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Editing: Nokian Tyres Plc Graphic design and layout: Vanto Design and Incognito Oy Photos: Kirsi Salovaara, Nokian Tyres' photo archive Translation: TekMil

Dear reader,

Nokian Tyres' environmental report 2006 features a comprehensive outlook on Nokian Tyres' activities related to environmental protection, occupational well-being and corporate citizenship. As Nokian Tyres has grown and expanded internationally, it has developed a global HR strategy that also includes strategies on occupational well-being, safety, environmental and social responsibility. Further elements of the HR strategy are recruitment, competence development, management, rewarding and total quality management. Corporate management has defined a safety policy comprising environmental protection, occupational safety and property protection. Environmental management is an integral part of the company's operations and operational systems. The environmental certificates (ISO 14001 and EMAS) and quality certificates (ISO 9001) granted to the company prove that Nokian Tyres observes the respective requirements.

For a long time, profitable growth has been one of Nokian Tyres' strategic goals. Over the last couple of years the company has established a new plant in Russia and developed a strong retail chain, Vianor, to handle its product distribution in the Nordic countries, the Baltic region and Russia. Internationalisation has set new challenges for environmental and safety management, as the company has expanded its operations to new regions, where environmental management is a novel concept. Nevertheless, the company has been able to successfully implement its values and create common practices throughout the Group. In all of the company's operating countries, Nokian Tyres employees have expressed solid support for safety management, environmental protection and responsible corporate culture. The joint quality and environmental certificates granted to the plants in Nokia and Russia in 2006 are one indication of this. This environmental report complies with the EU's EMAS regulation. It primarily deals with the Nokia plant. The EMAS certificate cannot be expanded to also cover the Russian plant, because the EMAS regulation only concerns operations in EU and EEA countries. Other Group units are only addressed when their operations significantly deviate from those of the parent company.

Nokian Tyres received an honorary mention for its environmentally friendly tyres in the Finnish scheme of "European Business Awards for the Environment" in 2006. This Europe-wide competition promotes companies that support sustainable development in their business and feature pioneering products, activities and processes. Nokian Tyres wants to remain a pioneer in developing safe, environmentally friendly tyres. Our development aspirations span the entire scope of our functions, from product development to



EHSQ specialist, Vianor: Satu von Bagh (left), safety specialist Paavo Juusela, environmental engineer Elina Ekola, Vice President/ Personnel and EHSQ Sirkka Hagman, Quality Development and Safety Manager Pasi Anias, trainee Riikka Innanmaa, environmental engineer Sirkka Leppänen.

material acquisitions, from production to logistics. In 2007-2010 we will place a specific focus on the challenges posed by the EU's VOC directive and REACH regulation, as well as the efficient utilisation of non-vulcanised rubber waste.

We hope you enjoy reading this report. In the upcoming years we will be updating this report in accordance with the EMAS regulation. The next environmental report will be published by 31 May 2010.

2 April 2007

Vice President, Personnel and EHSQ Quality Development and Safety Manager (EHSQ) The EHSQ Team

A specialist in Nordic conditions

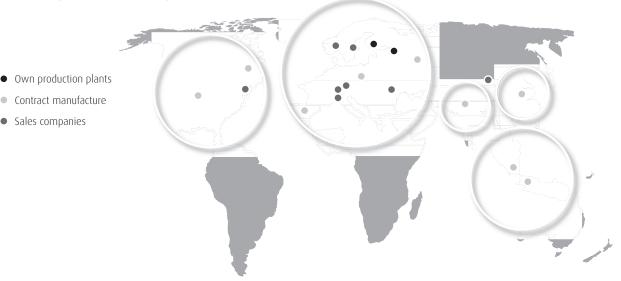
Nokian Tyres Plc develops and manufactures summer and winter tyres for passenger cars, truck tyres and retreading materials, as well as tyres for a range of heavy machinery, such as harbour, mining and forest machines. The company's core competence lies with mastering Nordic conditions, i.e. the varying situations of driving and usage on snow, ice and forest terrain. Nokian Tyres' strategy is based on sustainable safety, which refers to safe products and a safe company alike. The selected strategic focus has enabled the company's fast growth over the past few years.

Nokian Tyres is the only car tyre manufacturer in the Nordic countries and one of the most profitable companies in the industry worldwide. The company has two production plants, one in Nokia and one in Vsevolozhsk, Russia. In addition, the company has contract manufacturing in the USA, Indonesia, China, India, Spain and Slovakia. Nokian Tyres primarily operates in the tyre replacement markets. Its key market areas comprise the Nordic countries, Russia, the CIS countries, North America, eastern Europe and the Alpine region. The company also owns the Vianor tyre chain comprising over 250 sales outlets in Finland, Sweden, Norway, Estonia, Latvia and Russia. Some of the Vianor outlets operate on the franchising/partner principle.

Nokian Tyres plc was founded in 1988 and it was first listed on the Helsinki Stock Exchange in 1995. The company's roots go back all the way to 1898, when Suomen Gummitehdas Oy ("the Finnish rubber factory") was established. The Nokia plant was established in 1904. Passenger car tyre manufacture began in 1932, and the company's flagship product, the Nokian Hakkapeliitta tyre, was launched in 1936. In 2004, the company established a plant in Vsevolozhsk, Russia, and the first Hakkapeliitta 4 winter tyres were produced in this plant in early June 2005. The Vsevolozhsk compound mixing department was completed and inaugurated in the autumn of 2006 and, consequently, the plant can launch its third and fourth production lines in 2007. The expansion of the plant will continue after this, aiming at annual production volumes of 10 million tyres by 2011.

Key figures, IFRS

EUR million	2006	2005	Change%
Net sales	835.9	686.5	
Operating profit, EUR million	153.1	115.8	32.2
% of net sales	18.3	16.9	
Profit before taxes, EUR million		112.6	23.7
% of net sales		16.4	
Return on investment (ROI), %	22.7	21.4	
Return on equity, %	20.9	22.2	
Interest-bearing net debt, EUR million EUR	126.9	119.5	
% of net sales		17.4	
Investments, EUR million EUR	97.0	119.6	-18.9
% of net sales		17.4	
Net cash flow generated in busi- ness, EUR million	106.6	30.2	253
Earnings per share (EPS), EUR	0.88	0.7	27
Cash flow per share (CFPS), EUR	0.88	0.26	244
Shareholders' equity per share, EUR	4.56	3.89	
Equity ration	63	59.1	
Average number of personnel during the year	3 234	3 041	



Production plants and sales companies

Top results from systematic activities

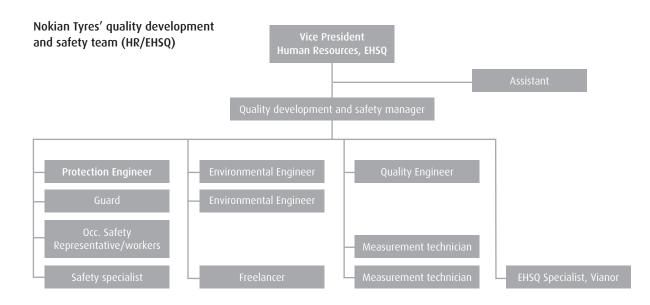
Organisation

The Nokian Tyres Group structure has become increasingly international, and at the same time the company has focused on developing global co-operation and common practices. In the field of safety management, significant milestones were reached with the new, global HR strategy and the establishment of the new EHSQ team. The HR strategy outlines the activities and goals of the personnel department (including environmental and safety management) in a new way and also clarifies the division of work between the central specialist organisation and various line organisations. In order to support common practices, the organisation in charge of the quality of operations was merged with the safety organisation, forming a new quality development and safety organisation, the EHSQ team, within the HR department. The EHSQ team is in charge of environmental, safety and quality management in the company.

