill is the most significant contributor to this achievement due to the switch in late 2011 to using iron ore pellets as a blast furnace feed stock. Raahe accounts for 94% of the company's total energy consumption.

Ruukki assesses the environmental impacts of its entire logistics chain and takes energy efficiency into account in its logistics solutions. Ruukki works closely with logistics partners to improve energy efficiency. In terms of product tonne transported, around 85% of land transportations per tonne of products are carried by a partner signatory to energy efficiency agreements in the transport sector.

Target: To increase recycling and material efficiency

In 2013, Ruukki launched a collection service for steel leftovers. This service improved the efficiency of steel recycling. Ruukki has for many years already returned scrap steel from production processes at its own sites to the steel mill for re-use. The service has now been expanded for the use of Ruukki's customers. Recycled steel is taken to the steel plant at the Raahe Works, where it is used to make new steel. Also in 2013, Ruukki launched a service to collect the waste originating at the installation stage of steel-coated mineral wool sandwich panels for recycling as a raw material.

In 2013, Ruukki avoided global carbon dioxide emissions totalling 580,000 (600,000) tonnes by recycling steel and mineral products. We improved internal steel recycling by around 5% compared to the previous year. In internal steel recycling, Ruukki's sites in Finland return their recycled steel and other recyclable materials to Raahe for re-use. The share of internal steel accounts for 80% of the total amount of recycled steel used.

During 2013, the use of recycled steel, briquettes and blast furnace and converter slag was increased at the blast furnaces at the Raahe Works, where the use of steel slag for new applications became established. Applications include recycling slag in the blast furnaces to replace limestone and recycling the metal part separated from the slag to replace pellets. In addition, a start was made on recycling the metal part separated from the slag to the steel plant to replace steel scrap sourced from outside. A start was made on commercial deliveries of iron oxide in 2013 and now all the iron oxide from the Raahe Works is sold as a by-product for further use.

Target: To maintain responsible operations in environmental matters

In 2013, Ruukki Building Systems' unit in Gargždai, Lithuania achieved ISO 14001 environmental management certification. This now means that 100% (99) of Ruukki's production sites are certified as being ISO 14001 compliant.

Ruukki takes thorough steps to actively track and anticipate future changes in environmental legislation. All changes in legislation are communicated to the organisation responsible.

Of Ruukki's 36 production sites, 17 have operations that require an environmental permit. Operations subject to permit are regularly and continuously tracked. Violations of permit limits are dealt with immediately and corrective actions carried out. In 2013, there were violations of permit limits at 1 (3) sites. These incidents were occasional and caused no significant impacts to health or the environment and the company received no significant environmental fines.

The Raahe Works submitted an application to the Regional State Administrative Authority for Northern Finland in May 2013 to review the environmental permit. A decision about the application is expected towards the end of 2014. During 2013, the Raahe Works carried out studies on the spread of noise, the impact of particulate emissions and other detrimental elements on the environment, different detrimental elements in wastewater and on the state of the sea area. Together with the city of Raahe, the works also monitored air quality.

Besides Raahe, the following plants also submitted applications to review their environmental permits: the Kankaanpää and Lappohja plants in Finland, the Kiev plant in Ukraine and the Obninsk and Balabanova plants in Russia.

Case: Ruukki's unit in Gargždai, Lithuania celebrated recent certification

Ruukki Building Systems' unit in Gargždai, Lithuania received ISO 9001 quality management and ISO 14001 environmental management certification. Work on building quality and environmental management systems began in February 2013 and the systems were ready for certification after around six months. The third party certification audit was carried out by Inspecta Sertifiointi Oy at the end of September. The Gargždai unit manufactures welded and coated steel frames. All Ruukki's global production sites are now certified as ISO 9001 and ISO 14001 compliant.

Case: Ruukki provides recycling service for panel waste

Ruukki manufactures sandwich panels, which consist of a mineral wool insulation core between two steel sheet layers, for use in external walls. Since May 2103, Ruukki has provided a service to recycle as a raw material the panel waste arising during the panel installation stage. The service cuts waste charges, makes it easier to process construction site waste and reduces the use of natural resources by recycling the raw material obtained. Sandwich panel waste was earlier taken to a landfill as building waste.

Waste originating when cutting door and window apertures is processed at Eko-Expert's site in Pöytyä, where the sheet steel is separated from the mineral wool core. The mineral wool in the panel is defibred into blowing wool which can be used for roofing and floor insulation. The sheet steel layers are returned to the steel-making process. For construction companies, the service means less waste transport, a tidier, safer construction site and compliance with the Waste Act.

ENERGY-EFFICIENT PRODUCTS AND SOLUTIONS

Working towards sustainability

Increased consumption of raw materials and energy brought about by long-term population growth and higher standards of living will create a strong demand for green technology, which conserves energy and natural resources. This trend will create opportunities for Ruukki's business. Ruukki innovates and develops energy-efficient steel solutions that can help to cut energy costs throughout the lifecycle of an end-product. Our vision is to be an innovative and acknowledged provider of energy-efficient steel solutions to build a better living environment together with our customers.

IN CONSTRUCTION

A study commissioned by Ruukki in 2013 and targeted at European stakeholders showed that decision-makers are steered towards energy-efficient construction not only by the prospect of financial savings through energy conservation, but also by reputational benefits and safeguarding the long-term value of their properties. The greatest demand is for solutions where the operating principle and energy savings potential are easily comprehended and within reach.

Ruukki's energy-efficient solutions for construction

Heating, cooling, lighting and air-conditioning account for about half the energy consumed by buildings. This is why heat recovery from air conditioning and the exterior structure of buildings are the most important factors in improving a building's energy performance.

Ruukki's steel construction solutions take into account increasingly stringent requirements for the energy performance of buildings and Ruukki's products feature ready solutions for low- and zero-energy construction. Ruukki offers customers solutions for energy production from renewable sources and for improved resource efficiency and energy performance of buildings.

Ruukki's solutions can directly impact on a building's energy performance rating or E rating, which includes the annual amount of energy a building requires per square metre.

E – rating= the total energy consumption of a building is expressed in kWh/m² per annum. The E rating is specified in the National Building Code of Finland and is used, inter alia, in the energy certificate for a building. The rating depends on how much energy a building uses and how that energy originates. The E rating or energy rating improves where renewable fuels or district heat is used.

Renewable energy product launches in 2013

Ruukki was the first company in the world to launch a roof designed for an ordinary single-family home to harness solar thermal energy. This new roofing product is the Ruukki Classic Solar thermal roof, which has been designed to generate energy both for domestic hot water and for heating, thus improving a building's energy performance. The sun heats the heat collector fluid, which in turn heats the hot water storage tank. The system can heat about half the annual domestic hot water for a small single-family home and provide 10–20% of the building's heating.

June 2013 saw the launch of the Ruukki solar panel, which produces solar power. Part of Ruukki's energy panel system, the panel is installed on walls and converts sunlight into electricity. The panel surface is coated with a photoactive film that converts the sun's rays into energy.

Ruukki added to its building product range with the new Hiarc reflect coating for façade solutions. Ruukki Hiarc reflect reflects some of the sun's heat radiation and so keeps the panel surface cooler. This in turn reduces the need for indoor cooling and thus improves the energy efficiency of the building. A reflective surface also allows the use of longer spans with dark-coloured wall elements.

Energy-efficient, airtight external wall solutions

In 2013, Ruukki's energy panel system received VTT Technical Research Centre of Finland certification and was the first in Finland to be certified. This ensures the thermal installation and air tightness properties that Ruukki guarantees for the product. Ruukki's energy-efficient external structural solutions conform to the strictest requirements for thermal insulation and underpin Ruukki's continuous efforts to improve the airtightness of structures. In Finnish conditions, Ruukki energy panels can generate savings of up to 20% in annual energy costs compared to the use of more traditional sandwich panels. Use of Ruukki's energy panel system enables a higher energy performance rating for a building and the achievement of more credits in LEED and BREEAM environmental certification systems. Also available are Ruukki life panels, which feature a mineral wool core made of 80% recycled material.

› Ruukki's calculator to estimate energy costs

Liberta Solar façade system is a fully building-integrated photovoltaic panel system, which converts the sun's rays into energy. It also produces electricity even when the weather is overcast or foggy. The electricity generated is used either to meet the building's own needs or is fed into the electricity grid.

Resource efficiency from foundations and use of ground-source heating

The good load-bearing capacity of piles can be utilised in the foundation of buildings by reducing the number of piles. This can impact on the energy efficiency and costs of the entire project also by reducing work, storage and transport volumes. Since this means less vibration caused by driving in steel piles, making foundations near existing buildings is safer. Ruukki provides eRR and eRD energy piles based on steel pipe piles and a separate heat collection system for building foundations.

Zero-energy construction

Increasingly stricter energy performance requirements create opportunities for new solutions and Ruukki is actively developing these solutions also for zero-energy construction. Targeting the energy performance of a building right from the investment stage to decades ahead can create added value for Ruukki's products and their combinations, especially in system hall construction. The applied technology already exists and work is currently under way on building a partnership network. Ruukki's functional building concept includes airtight envelope solutions with integrated solar power production, energy piles, solar collectors, HEPAC solutions, frames and energy simulation throughout the building's entire lifecycle.

Case: Ruukki's airtightness guarantee cuts energy costs at Ikaalinen shopping centre in Finland

Ruukki launched a shopping centre concept that enables a maximum occupancy rate and energy efficiency. In 2013, Ruukki supplied and installed the steel frame, load-bearing trusses, roof structures and external walls for the Ikaalinen shopping centre in the town of Ikaalinen, Finland. The 9,000-square-metre centre will open in 2014 and house 16 shops. The shell of the shopping centre building has been built using Ruukki's airtight energy panel system, which can reduce the heating costs of a building by up to 20%. A steel frame building also means the premises can be quickly and cost-effectively modified in response to tenants' needs.
The shopping centre investor is Ikaalisten Portti Oy and the lead contractor is CastorCon Finland Oy.

SPECIAL STEELS

Optimised weight and lower fuel consumption with special steels

Ruukki is a cutting-edge developer and manufacturer of wear-resistant and high-strength steels. Our advanced manufacturing technology enables us to supply these products in a wide range of thicknesses. Ruukki's recyclable, high-strength and wear-resistant steels prolong the service life of equipment, improve material and energy efficiency and enable higher payloads compared to traditional steel solutions. High-strength structural steels are used in materials handling equipment and mobile machines, as well as in booms and other lifting equipment. The use of special steels reduces the weight of vehicle tipper body structures and enables a new type of structural design. The use of wear-resistant special steels in structures prolongs the service life of tipper bodies and thus promotes sustainability. Also the dead weight of vehicles is lighter, which in turn means higher payloads and improved fuel economy.

Ruukki Optim® special steels make it possible to reduce weight and improve performance. In applications requiring high load-bearing capacity, the use of high-strength steel reduces structural wall thickness, which through weight saving cuts the fuel consumption of mobile machines. The frame structures of trailers made using Ruukki Optim steels reduces their weight by up to 20–30% compared to using traditional steel grades. This enables increased payloads and lower fuel consumption and emissions.

Weather-resistant Optim 550W and Optim 960W structural steels combine high strength and resistance to atmospheric corrosion. This results in the longer service life of structures and less need for maintenance painting. The most recent addition to the Ruukki Optim steel product family is an increase in the dimensional range of Optim 700QL steel to 60 mm.

Longer lifecycle compared to traditional structural steel

Wear-resistant Ruukki Raex special steels are used in earthmoving and mining machines. Use of special steels in construction and mining industry equipment prevents structural wear and damage, thus prolonging the useful life of products. To take a case in point, the use of Ruukki Raex wear-resistant steel can considerably prolong the useful life of critical structures in mining equipment. Compared to structural steels, the useful life can be up to 4 or 5 times longer. In 2013, Ruukki added thicker grades to the dimensional range of Raex steels. Use of thick wear-resistant steels can reduce the maintenance frequency of mining industry machinery and equipment, enhance energy efficiency and thus boost cost efficiency.

Ruukki makes galvanised, ultra-high-strength Litec steel, which is one of the materials used for body-in-white manufacture in the automotive industry. Litec is about four times stronger than formable steel and has an extremely high ability to absorb energy or prevent penetration into the car cabin in the event of collision. Ultra-high-strength steel enables the material thickness to be reduced and therefore results in lighter, more fuel-efficient cars that retain the same safety factor. Ruukki is focusing highly on developing materials and applications for the manufacture of lightweight, more energy-efficient vehicles.

In 2013, Ruukki launched a new Z600 metal coating for applications requiring excellent corrosion resistance. The thick Z600 coating has a mass of 600 g/m2 of zinc and can withstand complex forming. Typical applications for Z600 coating include silos, culverts, traffic sign poles, crash barriers, electrical cabinets, frame structures and cable trays. Z600 coating can significantly prolong the useful life of products. For example, compared to the Z450 coating widely used in silos, the new Z600 coating can prolong the useful life of a silo by up to a third.

Ruukki's energy efficiency calculator

Use Ruukki's energy efficiency calculator to calculate the energy and cost savings that can be made using Ruukki's Optim and Raex special steels.

› Ruukki's efficiency calculator

STEEL LIFECYCLE

Ruukki aims to reduce the environmental loading of each steel product at each stage of the lifecycle, from production to recycling and at the same time ensure a sustainable supply chain. Most of the lifecycle energy consumption and emissions usually arise during the use of a steel product. We can impact on this by offering customers high-strength, energy-efficient and long-lasting solutions to prolong the useful life of a product and reduce energy consumption, environmental impacts and costs throughout the lifecycle of the end product.

Steel products can also be re-used and after having been taken out of use, the steel in them is fully recyclable. Steel retains its properties no matter how many times it is recycled. Use of recycled steel saves natural resources since it replaces the raw materials used in the iron-making process, whilst also reducing carbon dioxide emissions. Huge amounts of steel, around 580 million tonnes each year, are recycled globally. Depending on the steel grade, recycled steel accounts for up to 30% of the raw material used in the steel-making process at Ruukki.

According to lifecycle assessments, the degree to which a steel product is recycled has the biggest effect on the environmental impacts during steel's lifecycle. Worldsteel datasets provide accurate and comprehensive data on the environmental profiles of 14 steel products. Ruukki has actively contributed to worldsteel's lifecycle data collection. Product lifecycle inventory data (LCI) is available on request to all Ruukki stakeholders via worldsteel's website.

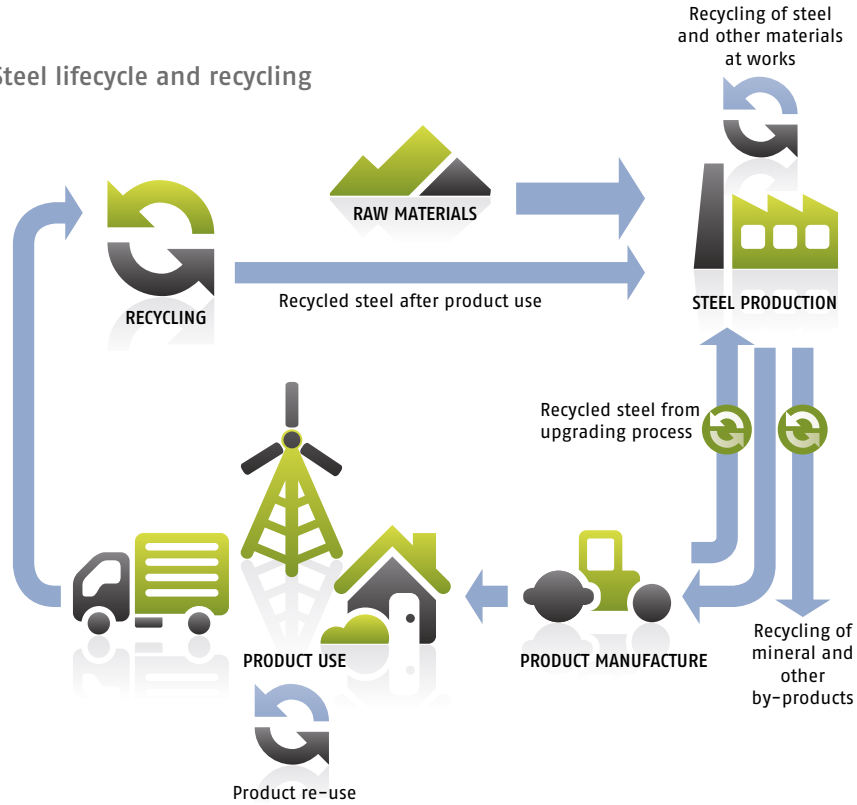
Ruukki has environmental product declarations for nine of its steel products. These declarations contain information about the lifecycle environmental impacts of products. Product declarations include information about the use of raw materials, energy consumption and emissions arising from production, as well as product recyclability. In addition, they include information about the safe use of products. Environmental product declarations are updated in conjunction with significant process changes or in the event of major changes in environmental impacts, standards and other requirements.

› Environmental declarations for Ruukki products

Case: Prolonging a building's lifecycle

The manufacture and transport of building materials account for a significant share of the energy used during construction. Transporting high-strength steels consumes less energy compared to other heavy materials since less steel is needed. Because of their strength, Ruukki's special steels enable lighter, stronger structures, which translate into long spans and thus greater modifiability and more open interiors in a building. Modifiability can prolong the lifecycle of a building by allowing flexibility to meet changing user needs.

Steel lifecycle and recycling



ENVIRONMENTAL IMPACTS

The most significant environmental impacts at Ruukki arise in steel production at the Raahe Works and at the start of the upgrading process in Hämeenlinna. The greatest environmental impacts are the use of energy and raw materials, as well as carbon dioxide and particulate emissions. Ruukki monitors the emissions originating in its operations both at production sites and in their vicinity to ensure compliance with emissions limits and to improve environmental performance.

In 2013:

- we avoided 580,000 (600,000) tonnes of carbon dioxide emissions by recycling compared to using iron-making feedstock in steel production
- 100% of our sites have ISO 14001 environmental management certification
- process changes and replacement of dust removal devices in iron production have reduced particulate emissions by over 85% since 2011
- the decrease in particulate emissions at the Raahe Works is evident in bioindicator studies as a contraction of the area affected by heavy metals
- energy efficiency actions at production sites delivered energy savings of 41 (76) GWh in 2013
- amount of municipal waste decreased by 30% compared to the previous year
- in 2013, Ruukki spent over €23 million (15) on environmental investments

SIGNIFICANT REDUCTIONS IN EMISSIONS

Ruukki actively seeks to reduce the environmental impacts originating in its steel production by developing steel-making processes. By focusing on energy and material efficiency, and by investing in environmental technology, we have successfully significantly reduced emissions over the past decades. The blast furnaces at the Raahe Works rank among the world's most efficient.

In the 1980s, low-sulphur iron ore concentrate was chosen as a raw material in steel production at Raahe. The change resulted in a reduction in annual sulphur dioxide emissions from over 50,000 tonnes to 10,000 tonnes. Likewise, sulphur emissions halved in the 1990s when a sulphur scrubber was installed in the coking plant at the Raahe Works in 1993. In addition, choice of fuels has also led to a fall in sulphur dioxide emissions.

At the end of 2011, the Raahe Works switched over to using only iron pellets instead of a mixture of iron ore concentrate and pellets as a feedstock in the iron-making process. Both blast furnaces were modernised in 2010–2011 and employ new particulate capture and scrubbing systems. Environmental investments made in previous years and the change in blast furnace feed stock made in conjunction with closure, in 2011, of the sinter plant have significantly reduced emissions into the air and energy consumption at the Raahe Works. New solutions have eliminated the considerable share of environmental emissions attributable to sintering at the works. Measurements show specific carbon dioxide emissions have fallen by 10% at the works and energy consumption by over one gigawatt hour, 11%, compared to 2011. Dust emissions have decreased by as much as 85%, fugitive dust from transport and storage by 18% and sulphur dioxide emissions by almost 70% since 2011.

The dust extraction devices were replaced and new blast furnace slag granulation units were built in conjunction with the modernisation of both blast furnaces at the Raahe Works. The units were converted from a hot-water system to a so-called cold-water system, where the closed circulation water is cooled in towers. The malodorous sulphur compounds are condensed into the circulation water in condensation towers. Because the system is closed, the amount of malodorous sulphur compounds has decreased. The closed cooling water circulation system in

blast furnace slag granulation has considerably reduced the discharge of suspended solids into the sea and decreased the use of fresh water.

The processes at Ruukki's steel works in Raahe give rise to dust, sludge, scale, fine scrap and slag. These were earlier returned to production through the sintering process. Since the sinter plant was closed at the end of 2011, these materials have been processed through a briquetting plant, which began operating in March 2012. In the briquetting process, dispersoids are compressed into briquettes using binding agents and returned to the blast furnace process as a raw material in iron-making.

Particulate emissions at the Raahe Works originate from traffic, materials handling and various process operations. Emissions escape into the air at points, for example, from smoke stacks on the works site and as fugitive dust from piles of materials and roof openings. Emissions are captured primarily by using dry filters in addition to cyclones and scrubbers. To prevent dust, piles of materials are watered and screening plants and fences are built.

Many actions have resulted in decreased particulate emissions:

- in the 1980s, construction of dust extractor systems in the blast furnace casthouses and stockhouse, modernisation of the multicyclone in the sinter plant and process changes reduced emission volumes
- in 1991, a new dust extraction plant in the lime burning kiln further reduced particulate emissions by about 700 tonnes
- in 1998, a new centralised dust extractor system in the steel plant reduced emissions by about 150 tonnes a year
- in the first decade of the 2000s, the reduction of particulate emissions was improved by deploying an electrostatic precipitator for flue gases for sintering machines, by improving dust recycling and by replacing dust extractor systems
- in the 2010s, environmental investments, closure of the sinter plant and the ensuing change in feedstock has reduced particulate emissions by more than 80%

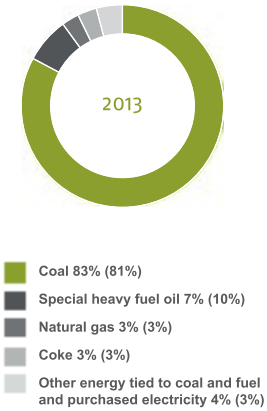
ENERGY AND RAW MATERIALS

Consumption of raw materials at Ruukki consists primarily of iron ore pellets, coking coal used as reduction agent and the use of recycled steel at the Raahe Works. In 2013, it took 2.21 tonnes (2012: 2.21) of raw materials to make a tonne of steel.

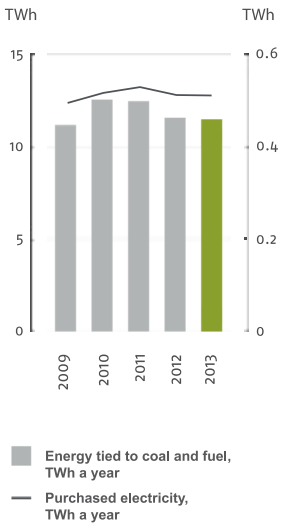
Ruukki's total energy consumption at production sites in 2013 was 11.6 terawatt hours (2012: 12), which equates to around 3% (3) of Finland's total energy consumption. Most of this energy is consumed by the Raahe Works, which accounts for 94% (94) of the whole company's energy consumption.

Process gases and heat from iron- and steel-making at the Raahe Works are recovered and used to produce electricity and district heat. Use of this energy accounts for 49% (49) of the company's total energy consumption.

Sources of energy



Energy consumption

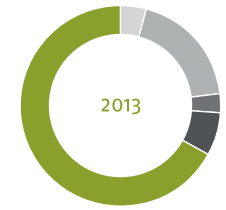


RECYCLING

Recycling significantly reduces carbon dioxide emissions in the steel production process because the use of scrap steel replaces raw materials in iron-making. In 2013, use of scrap steel reduced carbon dioxide emissions by 410,000 tonnes (2012: 420,000 tonnes), which equated to around 11% (11) of Ruukki's total carbon emissions.

Effective utilisation of by-products improves material efficiency and decreases environmental impact and the use of natural resources. In terms of volume, the most significant by-products are mineral products, which are used, for example, as a substitute for natural stone aggregate in earthwork construction, limestone in agriculture and clinker in the cement industry. In 2012, Ruukki sold around 470,000 tonnes (2012: 313,000) of mineral products. Use of Ruukki's mineral products in the cement industry and agriculture reduced global carbon dioxide emissions by a total of 166,000 tonnes (2012: 170,000) during the year. Around 190,000 tonnes (2012: 190,000) of Ruukki's mineral products were used in earthworks and road construction.

Share of avoided CO_2 emissions by recycling and energy recovery compared to realised CO_2 emissions



- Realised CO_2 emissions, 67% (66%)
- Steel recycling, 7% (7%)
- Recycling of mineral products, 3% (3%)
- Recycling of process gases, 19% (19%)
- Recycling of process heat, 4% (4%)

Recycling and energy recovery reduces CO_2 emissions by 33% (34)

WASTE

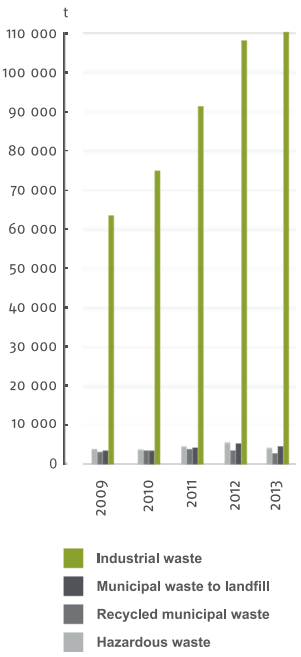
We utilise waste originating in the production process primarily as a material and secondly as energy. The waste material arising in our own processes is used as feedstock in production. Analyses show that the sorting of scrap steel enables optimal efficient utilisation of material and saves the filler materials used in steel manufacturing.

Around 70% of the dust and sludge arising in steel production at the Raahe Works is returned to the production process. Some of the dust has to be stored at a landfill site on the works site until there is a technically and economically viable solution to recycle it. The amount stored as dry substances equates to around 1% of the raw material used by the works.

In 2013, Ruukki produced 3,700 t (5,000) of municipal waste to landfill, 2,000 t (3,300) of municipal waste to recycling, 3,500 t (5,500) of hazardous waste and 110,700 t (108,300) of industrial waste. We recycled 35% (2012: 40) of municipal waste. The rolling mills and coating lines produce most of the hazardous waste, which is mainly oily waste, and sludge and sediment from wastewater treatment. This waste is used mostly as material and energy by a partner.

Ruukki has improved the use of material and reduced the amount of waste arising by studying waste management at the sites and updating instructions on materials processing and sorting. The amount of municipal waste decreased by 30% compared to the previous year. The sites and the commitment of their personnel to reducing waste are key to sorting.

Waste



EMISSIONS INTO THE AIR

In 2013, Ruukki's carbon dioxide emissions were 3.8 million tonnes (2012: 3.8), which equated to around 7% (7) of Finland's greenhouse gas emissions. The raw materials used in the production of pig iron in the blast furnaces are the main source of carbon dioxide emissions.

Consumption of coking coal in our steel production process is close to the minimum possible. Compared to the European average, for example, Ruukki's steel production generates around 250,000 tonnes less carbon dioxide emissions each year. The company seeks to further reduce carbon dioxide emissions, especially by improving energy and material efficiency.

The combustion processes and fine material used in iron and steel production give rise to particulate emissions into the air. The results of Ruukki's particular focus between 2010 and 2013 to reduce particulate emissions can be seen in a strong reduction in both particulate emissions and heavy metals emissions. In 2013, particulate emissions, excluding fugitive particulate emissions, totalled 215 tonnes (225). When including fugitive particulate emissions the total was 1,411 (1,455) tonnes. Particulate emissions contain heavy metals, which originate mainly from the iron ore pellets, coking coal and recycled steel used as raw materials. Emissions of volatile organic compounds (VOC) occur in the use of coatings and protective and profiling oils in the further processing of steel.

Around 1,400 tonnes (1,000) of sulphur dioxide emissions originate from the sulphur contained in raw materials and accounted for around 2% (2) of Finland's sulphur dioxide emissions. Modernisation of the coke gas desulphurisation plant resulted in higher sulphur emissions in 2013. However, the closure of the sinter plant and the switch to using iron ore pellets has resulted in a heavy reduction, 70%, in sulphur dioxide emissions compared to 2011.

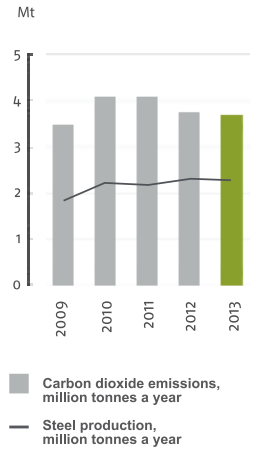
Nitrogen oxide emissions are mainly formed in the combustion processes in the coking plant and rolling mills at the Raahe Works. In 2013, nitrogen oxide emissions totalled 1,480 tonnes (1,800), which equates to around 2% (1) of Finland's nitrogen oxide emissions.

Heavy metal emissions into the air, kg	2013	2012	2011	2010	2009
Arsenic	12	34	52	10	56
Cadmium	2	5	121	76	56
Chromium	261	247*	453	436	282
Copper	756**	340	724	669	426
Lead	75	116	2,266	3,422	1,856
Mercury	0	0	0	1	25
Zinc	1,327	1,421	2,638	3,891	3,039

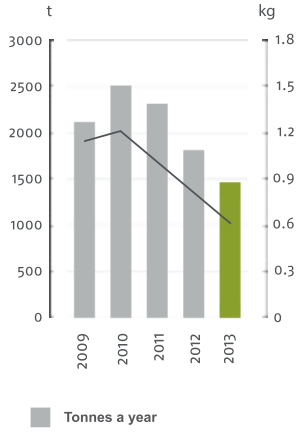
* Chromium emissions corrected for 2012.

** The annual fluctuation in copper is due to the steel grade used and furnace conditions when measurements are taken. Measurement is taken once a year.

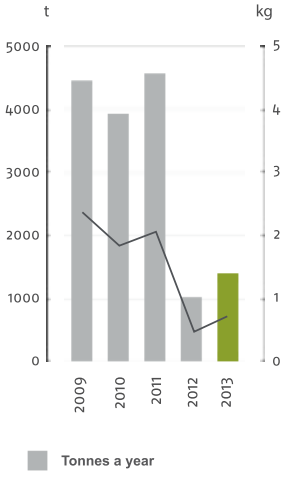
Carbon dioxide emissions



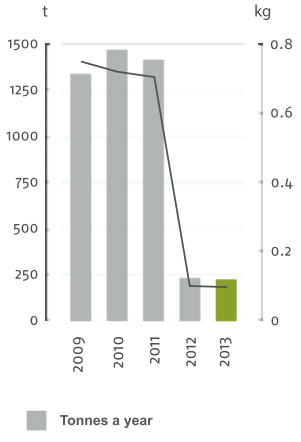
Nitrogen oxide emissions



Sulphur dioxide emissions



Particulate emissions



EMISSIONS INTO THE WATER

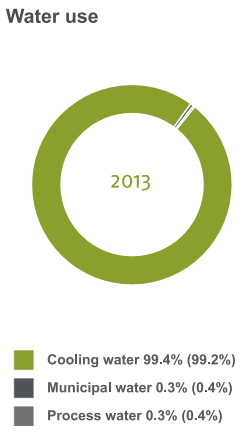
Discharges of effluent into the waterways consist mostly of suspended solids, which contain calcium, magnesium and silicon compounds, and originate from from the steel plant and blast furnaces at the Raahe Works. Oily emissions originate from the rolling process.

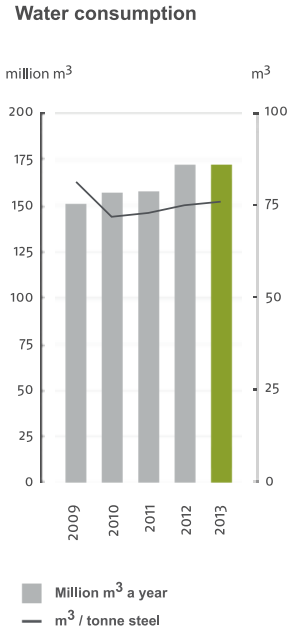
The following table shows effluent discharge into the waterways in 2013.

Effluent discharge into the waterways, t	2013	2012	2011	2010
Suspended solids	958	551	982	1,150
Chemical oxygen demand, COD	176	178	193	208
Oil	14	12	15	10
Zinc (Zn)	1	0.5	1	1
Nitrogen (N)	68	40	38	35
Iron (Fe)	62	31	62	79

USE OF WATER

In 2013, Ruukki consumed 170 million (170) cubic metres of water, 75 cubic metres per tonne of steel produced. Most of the water was used by the Raahe Works, which accounted for 95% of the total water used. Water is used at production sites mostly in processing, cooling and in scrubbing flue gases at the steel works and rolling mills. Of the water used, 99% (99) was for cooling purposes. A large share of the water used in production at Ruukki is cleaned and re-used. Actions are taken to prevent the risk of contaminating local water resources.





TRANSPORTATION

Transportation at Ruukki consists of transporting both products and raw materials. Ruukki continuously assesses the environmental impacts of its total logistics chain and takes energy efficiency into account in logistics solutions when working with transportation subcontractors.

One of Ruukki's energy-efficiency targets is for logistics partners to sign up for energy efficiency agreements in the Finnish transport and logistics sector so that 60% of Ruukki's partners have signed up for agreements in Finland by the end of 2016. The energy efficiency agreement aims at 9% in energy savings, compared to 2005 levels, by 2016. In 2013, about 50% of all land transport contractual partners had signed up for energy efficiency agreements. Around 85% of Ruukki's land transportations per tonne of products are carried by a partner signatory to energy efficiency agreements.

Ruukki's international contractual partners have certified environmental management systems and they are generally committed to reducing carbon dioxide emissions, which in turn

means lower energy consumption. When reviewing contracts, logistics firms outside an energy efficiency agreement are regularly encouraged to sign up for one.

The table below shows Ruukki's transportation by mode of transport. Transport of raw materials at Ruukki consists of the raw materials needed in steel production. Ruukki has total transportation of around 8 million tonnes of raw material and 11.5 million tonnes of products.

Transportation at Ruukki by mode of transport in 2013

% of total transportation	By sea	By rail	By road
Raw materials	50%	36%	14%
Products	8%	2%	90%

ENVIRONMENTAL PERMITS

Of Ruukki's production sites, 17 (22) have operations that require an environmental permit. The change since the previous year is because some production sites were transferred to Fortaco Group Oy in December 2012. Violations of permit limits are dealt with actively. In 2013, there were violations of permit limits at 1 (2012:3) sites. These incidents were occasional and caused no significant impacts to health or the environment and the company received no significant environmental fines.

In May 2013, the Raahe Works submitted an application to the Regional State Administrative Authority for Northern Finland to review the environmental permit. A decision about the application is expected towards the end of 2014. Besides Raahe, the following plants also submitted applications to review their environmental permits: the Kankaanpää and Lappohja plants in Finland, the Kiev plant in Ukraine and the Obninsk and Balabanova plants in Russia. The Zyrardow plant in Poland had no rainwater treatment permit. This came to light after asphalt work in the yard at the plant. Negotiations to solve the problem have been initiated with the city authorities and the owner of the sewer system.