The Vice President, HR and EHSQ, is responsible for the quality development and safety function with a subordinate Quality Development and Safety Manager leading operative work in the field. In addition, the EHSQ team comprises two environmental engineers, a protection engineer, safety specialist, quality engineer, Vianor's EHSQ specialist, two measurement technicians and the Occupational Safety Delegate of the Nokia plant. The team works in close co-operation with the people responsible for quality and safety in other units, as well as with external experts, such as occupational healthcare services.

The EHSQ team functions as an expert in all matters related to quality development and safety, including environmental management, chemical safety, waste management and occupational hygiene. The Team is in charge of the numerous legislative obligations related to environmental, occupational and property protection, such as authority relations and permissions related to large-scope chemical handling, monitoring of chemical use, safety counselling on the transportation of hazardous substances, co-operation in the field of occupational protection, and maintenance of emergency readiness and the related planning. Furthermore, in Nokia the team's tasks also include plant area safequarding arrangements, facility management, measurement device calibration, operational system maintenance, audit arrangements, quality and safety training with the related communications, and occupational healthcare arrangements. The organisation compiles disaster risk analyses concerning the entire plant, monitors the development of legislation and monitors the awareness of and compliance with instructions and legislative regulations in other units.

Various units of the Nokia plant have designated environmental officers and occupational protection delegates that handle safety management tasks in addition to their



own duties. The environmental officers act as environmental specialists in their respective units and as contact persons in interaction between units. They are also in charge of the appropriate handling of chemicals and waste in their units. The occupational protection delegates are elected representatives of employees in occupational protection issues. Unit supervisors and other members of the line organisation handle safety management in accordance with their respective job descriptions. Training and discussion sessions are arranged annually for the persons responsible for these matters in each unit, and the persons work in continuous co-operation with the EHSQ team.

Management systems

Nokian Tyres aims at managing all environmental impacts of its products throughout the product lifecycle and addressing the safety and quality issues related to its operations systematically and comprehensively. An extensive system encompassing environmental, safety and quality issues serves as a key tool for this purpose. The function manual complies with the ISO 14001 standard, EMAS regulation in environmental issues and the ISO9001 standard in quality issues. The management system also covers the safety management system referred to in regulation 59/99 (industrial handling and storage of hazardous chemicals, SEVESO II). In 2005 the environmental and quality system was extended to also cover the Russian plant, and in 2006 the Russian plant was also included in the common ISO 14001 and ISO 9001 certificates.

The long term goals for environmental, safety and quality issues are defined in the HR strategy, which is compiled for five-year periods and updated annually. The environmental programme sets out the annually specified goals, means, schedules and persons responsible for the goals outlined in the strategy. The environmental programme of 2006 was the first one to also include goals for the Vsevolozhsk plant, in addition to the Nokia plant. Furthermore, units have their own EHSQ-related goals and development projects concerning their own activities and processes. The development of environmental, safety and quality issues is regularly addressed in the monthly management meetings. Furthermore, the records of weekly HR department meetings that outline the most current matters are delivered to the President and CEO and other concerned parties. When necessary, top company management gives direct feedback to the EHSQ team.

SAFETY POLICY

Uncompromising respect for and awareness of environmental and safety issues is part of Nokian Tyres' successful operations.

As a company and as individuals, we assume responsibility for the safety, health and mental and physical well-being of our environment, working community, cooperation partners and customers. Our operations are customer-oriented and profitable. Our activities and attitudes reflect respect for different individuals and opinions.

When producing, developing and marketing tyres, tread and related processes and services, we embrace the absolute necessity of environmental and working safety and aim at top-level safety, continuous improvement and sustainable development. We develop our activities mindful of the products' entire life span and aim at a level of 0 faults in all areas of safety.

Practical measures:

- Safety issues are handled in co-operation with personnel, occupational health services, occupational safety committee, authorities and experts.
- The employees are guided, trained and encouraged to constantly account for safety and environmental issues in their work.
- We make sure that our contract partners apply these principles.
- We apply the related legislation, regulations and instructions, set function-specific goals and monitor the implementation thereof.
- Risk analyses, internal reviews and audits are carried out on a regular basis and the implementation of set goals and legislative regulations is monitored.
- Harmful environmental and safety effects are prevented by using high-quality, contemporary technology and operational procedures.
- We develop products that are safer and more environmentally friendly.
- The environmental, safety and health effects of projects are analysed beforehand.
- The development of safety and environmental issues is communicated on a regular basis and open, confidential relations are maintained with all stakeholders.

QUALITY PRINCIPLES

- We offer our customers products and services that exceed their expectations.
- We continuously improve our operations and processes to reach the top global level.

Safety policy and quality principles

Nokian Tyres' safety policy covers all environmental and safety issues. The safety policy reflects the importance of environmental and safety affairs for the company, and the objectives set for them. Correspondingly, Nokian Tyres' quality principles describe the objectives set for quality issues.

Quality development and safety management

Authorities and permissions Nokian Tyres' environmental and safety activities are supervised by several authorities, in Nokia primarily by Pirkanmaa Regional Environment Centre, the Safety Technology Authority TUKES, various officials of the town of Nokia, such as its environmental protection office, construction supervision, and the Nokia station of the Tampere Region Emergency Service. The body responsible for occupational safety issues is the Occupational Health and Safety Inspectorate of Häme. The activities of other Nokian Tyres sites are subject to supervision by local authorities.

Nokian Tyres maintains constant discussion contacts with various authorities and organises visits and meetings when necessary. The contacts are established already at the project planning phase in order to be able to take any authority regulations and requests into account in time. Authorities are immediately informed of any disruptions, accidents or deviations from permit terms and conditions.

Nokian Tyres sees authority permits as minimum conditions. The company stays abreast of the developments in environmental and safety legislation in Finland, the European Union and Russia alike, and anticipates the impacts of regulations under preparation. For example, the EU directive that will become effective on 1 January 2010 requires that all high-aromatic plasticiser oils be abandoned in the tyre industry. Nokian Tyres is the only tyre manufacturer to have already abandoned these oils.