Violations of permit limits in 2013

Permit limits for oil discharges into the waterways were violated at the Raahe Works. The most common cause of violations was oil emissions escaping into cooling systems. Not all the oil was recovered and some entered the wastewater sewer and escaped into the waterways. Corrective actions included dredging the oil separation well, replacing the oil recovery and processing system and reviewing working practices. The wastewater connections in the seawater sewer have been studied, systematically inspected and the most likely leaks have been repaired.

Additionally there were violations of permit limits for particulate emissions in boiler 4 related to the use of additional fuel. In early 2013, the VOC combustion plant failed to reach the permit limit, but after thorough corrective actions the result was once more below the limit. The violations of permit limits accounted for 1.36% of all existing permit limits at Raahe.

ENVIRONMENTAL NON-COMPLIANCES

Ruukki records all environmental damage and other environmental non-compliances in the Safety Tool system. In all cases of slight environmental damage occurring at Ruukki production sites, swift corrective action was taken and prevented the occurrence of damage to health and the environment.

Raahe Works

A total of 56 cases of environmental damage, permit limit violations or other environmental non-compliances were recorded at the Raahe Works in 2013. During the year, there were five cases of environmental damage where oil escaped into the waterways. These have been reported as violations of permit limits. Cases of slight environmental damage involved oil leaks,

which were cleaned up, on the ground from vehicles or equipment, the soiling of vehicles on the works site because of fugitive dust emissions, or temporary particulate or fugitive emissions.

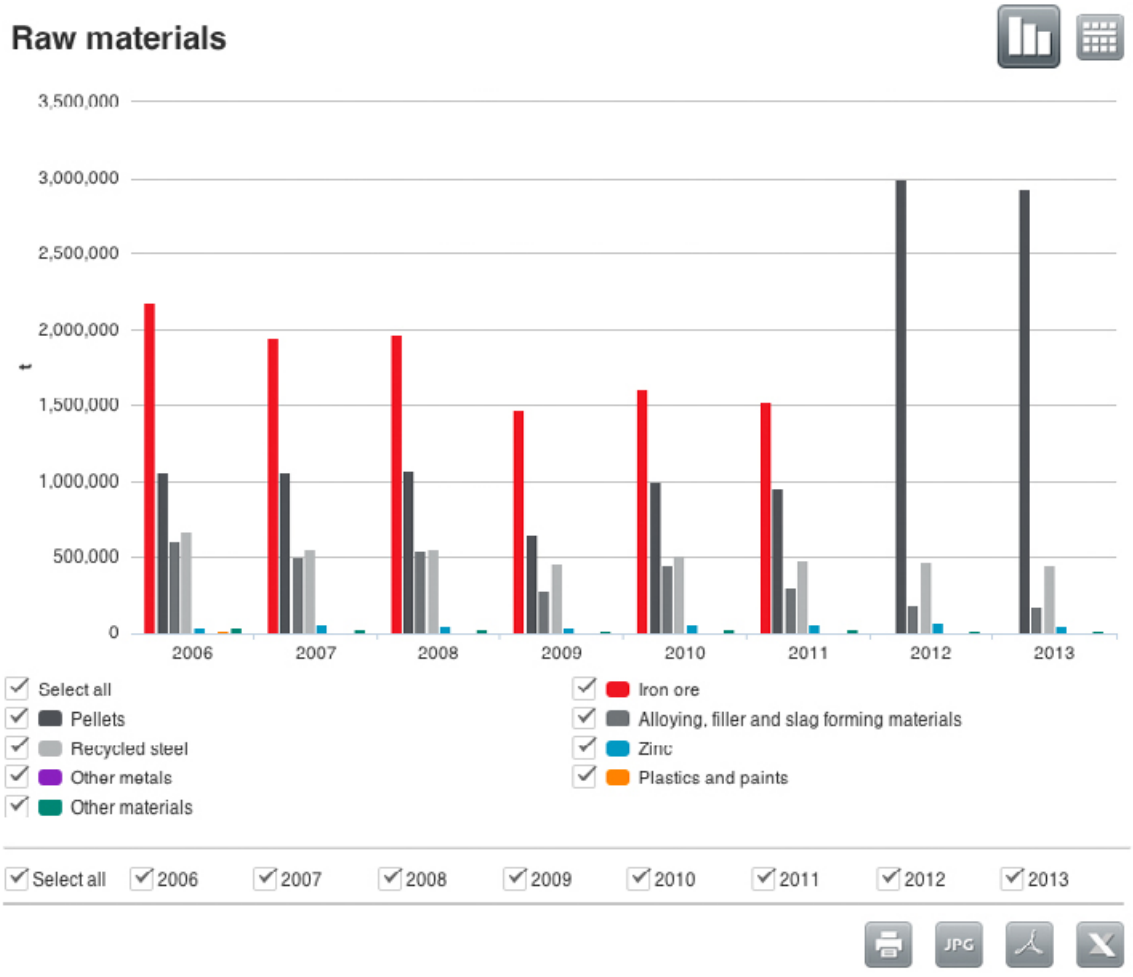
Other sites

A total of four cases of slight environmental damage occurred at Ruukki's works in Hämeenlinna and Vimpeli. These were caused by a broken tractor gearbox, broken oil pipe in a lorry, a pallet containing accumulators falling to the ground and a broken hydraulic hose in a refuse vehicle. In all cases, immediate corrective action was taken and no liquids entered the soil.

A case of environmental damage was reported at Ruukki's bridge construction site in Sweden, where paint entered the waterways. Ruukki reacted to the incident by clarifying instructions and working practices when painting. In future, site protection will be better dealt with to prevent similar incidents.

ENVIRONMENTAL DATA MONITOR

Rautaruukki's environmental figures can be viewed via this environmental data monitor. The monitor enables you to create charts and tables from selected figures and download them into excel, pdf or jpg format.



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› Environmental data monitor

ENERGY AND MATERIAL EFFICIENCY

Material efficiency

During the actual steel production process, Ruukki makes a considerable amount of by-products that are valuable materials. These can be almost fully re-used: scrap steel continues its lifecycle as a raw material in steel production and mineral products created as by-products can be used in civil and highway engineering and as soil conditioners. In 2013, Ruukki avoided almost 580,000 tonnes of carbon dioxide emissions by recycling mineral products.

Ruukki processes and markets blast furnace slag and steel slag created as by-products in steel production to turn them into mineral products that can be used as a substitute for natural resources. Mineral products are used in civil and highway engineering, as soil conditioners and as raw materials for industry. The good thermal insulation and bearing capacity of blast furnace sand make it an ideal material for road and street bases, the underfloor filling of building foundations and to insulate pipeline trenches, for example. The environmental characteristics of these mineral products are tested regularly in accordance with EN 12457-3 and they also have CE marking. Use of mineral products saves non-renewable natural stone aggregates because bases can be made thinner with mineral products than with natural materials. Thinner bases mean less transportation, which translates into savings in material and fuel costs.

Most of the scrap steel originating in conjunction with production at Ruukki is returned to the steel-making process as a raw material. This saves natural resources and energy. The tar, benzene and sulphur generated as by-products in the coking process at the Raahe Works are used as feedstock in the chemical industry. Most of the tar is used as a fuel in the iron-making process. The zinc slag from galvanising at the Hämeenlinna Works in Finland and at the Virsbo plant in Sweden is recycled to make, for example, zinc oxide. In addition, the iron oxide originating in Hämeenlinna during the pickling process is supplied as a raw material for permanent magnets and ferrite, etc.

Ruukki aims to promote the use of materials originating and made in conjunction with its own production activities in its own processes and thus reduce raw material costs in production.

Energy efficiency

Energy efficiency in Ruukki's operations

Improving energy efficiency is one of the most cost-effective ways to tackle climate change. Ruukki had been aiming at improved energy efficiency, lower costs and reduced emissions in production for a number of years even before the existence of today's international climate agreements. In practice, this is achieved by the use of energy-efficient technology and by using the process gases and residual materials generated in our own production processes to replace fuel and raw materials purchased. Energy efficiency is taken into account in decisions concerning investments and production development and in product and process planning. In addition, changing steel production runs, training and changes in feedstock have delivered significant savings compared to earlier without projects.

Steel production at Ruukki ranks among the world's most carbon dioxide efficient, with coal and energy consumption approaching the minimum possible using existing technology. In iron making, coking coal is used primarily as a reducing agent. Most of the energy used in ore-based production is based on coking coal used as a reducing agent. In the use of coal, Ruukki's blast furnaces rank amongst the most efficient in European comparative studies. Compared to the European average, Ruukki's steel production generates almost 250,000 tonnes less carbon dioxide emissions a year. There are no short-term technical and economic solutions available to significantly decrease the consumption of reducing agents.

Ruukki is signatory to energy agreements for 2008-2016 by the Ministry of Employment and the Economy, Confederation of Finnish Industries EK and organisations in the sector.

Energy efficiency management is systematically promoted at all Ruukki's production sites as part of ISO 14001 environmental management systems. Energy reviews and analyses are the tools used to assess the potential for energy savings and improved use of energy.

Energy recovery at steel mill

Most of the energy used at the Raahe steel works comprises the coking coal used as a reducing agent in the steel production process. The process gases originating in the blast furnaces and coking plant cover most of the fuel consumption at the entire works. Around 50% of the electricity needed by Raahe steel mill is produced from own process gases. Using best available technology, the process gases are used in all production departments and the variable surplus volume is used to generate electricity at maximum efficiency.

Efforts are constantly under way to maximise the use of gases and to minimise the use of fuel and electricity sourced from outside.

The coke oven gas arising in the coking plant is used as a fuel in different processes. In blast-furnace based steel production, iron ore is reduced to iron using coke made from coking coal, together with oil, in the blast furnace. The blast furnace gas originating in the blast furnace is used as the main fuel to pre-heat the blast air for the furnace and at the power plant is generated into power and heat to meet the works' needs.

In 2013, blast furnace and coke oven gases were recovered to produce 1.5 TWh of energy, which equates to the annual energy used by more than 70,000 single-family homes.

The third process gas is converter gas, which is generated in the steel plant when oxygen is used to burn the carbon contained in the raw iron into coal gas. The heat and chemical energy contained in the converter gas is used in the production of district heat. Enough heat is recovered from the converter and used in the district heat system to meet the annual heating needs of around 20,000 single-family homes. In addition, Ruukki is the only steel company in Western Europe to utilise the high-pressure steam from the dry quenching of coke in electricity production.

The heat and steam generated in production processes at the Raahe Works are used for electricity production and heating on the site and as district heat for the city of Raahe. In 2013, the company sold 183 000 MWh (2012: 196,000) of district heat, which was enough to almost meet the needs of the Raahe area. Over 60% of Raahe inhabitants are within the catchment area of the district heat network and over 90% of the heat originates at Ruukki's Raahe Works.

ENVIRONMENTAL INVESTMENTS

Ruukki continuously monitors the emissions arising from its operations both at production sites and in their vicinity to ensure compliance with emissions limits and to improve environmental performance. In 2013, Ruukki spent a total of €23 million (2012: 15) on environmental investments.

The Raahe Works in Finland is the most significant unit in terms of environmental impacts and, in 2013, accounted for around 90% (2012: 94) of Ruukki's total environmental investments. Around 98% of Ruukki's carbon dioxide emissions originate from Raahe.

Environmental investments at the Raahe Works

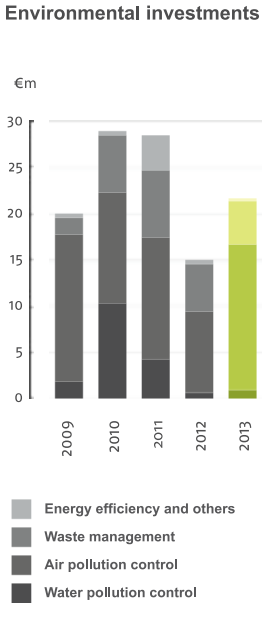
Ruukki's largest air pollution control investment and the largest single environmental investment at the Raahe Works in 2013 was an improvement in recovering fugitive dust emissions at the steel plant and the associated new particulate filter device. The investment means that the filter now captures more than 90% of fugitive dust and dust can be increasingly recycled as a raw material. The investment has a major impact on reducing fugitive dust at the works since earlier, the fugitive dust at the steel plant remained unused.

Other environmental investments at the Raahe Works in 2013 included replacement of the old dust removal device of the flame cutting machine, finishing work at the briquette plant, surface water drainage at the import quay and replacement of the chemical containers and their storage space at the power plant. Clarifier loading at the plate mill was reduced and oil separation was improved in the same context by separating clean cooling water from wastewater. Oil leaks at the strip mill were reduced by installing oil collection sumps for screws.

Environmental investments at other sites

The largest single environmental investment at the Hämeenlinna Works in 2013 was replacement of the scrubber and chimney at the regeneration plant. In addition, investments were made in colour-coating equipment at the works to enable excellent chromium-free conversion chemical coating on a galvanised steel surface. The change introduced will reduce diverse environmental impacts in production. The project progressed in stages and by the end of the year had resulted in a number of chromium-free product groups for both interior and exterior premises so that most products can be supplied chromium free. Ruukki continues to work on this front so that in future all colour-coated products can be provided without chromium.

Ruukki's works in Lappohja switched over to using a waste compactor and the works intends to sort all waste for productive use. Ruukki Metals' service centre in Seinäjoki, Finland, for example, switched over to LED lighting. The service centre in Naantali completed a roof renovation and as a result saves in heating costs. Environmental investments at the site in Virsbo, Sweden related to improvements to water protection and waste processing. At Oborniki in Poland, work was done to improve the external walls and an investment was made in a wastewater separator to improve wastewater treatment. In addition, the heating plant was modernised, which considerably improved heat recovery at the site. Likewise, the plant switched over to using LED lighting, replaced the lift doors and invested in waste recycling containers.



OUR OPERATING ENVIRONMENT

Ruukki operates in an international environment, which is affected by many international agreements and especially by EU legislation. Ruukki takes thorough steps to actively track and anticipate future changes in environmental legislation.

We actively participate in joint projects and organisations to support the company's aims of developing energy-efficient products and solutions for customers.

Ruukki has production in 15 countries, whose legislation is tracked locally. The most significant operations in terms of environmental impact are located in Finland. The adjacent table sets out environmental factors that impact on Ruukki's operating environment and products.

Sets of acts, standards and stakeholders that Ruukki actively tracks:

- Acts relating to reserve power and capacity
- Chemicals legislation
- Eco-design requirements for products
- Electricity and energy taxation
- Electricity market legislation
- Electricity transmission and grid legislation
- Emissions ceilings for traffic
- Energy efficiency in production
- Environmental criteria for public procurements
- Environmental labelling criteria
- Environmental rating systems for buildings
- Environmental restrictions relating to shipping
- EU's carbon emissions trading and international climate negotiations
- Fertiliser legislation
- Industrial emissions and environmental protection
- Legislation concerning renewable energy resources
- Requirements concerning environmental data to be given about products
- Requirements for the energy performance of buildings and building products
- Resource efficiency
- Restrictions on the use of hazardous substances in electrical and electronic equipment
- Rules on the origin of electricity at national and EU level
- Waste legislation and taxation
- Windfall and uranium taxation

CLIMATE CHANGE

Curbing climate change by improving energy efficiency in production

Ruukki is well placed in its own energy and materials efficiency to also reduce the carbon footprint of end-products. From the product lifecycle perspective, steel is an energy-efficient product since it can be fully recycled without losing its properties.

Business opportunities related to curbing the impacts of climate change are assessed and taken into account in Ruukki's strategy process. Energy efficiency is a key theme in the development of Ruukki's products. Our blast furnace coking coal consumption makes steel production at Raahe among the world's most carbon dioxide efficient. There are no short-term technical and economic solutions available to considerably decrease the consumption of coking coal used as a reducing agent.

During 2013, Ruukki reduced global carbon dioxide emissions by a total of 2 million tonnes by improving energy efficiency in production and by recycling steel and mineral products. We produce about 50% of the electricity we require by using the process gases and heat arising as by-products in production. We implement cost-effective investments in energy efficiency. In addition, Ruukki is involved in carbon-dioxide-emission-free electricity production development projects so that the company can avoid unfavourable financial impacts caused by emissions trading in sourcing electricity in the future.

As regards transportation, preparation for climate change must consider the rising cost of fossil fuels and increased regulation applying to energy efficiency and emissions in traffic. Ruukki is actively monitoring the impacts of stricter EU traffic regulations. Rail is the most energy-efficient mode of transporting goods within Finland. Road transport contractual partners are encouraged to sign up for energy efficiency agreements and thus for energy savings. Around 85% of Ruukki's land transportations and 65% of Ruukki's road transportations per tonne of products are carried by a partner signatory to energy efficiency agreements. Ruukki works in close cooperation with its haulage subcontractors to develop energy efficiency and delivery reliability.

Ruukki has taken steps in its own operations to prepare for the impacts of climate change. Risk analyses as the Raahe Works take into account weather phenomena and extreme conditions. Measures taken are forecasting, preparation for protection and drills. In addition, situational awareness analyses have been made to help safeguard continuity also in subcontracting processes.

Steel Roadmap for a Low Carbon Europe 2050

The Steel Roadmap for a Low Carbon Europe 2050 was produced in response to the European Commission's "Roadmap for moving to a low-carbon economy in 2050" published in 2011. The Commission's roadmap assumes the steel sector will achieve 88-92% emissions reductions compared to 2005. This would be in addition to the emissions reduction of around 20% already achieved across the industry (1990 - 2005).