The Environmental Permit granted to the Nokia plant is the company's most important environmental protection permit. The Pirkanmaa Regional Environment Centre awarded Nokian Tyres the Environmental Permit in accordance with the Environmental Protection Act on 20 February 2007. In addition to this and the chemical permits granted by the Safety Technology Authority, the company's Nokia plant has the Water Court's permit for taking cooling water from River Nokianvirta. The permits needed at the Russian plant were acquired at the construction phase in accordance with local legislation.

Chemicals control

Chemicals are handled and stored at the Nokia plant on a large scale, as stipulated in the decree 59/1999. This means that the company is required to obtain a permit from the Safety Technology Authority. In 2006 the plant was transferred from the category of establishments obliged to set out their accident-prevention policy to the category in which a safety report is obligatory. This change was mainly due to the changes in chemical classification and the lowered licence limit of hazardous chemicals. The amount of chemicals stored in raw material storages has increased slightly due to the increased production volumes. The Nokia plant has increased its own production and, in addition, it makes some of the rubber compounds for the Russian plant.

Nokian Tyres initiated chemicals control activities in the early 1960s, when a serious chemical accident happened at the company's paper factory. Currently, the company has a chemicals control team including an environmental engineer and a chemist from the product development laboratory. When necessary, other experts such as occupational health and safety personnel are consulted. Chemicals control aims at ensuring safe chemical handling at the plant. The company's internal instructions state that chemical suppliers are required to provide the chemicals control team with a valid, statutory Safety Data Sheet prior to the chemical delivery. No chemical may be taken into use before the control team has granted it a department-specific usage permit. The purpose of this procedure is to streamline the use of chemicals throughout the company and, whenever possible, replace hazardous chemicals with safer ones.

New raw materials to be used in rubber compounds are tested for quality assurance and suitability for production in both laboratory and production conditions. Raw materials approved for rubber compounds are recorded in a list of approved raw materials. Purchasers may only acquire materials contained in this list to the plant. The raw materials used in the Russian plant are also tested and listed in Finland.

A total of 500 different chemicals are used at the Nokia plant. Their names and up-to-date safety data sheets are saved in a database available to the entire personnel. The function manual's instruction section also includes instructions on chemicals handling. The electronic database is being expanded to also cover the Russian plant, as well as Vianor's Finnish outlets in 2007.

The company manufactures and sells glues and paints for the rubber industry and imports approximately 40 raw materials used in rubber compounds. The company's environmental engineer compiles safety data sheets for these products and submits them to the chemicals unit of the National Product Control Agency (STTV) for review and registration.

At the beginning of 2006 the Nokia plant deployed an automatic chemical weighing system and has consequently been able to abandon nearly all manual weighing. This is a major improvement in the management of health risks in primary manufacture. The small chemicals weighing system covers all of the most commonly used small chemicals; only some 5-10% of small chemicals are weighed manually.

Nokian Tyres is already prepared for the impacts of the EU's new REACH chemicals regulations that will become effective in 2007 by surveying its future obligations and various possible practices to fulfil them.

Audits

Regular audits form an integral part of environmental, safety and quality activities. With the audits the company aims at ensuring an environmentally friendly, high-quality, safe working environment for its employees. The audits aim at finding out whether the audited activities comply with legislation, the company's safety policy, quality principles and operational system's instructions. At the same time the activities are surveyed to determine whether they could be further developed in an even more environmentally friendly, high-quality and safe direction.

Internal audits are carried out at least once per year in accordance with the audit plan approved for the company. Each sub-area in the operational system is audited at least once every three years.

The audits are carried out on-site or on the basis of memos produced in the unit, depending on the auditor's choice. In addition to the auditors, the audit team comprises the required number of unit representatives. The team observes the unit's circumstances on site and in conversations with employees. The auditor must inspect the unit's machinery and processes and get acquainted with reports, registers, work instructions and other operationally significant documents as comprehensively as possible. Internal safety audits include environmental and occupational safety audits. The safety audit covers machinery protection, fire protection and general order, appropriate handling and storage of chemicals, occupational hygiene, working conditions and waste management. The audit team also monitors the development of the units' safety index (points/%).

The auditor compiles an audit report featuring development targets as well as positive observations. The unit's line supervisors are in charge of rectifying the development targets noted in the audit in co-operation with various personnel groups of the unit. Once completed, the corrective measures are recorded as done, i.e. in quality terms, "the deviation is closed." Persons responsible for quality and safety audits compile a written audit summary after the audit round in accordance with their area of responsibility. The summary is then presented at the management's audit. The purpose of these summary documents is to inform the management of the audit results and development and therefore to serve as a basis for the management's decisions on any new necessary development measures.

Audits carried out by customers and co-operation partners are also considered internal audits. These include, for example, audits by the car industry, weekend on-call duties by the management, and audits carried out in conjunction with Total Process Management (TPM).

An external auditor performs an audit once a year to assess conformity to standards. Authorities and the insurance company also control compliance with laws and regulations on an annual or per need basis.

Environmental and safety objectives

The long-term environmental goals are defined in the HR strategy compiled for five-year periods. The environmental programme sets out the annually specified goals, means, schedules and persons responsible for the long-term goals outlined in the strategy. The annually selected objectives must be relevant in terms of the company's environmental performance and the level of occupational safety. The table below is an extract from the HR strategy, section Social Responsibility and the Environment.

Objective	Measures
Minimising environmental risks	 Applying for permits and conforming to legislation Common, Group-wide principles for environ- mental issues and the use of chemicals Fulfilling the requirements of the EU's VOC directive and REACH regulation Common practices for assessing the environ- mental impacts of different projects and corporate acquisitions
Environmental friendliness and safety of products	 Maintaining the life-cycle principle in product development Participating in tyre recycling development projects in the EU and Russia Using safer chemicals in production, pioneering in the tyre industry Educating tyre testers to emphasise the tyres' environmental properties in test results
Environmentally responsible image and good corporate citizenship	 EMAS environmental report 2007, corporate citizenship report 2010 Implementing an applicable point system for measuring corporate citizenship

From use to recycling

Lifecycle refers to the different stages a product undergoes from manufacture to use to removal from service, in other words from raw material to waste. The lifecycle of a tyre begins from a caouthuc tree in the southern hemisphere, e.g., Indonesia or Thailand. The lifecycle spans the manufacture of raw materials and products, storage, and many rounds of transportation. The tyre's actual lifecycle ends, for example, when the tyre is crushed and used in land construction. The lifecycle can be roughly divided into four parts:

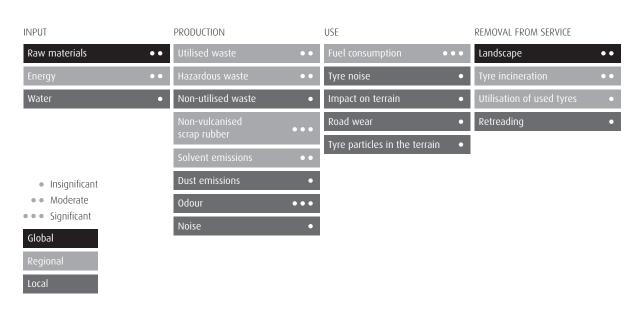
- 1. Procurement and manufacture of production inputs such as raw materials and energy.
- 2. Tyre manufacture
- 3. Use of tyre
- 4. Utilisation of used tyres

Nokian Tyres' environmental protection policy stems from lifecycle thinking. This means that the company acknowledges its responsibility for the environmental impacts of its products and activities over their entire lifecycle. The company's purchase policy states that the suppliers' commitment to environmental affairs is investigated as part of the procurement process. All contract partners, such as contractors and subcontractors, must be committed to Nokian Tyres' principles.