The Steel Roadmap for a Low Carbon Europe 2050 is a holistic approach to emissions reduction potential from the production and product perspective. The conclusion of study is unambiguous: there is currently no technical and economical solution in sight which would put the emissions reductions envisaged by the Commission within reach of the steel sector.

The steel industry has cut carbon dioxide emissions by around 25% between 1990 and 2010. The remaining realistic potential is a cut of around 15% by 2050. This would require, inter alia, low-carbon electricity production, a greater use of scrap steel and the use of best available technologies. The availability of scrap steel, for example, will still considerably limit the emissions reduction potential in 2050.

Increasing this potential calls for the commercialisation of many breakthrough technologies and massive investment in infrastructure, including carbon capture and storage (CCS) systems. This scenario would theoretically result in emissions reductions of about 60%. Should similar sanctions not be in place outside Europe, the deployment of break-through technologies would not be possible without the collapse of competitiveness.

The Roadmap for a Low Carbon Europe 2050 also examined the role of steel as a mitigating factor of climate change in other sectors. The CO2 balances were analysed in product applications where steel is the only material enabling emissions reductions. Examined in the light of eight case studies on selected steel applications, use of steel resulted in significant savings that were six times greater than cautious estimates of the emissions released in steel production. Based on these results, we can conclude that all use of special steels amounts to at least double the emissions reductions compared to the emissions released in their production.

Eurofer's low carbon roadmap can be viewed in full at www.eurofer.org

LEGISLATION AND OTHER CRITERIA

EU emissions trading

The European Union has its own binding carbon dioxide emissions reduction target. Greenhouse gases must be cut by 20% by 2020. Tougher emissions reduction targets and new regulations meant that fewer free emissions allowances than earlier were allocated to industry for the 2013–2020 emissions trading period. The steel industry now receives emissions on the basis of efficiency, which means companies like Ruukki that have invested in low emissions benefit from their efficiency. Steel production at Ruukki ranks among the top performers in terms of carbon dioxide efficiency: compared to the European average, Ruukki's steel production generates around 250,000 tonnes less carbon dioxide emissions a year.

Ruukki's carbon dioxide emissions in 2013 totalled 3.8 million tonnes in (2012: 3.8), of which 99% came under the EU's Emissions Trading Scheme. As regards operations, the Raahe Works and Hämeenlinna Works in Finland come within the scope of this scheme. Hämeenlinna's share of carbon dioxide emissions covered by emissions trading is more than 10 times higher for the new emissions trading period. This is because besides the works' steam boilers, combustion plants with a capacity of < 20 MW are now also included as emissions sources. In 2013, trading in emissions allowances generated income totalling €0.3 million (4). The final number of free emissions allowances awarded in the initial allocation for the third emissions trading period 2013–2020 has yet to be confirmed.

As part of managing the carbon dioxide emissions balance, Ruukki is a participant in the World Bank's Community Development Carbon Fund and GreenStream Network Oy's Climate Opportunity Fund. Ruukki also participated in GreenStream Network Oy's Fine Carbon Fund, which closed in 2013. These funds purchase certified emissions reduction units, based on the Kyoto Protocol that can be used in the EU's Emissions Trading Scheme. The balance sheet value of emissions reduction funds and funds yielding emissions reductions totalled €3 million (3) at year-end 2013.

Emissions trading impacts on the market price for electricity because the cost of emissions allowances is transferred to the price of all market electricity via the production cost of coal condensate electricity. Coal condensate electricity production is often the form of production that sets the price level of electricity. Ruukki manages electricity price risks through electricity derivatives and long-term supply contracts.

Ruukki actively tracks changes in the EU's emissions trading legislation that have significance for production and freight alike. Compulsory regional emissions or other policy instruments cover only part of global steel production. The EU Emissions Trading Scheme as such is already considerably more binding than in other areas. Future EU targets may be further tightened. There is currently no solution in sight that would level the regulatory playing field for the global steel industry. Additional costs impact on Ruukki's competitiveness, especially if the same rules of play do not apply equally to all players in the field.

Energy Efficiency Directive

The EU also has an energy efficiency target alongside the target to cut greenhouse gases. Energy savings of 20% must be made by 2020. To promote achievement of this target, the European Union adopted a recast Energy Efficiency Directive (EED) in autumn 2012. This requirement also challenges Ruukki to continuously improve energy consumption.

We are already committed to the energy agreements for 2008–2016 by the Ministry of Employment and the Economy, Confederation of Finnish Industries EK and organisations in the sector. A new agreement period will be launched in early 2017. Energy reviews and analyses are the tools used to assess the potential for energy savings and improved use of energy.

Environmental protection legislation

Of Ruukki's production sites, 17 have environmental permits as required by environmental legislation and operate in compliance with them. In 2010, the EU provided for more stringent emissions regulations for industry and the implications of these requirements are being studied. In May 2013, the Raahe Works submitted an application to the Regional State Administrative Authority for Northern Finland to review the environmental permit. A decision about the application is expected towards the end of 2014. Besides Raahe, the following plants also submitted applications to review their environmental permits: the Kankaanpää and Lappohja plants in Finland, the Kiev plant in Ukraine and the Obninsk and Balabanova plants in Russia.

Sulphur Directive

The International Maritime Organization (IMO) and the EU decided the new sulphur content limits of fuels effective as of 1 January 2015. This will reduce the maximum permitted content of sulphur in shipping fuels in the Baltic Sea to 0.1%.

The Sulphur Directive entering into force at the start of 2015 will increase shipping costs. International maritime regulation of carbon dioxide, a reduction in nitrogen and particulate emissions, together with possible emissions trading will also add to shipping costs. Shipping companies are preparing for the entry into force of the Sulphur Directive by investing in vessels fuelled by liquefied natural gas or fitted with sulphur scrubbers or by using more expensive low-sulphur heavy fuel oil or gasoil. All the alternative solutions imposed by the Sulphur Directive will serve to increase shipping costs.

REACH

The REACH Regulation entered into force on 1 June 2007 in all European Union member states. REACH aims to improve the protection of human health and the environment against the risks of chemicals and to enhance the competitiveness of the EU chemical industry. Ruukki actively tracks the progress of REACH in many different forums including Eurofer, the European Steel Association.

Ruukki acts as manufacturer, importer and user of substances and articles that REACH applies to. We submit information about the registration of substances and of any hazardous substances in the supply chain. The chemical safety data sheets for our products comply with the requirements of Europe's revised chemical legislation. Ruukki employs a chemical safety data sheet management system to improve management of up-to-date information about the use of chemicals. In addition, Ruukki communicates with stakeholders about any requirements regarding REACH and Ruukki's products when obligations change. Ruukki works actively together with the supply chain to replace substances regulated by REACH with safer ones as soon as possible. Thanks to effective monitoring and active work with stakeholders, Ruukki's products comply with the requirements of REACH.

Queries about REACH matters can be submitted to reach@ruukki.com

› Read more about the REACH regulation

Energy efficiency requirements in traffic

Traffic accounts for around a third of global carbon dioxide emissions. Mobile machines are estimated to be the second largest source of emissions, which makes them a larger source of carbon emissions than aircraft traffic and shipping. The EU has put in place an emissions reduction target of 60% for road transport by 2050. This calls for a significant improvement in energy efficiency. Materials, engineering and design have a key role in the EU's strategy to reduce emissions from mobile machines on the road since the fuel economy of mobile machines is largely determined by weight and payload.

Ruukki has promoted the energy efficiency of mobile machines by developing very high-strength and wear-resistant grades of steels that prolong the service life of products whilst improving their load-bearing capacity. Moreover, special steels enable lighter structures, which in turn lower fuel costs and emissions. Use of Ruukki's special steels typically delivers weight savings of 20–30% in commercial vehicle applications.

› Ruukki's energy-efficient solutions
› Ruukki's energy efficiency calculator

Case: Replacement of chromium in colour-coated products

In the wake of requirements imposed by the EU's REACH regulation, also Ruukki is addressing the replacement of hazardous substances in products. One of the substances to be replaced is hexavalent chromium, a carcinogen, and compounds thereof, which are used in conversion and priming in colour coating.

Work started on replacing chromium in Ruukki's colour-coated products in 2009, with the aim of replacing chromium and yet retaining the excellent properties, especially corrosion resistance, of products. Development work on this front has called for many innovations including those relating to the technical details of colour coating.

In 2013, investments were made in colour-coating equipment at the Hämeenlinna Works to enable excellent chromium-free conversion chemical coating on galvanised steel surfaces. The change introduced will reduce diverse environmental impacts in production, including a decrease in the heavy metal content in waste water. Once the changes have been completed, employees will no long be at risk of chromium exposure.

The project progressed in stages and by the end of the year had resulted in a number of chromium-free product groups for both interior and exterior premises so that most products can be supplied chromium free. Ruukki continues to work on this front so that in future all colour-coated products can be provided without chromium. In addition, the project spawned one international scientific publication and a quality management system, which enable excellent resistance using process chemicals that are also in compliance with future legislation. Ruukki earlier received an award in the Quality Innovation of the Year competition. Ruukki will continue development work so that in future all colour-coated products will be available without chromium.

Energy efficiency requirements in construction

Buildings account for about 40% of global energy consumption and carbon dioxide emissions. The EU's energy efficiency targets and regulations applying to construction and building products will be tightened to curb emissions. Ruukki offers energy-efficient solutions to harness renewable energy sources and to improve the airtightness of buildings. Ruukki's energy-efficient products and solutions can deliver annual savings of 20% in energy costs.

Energy Performance of Buildings Directive

The recast Energy Performance of Buildings Directive, which entered into force in 2010, is one of the EU's means to achieve the targets in the

climate and energy package. The Directive is applied at the national level by taking into account a country's outdoor climatic and local conditions, as well as indoor air climate requirements and cost effectiveness. In addition to these, the Directive lays down minimum requirements on the energy performance of renovation construction. Under the Directive, all new buildings should meet nearly zero-energy construction criteria from the end of 2020 onwards. The regulations apply to public buildings already after 2018. The zero-energy requirement means that buildings must use a minimum amount of energy which should be covered by renewables. Ruukki's steel construction solutions take into account increasingly stringent requirements for the energy efficiency of buildings. Ruukki already has solutions that can help achieve future minimum requirements under the EU Directive.

› Calculate how much Ruukki's energy panels can help you save in heating costs
› Read more about Ruukki's energy-efficient products

CE marking in compliance with the Construction Products Regulation

CE marking in accordance with the Construction Products Regulation (305/2011/EU) became compulsory in respect of construction products from 1 July 2013 and will become compulsory for load-bearing structures from 1 July 2014 onwards. Ruukki introduced CE marking in all product groups already in May 2013. In the construction industry, CE marking enables the free movement of construction products throughout the European Economic Area (EEA) and European Free Trade Association (EFTA). Since local product certificates and approvals have been replaced by one set of harmonised product requirements and procedures, CE marking makes it easier to compare different manufacturers. By affixing the CE mark on a product, a manufacturer declares conformity with all relevant legal requirements and in particular those ensuring health, safety, and environmental protection. The Construction Products Regulation requires a Declaration of Performance (DoP) to indicate the technical characteristics of CE-marked products. Ruukki's customers receive a DoP with the product.

In construction, Ruukki has CE marking rights in, among others, sandwich panels, steel frame structures, load-bearing sheets, steel piles used in foundations and guard rails for roads. In building projects, Ruukki has CE marking rights for welded steel structures. CE marking is also in use in some residential roofing products.

› Ruukki's declarations of conformity

Building standards and stakeholder requirements

Updated versions of LEED and BREEAM certification system criteria were published in 2013. In addition, Sweden and Norway published their own national versions of BREEAM. Ruukki has long accumulated expertise in the certifications systems for buildings and the aim is to support the customer apply for certification by influencing choice of products. To take a case in point, Ruukki's sandwich panels can promote energy efficiency, reduce lifecycle costs and increase the points awarded for sustainable materials. During 2013, Ruukki Building Products salespersons received training in certification system requirements internationally. In addition, one aspect of product development is to improve the environmental performance of products and thus the buildings to be certified.

› Read more about Ruukki's solutions affecting LEED and BREEAM points

Ruukki actively tracks the work of the European Committee for Standardization (CEN) and also makes its own contribution via European and national interest organisations. As regards the latest new standards, the most important is EN 15804, the sustainability of construction works, which applies to environmental product declarations, and defines the way the lifecycle data for a building product is to be presented. The standard will also change the way lifecycle data is presented for Ruukki's building products.

Nordic stakeholders are particularly interested in the chemical safety of products. Ruukki actively informs about the material composition of products. In Sweden, the material composition of Ruukki's building products has been registered in several environmental safety assessment systems, such as Byggvarubedömningen (Building Material Assessment) and BASTA. Ruukki also receives similar requests for information from many individual customers and actively tracks new material composition requirements via work with stakeholders.

INTEREST REPRESENTATION AND JOINT PROJECTS

Ruukki is actively involved in representing interests and in joint research projects within the following organisations:

- Association of Finnish Steel and Metal Producers
- Cleantech Finland
- Confederation of Finnish Construction Industries RT
- Confederation of Finnish Industries (EK)
- Eurofer (European Confederation of Iron and Steel Industries)
- European Steel Technology Platform
- European Coil Coating Association
- Euroslag
- Finnish Business & Society ry (FiBS)
- Green Building Council Finland
- Green Business Council Sweden
- IPO Steel Network
- Jernkontoret, The Swedish Steel Producers' Association
- Metals for Buildings
- Stahlinstitut VDEh
- Strategic Centres for Science, Technology and Innovation (CSTI)
- Suomen ElFi Oy
- Swerea MEFOS
- The Federation of Finnish Technology Industries
- The Finnish Association of Construction Product Industries RTT
- World Steel Association

Ruukki is developing the environmental performance of its production processes and products by active participation in various national and international joint projects relating to the environment.

IETS Annex XIV Integration of Biomass in Steelmaking (2010–2014)	Development and use of process integration in the iron and steel industry – Towards a lower energy use and reduced carbon dioxide emissions. Objectives are to communicate process integration, to initiate new international collaborations and to establish new R&D connections.
CCSP (Carbon Capture and Storage Programme) (2011–2013)	The Finnish Energy and Environment Competence Cluster, Cleen Ltd's five-year research programme to develop carbon capture and storage. (CCTS = Carbon Capture, Transportation and Storage)
HISTWIN II (2011–2013)	A programme funded by RFCS (Research Fund for Coal and Steel) that seeks to develop high wind turbine towers based on a cylinder tower concept. The project is being coordinated by Luleå University of Technology in Sweden.
NeReMa (2010–2012)	A programme to establish the sustainable recycling of new materials which aims at a comprehensive study of the current state of selected waste processing chains and the future conditions and requirements affecting development of the sector. Other partners in the project are the Finnish Environment Institute, Technical Research Centre of Finland (VTT), Aalto University, Lappeenranta University of Technology and companies.
BIOREDUCER (2010–2013)	A research programme funded by Tekes – the Finnish Funding Agency for Technology and Innovation – to examine the possibility of using biomass as a blast furnace fuel.
VILD – Vanadin I LD-slagg (2009–2012)	A joint programme between Nordic industry and MISTRA (The Foundation for Strategic Environmental research) to examine separating vanadium from LD slag and processing it into a product. The programme has spawned a technique to separate vanadium from steelmaking slag so that it can be used. Work on developing the technique was awarded the Swedish Recycling Industries' Association's Inspiration Award for 2011.
PRISMA Step 1: 2006–2010 Step 2: 2010–2012 Step 3: 2013–2015	Step 3 project focuses on research questions in energy and material efficiency and the main projects are flexible production, maximum use of materials and future energy transmission

PRISMA: Zero Waste (2007–2012)	The Centre for Process Integration in Steelmaking, PRISMA's programme is examining material flows in heavy industry in the Bothnian Arc as an extensive whole and is also studying among other things, a pan-Nordic solution to recycle secondary materials with a zinc content.
FIMECC ELEMET MEBF (2009–2014)	The Finnish Metals and Engineering Competence Cluster, FIMECC Ltd's Material Efficient Blast Furnace programme to develop the material efficiency of a blast furnace.
FIMECC Light (2009–2014)	The Finnish Metals and Engineering Competence Cluster, FIMECC Ltd's programme where companies, universities and research bodies come together to develop ways to lighten the structure of machinery and equipment, improve performance and cut carbon dioxide emissions, for example.
FIMECC Demapp (2009–2014)	The Finnish Metals and Engineering Competence Cluster, FIMECC Ltd's programme, where companies, universities and research bodies come together to develop novel, breakthrough competitive materials based on an understanding of demanding operating conditions and the phenomena in them. Ruukki's role is to develop improved wear-resistant steels, reduce the wear of steel structures and thus energy consumption and carbon dioxide emissions, etc.
ULCOS TGR-BF II (2009–2012)	A programme funded by RFCS (Research Fund for Coal and Steel) that is piloting an oxygen blast furnace process. (ULCOS = Ultra-Low Carbon dioxide (CO_2) Steelmaking)
FRAME -Future envelope assemblies and HVAC solutions (2009–2012)	A programme run by Tampere University of Technology to, among other things, ascertain the type of structural or other technological solutions to best improve the function of building structures by taking into account the impacts of climate change and increased thermal insulation. The programme is being funded by Tekes – the Finnish Funding Agency for Technology and Innovation, the Ministry of the Environment, the Confederation of Finnish Construction Industries RT and businesses.
PROBIO (2009–2011)	A programme funded by Tekes – the Finnish Funding Agency for Technology and Innovation – to study the cost effective processing of slag and waste material based on bioleaching in partnership with research bodies and businesses.
GreenSteel (2008–2011)	A Sustainable Energy research programme funded by the Academy of Finland to examine the potential to reduce the need for energy and emissions in steel production.
SLAGFERTILISER (2011–2014)	A programme funded by RFCS (Research Fund for Coal and Steel) to study the impacts of slag used for agricultural purposes on the soil and plants.
CLEEN CCSP (2011–2015)	CCSP – Carbon Capture and Storage Programme, The Finnish Energy and Environment Competence Cluster (Cleen) consortium's CCS programme to study carbon dioxide storage and oxygen blast furnace technology.
ZEMUSIC – Zero Energy Solutions of Multifunctional Steel Intensive Commercial Buildings project (2011–2014)	A programme funded by RFCS (Research Fund for Coal and Steel) aimed at developing technical concepts for steel-structure low- and zero-energy office buildings.
RESPIRE- Case studies on Sustainable Renovation in Eastern and Northern Europe (2010–2012)	A research project funded by Tekes – the Finnish Funding Agency for Technology and Innovation – aimed at adapting Finnish expertise in renovating concrete element buildings to countries in Eastern Europe. The focus is particularly on technological (architecture, structural physics, structure and safety), economic (business models), institutional and political aspects.
TABASCO -Thermal bridging atlas of steel construction for improved energy efficiency of buildings (2011–2014)	A programme funded by RFCS, (Research Fund for Coal and Steel) to develop energy-efficient structural solutions for steel construction.