Most of the tyre's environmental impacts are generated during tyre use. The most important in-use impact is the vehicle's fuel consumption. Tyre consumption can be reduced by lowering the tyre's weight and rolling resistance, consequently reducing exhaust fume emissions and the formation of greenhouse gases. However, the most significant factor affecting the level of exhaust fume emissions is the driver's driving style. Economic driving can generate 10–20 per cent savings in fuel consumption.

Nokian Tyres' technical customer service deals with product and usage training, technical information distribution and solving problems related to the company's products and their usage throughout the entire customer chain. It provides technical support to the marketing function and is actively involved in new product launches and the preparation of marketing material. As part of the product develop-

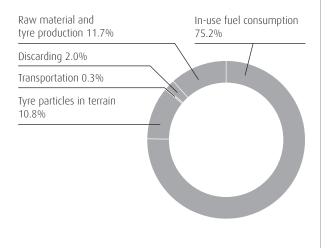
The lifecycle of Nokian Tyres' products and the significance of environmental impacts



ment process, technical customer service collects and analyses feedback from the field, concerning both Nokian Tyres' and its competitors' products.

In Finland, under Government Decision no. 1246/1995 on the recovery and disposal of discarded tyres, it is forbidden to take tyres to public landfill sites. The Decision stipulates that the tyre manufacturer must organise the collection, transportation, storage, reuse or other forms of utilisation of discarded tyres, as well as the related communication and education. Fulfilling its producer's responsibility, Nokian Tyres was one of the founders of the tyre recycling company called Suomen Rengaskierrätys Oy in 1996. This company deals with the collection and utilisation of used tyres on a nationwide basis. The objective of a 90-percent utilisation rate by the year 2000 was already achieved in 1998. In 2006, a total of 40,787 tonnes of tyres was received for recycling through Suomen Rengaskierrätys Oy. The tyres are crushed or granulated and then utilised mainly in land construction. The recycling of used tyres is financed from the recycling fees collected from buyers of new tyres. Nokian Tyres has also initiated discussion on launching tyre recycling in accordance with the Finnish model in the St. Petersburg area as well.

Distribution of environmental impacts over a tyre's lifecycle





Street dust

In Finland, winter sanding sand is considered the main source of street dust in the spring. The quality of air in cities is also dependent on the way the dust accumulated on roads blows up into the air. There are differences between tyres in terms of how they wear the road surface and form particles from it. Furthermore, tyres have different grip on the road and, consequently, different impacts on the amount of dust blowing up from the road (resuspension). Dust measurements carried out in the autumn of 2005 provided new information on the impacts of friction tyres and studded tyres on the street dust problem: studded tyres impose greater wear on the street surface.

Nevertheless, friction tyres leave behind approximately 25% more dust than studded tyres. This difference is due to the suction cup phenomenon of friction tyres: the tyre attaches to the asphalt surface more firmly than a studded tyre. When the tyre surface detaches from the road, the fine dust gathered in its cavities blows up into the air.

Source: Reduction of rolling noise. (VIEME) Preliminary study.

Estimates on the road wear caused by studded tyres vary greatly. In 1993, asphalt wearing in Finland was estimated to add up to 107,000 tonnes/year. Asphalt wearing has been reduced by changing the asphalt material as well as the size and metal compound of tyre studs. According to the latest estimates, the road wear caused by tyre studs is approximately 47,000 tonnes/year. Source: Helsinki Metropolitan Area Council (YTV) report: Studies on the

composition and sources of urban road dust.

Innovative leader

The cornerstone of product development at Nokian Tyres is to develop tyres for the demanding Nordic conditions. Development is guided by the principle of sustainable safety: the tyre should retain its safety features almost intact despite ageing and wear. In addition, the objective is to reduce the tyre-induced fuel consumption and noise, as well as the road and tyre wear.

Safety also means developing environmentally friendly products and production technology. Nokian Tyres has been a pioneer in the development of product manufacturing processes utilising the safest chemicals possible. An EU Directive stipulating that high aromatic oils must be abandoned in tyre manufacture will become effective at the beginning of 2010. Nokian Tyres was able to abandon most hazardous substances as early as ten years ago, and the use of hazardous high aromatic oils was terminated altogether at the Nokia factory at the end of 2004. Currently Nokian Tyres uses no poisonous or carcinogenic chemicals. The company's example has accelerated the use of cleaned, low aromatic oils in tyre manufacture in Europe.

The most important in-use environmental impact of tyres is the vehicle's fuel consumption. Lower fuel consumption contributes to the reduction of greenhouse gases emitted to the atmosphere. With goal-oriented, long-term product development work, Nokian Tyres has succeeded in further lowering the rolling resistance of its new tyres. The average rolling resistance of passenger car winter tyres is nowadays lower than that of summer tyres. This has been achieved by such measures as tread pattern and tread rubber compound development.

Furthermore, the company places a continuous focus on reducing tyre noise. Reductions in pass-by noise contribute to general comfort. It has been stated that inside noise in a car affects the driver's alertness, which, in turn, has an impact on traffic safety. Consequently, reductions in inside noise can contribute to traffic safety.

Nokian Tyres' novelty for autumn 2006, the Nokian Hakkapeliitta 5, has gained excellent results in car magazines' winter tyre tests. The grip and driving qualities of the Hakkapeliitta 5 have proven to be clearly the best in tests on snow and ice. The development process of Hakkapeliitta 5 included studies of the square stud's grip properties in comparison with the traditional round stud. The square stud also has clearly better grip properties. A road wear comparison survey carried out by VTT Technical Research Centre of Finland showed that the new studded tyre of Nokian Tyres' main competitor caused 30% higher wear on road surface than did Nokian Hakkapeliitta 5.



The target share of new products in net sales is no less than 25 per cent annually. The development of a new passenger car tyre takes 2–4 years.