SOCIAL RESPONSIBILITY

Social responsibility at Ruukki includes all direct or indirect action of significance to people dealing with the company. Social responsibility also incorporates all human resources practices, engagement with people in neighbouring communities, responsible sourcing and user safety of Ruukki's products.

The company has defined its customers, current personnel, educational institution partners and the people in the surrounding communities of the company's sites as key corporate responsibility stakeholders. The cornerstones of social responsibility are human resources practices that seamlessly respect human and labour rights, active dialogue with close partners and networks, and product responsibility.

Materiality analysis has resulted in safety, competence and a good leadership culture becoming the focus areas of social responsibility. The safety theme incorporates the occupational safety of the company's own people, the safety of subcontractors working for Ruukki and product safety. Safety is also reflected in sourcing principles and in the related criteria used to guide sourcing. A high level of competence is essential in supporting the company to achieve its targets, but is also key to building the professional identity and motivation of each employee. A good leadership culture provides the foundation for responsible business vis à vis different stakeholders.

Key goals	Some of our actions and achievements in 2013	Goals in 2014
Improved safety	• Site-specific participation in safety culture development • Systematic monitoring of safety standards of contractors • Training in the development of a safety culture and the elimination of human errors	• To reduce total injuries by developing a culture of safe working
Strengthening top quality expertise	• Sales skills development programme in Russia • New induction model for the global sales organisation • New product training at Ruukki Metals	• To increase business-area-specific competence • To increase product development and manufacturing technology know-how in special steels • To strengthen global sales skills • To build on competence in the roofing business
Development of leadership culture	• Bi-annual development discussions • Leadership training focus on coaching • Launch of induction programme for supervisors	• Financial performance management • Productivity and operating-efficiency management • To strengthen sales management

From the human resources management perspective, the organisational changes effected during 2013 were the most important events characterising operations. The most visible changes were the restructuring of operations into three business areas, with reporting accordingly from the start of the second quarter. The change required the readiness of the personnel to accept new work packages, take responsibility for competence development and a general willingness for change.

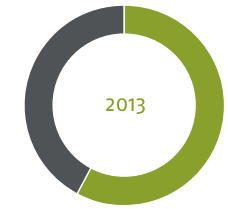
Operating profitably in difficult market conditions has required collaboration and personnel across the company have been thrown the challenge of considering how operations can be continuously improved. One way this was done was the employee engagement study carried out in the autumn. The study response rate was a record high 74%. This indicates that the company's employees want to give feedback and are ready to challenge tomorrow. The results show that most of the personnel, 76%, would recommend Ruukki as an employer. The company's personnel are committed and motivated in their work and are actively involved in taking Ruukki forward.

KEY FIGURES

Key figures

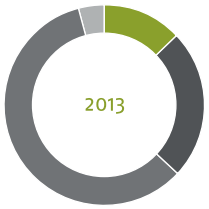
	2013	2012	2011
Personnel at year-end	8,600	9,034	11,382
Personnel, average	8,955	11,214	11,821
permanent, %	96	96	94
temporary, %	4	4	6
Average age of employees, years	43	42	42
Average duration of employment, years	15.2	13.9	13.2
Employee churn, %	7.9	5.2	6.1
% of female personnel	17	17	17
workers, %	6	6	6
salaried employees, %	33	34	35
supervisors, %	14	14	15
Corporate Executive Board, %	11	22	22
Net sales per employee, €1,000	269	249	237
Lost workday injury frequency, number of injuries resulting in absence of more than one day per million hours worked	7	7	8
Total number of accidents	106	124	162
Safety action frequency, safety actions per million working hours	3,997	3,618	3,871
Sickness absenteeism, %	3.83	4.20	4.00
Training days, average per person	1.62	2.20	1.76

Personnel structure



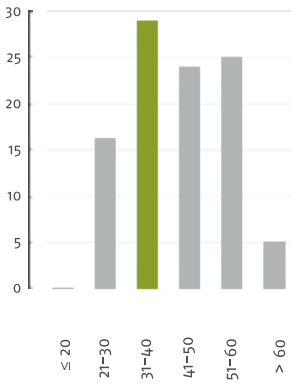
- Employees, 58% (60%)
- Salaried employees, 42% (40%)

Personnel on average by business area

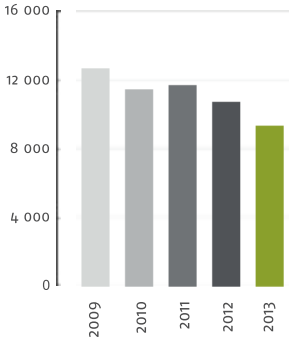


- Ruukki Building Products, 13%
- Ruukki Building Systems, 24%
- Ruukki Metals, 59%
- Corporate functions, 4%

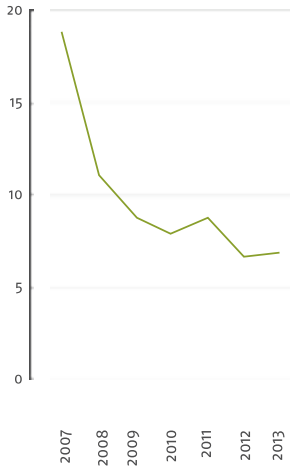
Personnel by age



Personnel on average

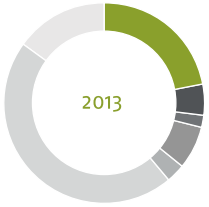


Accident frequency



- No. of accidents resulting in an absence of more than one day per million working hours

Personnel training days by categories



- Safety, 22% (20%)
- Management and leadership, 5% (6%)
- Sales, 2% (8%)
- Languages, 7% (6%)
- IT, 3% (6%)
- Production and manufacturing, 46% (44%)
- Other, 15% (10%)

INTELLECTUAL CAPITAL AND DEVELOPMENT POTENTIAL

Development discussions make targets clear

In 2013, 89% (91) of salaried personnel had development discussions with their supervisor. Targets were mostly set for the whole year and centred on the profitability of the company and business units. Also personal targets were set to support the achievement of business goals. Part of the development discussions for salaried employees involved drawing up a personal development plan to develop competence to support target achievement.

Most of the development discussions for workers were carried out as team development discussions, in which a total of 1,684 workers participated during 2013. Team development discussions can be held flexibly in conjunction with department or shift meetings. In addition, one-to-one development discussions were held between worker and supervisor in some organisations. Own job discussion themes included for example, safe working, job skills and competence, work ability, the role of the employee or cooperation in teams. The themes were chosen and discussions held in accordance with local practice.

› Read more about the development discussion process

Focus areas on product, sales and production training

Ruukki's training programmes develop competence areas to support achievement of the company's goals. In 2013, these focus areas were:

- product training
- safety in production
- sales training in Russia

Sales training was also held in Poland, where a total of 33 roofing products salespersons from Ruukki Express outlets participated in training aimed at improving customer service.

Autumn 2013 saw the formation in Hämeenlinna of a new SteelPro group

chosen for development for supervisory duties in production and maintenance. The group consists of 12 persons already employed by Ruukki. The training programme lasts about two years, during which time the group will develop readiness in leadership skills, production processes and safety through apprenticeship and multiform learning.

Training programmes were also reviewed in conjunction with reorganisation of the business areas to better respond to the special needs of the customer base and business model of each business unit. The results of thorough analysis and planning were visible, for example, in sales and production training. On the production side, a total of 152 Ruukki people participated in training in the human factors in safety course.

Extensive training offering from on-the-job learning to e-learning

Each Ruukki employee participated in an average of 1.62 (2.21) training days, with an average of 1.54 (1.91) training days for workers and 1.71 (2.64) for salaried employees. Ruukki spent a total of €2.8 million (3.3) on training in 2013. This figure excludes pay during training time. Ruukki Industrial Institute is responsible for industrial training in Finland and held a total of 344 training events in 2013.

In addition to training arranged by the company, Ruukki also supports self-motivated studies in each country. For example, opportunities to take study leave of various lengths covered 96% (93) of the personnel. The company also awarded three grants to Ruukki people continued to study in addition to working and who excelled in their studies.

Towards the end of 2012, Ruukki Metals rolled out a product training concept based on e-learning. This concept established its position during the course of 2013 and around 1,550 Ruukki people from across 27 countries participated in training, which was held at least once a week. Expansion of the distribution network entailed the recruitment of new salespersons and technical customer support people in various parts of the world. E-learning product training events provided a convenient, cost effective way for newcomers to Ruukki to learn about Ruukki's products.

Ruukki's experts received awards

The expertise of Ruukki's people was acknowledged also through several awards and recognitions received during 2013. The Association of Finnish Steel and Metal Producers presented application manager Hannu Indrén with the Association of Finnish Steel and Metal Producers' award. This award is made for, among other things, work done to develop the industry or to make it well known or for finding new applications for metals. Hannu Indrén has worked for Ruukki for 33 years, of which the last ten years have been at the customer interface representing sales of Ruukki's special products. Construction manager Risto Haapaniemi was the first Finn to receive the Swedish Institute of Steel Construction's Silverbalken award. The award was made for his unique expertise in the installation of complex steel structures. Analysis and research company Regi presented Timo Pirskanen, Vice President, Investor Relations, with an award as the best Nordic IRO in the Mid Cap category. Young development engineers Juha Erkkilä and Veli Vuorenmaa from Ruukki were announced European-CIS Regional Champions in the qualifying round in the Industry category of the World Steel Association's Virtual Steelmaking Challenge.

Case: Mentoring as a means of personal development

In mentoring, a mentor guides and supports the personal development of a mentee. Reciprocal sharing and learning is key in both roles. During 2013, 16 pairs participated in Ruukki's mentoring programme.

Ruukki's mentoring programme is a systematic process where the mentor and mentee meet 6–8 times over a ten-month period. Besides actual one-on-one discussions, the programme includes a kick-off meeting, interim evaluation and a wrap-up event where all mentoring pairs reflect on their own learning.

"Meetings with my mentor have been brilliant. We've talked about major and minor things alike: different aspects of leadership, competence development, the achievement of Ruukki's business strategy and so on. Besides this, we've talked also surprisingly a lot about very personal matters such as the compatibility of professional and family life, and also own goals. My mentor and I got off to a good, trusting relationship from the very beginning. Personal chemistries were well matched. Since I've been involved in project and IT work during my entire career at Ruukki, I more than welcomed the chance that mentoring offered to gain a greater understanding of our actual core business. On top of this, I've been able to form a personal relationship both to my mentor and his inner circle. One of the aims of mentoring was also to create in-house networks for programme participants," explains Jussi Juvani, Director, Corporate IT Services.

A mentoring relationship is characterised by mutual trust and respect.

"We took the best lessons learnt from smaller-scale mentoring processes implemented earlier and rolled out the first cross-business area mentoring programme. We wanted to provide in practice a tried and tested way to promote a leadership culture and professional development in line with Ruukki's values," says Raija Syväniemi, Vice President, Human Resources Development.

DIVERSITY AND EQUALITY

From the diversity aspect, Ruukki's personnel structure highlights the culture of masculinity and the age structure in the industry. At some sites, the age structure is weighted towards the older age groups. Equality and equal opportunities are important principles in human resources policy. Where necessary, these are supported by special measures directed towards different target groups.

The personnel age structure diagram on the Key figures page shows a rather balanced structure of employees of different ages. Employment relationships in the company are long and, especially at production sites, there are many employees who have spent their entire career working for Ruukki. Nevertheless, the younger generation (aged 21–30 years) makes up a fairly large share of the personnel.

Recent years have seen Ruukki recruit young trainees and specialists through various trainee programmes and as a continuation of commendable thesis work done for Ruukki. At the works sites in Raahe and Hämeenlinna, young experts are trained at Ruukki Industrial Institute.

The low numbers of women in the sector can be seen already at the recruitment stage, when for some positions there are no female applicants. Overall, women accounted for 17% (17) of Ruukki's personnel in 2013 and for 14% (14) of supervisors. Women accounted for 33% (34) of salaried employees. Three of the seven members of Ruukki's Board of Directors are women and women make up 11% (22) of Ruukki's Corporate Executive Board. It is still the case that already during schooldays more boys than girls are interested in mathematical subjects and are also more likely to choose to go on and take postgraduate technical studies.

The company does not collect or keep information about the ethnic or national background of its personnel or other personal traits not directly related to work. The company is committed to complying with fairness and equality in its Code of Conduct. Under no circumstances is the use of either forced or child labour tolerated. In countries listed by Unicef as having a risk of child labour, Ruukki has activities other than sales organisations only in Romania and Ukraine. All Ruukki's employees in these countries are of age.

RESPONSIBLE RESOURCING

Changes in personnel numbers

At year-end 2013, Ruukki had a total of 8,600 (9,034) employees. Temporary employees accounted for around 3.9% (3.6) of the company's personnel. Temporary employees include summer workers, who totalled 831 in various units and functions in Finland in 2013. Summer jobs give young people a good opportunity to learn about various jobs at the company and students often do compulsory practical training relating to their studies as a summer job. The some 40–50 students writing their thesis at Ruukki each year are also classed as temporary employees. A total of 464 (627) people started new permanent jobs at Ruukki in 2013.

Personnel numbers fell by 434 employees during the year. This was mainly due to overall market conditions and weakened demand. Some reorganisations were effected through role and job changes, the discontinuation of temporary employment contracts and through retirement arrangements.

During employer-employee negotiations, active efforts were made with the personnel to find new jobs for persons temporarily laid off or threatened by redundancy or solutions to support the continuation of units otherwise facing closure. For example, the outcome of employer-employee negotiations in Peräseinäjoki was that closure of the plant was avoided and production continues on a scaled-down basis at the plant, which focuses on manufacturing large steel trusses for the construction industry. All persons affected by employer-employee negotiations within Business Support functions in summer 2013 were redeployed in other functions at Ruukki.

We were regrettably unable to find a positive solution in all cases. The decision was made to close Ruukki's Kalajoki unit at the end of 2013 in the wake of the difficult economic climate and because the unit's order book had dried up. This resulted in the loss of 58 jobs. A few people were redeployed at other Ruukki sites. Other units also initiated employer-employee negotiations to reduce or temporarily lay off the workforce. There was a total of 172 redundancies on financial or production-related grounds.

Persons made redundant were offered support in finding new employment and retraining, for example, in accordance with local practices. In redundancy situations, external partners are used in most countries to improve the employability of those persons losing their jobs. Conversational therapy is also available through local healthcare arrangements. Supervisors dealing with redundancies were trained to show support and consideration to the persons affected.

The period of notice depends on local labour legislation and how long the employment contract has lasted but, however, is at least 14 days in all countries where Ruukki operates.

Personnel were temporarily laid off in Finnish units due to weakened market conditions. The layoffs took place according to various plans and the possibility was also explored of redeploying the persons affected at other Ruukki sites instead of laying them off. Layoffs affected 4.1% of the total personnel in Finland.

Personnel by region	2013	2012
Finland	5,218	5,547
Other Nordic countries	536	580
Central Eastern Europe	1,099	1,106
Russia and Ukraine	1,649	1,686
Rest of Europe	52	63
Other countries	46	52
Total	8,600	9,034

In-house and local recruiting

In 2013, almost all recruitments were replacement recruitments (89%). All recruitments took into account also persons who had been made redundant or temporarily laid off, with such people being actively offered any vacancies arising. A suitable applicant was found within the company in most recruitment.

Local HR departments in different countries work closely with employment services and educational institutions. In Ruukki's largest unit in Raahe, for example, the company again worked with local employment services to retrain jobseekers who were either unemployed or at risk of losing their job (10 persons) to become crane operators at the Raahe Works.

Ruukki employed over 800 satisfied summer workers

In summer 2013, Ruukki again provided over 800 summer jobs at various sites in Finland. Most of these summer workers were employed in a diverse range of jobs in production processes, maintenance and supervisory work at the company's works in Raahe and Hämeenlinna. In addition, summer jobs were also available in corporate business support functions, for example in product development, production planning and logistics.

Summer workers from one year to the next have been very pleased with their stint at Ruukki. The annual summer employees' feedback study shows that the best things about working for Ruukki are colleagues, the work atmosphere, work diversity and learning new things: "My experience greatly increased my motivation to study and I just felt like let's get the studies out of the way and then enter working life." As many as 98% of summer workers completing the employee study stated that they would consider applying to Ruukki again.