The Nokian Hakka series tyres that will be launched for sales in spring 2007 feature a number of safety-enhancing and noise-reducing innovations. The asymmetric tread pattern of the new Nokian Hakka H and Nokian Hakka V tyres effectively prevents aquaplaning and improves the tyres' driving qualities. The uniform outer shoulder lowers noise, as the tread blocks remain stable in varying driving situations. The protrusions and noise cavities in the longitudinal affect airflow and prevent the emergence of the unpleasant hauling noise. The carcass measuring and material selections have been designed with a specific focus on lowering impacts and road noise. The noise generated by the tyres is 1–2 dB lower than that of competing products. The innovative Driving Safety Indicator (DSI) is further developed in the new Hakka tyres: in addition to the numbers indicating groove depth, the tyre also has an aquaplaning indicator. When the tyre has only four millimetres of tread depth remaining, the tread's drop symbol will disappear, reminding the driver of the increased risk of aquaplaning.

In conjunction with the Nokian Hakka summer product group, Nokian Tyres expanded the safety of its tyres in use. The company grants new Nokian Hakka passenger car summer tyres a free-of-charge Hakka Warranty in Finland, Sweden, Norway and Russia. If a tyre that has been mounted correctly and used appropriately accidentally breaks in normal use, the consumer receives a similar replacement tyre free of charge.

Nokian Heavy Tyres' most significant novelty for autumn 2006 was the Nokian Forest Rider, a radial forestry tyre. The

patented side puncture protection, combined with the radial structure, ensures the safety, durability and long operating life of the tyre. The large contact patch and lower surface pressure of the tyre reduce its impact on the terrain. Thanks to the low terrain impact and excellent cleaning properties, the tyre does not transfer soil to roads. Its good traction and running ability and the rolling resistance that is approximately 5% lower than that of the previous model also reduce fuel consumption.

The Nokian TRI2 launched in 2004 was the first HAoil-free product in the heavy tyre category, and today all Nokian products are HA-oil-free. The block-surfaced TRI2 ensures good grip properties in the winter, even wearing and a long operating life. The tyre is quiet, and its low rolling resistance saves fuel; the rolling resistance is 10% lower than that of the predecessor.

All Nokian truck tyres gained noise approval in accordance with the EC type approval procedure in summer 2006. Inside noise with the tyres is, at lowest, 70 dB, whereas the limits are 76 dB for summer tyres and 78 dB for winter tyres. The improved durability and quality of tyre carcasses have enabled better retreading properties. New products include NTR-861 and NTR-844 for all-yearround use. Thanks to the new SPIRAL SIPE SYSTEM technology, the tyres have excellent grip and long-lasting driving qualities. Further properties of the tyres include lower rolling resistance and noise level, and approximately 20–30% better wear resistance than those of the previous models. The tyres are also equipped with DSI that indicates the remaining groove depth.

Tread production is another field in which Nokian Tyres has been a clear forerunner in terms of using safer chemicals. Nokian Noktop treads have been entirely free of poisonous oils since the mid-1990s. Water dilutable glues have been tested over the past few years in tread production and retreading plants. Production testing of water-dilutable glue spraying devices began in Nurmijärvi in January 2007. The company intends to start using Finnish water-dilutable glue at its Finnish retreading plants.

The Nokian Noktop 40 is a new tread product for allyear-round use, featuring up to 20% better wear resistance and 10% lower rolling resistance compared with its predecessor. This can add up to 5% fuel savings, particularly in long-haul bus use. Furthermore, the noise level of the tread is low, 3% lower than in the previous type. The tread also has DSI.

HA-oil-free products

ALL products made at Nokian tyres plants include rubber compounds with purified, low aromatic oils only. Nokian Tyres is the first car tyre manufacturer in the world with entirely HA-oil-free production.



Square studs (Nokian Eco Stud System 4)

Nokian Tyres introduced the square stud for the first time three years ago. The square stud has four-way grip and improves driving safety in winter conditions. The square stud now has a plus after its name. After



further development, not only the hard metal stud pin and bottom flange, but also the body of the stud is now square shaped. This produces two advantages: the stud's wider support improves grip on ice, and the stud is anchored more firmly in the tread compound. This ensures tyre safety throughout the tyre's lifespan. The front edge of the tread blocks features a sharp-edged, claw-like projection – the "bear claw" – which pre-tightens and supports the stud. The bear claw holds the stud in the ideal position during road contact and braking, as well as in lateral movement. The stud does not twist or give way and thus maximises grip.

DSI (Driving Safety Indicator)

The wear indicator on the centre rib of the tyre indicates in clear numbers how many millimetres of tread are left on the main grooves. The numbers fade one at the time as the tyre wears down. In addition to the numbers indicating groove depth, the new



Nokian Hakka tyres also have an aquaplaning indicator. When the tyre has only four millimetres of tread depth remaining, the tread's drop symbol will disappear, reminding the driver of the increased risk of aquaplaning.

High-quality competence

The tyre manufacturing process can be divided into six main phases: raw material acquisition and receipt, rubber compound making, component manufacture, assembly, curing and inspection.

Nokian Tyres' purchase policy states that the suppliers' commitment to environmental affairs is investigated as part of the procurement process. Initial approval criteria for suppliers include compliance with statutory requirements, a designated person responsible for quality and environmental affairs or identification of the key quality-related and environmental impacts. Furthermore, the supplier must demonstrate commitment to continuous improvement, have defined quality and environmental policies and environmental goals, and recognise significant environmental issues. A (certified) quality and/or environmental system, at a reasonable extent considering the supplier's resources, is a further requirement.

All raw material deliveries to Nokian Tyres plants undergo a receipt inspection before unloading and storing. A sample is taken from each delivered batch of raw materials for laboratory examination. Each batch of raw material stays in the raw material storage until the laboratory grants it utilisation approval. Only after this can the material be used in rubber compounds. In primary production, the raw materials are first mixed into rubber compounds. The main raw materials are natural rubber, synthetic rubber, carbon black and oil. Raw materials are fed into a mixing mill in accordance with specific recipes. The recipes depend on the desired characteristics of the rubber compound. During mechanical mixing, the temperature of the mixing mill may rise to as high as 180 degrees. When completed, the compounds are cooled down to prevent vulcanising.

Component manufacture makes different rubber mats, textile and steel belts and cables from rubber compounds, textile mats and metal cords. It usually takes 10–30 components for one tyre.

The tyres begin to take shape at the tyre-building machine, in which the assembler puts the components in place. New machines are mainly automatic, and the assembler's tasks include supervising the machine's work (phases) and checking the seams. The body side of the machine runs the inner and sidewalls as well as a sufficient amount of reinforcing material, while the belt side takes the so-called tread package, i.e. steel belts and the surface rubber. After these phases the machine places the cables, turns the sidewalls and rolls the tread package on. The resulting product is a green tyre. Before curing, the inner wall of the green tyre is lubricated with a release agent to prevent the curing



pad from sticking on the tyre. At this phase, the green tyres can still be shaped.