Ruukki's long tradition of providing summer jobs is one which the company wants to retain even during tough economic times. Ruukki considers offering young people a chance to gain work experience and earn their own money to be part of putting social responsibility into practice, taking young people into account and taking educational responsibility. Ruukki participated in the "Responsible Summer Job 2013" campaign in Finland and had also taken part in a similar campaign the previous year. The campaign aims to challenge employers to offer more and better summer jobs to young people. The campaign sought to remind both employers and summer workers alike about the good principles of summer employment which are: a meaningful job and reasonable pay, job induction and guidance, justice and equality, a written employment contract and certificate, as well notification about selection.

Extensive cooperation with students and educational institutions

Ruukki works extensively in cooperation with students and educational institutions, mostly with students of technology. The summer jobs and thesis projects on offer at Ruukki were presented at a total of eight career and recruiting events, which attracted a total of over 14,000 visitors in 2013. Around 2,700 schoolchildren, students and teachers visited our works to learn about production plant operations in the steel industry and various jobs in the sector. As well as visits, various local student events were held at different sites.

In Poland, Ruukki invited students at Warsaw University of Technology to enter a competition to design an energy-efficient building. Student teams were tasked with designing an energy-efficient building using Ruukki's solutions such as energy panels. Also in Poland, Ruukki organised a workshop for university students on the theme of developing energy panels. The workshop gave rise to interesting and innovative ideas, which will be studied with regard to their feasibility and profitability.

In Russia, Ruukki works together with selected universities. To take a case in point, students at the State University of Management in Moscow can apply for the summer internship programme at Ruukki's Obninsk unit. The best students are offered an opportunity to continue their internship part-time after the summer. Ruukki also has its own liaison officer at the university.

In December 2013, Ruukki signed a framework agreement for a Steel Construction Excellence Center, in the context of which Ruukki will invest around €2.5 million in steel construction research and development between 2014 and 2017. This figure is in addition to other development investments. The agreement will strengthen 15 years of partnership

Case: Ruukki challenged students and industry professionals to a steelmaking

World Steel Association organised the eighth "Virtual Steelmaking Challenge". Ruukki challenged students in the industry to take part in the competition and receive, international experience amongst the industry's top professionals.

The competition was held in two rounds. The first round lasted 24 hours during which time all students attempted to complete an order for a specific grade of steel using the organiser's simulation program. Entrants could take part in the competition in teams or as individuals and were divided into two categories: Industry and Student. Entrants could have as many attempts to complete the task as they wanted during the 24-hour period.

"It's important for Ruukki for students to gain international experience, which will further the development and innovation of the industry. Students will get to test their skills amongst the industry's top professionals, who can use the opportunity to better their expertise and network", says Toni Hemminki, CSO, at Ruukki. "

Ruukki was active in supporting competition entrants from Finnish universities by inviting them to Ruukki's Raahe Works for a day to see steelmaking operations in practice and by entering university entrants in the competition in a prize draw for an iPad tablet. Also Ruukki's experts were available in preparation for the competition.

Young engineers Juha Erkkilä and Veli Vuorenmaa from Ruukki's Raahe Works were the European-CIS Regional Champions in the qualifying round in the Industry category and will go on to the Grand Final to be held in Brussels in February 2014. University of Oulu students Juho Moilanen and Hannu Tolonen came second and Sanna Pikkupeura was fourth in the Student category in Europe.

between Ruukki and Tampere University of Technology and HAMK University of Applied Sciences in the product development of coated steel sheets and in the research and testing of steel structures. Other parties to the agreement are Tavastia Vocational College, the City of Hämeenlinna and Häme Development Centre Ltd.

Ruukki offers young people an easy and lightweight way to learn about the steel industry through the social media. Ruukki's global Facebook site features many photos from trade fairs and other events. Ruukki's YouTube videos are available in different language versions. As well as these, future professionals have been told in the glossy magazines of various student organisations that Ruukki also has an active blog.

INTERACTION WITH THE PERSONNEL

Employee participation

Ruukki respects its employees' freedom of association and the company's employees can join trade unions in compliance with the legislation in each country. In countries where local legislation does not recognise these rights, Ruukki provides other channels for employees to engage in the company's activities and express their opinions. The local management in each country is responsible for creating opportunities for employee engagement.

In 2013, 78% (78) of the personnel were covered by local employee participation procedures. For example, all sites in Finland have an advisory committee or similar, which meets once a month. The largest sites – Raahe and Hämeenlinna – also have themed committees, which meet several times a year to deal with, for instance, training and recreational opportunities for the personnel. There are a total of 49 personnel cooperation bodies in Finland and corporate-wide that convene on a regular basis.

After Finland, Ruukki's largest countries in terms of headcount are Russia and Poland. Personnel participation at the local level in Russia, for example, takes place through monthly personnel meetings. In Poland personnel participation at the local level takes place at meetings of trade union, works council and employer representatives. These meetings are held roughly every month and discuss current topics.

Topical themes in employee cooperation

Ruukki Forum – a European works council based on the EU's European Works Council Directive and covering all sites in Europe – met in Tallinn, Estonia on 6–7 May 2013. This time, the Forum's themes were the focus areas of the business areas and corporate social responsibility.

Employee cooperation arrangements within the company were among the themes raised at the corporate Working Committee in 2013. The Committee meets four times a year to prepare items for the corporate annual meeting and at least once a year to consider matters applying to the entire personnel in Finland. The employer is represented by the company's president & CEO, the senior vice president, HR and Ruukki Metals' HR director. The personnel are represented by nine shop stewards from different business areas and units. At the corporate annual meeting held at the end of November, topics included current matters in the various business units and the results of the latest employee engagement study.

Ruukki also has an administration representation group which considers matters concerning the company's business, finances and human resources. The employer is represented by the company's president & CEO and the senior vice president, HR. There are five personnel representatives. In 2013, the work of the administration representation group centred around the company's financial situation and on the challenges posed by operating in an international business environment. The administration representation group also evaluated, among other things, the most significant focus areas for the company of social interest groups. Ensuring industrial competitiveness in Europe and especially in Finland is a major shared concern.

The corporate personnel day, at which discussions centred on topical themes raised by the personnel, was also held in November. The company has initiated negotiations to renew the cooperation agreement at the European level, Ruukki Forum.

Voice of employees heard

Ruukki carried out an employee engagement study covering the entire personnel in September 2013. The results of the study were announced in November, after which supervisors discussed them with their teams and chose areas for development. As a whole, Ruukki people gave more positive feedback than earlier about induction for new jobs and acknowledgement from supervisors for good work. The study also showed an improvement in cooperation and information flow within teams, and that respondents viewed their work as more challenging and interesting than earlier. An increasing number of respondents, 76%, were willing to recommend Ruukki as an employer. Areas for development that were raised included cutting the bureaucracy and making responsibilities in decision-making clearer.

PROMOTION OF WORK ABILITY

Occupational health

Ruukki has defined competence management, occupational health and retirement management as the focus areas in managing work ability. The focus is on pro-active practices, which vary from one site to another.

The sickness absenteeism rate in 2013 was 3.83% (4.20). Ruukki employs, among other things, an early support model to keep sickness absenteeism under control and most sites offer employees free flu vaccination, for example. In Finland, Ruukki employs treatment insurance, which is intended to accelerate access to treatment for Ruukki employees who suffer from musculoskeletal problems by shortening waiting times and thus promoting employees' convalescence to make them fit for work.

Ruukki carries out regular risk assessments of various jobs. These assessments form an opinion as to whether or not a job entails a greater risk of strain injury or of suffering, for example, from overstress.

Retirement is one of the key challenges of work ability in Ruukki's units in Finland. This is why the company has addressed retirement management mainly through everyday supervisory work: by forecasting retirement and ensuring skills transfer.

Work-life balance

Paid parental leave, an opportunity for study leave and other sabbaticals or time out for dependent care based on legislation or local practice are available in most countries where Ruukki has a presence. To take a case in point, parental leave is a statutory right in all countries where Ruukki operates. Around 75% of Ruukki's employees had flexible working hours or an opportunity to work part-time. The average working week at Ruukki was 37.8 hours (37.8).

Exercise increases work ability

A total of 451 (481) Ruukki people took advantage of the fitness training Ruukki made available to its personnel in Finland in 2013. These courses were run by professional trainers at sports institutes or were in the form of local group training courses. Ruukki people can take part in such courses on full pay every fifth year. Fitness courses are intended to encourage and motivate each Ruukki employee to look after his or her fitness and wellbeing.

Besides self-motivated exercise, employees are encouraged to keep fit through specific practices at different units. These include various campaigns, site-specific clubs or subsidised sports vouchers. Summer 2013 saw 214 Ruukki people from different sites in Finland take part in the Kilometrikisa cycling competition between companies and organisations. Ruukki's Ruukin rautareidet team was the largest in Finland and cycled the most kilometres (254,800 km) in the competition. The cycling campaign sought to encourage people to save energy and the cyclists saved an estimated 17,836 litres of fuel.

Case: Ruukki has invested in practices to reduce psychosocial risks at work

The steel sector has common features that impact on psychosocial risks at work. Ruukki participated in a study that charted measures taken to prevent these risks.

A study conducted by Eurofer, IndustriAll, Eurofound and ConsultingEuropa established the practices impacting on the social psychosocial factors at work relating to occupational health and safety in the steel industry. Ruukki's Hämeenlinna Works in Finland was one of three sites studied. The study included physical and mental wellbeing at work, occupational health, ageing aspects and the functioning and interaction of teams in the workplace community and at the works level.

Psychosocial risk factors in the steel industry include at times heavy labour working with chemicals, the personnel age structure, structural change within the sector and technological development as regards the environment. The companies participating in the study won plaudits for having made real investments in increasing awareness, training and proactive measures. Practices in all the companies studied also exceeded those required by national legislation.

The study raised the continuing challenge of the varying causes underlying psychosocial risks, causes that are not necessarily directly related to symptoms or health grounds. This being the case, prevention is challenging. Direct participation and dialogue between employees and employer would seem to be one of the most important requirements for success. The study gave Ruukki's Hämeenlinna Works a positive rating for cooperation at various levels between the personnel, foremen and employer.

Case: Reduction and prevention of musculoskeletal problems in harbour work

Spring 2013 saw the harbour at Ruukki's Raahe Works in Finland initiate a work ability programme aimed at a holistic, healthy body and improved wellbeing.

A total of around 70 harbour professionals participated in the work ability programme, which continues until the end of 2014 and aims at reducing and preventing pain, stress problems and injuries by instruction in body loading. Attention is also paid to nutrition to maintain alertness and to promoting the ability to concentrate and prevent stress.

The programme leaders have visited the employees' workstations to learn about work performance and the surrounding conditions. Work performance is videoed and the observations made about it in the workplace community form authentic learning material for teamwork, which constitutes an essential part of training. Training also includes personal instruction.

During training, participants were taught techniques to reduce loading. In the long term, these techniques will reduce musculoskeletal problems. The right ways of working are documented and made into material to help employees remember the ways of working taught and to serve as induction material for new employees. The programme resulted in a guidebook of recommended gym exercises and stretching to support and counterbalance harbour work.

REMUNERATION

Remuneration at Ruukki motivates and means fair and objective recognition of excellent performance. Ruukki complies with minimum valid wage regulations and minimum pay agreements provided by collective agreements in all the countries where it operates. Ruukki exceeds the minimum wage level voluntarily in all the countries where it has operations. Ruukki actively tracks the pay market and takes it into account as a criterion for remuneration to ensure competitiveness and attraction as an employer.

In 2013, 72% (68) of Ruukki employees were covered by collective agreements. The company complies with collective agreements also in situations where the company's workforce is mobile across country borders. Ruukki also requires its subcontractors to comply with the same regulations and agreements.

› Read more about Ruukki's remuneration principles

We pay bonuses for results

In the bonus system, bonuses depend on the company's overall result and on personal performance. Employees can earn bonuses when they achieve or exceed their personal targets set in development discussions. The personnel are encouraged to achieve Ruukki's strategic targets through rewards based on performance and financial indicators at the individual and team level. The same bonus principles apply to all Ruukki's salaried and senior salaried employees. The majority of workers are covered by locally defined bonus schemes. Profit sharing applies to the entire personnel and is based on the company's financial performance. In Finland, any share of the profit is paid into the personnel fund.

Intangible remuneration

Intangible remuneration is an important part of looking after the personnel. Intangible remuneration at Ruukki creates diverse opportunities for personal development and employees can also impact on organising their own work. Ruukki provides permanent and temporary employees in all the countries it operates in with statutory healthcare, insurance against the risk of accident and occupational disease, parental leave and pension benefits.

In addition, Ruukki offers a diverse range of development and career opportunities, a safe working environment, good supervisory work, the means to balance work and leisure, and an interesting job. Flexible working hours are possible in most positions and an important means of intangible remuneration. If a job so requires, the personnel are also provided with other employment benefits such as a company phone or car. There is a strong focus on intangible remuneration also, for example, through training and other competence development at Ruukki.

SAFETY

Continuous improvement in safety is one of the key personnel targets at Ruukki. Safety first applies to all employees irrespective of their job and work is constantly being done to improve safety performance. In 2013, total recordable injury frequency (TRIF) at Ruukki fell to 19.1 (19.9). The number of injuries fell by 44 (323 –>279), of which 173 were so-called zero-day accidents, which involve injuries that do not result in absence.

Despite extensive actions to improve safety levels, lost time accident frequency at Ruukki rose to 7.3 compared to 2012 (6.6). There were a total of 106 (119) injuries resulting in an absence of more than one day. In roughly half these cases, injuries involved fingers, hands or eyes.

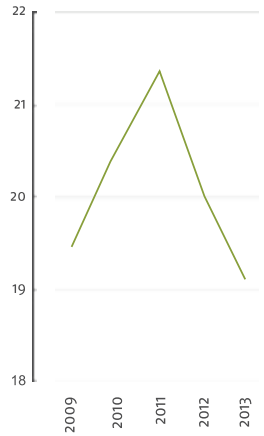
The inclusion since 2012 of total recordable injury frequency as one of the safety indicators mainstreams actions towards a more proactive approach since it better describes the likelihood of an injury than just injury frequency, which takes into account absences. Monthly safety reports with safety tips are posted on the company's intranet, together with safety statistics shown on info screens at Ruukki's largest sites help to ensure the entire personnel are kept up to date with safety progress and motivate them to strive for an increasingly safe working environment.

Ruukki people implemented more proactive safety actions than in previous years and safety action frequency rose to 3,997 (3,618) per million working hours. A total of 6.5 (6.5) such actions were taken per employee. The reporting and fast implementation of these actions is the most important tool on the way to an accident-free working environment.

There were a total of 58,361 (68,500) safety actions taken, of which 38% (35%) were safety moments held by teams, 40% (42%) workplace safety rounds headed by line management and 22% (23%) safety observations reported by the personnel. A total of 15,559 (18,600) corrective measures were ordered and 54% (57%) of these were effected within the deadline.

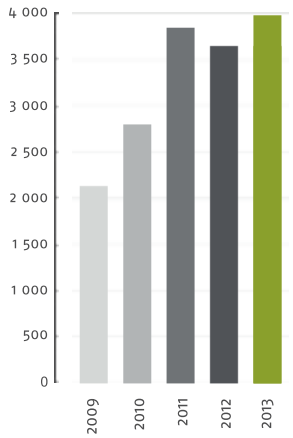
Good induction is an important aspect in influencing safety attitudes. Besides this, efforts to improve Ruukki's safety culture in 2013 included human factor safety campaign workshops for management and workers, more effective safety actions and closer collaboration with the personnel. At Ruukki Metals, safety themes

Total recordable injury frequency, TRIF



Accidents resulting in absences or requiring professional medical attention/million working hours

Safety Action Frequency, SAF



Safety Action Frequency per million working hours

Case: Occupational safety day provides added impetus to improve safety

Ruukki Metals' Safety Day sought new impetus and enthusiasm for safety work. A total of more than 60 Ruukki Metals' people working in safety management got together with senior management to consider how to build an increasingly safer working environment.

Despite active efforts at all organisational levels, injury numbers in recent years have not declined as desired. Ruukki's maxim remains unchanged: all accidents can be prevented.

"Also customers take into account safety levels. They often ask us about injury frequency. It's an important indicator that tells how safely Ruukki manufactures the products they order," says Sakari Kallo, Senior Vice President, Production at Ruukki Metals.

Based on the results of group discussions heard during the day and actual measures, it was decided to clarify the roles and responsibilities of immediate supervisors and management with regard to safety. In addition, a decision was made to strengthen exchange of information between industrial safety specialists and safety specialists at different sites.

Alpo Pirneskoski, industrial safety delegate at the Raahe Works, considered the day a productive one. He considers it important in safety matters for the various parties to be included already at the planning stage. "Teamwork is the only way forward to build safety. The fact that we really put our heads together and that the personnel are also represented," Pirneskoski says.

Case: Improved safety at the steel service centre in Oborniki, Poland

Ruukki's steel service centre in Oborniki, Poland adopted an annual process to analyse workplace safety risks. Besides this, the centre invested in new equipment for warehouse operations.

Towards the end of 2012, Ruukki's steel service centre in Oborniki identified a need to make a more systematic analysis of the safety risks at the unit. A safety risk analysis was performed at each workstation during the course of 2013 and safety instructions were updated. These risk analyses are now available at every workstation and the instructions are posted on the noticeboards near each workstation. Audits have shown that thanks to the risk analyses, workers have a greater awareness of and commitment to safety aspects. There is now a much more careful approach to using tools and equipment, for example, in accordance with the instructions drawn up.