To make them hard and flexible, they are vulcanised, in other words cured at the right temperature and pressure. Vulcanising agents in the rubber compound cause the tyre to harden. Tyres are vulcanised in the mould of the curing press, giving the tyre its final shape and tread pattern. The curing temperature of a passenger car tyre is 170 degrees, curing pressure 15 bars and curing time 10–15 minutes. The high steam pressure conducted into the curing pad inside the curing press presses the elastic green tyre against the tread pattern and side texts inside the moulds, giving the tyre its final appearance. For heavy tyres, the curing time is much longer: up to five and a half hours. Apart from that, heavy tyres are made mainly in the same way as passenger car tyres.

After curing all tyres undergo a visual inspection. Finally, the roundness of all tyres is tested in a test machine before labelling, packaging and delivery to the logistics centre, from where they will be delivered to retail outlets.

The company also manufactures materials for retreading used tyres. The only difference in their manufacture, compared with tyre manufacture, is that there is no assembly phase. The surface line makes "rubber plate" from the rubber compound made in primary production. The rubber plate contains two compounds. The rubber plate is then vulcanised in the mould of the curing press, giving the material its tread pattern. The curing time of retreading materials is 14 minutes. After vulcanising, the bottom surface of the tread is sprayed with vulcanising glue that enables the tread to adhere to the buffed carcass at the retreading plant. The use of water-based vulcanising glue in this process has also been tested for years. The obstacle to its utilisation has been the lack of non-blocking spraying nozzles. Another hindering factor has been resistance at the market.

Energy consumption

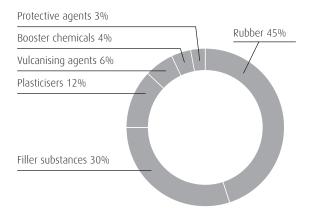
Various energy saving projects have improved energy efficiency at Nokian Tyres' Nokia plant despite the strong growth of production. The company uses energy in the forms of steam, industrial water and electricity. Electricity accounts for some 45% of the energy consumed, steam for 32% and industrial water for 23%. In 2006, the company's energy consumption totalled 201,050 MWh. All of the electricity consumed is produced using hydropower, so-called environmentally labelled "Norppa electricity."

The Vsevolozhsk plant has its own steam boiler using natural gas. In 2006, the plant's gas consumption totalled 3551500 m^3 and electricity power consumption totalled 38,650 kW.

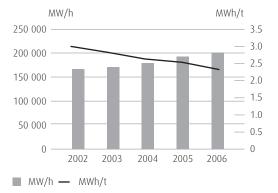
The heating energy needed for the tyre storage is produced in a heating plant constructed in 2001. The plant has two boilers, a 1-MW boiler using pellets and a 1.6-MW using light oil. Wood pellets account for 85% of the fuel consumption. The storage was expanded in 2005–2006. When the entire storage facility is in use, the estimated annual energy consumption stands at 4000–5000 MWh.

Chart on energy consumption and oil use development, and a pie chart on raw material composition.

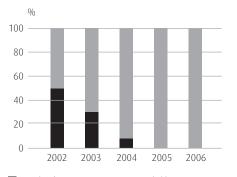
Rubber compound raw material composition



Energy consumption



Oil use development



■ HA (High-Aromatic, carcinogenic) (t)

LA (Low Aromatic, non-carcinogenic) + canola oil, total (t)

The curing temperature of a passenger car tyre is 170 degrees, curing pressure 15 bars and curing time 10–15 minutes.



Best practices with respect for the environment

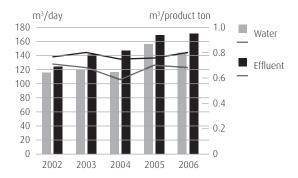
Environmental impacts of tyre manufacturing include emissions to natural waters and sewage systems, emissions to the air (VOC, odour and dust), noise and waste. Waste and solvent emissions, as well as unpleasant odours in some locations, represent the most significant burden on the environment. In accordance with our safety policy, we strive for zero tolerance in terms of faults in all areas of safety.

The environmental impacts of tyre plants are annually reported to local authorities in line with each country's legislation. The Nokia plant has a separate register for environment-related feedback received from the neighbourhood's inhabitants and the plant employees. All reports and claims submitted directly to the EHSQ team are recorded in this register. Our goal is to handle our environmental affairs so well that no claims whatsoever should arise.

Emissions into natural waters and sewage systems

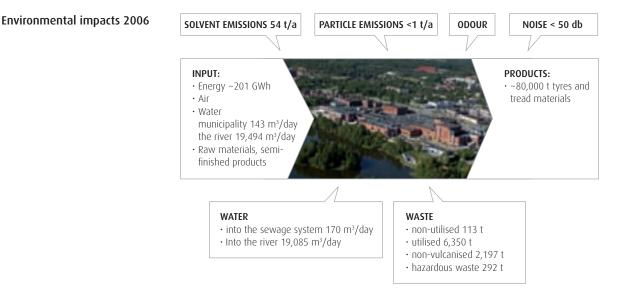
Large amounts of water are used for cooling in various tyre manufacturing processes. The Nokia plant takes its cooling water from the adjacent river Nokianvirta. Used cooling water, as well as rain water, is first run through oil separating wells and then back to the river. The cooling water is never in contact with any chemicals used in the manufacturing process, and therefore it can be returned to the river. No numeric targets can be set for cooling water consumption as it depends on the temperature of the river water. The amount of cooling water released from the plant to the river totalled 19,085 m³ per day in 2006. The waste water of the plant (process and sanitary water) is pumped to the Nokia city sewage treatment plant. In 2006, the volume of waste water pumped to the city sewage system was 170 m³ per day. Consumption of water taken from the Nokia city water supply network stood at 143 m³ per day.

Water and effluent flows



Water samples taken from the cooling water drains leading to the Nokianvirta river, as well as from the waste water taken to the sewage treatment plant were analysed in autumn 2006. The water in all cooling water drains was practically clean: it did not contain oil, solvents or other substances indicating a burden on the water system in amounts detectable by standard analysis. The water led to the Nokia city sewage system was rather typical sanitary water; it did not contain heavy metals in hazardous amounts but contained a small amount of oil. The detected solvents do not hinder biological sewage treatment.

The Vsevolozhsk plant uses lake water supplied by a water supply plant, and the water is cleaned before it can be used in production. The amount of cooling water needed has been minimised by deploying closed cooling water circulation, which means that only a small part of the cooling water is replaced with new water when necessary. In 2006 the plant's water consumption was 228 m³ per day. The plant has two sewers conducting the process and sanitary water to the municipal sewage treatment plant (192 m³ per



day in 2006). Rain water is collected in another drain and cleaned mechanically and physical-chemically in a small local treatment plant (approximately 0.07 m³ per day).