Investments have also been made to improve the safety of warehouse operators at the service centre. Apart from safety, the new investments have also improved the quality of customer service and the speed at which large special steel sheets are handled. One of the improvements at the warehouse was the acquisition of a new side loader truck to load and unload lorries. The new loader also makes it faster and safer than earlier to handle products.

Case: Involvement plays a key role in improving safety

Ruukki Building Products has achieved good results at its plant in Pärnu, Estonia, by involving workers in safety work.

In 2013, the plant implemented 49 minor improvements relating, among other things, to cost savings. Thirteen suggestions for improvement had a direct impact on employee safety. Employees make suggestions for improvement directly to supervisors and receive a small incentive bonus once the suggestions have been approved. One such improvement suggestion made by workers was to modernise the packaging station and to move the materials needed to a more practical place. According to plant manager Tarmo Rannak, even a minor change such as this made a huge difference compared to earlier, adding that he received much positive feedback about the new working practice. Job motivation and satisfaction have improved, especially among those workers whose everyday work has been affected by the change.

In safety work, one way of motivating and committing employees to new common practices is to involve them like this so that they can decide and contribute to planning and implementing the changes and voice their ideas and opinions at different stages in the process. Another example of involvement is to regularly include workers in safety rounds, where they have a chance to discuss ways to improve safety and to increase an understanding as to why it is not possible to implement all suggestions.

were covered, for example, at the occupational safety day event, which was attended by more than 60 Ruukki Metals' people from various sites in Finland. The idea behind the event was to identify together ways to improve the safety culture.

Product safety

Product safety at Ruukki is based on compliance at all the company's units with the applicable legislation and generally accepted policies applying to quality control and safety.

Ruukki conforms to at least the minimum product safety requirements provided by local legislation in each country in respect of those products sold to customers in the countries concerned. In addition, customers often require products to meet stricter criteria than those provided by law. Compliance with existing quality management systems ensures these criteria are met.

The company also tracks product safety criteria imposed by forthcoming legislation and strives also to impact on norm content at the national and international level. This ensures production is able to prepare in good time for the future and to ensure Ruukki products are safe and safe to use for customers.

The company is responsible for the quality assurance of the raw materials and components used in its own production and makes and tests finished products in accordance with quality requirements, specifications and standards agreed separately with the customer. Working practices harmonised in accordance with ISO standards help to ensure the consistent quality of products irrespective of where they are made.

› Read more about our ISO standards

Product safety taken into account from the outset

Ruukki takes safety into account in the products it designs as required by the product development process (SPM) already at the design stage of a product concept. Product safety risks are systematically mapped and analysed throughout the product development process. A detailed risk analysis describing project risks, their significance and likelihood is performed in conjunction with the project plan.

We prepare environmental product and safety declarations for our main steel and construction product components. These declarations provide, among other things, information about the composition of products and their safe use. Where required, we contact our customers and suppliers to collect and pass on the information needed.

› Read more about the REACH regulation

Safe construction sites

Ruukki actively seeks to promote safety on those sites where we act as subcontractors and in projects where Ruukki's products are used. Among other things, we have developed tools for the safe installation of our products. Various technical solutions and user-friendly auxiliary devices improve the safety of lifting on construction sites. End-user safety has also been taken into account by selling roof safety products alongside Ruukki's roofing products.

› Check out Ruukki's safe installation method

Construction products, such as wall, façade and roof elements, made by Ruukki can be easily installed. This reduces the safety risks associated with the wrong installation of products. Ruukki provides product and installation instructions, as well as technical product support to ensure installation people have adequate information about the right way to use and install our products.

STAKEHOLDERS

Ruukki aims for regular, honest and transparent interaction with stakeholders. Ruukki actively maintains and develops stakeholder relations and draws on information obtained from stakeholders when developing its operations, products and services. Ruukki has defined its key stakeholders as being its customers, owners, investors and its own personnel. Collaboration and interaction with these stakeholders are high on the corporate responsibility agenda. Other stakeholders we interact actively with include suppliers and subcontractors, the media, local communities near our production sites, regulators and various non-governmental organisations, research bodies and partner organisations. Ruukki's business areas and support functions are responsible for open and continuous dialogue and for improving transparency vis à vis their own stakeholders. Various studies are used to gauge our success in our work with stakeholders.

- CUSTOMERS
- PERSONNEL
- OWNERS AND INVESTORS
- SUPPLIERS AND SUBCONTRACTORS
- LOCAL COMMUNITIES

INTERACTION WITH STAKEHOLDERS

Stakeholder feedback and information about stakeholder expectations of Ruukki obtained via various channels is a key aspect in our activities. Each of Ruukki's many stakeholders has different expectations of the company. We engage in continuous dialogue with our stakeholders and actively meet stakeholder representatives.

The table below describes the interaction we have with our key stakeholders, the tools we use to do this and the actions we took in 2013.

Key stakeholders	How we survey our stakeholders' expectations and measure our own performance	How we respond to expectations	Some of interactions that took place in 2013
CUSTOMERS	• Customer satisfaction-surveys • Customer feedback • CRM system • Key accounts and key account managers • Brand surveys • Customer and market analyses	• Personal sales work • Customer events, training • Technical product support • Product launches • Answering customer queries • Product brochures • Product environmental declarations • Ruukki.com • Electronic customer letters • Loyal customer programmes for distributors and end customers • Trade fairs	• We were present at 33 special steels trade fairs in 17 countries • We participated in 28 energy efficient building events attracting over 50 visitors in seven countries • Study of house owners' expectations vis à vis renewable energy roofing solutions and various service concepts in six countries • Study of views regarding energy efficiency for commercial and industrial construction decision-makers in Germany, Poland, Sweden and the UK • Ruukki Classic Solar roof at the housing fair in Finland, 130,000 visitors • Customer satisfaction measuring process

Our most important Key stakeholders	How we survey our stakeholders' expectations and measure our own performance	How we respond to expectations	Some of interactions that took place in 2013
PERSONNEL	• Employee engagement study • Safety reporting system • Competence assessments • Initiatives	• Supervisory work • Development discussions • Co-determination • Coaching and training • Site safety committees • Info screens at plants, intranet	• 6,395 Ruukki employees replied to the employee engagement study • 89% of Ruukki people had development discussions • 49 employee cooperation bodies that meet regularly • Ruukki Metals' Safety Day
INVESTORS AND OWNERS	• Active contact with analysts, investors and owners • Investor surveys	• Consistent, adequate and impartial information at the same time to all investor audiences • Meetings with investors • Annual General Meeting • Financial statements, interim reports and annual report • Capital Markets Day • Answering investor questions • Events intended for investors • ruukki.com and ruukki.fi websites as the principal information channels	• Around 190 investor meetings in 2013 • 483 of our owners attended the Annual General Meeting • Over 30 visitors attended our Capital Markets Day in person and dozens of others via webcast • We participated in the Rahapäivä event organised by the investor magazine Arvopaperi at which we met hundreds of small-scale investors • Investor communications on ruukki.com/ruukki.fi website, through video conferences and webcasting
SUPPLIERS (PARTNERS) AND SUBCONTRACTORS	• Supplier management process including audits, development meetings, complaints, feedback on agreed indicators, etc. • Price and other negotiations • Feedback from suppliers	• Contacts • Purchase forecasts, volume estimates • Participation in activities of trade organisations • Coaching, training, supplier days • Ruukki.com • Annual planning with suppliers	• 37 supplier evaluations • 95 supplier meetings • Safety briefing day for subcontractors where an award was given to the previous year's best supplier from the safety aspect.
EDUCATIONAL INSTITUTIONS	• Employer image surveys • Contact with educational institutions • Monitoring of trainee feedback • Summer employee feedback study	• R&D projects • Training and thesis project places • Summer jobs • Guest lectures • Recruitment fairs • Site visits by schoolchildren and students • Training by recruitment • ruukki.com	• We participated in 8 student or recruitment fairs • Approximately 2,700 students and teacher groups visited our works • 831 summer workers • Numerous research projects, trainees, employees with a thesis project
MEDIA	• Surveys • Media monitoring • Active contact with media representatives	• Releases • Interviews, answering queries • Meetings with the media, background briefings • Ruukki.com	• In addition to media events in conjunction with the disclosure of results, background briefing events with reporters • PR Barometer
REGULATORS, NON GOVERNMENTAL AND OTHER ORGANISATIONS, LOCAL COMMUNITIES	• Active participation in the activities of various organisations • Various development partnerships • Questionnaires and monitoring use of the website	• Local collaboration with regulators and reporting • Opinions • Participation in the activities of interest groups • Annual report • Releases • Interviews, answering queries • Meetings with the media, background briefings • Environmental reports • Open days • Ruukki.com	• Approximately 400 visits to works • 12 research projects related to environmental issues • Regular participation in the activities of 22 interest organisations and working groups • 1 environment evening held by the Raahe Works

CUSTOMERS

Ruukki's operations are customer driven. Construction has seen our customer base expand not only in the Nordic countries, but also in countries in Eastern and Central Eastern Europe, whilst special steel products have seen us enter the emerging markets such as China, India and South America.

Our biggest customers are companies and retailers and Ruukki has a total of 11,760 active corporate customers. Consumers who use Ruukki's construction products and related installation services are also an important customer segment.

During the course of the year, we meet customers at many various customer and other events, trade fairs, seminars and training events. Examples of events organised by Ruukki include the Steel Pile Day, Construction Day and Special Steels Days, which bring together professionals in each respective field to discuss topical themes, especially those involving energy efficiency. Special Steels days were held in 15 countries. We were present at 28 stakeholder events relating to energy-efficient construction in seven countries. We also work together with actors in the environmental field. For example in 2013, we participated in Cleantech Finland's joint press conference in Moscow.

Continuous tracking and actions in response to customer requirements regarding responsibility

Ruukki's customers have requirements regarding responsibility. Ruukki ascertains and receives information about such requirements via the customer satisfaction survey, direct customer requirements and through targeted customer surveys.

In 2013, we continued to work on and expand the renewed corporate-wide customer satisfaction measurement rolled out in 2012 and received a total of over 1,000 replies from different business areas. The most important single feature in our renewed customer satisfaction process is immediate reaction to negative customer feedback.

Ruukki uses NetPromoterScore (readiness to recommend) and total customer satisfaction index as its indexes to measure customer satisfaction. Despite the slightly negative development over the past year, we received a good score in both. Based on measurement results, our customers value the responsibility we take in safety, the fact that we keep our promise and the quality of our products.

	2010	2011	2012	2013
NetPromoterScore*	16	N/A	42	35
Total customer satisfaction**	3.6	N/A	3.8	3.7

*NPS is calculated based on the results of the customer satisfaction survey derived from recommendation values (share of recommendations – share of non-recommendations).
A value of 15–29 is slightly good and a value of 30–45 is good.
**Total customer satisfaction has been evaluated on a scale of 1–5, where 1 = poor and 5 = excellent.

In our customer satisfaction survey, we asked customers also about responsibility aspects with regard to social and environmental responsibility themes. Customers were of the opinion that we performed very well, especially in the areas of safety and environmental responsibility.

We deal daily with direct customer requirements regarding environment and social responsibility as part of our quotation request stage. Such requirements can concern the chemical compounds we use in our coatings, certification of our environmental management systems or our principles of social responsibility, for example. We ensure that both the products we make ourselves and those of our subcontractors meet customer requirements. Besides this, environmental product declarations for Ruukki's most popular products are in the public domain on our website.

In addition to continuous customer satisfaction surveys and direct customer requirements, we also conduct targeted customer research. In 2013, for example, we studied the expectations of people living in single-family homes vis-à-vis renewable energy solutions for roofs and various service concepts. These studies were conducted in six different countries.

Case: future Polish engineers learn about Ruukki

During 2013, Ruukki organised five special steel workshops for technology students in Poland. Besides building on their knowledge of steel, the students also learnt about Ruukki as a company and potential future employer.

Workshops were held at the principal educational institutions in the sector in Poland: Szczecin, Kraków, Gdansk, Lublin and Poznan. The events attracted great interest, with between 70 and 150 students participating at each event.

At lectures delivered by Ruukki, students were provided with technical information about special steel products and heard about their end-user applications. Besides lectures, students also had the chance to enter a competition to design a tower crane.

"It's great that so many students are already considering their lines of study and were enthusiastic about our competition. The best way to learn is by doing," notes project manager Marcin Dworecki, who was one of the lecturers from Ruukki.

PERSONNEL

Without motivated, committed personnel who have adopted Ruukki's values and work towards shared goals, Ruukki would be unable to achieve its targets. The company has particularly focused on creating natural interactive channels with the personnel at each site.

Various active cooperation forums, employee opinion surveys and everyday team-specific cooperation form a good base to find out about personnel expectations. We take notice of feedback from our personnel in developing human resources practices.

› Read more about the personnel as a stakeholder and our means of interaction

In addition to Ruukki's own personnel, potential Ruukki employees are also another important stakeholder.

› Read more about our cooperation with potential Ruukki employees

OWNERS AND INVESTORS

At year-end 2013, Ruukki had 47,031 shareholders. The Finnish state has a 39.7% stake in Ruukki through Solidium Oy. Our shareholders expect to see increased shareholder value, responsible and sustainable operations and risk management.

Hosting meetings with our management for analysts and investors, our investor relations function, shareholder meetings, press conferences, the Investors section on our website, stock exchange and press releases, financial reports and capital markets days are some of the ways we engage in open dialogue with our owners.

We evaluate our success on this front on the basis of feedback received at meetings with investors, external investor relations surveys, shareholder numbers and structure, trading in the company's share and appreciation in share value.

Around 190 meetings with investors and analysts

Ruukki's Investor Relations is tasked with providing the capital markets with information about the company's news and financial performance. The main principles guiding investor relations include providing consistent, adequate information impartially at the same time to all investor audiences in all situations. The company also aims at honesty, transparency and good service.

Together with senior management representatives of the company, Ruukki's Investor Relations hosts meetings with owners, investors and analysts, both in Finland and outside, mostly in Europe and the United States. A total of some 190 investor meetings took place in 2013.

The 2013 Annual General Meeting held in March was attended by 483 shareholders. Our capital markets day was held in Hämeenlinna, Finland in June and was attended by 30 visitors in person, together with dozens of others via the webcast. Also conferences held in conjunction with the disclosure of results are an effective way to share information and receive feedback from capital market representatives. In September, we participated in the Rahapäivä event organised by the investor magazine Arvopaperi at which we met hundreds of small-scale investors. Also we arranged many visits for investors to our works during the past year.

The principal channel for investor information is the Investors section on our ruukki.com website. We have continuously developed the content of this website to improve both site content and user-friendliness. During 2013, we particularly focused on developing the information content and presentation of our interim reports. Ruukki's Investor site received an excellent ranking by KWD Webranking, for example. Such recognition motivates us to continue development work on this front.

Ruukki received an award as the best Nordic Mid Cap company in the 2013 Nordic IR Awards competition. In addition, Timo Pirskanen, Vice President, Investor Relations at Ruukki was nominated the best Nordic IRO in the Mid Cap category. Organised by the Swedish analysis and research company Regi, the competition results for the investor relations activities of listed companies were published for the 16th time. In 2013, the results were announced with an all Nordic perspective and a total of 159 Large Cap & Mid Cap companies were included. A total of over 600 analysts provided feedback on the investor relations of the Nordic companies they follow.

Online responsibility questionnaire for owners and investors

Summer 2013 saw Investor Relations conduct an online questionnaire for key owners, investors and analysts about their expectations vis-à-vis responsibility, responsibility communication and reporting at Ruukki. The corporate responsibility task force went through the questionnaire results and the relevant points were taken into account in developing responsibility management, communication and reporting at Ruukki.

SUPPLIERS AND SUBCONTRACTORS

Effective and responsible supply chain management ensures qualitative, cost-effective delivery of our products to customers

Our customers benefit from well-managed supply chain management, which consists of responsible sourcing, dependable logistics and the continuous development of our own operating activities. Responsible business is part of a company's success, competitiveness and risk management. This is why we continuously evaluate our own operations and those of our partners to ensure compliance with the highest business standards, safety, quality and environmental matters

Supply chain management includes:

Responsible sourcing: Working with suppliers to ensure products and services, controlling purchasing operations and safeguarding supplies of raw materials

Dependable logistics: In a global environment, the best logistics concepts ensure our products reach their destination reliably and cost-efficiently according to our customer promise

Operational excellence: Safety comes first at all times, followed by continuous development of operational activities to improve quality and productivity

Delivery reliability: Good delivery reliability is a key requirement for the success of Ruukki and its customers

Ruukki operates in around 30 countries and supplies products to customers around the world. We strive to ensure the cost-effective management of material flows between our units and to our customers by minimising unnecessary transport and handling. A well-managed supply chain also has wider environmental implications because it means energy savings and lower environmental impact.

We require suppliers to comply with our Code of Conduct and to respect human rights in all their operations. Compliance with the Code of Conduct is ensured by regular supplier evaluations.

Responsible sourcing

Taking into account cost factors, Ruukki values delivery flexibility, reliability and delivery accuracy, as well as the quality of goods and services in sourcing. The general terms and conditions of sourcing contracts take into account the company's Code of Conduct. Ethical values and environmental aspects are also taken into consideration when choosing suppliers.

Supplier evaluations

Continuous evaluation is an important part of supplier management. Ruukki's supplier evaluation database currently holds around 300 supplier evaluations. During 2013, Ruukki performed 37 supplier evaluations of new potential suppliers and of existing suppliers who are deemed critical and whose performance requires improvement. Criticality and performance can refer to for example delivery reliability, the characteristics of a product or service or environmental or safety practices.