Emissions into the air

Volatile Organic Compound, VOC

Solvents or volatile organic compounds – VOC for short – constitute the most significant emissions into the air. Solvents are mainly used in the production of heavy tyres and treads to improve the adhesion of components. Approximately 150 tonnes of solvents are used annually. The most volatile organic compounds are collected and conducted to a catalytic incineration plant. In 2006 solvent emissions after cleaning totalled 53.8 tonnes, which equals 0.7 kg/ product ton.

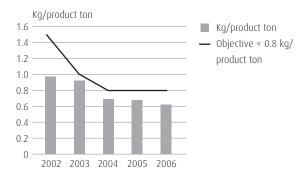
The company has striven to comply with the total emissions limit set in the VOC regulation, which is 25% of solvents used. An initial intermediate goal was set to achieve the emissions level of 38% of solvents used by 31 October 2005. This goal was achieved as early as in 2003 with the emissions level at 36%. In passenger car tyre production, solvent-based green tyre chemicals and the tyre test machine's release agents have been replaced with waterbased substances. Furthermore, water-based paints and glues have been tested in heavy tyre and tread production, but these units have not yet been able to completely abandon solvent-based substances. The company continues testing safer substances in order to achieve the 25% target value. The Vsevolozhsk plant uses solvents in very small amounts, mainly in maintenance.

0dour

According to an odour survey conducted by Nokian Tyres, the majority of odours at the Nokia tyre plant come from various hydrocarbons used in rubber compounds. Odours are also generated in the mastication process where natural rubber is softened: the precipitation and dehydration phases of rubber milk include compounds with an unpleasant odour. Droplet separators are used to reduce odours from mastication. Furthermore, separate mastication processes have been reduced, which has resulted in a reduction in odours as well.

Some of the odours come from the tyre curing process. The quantity of curing steam is direct related to the quantity of cured rubber. At the moment, a feasible system for recovering and processing curing fumes is not available. The Tampere Regional Office of the Finnish Institute of Occupational Health examined the steams generated in tyre curing and

VOC (volatile organic compounds) Solvent emissions



their composition in 2004. Only small concentrations of individual substances were found in the research.

A microwave oven for pre-heating rubber bales was implemented in primary production in 2005. With the microwave oven the pre-heating time and, consequently, the odour-generating phase is shorter. Furthermore, the microwave oven is a more energy efficient tool in rubber preheating than the pre-heating chamber. An odour survey conducted in Nokia in 2005 stated that the plant's odour emissions do not cause significant harm outside the plant. The latest survey related to reducing odour emissions was conducted by Nokian Tyres in 2006, in conjunction with testing the impact of acids and alkali on the odour-removal efficiency of the mixing machine's wet washer. Changes in the pH values did not improve odour removal efficiency.

The company's goal with regard to odours is zero complaints concerning odour. In 2006, a question concerning the rubber plant's emissions and unpleasant odours was submitted to the Nokia city website. Nokian Tyres provided the City with a response that was published on the website.

The Vsevolozhsk plant has only generated small odour emissions due to tyre curing in 2005 and 2006. The nearest residential area is located 600 metres from the plant.

Particle emissions (dust)

Particle emissions originate in the processing of powder chemicals in the Compound Mixing Department. In order to minimise emissions, the dust filters at the Nokia plant have been replaced on a regular basis. In addition, the best available filter technology was implemented in conjunction with the Nokia plant's compound mixing department expansion and the Vsevolozhsk plant construction. The mixing equipment features effective ventilation and dust collection devices. The water cleaners can reach a separating ratio of well above 99 per cent. Particle concentration and differential pressure meters are used to monitor particle emissions. In addition, external experts carry out regular density measurements. The measured densities have been clearly below permitted values. According to the latest measurement carried out in 2005, the calculated annual emissions total approximately 400 kg. In this measurement the measured dust densities were also primarily very low, which proves that the filters are functioning well. The chemical composition of dust is impossible to define, and therefore the raw material composition data and feed quantities are used to evaluate the dust composition. The average particle size in the dust in exhaust air is less than 3 micrometres. The dust that passes through the filter system mainly causes an aesthetic inconvenience and presents no harm to the environment or to health.

The new technology has reduced particle emissions, and the implementation of dust-free, oil-treated chemicals has also contributed to emission reductions.

No significant particle emissions were generated at the Vsevolozhsk plant in 2006, because the plant's compound mixing department only started operating at the end of the year.

Noise

The Nokia plant's Environmental Permit requires that the noise level must remain below 55 decibels in the daytime and below 50 decibels at night. These figures are LAeq decibels, which refers to the average noise level a human ear can detect. According to the latest noise report compiled by an external expert in the summer of 2004, the 50-decibel zone barely extends to the old residential areas on the southeast, east and northeast sides of the plant. The most significant sources of noise were defined on the basis of noise reports and noise reduction measures to be implemented according to a specified schedule were agreed upon. The company places a continuous focus on noise prevention.

At the Vsevolozhsk plant noise is not considered a problem because the nearest residential area is 600 metres from the plant. Statutory control measurements were completed in 2006, and they indicated a noise level of 40 decibels at 315 metres' distance from the plant.

Waste

Waste is generated in production as well as support functions. Production waste generation is recorded in department-specific files. The generated waste is sorted at the plant in accordance with separate waste management instructions. Most production waste is taken directly to utilisation without any intermediate storage. Hazardous waste, i.e. problem waste, is stored separately in labelled containers in separate, locked collection points. The generated waste can be roughly divided into three categories: landfill waste, i.e. non-utilised waste, utilised waste and hazardous waste.

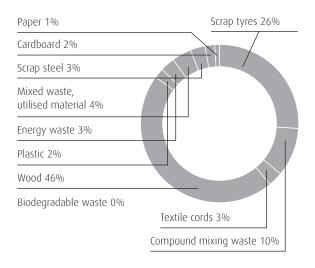
Utilised waste

Waste suitable for utilisation is sorted at the point of origin and collected into separate, labelled containers. Scrap tyres - tyres that do not meet the company's high quality standards - are taken for direct utilisation through Suomen Rengaskierrätys Oy. A total of 1,600 tonnes of scrap tyres were sent for utilisation from the Nokia plant in 2006. Non-vulcanised scrap rubber is generated in production before vulcanising. Non-vulcanised scrap rubber can be divided into two categories: compound mixing waste (scrap rubber) and other non-vulcanised rubber waste. Compound mixing waste that can be used in compounds is separately collected on platforms for reuse as raw material. Internally recycled compound mixing waste at the Nokia plant totalled 3,358 tonnes in 2006. The scrap rubber generated at the Vsevolozhsk plant in 2006 (623 tonnes) was utilised in the Nokia plant's compound mixing department.