Ruukki's supplier evaluations examine the following aspects: management responsibility, environmental management, risk management, quality and delivery management, sourcing processes, materials management, the production process and facilities and equipment. Problems in complying with the principles of good business practice, without exception, result in cooperation being discontinued. We make 50–80 delivery evaluations a year for longer-term service contracts. The results in respect of each supplier are summarised and an annual trend is compiled using the average values of the evaluation results for principal suppliers. This annual trend is discussed in meetings with suppliers. A total of 95 supplier meetings were held in 2013 to intensify and develop partnership with suppliers. The implementation and effectiveness of the measures agreed as a result of supplier evaluations are also verified at these meetings.

Safety

Ruukki's aim is for subcontractors to train their own people in safety matters. New service providers are required to have undergone safety training before they commence work at a plant. In addition, contractors are required to have completed occupational safety card training.

Principal subcontractors are invited once a year to a joint safety briefing, which covers the latest safety topics, gives feedback on the development of supplier safety and states the targets. In 2013, management or management representatives from 43 suppliers attended the briefing. At the event, an award is given to the previous year's best supplier from the safety aspect. In 2013, the award went to Bilfinger Industrial Services Finland Oy for very good work on the safety front over the past three years.

Dependable logistics

We are continuously developing our logistics operating models in our ongoing commitment to improving the overall total quality, cost-effectiveness and delivery reliability of transport.

Besides cost effectiveness, we also seek to avoid unnecessary environmental impacts by using the most appropriate forms of transport and by choosing as subcontractors companies that share our values and our commitment to using environmentally-aware solutions.

The environmental objectives of Ruukki Logistics unit include lowering energy consumption in transportation, minimising shipping risks and reducing damage sustained during transportation. We seek to be conducive to ensuring the transport firms we use sign up for the joint energy efficiency agreement in the Finnish transport and logistics sector. The energy efficiency goal is for logistics partners to sign up for energy efficiency agreements in goods transportation and logistics so that by the end of 2016, 60% of Ruukki's partners will have signed up for an energy efficiency agreement in Finland. The situation in 2013 was that companies who have signed up for an energy efficiency agreement accounted for 85% of Ruukki's land transportations.

One of our priorities in transportation is to reduce damage sustained during transportation throughout the transport chain. Our inspectors report the external quality of all Ruukki products from different ports when the goods are unloaded. In 2013, defective products accounted for 7.5% (2012: 10.7 %) of the products unloaded. Although the percentage of quality-defective products has shown a downward trend, quality-defective products still account for a high share of defective products. Packaging damage accounts for almost 75% of defects and around 11% of defects are moisture and rust damage. Mechanical defects account for around 6% of defects.

Transportation reporting and coverage is under development and the number of part loads is being eliminated by optimising transport and ways of loading.

Delivery reliability

Good delivery reliability underpins the success of Ruukki and its customers. Good delivery reliability minimises the environmental impacts of all parties in the supply chain. Our customers can minimise their inventories, improve their own logistics efficiency and optimise their own production.

Operational excellence

Development of operational excellence (OPEX) at Ruukki aims at lasting improvement in safety, performance, quality, delivery accuracy and flexibility. This is where our own personnel and competence development across Ruukki play a key role.

Between 2009 and 2012, more than 8,000 Ruukki people were trained in the use of OPEX tools (Lean, Six Sigma, Project management and Change management). This resulted in the completion of almost 1,000 development projects, large and small. In 2013, we switched to the normal continuous improvement model, where business areas and their support functions continuously develop things on a daily basis.

LOCAL COMMUNITIES

Ruukki strives to develop and maintain good relations with various stakeholders in society. Ruukki has a long tradition of actively working together with stakeholders in the vicinity of its sites. In most places where it has production sites, Ruukki is a significant local and regional force, whose role is reflected, for example, as an employer, buyer of regional goods and services and as a benefactor to local communities. The responsibilities and forms for working with local stakeholders have been defined on a site-specific basis. At the local level, Ruukki works together with regulators, communities, educational institutions, societies, neighbours and the personnel.

Ruukki's largest sites are mostly in medium-sized cities, where the company is a major force as a local employer. In addition to permanent employees, Ruukki also provides employment at its sites in Finland for large numbers of young, local students. The company also works together with local employment services.

At many sites, Ruukki is an important partner for local educational institutions and also within research, as well as offering young people internships and thesis projects. In addition, Ruukki's specialists are often invited to educational institutions as guest lecturers and at Hämeenlinna in Finland, for example, Ruukki provides a Ruukki course each year for high school students studying entrepreneurship to learn about working life and industry.

› Read more about our work with educational institutions

Ruukki works together with local environmental regulators on a plant specific basis. Besides ongoing collaboration with the supervisory authority, Ruukki also works together with cities and associations in monitoring air quality and observing the condition of waterways, for example.

Many different stakeholders visit Ruukki's sites each year. Visitors include schoolchildren, students, customers, subcontractors, various inspectors and regulators. To take a case in point, there were some 7,700 visitors to the Raahe Works in 2013.

Case: Ruukki holds events for plant neighbours:
At Virsbo in Sweden, Ruukki organised a local company day. Safety and environmental matters were the main themes of the event in 2013. Residents living within a radius of around 50 kilometres of the plant were invited to the event.

Case: Ruukki informs the immediate neighbourhood about environmental matters:
Ruukki informs its local neighbours and other stakeholders in the vicinity about the environmental impacts of its own operations. At Pärnu in Estonia, neighbours and the partner responsible for waste management at the plant were among those Ruukki informed about environmental requirements.


Photo: A. Aunola

Case: Local cooperation at the Raahe Works

Social responsibility – part of society

Ruukki's works in Raahe participates in diverse ways in the activities of the city of Raahe and the neighbouring community. Examples of cooperation include work done to safeguard the working conditions and improve productivity of the shared harbour. Discussion between Ruukki representatives and local decision-makers and regulators is an inherent part of everyday operations.

Ruukki supports local sports and cultural activities to promote the personnel's health and wellbeing. The Raahe Works also supports local sports activities for children and young people mainly through long-time cooperation agreements. In its capacity as an employer, the Raahe Works directly and indirectly affects a considerable share of households in the area. This is why Ruukki works closely with educational institutions and employment services in the city. Within the framework of such cooperation, over 1,700 students and schoolchildren visited the Raahe Works in 2013, when the Works had a total of around 7,700 visitors. Besides this, for example, machinery and metal technology students at Raahe Vocational Institute come to Ruukki for practical training and Ruukki awards scholarships to the best students. Ruukki works together with universities of applied sciences in the region in relation to studies and development projects. The University of Oulu is one of the principal partners of the research unit based in Raahe and the company is working with the university on a number research projects.

Most of the hundreds of summer workers employed by the Raahe Works are young locals. Ruukki works closely with local employment services and in 2013, for example, the company again worked with local employment services to retrain jobseekers who were either unemployed or at risk of losing their job (10 persons) to become crane operators at the Raahe Works.

Safety

Safety management is an inherent part of our everyday work. To take a case in point, over 20,000 events are held each year at the Raahe Works to ensure the safety of workstations and access routes.

We work together with transport firms visiting the Raahe Works and subcontractors working there to further improve the safety of traffic and people. Besides this, the company makes an award to a contractor for good safety work that has successfully led to a reduction in the number of injuries.

Ruukki works actively with various authorities to increase mutual knowledge of operations and to be prepared for emergency situations. Cooperation on this front includes regular drills with rescue services and the police.

Environmental responsibility

The Raahe Works is committed to continuously increasing the personnel's environmental awareness by, among other things, organising energy efficiency and waste sorting training, and by building business models to keep the working environment neat and tidy.

The environmental training theme in 2013 was waste sorting and 150 persons took part in training.

Regular meetings are held with environmental regulators. Ruukki works with the city of Raahe to monitor local air quality. The Raahe Works hosts an annual environment-themed evening for neighbouring residents. The theme in 2013 was the environmental impacts of the Works' operations since the closure of the sinter plant.

Heat generated in processes at the Works provides most of the district heat in Raahe.

SUPERVISION OF INTERESTS

Ruukki tracks and anticipates future legislation impacting on its operating environment and products. For example, increased EU environmental regulations have changed Ruukki's operating environment and imposed new requirements on products and production processes over the past ten years. The company maintains dialogue with society through industrial organisations and public debate. Ruukki has sought to improve the effectiveness and predictability of legislation by providing constructive information about proposed legislation already at the drafting stage.

Ruukki does not support government bodies, political parties or candidates, religions or associations by giving them any funds or donations. Ruukki is committed to compliance with its Code of Conduct in all its activities.

› Read more about our operating environment and joint projects

CORPORATE RESPONSIBILITY REPORTING

Regular reporting is a key part of communicating corporate responsibility at Ruukki, which has published an annual corporate responsibility report since 2003. Our corporate responsibility report is based on Global Reporting Initiative (GRI) G3.1 reporting guidelines. Besides our annual corporate responsibility report, we also actively provide information about environmental matters, the environmental lifecycle impacts of our products and matters relating to sustainability. Such information is principally published on our ruukki.com website. Unless otherwise stated, this corporate responsibility report provides information about Ruukki's economic, social and environmental responsibility for the period 1 January – 31 December 2013. More extensive information with regard to economic responsibility is published in our annual report and corporate financial statements.

Ruukki's Corporate Responsibility Report for 2013 has been published in Finnish and English as an online report and as a downloadable pdf report. The report consists of seven sections: Overview of 2013, Corporate responsibility at Ruukki, Economic responsibility, Environmental responsibility, Social responsibility, Stakeholders and Corporate responsibility reporting.

REPORT SCOPE AND DATA COLLECTION

Our corporate responsibility report sets out the relevant information about the management of economic, social and environmental responsibility, together with practices and our performance in different aspects of corporate responsibility. GRI indicators and verbal descriptions are used to describe our performance and achievements in the relevant aspects. In addition, we tell about corporate responsibility and sustainability in our Corporate responsibility section on our Ruukki.com website.

No significant changes took place in data collection methods during the year, nor have any material errors been found in previous reports.

- The financial information contained in this report is the same as that in financial reporting. Any exceptions or limitations have been stated in conjunction with the relevant figures. The reporting of key figures excludes subcontractors and suppliers of goods and services.
- The financial information contained in this report is based on Rautaruukki's consolidated financial statements, which have been prepared in compliance with IFRS.
- Information about the personnel has been collected from the company's corporate-wide personnel information system.
- The web-based Sofi+ data collection system has been used to collect environmental data from all production sites that were part of the group at year-end 2013. The scope of the data collected depends on the significance of environmental impacts at each site when examined from the environmental perspectives of the entire group.

The table below sets out the scope and data collection methods of Ruukki's corporate responsibility reporting.

Aspect	Scope of reporting	Data collection methods
Economic responsibility	All Rautaruukki Corporation's (Ruukki) activities (in accordance with the rules of consolidation)	Data are collected from Rautaruukki Corporation's (Ruukki) ERP system and consolidated at the corporate level
Environmental responsibility	All Ruukki's production sites	Data are collected from the Sofi reporting system and consolidated at the corporate level
Social responsibility: safety	All Ruukki's sites and business areas	Safety tool and safety reports
Social responsibility: personnel data	All countries which Ruukki operates in	Data are collected from the Sofi reporting system and personnel data systems and consolidated at the corporate level

Report verification

Ruukki uses Global Reporting Initiative (GRI) G3.1 reporting guidelines. This corporate responsibility report has not been verified by an external party. The financial information disclosed in the report is subject to audit. Environmental data are collected from sites with a certified ISO 14001 environmental management system. All Ruukki production sites are certified according to the ISO 14001 standard. The data have been checked by comparing them with the data for previous years at both the site and corporate level. Any divergences have been analysed.

GRI – INDEX

Ruukki's corporate responsibility report is based on Global Reporting Initiative (GRI) G3.1 reporting guidelines. GRI is a multinational organisation that develops guidelines for sustainability reporting. GRI's reporting recommendations are designed to serve as a generally accepted framework for organisations to use to measure and report their economic, environmental and social performance.

The table below compares Ruukki's corporate responsibility report and GRI G3 reporting guidelines.

Topic	On the web site	Comments
Description of the organisation		
1. Strategy and analysis	› Strategy › From the CEO › Risk management › Corporate Responsibility focus areas and targets › Our operating environment › Stakeholders › Economic value distribution	
2. Organisational profile	› Overview of Ruukki › Corporate structure › Business areas › Geographical locations › Financial statements › Shares and shareholders	
3. Raporting parameters	› Corporate responsibility reporting › Significant changes during reporting period	
4. Governance, commitments and cooperation	› Governance › Commitments › Our operating environment › Stakeholders	
5. Disclosure on management approach (economic, environmental, social)	› Code of conduct › Commitments › Social responsibility	

Topic	On the web site	Comments
Core indicators: Economic		
Economic responsibility	> Economic responsibility	
EC1: Economic value generated and distributed	> Economic value distribution	
EC2: Financial implications of climate change	> Environmental management > Environmental objectives and targets > Our operating environment, EU emission trading > Risk management	
EC3: Defined benefit pension plan obligations	> Remuneration statement > Remuneration > Coverage of pension plan	• Reported partially
EC4: Financial assessment from governance	> Public sector	
EC5: Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation		• Not reported
EC6: Locally-based suppliers	> Sourcing > Suppliers	• Reported partially
EC7: Local hiring	> Competence management	• Reported partially
EC8: Infrastructure investments and services		• Not reported
EC9: Significant indirect economic impacts, including the extent of impacts	> Economic value distribution	• Reported partially
Core indicators: Environment		
EN1: Used material	> Material data monitor > Raw materials	
EN2: Materials that are recycled	> Material data monitor > By-products > Energy and material efficiency in production > Environmental impacts	
EN3: Direct energy consumption	> Energy consumption > Environmental impacts	
EN4: Indirect energy consumption	> Energy recovery at steel mill > Energy and material efficiency in production	
EN5: Energy saved due to conservation and efficiency improvements	> Environmental objectives and targets > Energy and material efficiency in production	
EN8: Water withdrawal	> Water usage > Environmental impacts	
EN11: Land owned in protected and high diversity value areas		• Not reported
EN12: Impacts in protected and high diversity value areas		• Not reported

Topic	On the web site	Comments
Core indicators: Environment		
EN16: Direct and indirect greenhouse gas emissions	› Environmental impacts	
EN17: Other relevant indirect greenhouse gas emissions		• Not reported
EN19: Emissions of ozone depleting substances		• Not reported
EN20: Nox, Sox and other significant air emissions	› Environmental impacts	
EN21: Water discharge	› Environmental impacts	
EN22: Waste	› Environmental impacts	
EN23: Significant spills	› Environmental impacts, exceeding of permit limits, non-conformities	
EN26: Initiatives to mitigate environmental effects of products and services	› Energy efficient products and solutions › Significant reduction in emissions › Environmental management and risk management › Environmental objectives and targets › Working towards sustainability	
EN27: Reclaimed products and their packaging materials	› Material data monitor › By-products › Environmental impacts › Steel recycling	• Reported partially
EN28: Fines and non-monetary sanctions	› Exceeding of permit limits, non-conformities › Environmental objectives and targets, achievements in 2013	
Core indicators: People		
LA1: Workforce breakdown	› People › HR key figures	
LA 2: Employee turnover	› HR key figures	• Reported partially
LA 4: Collective bargaining agreements	› Remuneration	
LA 5: Notice period regarding operational changes	› Responsible resourcing	
LA7: Injuries, occupational diseases and work related fatalities	› Progress with safety	
LA8: Education and training related to serious diseases	› Promotion of work ability	• Reported partially
LA10: Average training hours	› HR key figures	
LA12: Percentage of employees receiving regular performance and career development reviews, by gender	› Intellectual capital and development potential	
LA13: Composition of governance bodies and breakdown of employees	› Board of Directors › Committees	
LA14: Salary ratios		• Not reported

Topic	On the web site	Comments
Core indicators: People		
HR1: Investment agreements including human rights clauses		• Not reported
HR2: Suppliers and contractors undergone screening of human rights		• Not reported
HR4: Incidents of discrimination		• Not reported
HR5: Freedom of association and collective bargaining	› Interaction with the personnel	• Reported partially. Ruukki's principles of social responsibility undertake to respect freedom of association and the freedom to belong to trade unions
HR6: Risks related to child labour	› Diversity and equality	
HR7: Risks related to forced and compulsory labour	› Code of conduct	• Ruukki's principles of social responsibility prohibit the use of forced labour
SO1: Impacts of operations to communities	› Community support	• Reported partially
SO2: Risks related to corruption		• Not reported
SO3: Training of anti-corruption policies	› Code of conduct › Commitments	• Reported partially
SO4: Actions in response to incidents of corruption		• Not reported
SO5: Participation in public policy and lobbying	› Supervision of interests	• Reported partially
SO8: Fines and non-monetary sanctions for non-compliance with laws and regulations	› Overview of 2013	• No significant during reporting period
PR1: Improving health and safety across lifecycle of products and services	› Products and services	• Reported partially
PR3: Information and labelling of products and services	› Product safety › Environmental product declarations	• Reported partially. Environmental product declarations and instructions for safe use are available for Ruukki's products.
PR6: Adherence to laws, standards and voluntary codes related to marketing	› Code of conduct	• Reported partially. Ruukki complies with legislation in each country.
PR9: Fines and non-monetary sanctions related to products and services	› Product safety	• No significant during reporting period.

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CFI.001EN/02.2014/TASKUT/RUUKKI

Ruukki provides its customers with energy-efficient steel solutions for better living, working and moving.

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