In the future, the Vsevolozhsk plant's own compound mixing department will be able to utilise the plant's scrap rubber. Other items of non-vulcanised rubber waste are sorted in containers and delivered primarily for utilisation in Finland or abroad, depending on the demand. Utilisation targets include collision shields, conveyor belts and other rubber products that do not pose critical requirements on the material. As for non-vulcanised scrap rubber, textilereinforced rubber, i.e. textile cords, have been delivered to Holland for utilisation, and compound mixing waste has been utilised in Finland, Italy, Turkey and Russia. In 2006, new foreign utilisers were found for such steel-reinforced non-vulcanised scrap rubber that had not been utilised before, and the amount of utilised waste increased by 250 tonnes compared with the previous year. Waste that cannot be utilised is taken to a waste treatment plant.

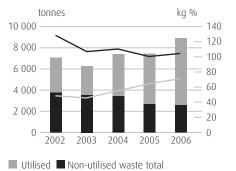
Plastic waste is generated from packaging in the plastic used for insulating materials in the production departments. Layers of plastic are needed to prevent rubber components from adhering to each other during storage. The utilisation of plastic waste became more efficient in 2006, as the production of heavy tyres re-initiated the recovery of plastic from different points of production. Previously, the insulation plastics were disposed of as mixed waste and taken to landfill sites. On average, five tonnes of plastic per month is collected for utilisation. To further enhance the recovery of plastics, a baler was acquired at the Rounionkatu storage in Nokia. In 2006, a total of 104 tonnes of plastic waste was taken for utilisation from the Nokia plant, 37 tonnes more than the previous year. At the Vsevolozhsk plant, 10 tonnes of plastic waste was taken for utilisation.

Wooden packages and platforms (2,881 tonnes from Nokia, 193 tonnes from Vsevolozhsk) are delivered for utilisation in energy generation or composted. Platforms are reused as long as they are in good condition. The main



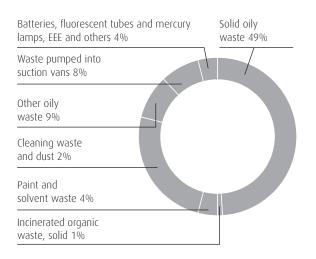
Utilised 6,350 tonnes (2006)

Utilisation in proportion to all waste



- Waste kg/product ton - Utilised of total amount (%)

Division of hazardous waste in 2006



Jätelaji	2002	2003	2004	2005	2006
Mixed waste	475	456	411	121	113
Hazardous waste	114	238	218	262	292
Non- vulcanised scrap rubber	3 191	2 871	2 827	2 322	2 197
Utilised waste	3 341	2 787	3 981	4 811	6 350
Total waste kg/product ton	128	105	109	99	103

44

54

64

71

Waste generated at the Nokia plant (tonnes)

47

source of scrap wood is the raw material storage, as most raw materials are delivered to the plant on wooden platforms or in wooden boxes. Scrap iron and steel are mainly generated in conjunction with disposal of machinery and equipment. In 2006, a total of 217 tonnes of scrap iron and steel was taken for utilisation from the Nokia plant and 16 tonnes from the Vsevolozhsk plant. Waste paper (44 tonnes from Nokia) and cardboard (127 tonnes from Nokia, 1 ton from Vsevolozhsk) are also reused. A cardboard baler was acquired at the Rounionkatu storage to further enhance the recovery of waste cardboard.

The two cafeterias at the Nokia plant generate biodegradable waste (11 tonnes), which is composted.

Some of the mixed waste generated at the Nokia plant is sorted as energy waste. A total of 181 tonnes of energy waste was generated at the Nokia plant in 2006.

Landfill waste

Utilised [%]

Mixed waste generated at the Nokia plant is pressed and delivered for processing. The processor can separate 85% of the mixed waste for utilisation as material or energy. Mixed waste that cannot be utilised, as well as non-pressed mixed waste generated at the plant and storage, are delivered to a waste treatment centre. Non-vulcanised scrap rubber that cannot be utilised is also taken to the waste treatment centre. In the future, this will also be done with non-vulcanised scrap rubber that is dirty and in cases where the utilisation of some waste is not even environmentally sensible due to high transportation costs. In 2006 the Nokia plant generated 113 tonnes of waste not suitable for utilisation, i.e. 1.29 kg/product ton.

Hazardous waste

Hazardous waste is delivered to a hazardous waste treatment facility. Some of the waste can be reused; for instance, the clear waste oils can be used as saw chain oil. In 2006 the Nokia plant generated 292 tonnes of hazardous waste and the Vsevolozhsk plant 14 tonnes. The amount of hazardous waste has gone up over the past few years due to stricter legislation and increased production volumes. Approximately one half of the hazardous waste is blade seal oil from the compound mixing machines (so-called box grease). The consumption of these oils is directly dependent on the rubber compound volumes manufactured. Therefore, the amount of hazardous waste generated at the Vsevolozhsk plant has so far remained very low, because the plant's compound mixing department only started operating in late 2006. Other kinds of hazardous waste include oily waste, chemical waste, waste oil, fluorescent tubes, batteries, as well as electronic and electrical equipment (EEE).

Waste projects

There are several ongoing waste reduction projects in various production departments. Production quality projects aim at reducing the amount of waste generated in production.

In 2006, material productivity projects in the field of passenger car tyres focused on utilising the generated scrap rubber and reducing the number of defective end products in demanding product manufacture. Waste reporting methods were developed to become even more reliable, which helps the targeting of quality projects.

The "Reduction of compound mixing waste on tread lines" project initiated in 2004 has been the most extensive measure for waste reduction. When the project began, the amount of non-vulcanised scrap rubber taken to landfill sites from tread lines totalled approximately 23,000 kg/week; at the end of 2006 the amount had gone down to 2,000 kg/ week. The waste that was previously taken to landfill sites can now be almost entirely reused. The project will end at the beginning of 2007.

"Radial power variation" is the foremost reason for scrapping tyres and, consequently, the key focus area in scrap tyre reduction projects. The amount of scrap tyres has gone down 12% compared with the 2005 level, which means some 5,000 tyres annually. This quality project focused on mould equipment repair.

TPM training was arranged in 2005 and 2006. These training sessions provided for all production employees also cover waste-related matters, such as waste flows, utilisation and the packaging of waste to be utilised. The training will continue in 2007 and the objective is that all employees will have received it by the end of the year.

In 2005 the company launched the RURS (Recycling of Unvulcanised Rubber Scraps) project that included surveying utilisation and recycling possibilities in Finland and abroad and analysing the costs thereof. Cost-efficient utilisation targets for non-vulcanised scrap rubber were found from abroad, so in the future such waste will not be taken to landfill sites apart from exceptional cases.

At the moment the company is involved in the "New surface materials of ball fields" research project that studies the suitability of various waste-based materials as construction materials of sports fields. Laboratory tests on the materials' suitability were completed in 2005, and the project's pilot target, a ball field in Tampere, was also completed in the same year. Rubber granulate seems to be a promising material for ball field surfaces. Granulate made from tyres has also been successfully used in the base structures of horseback-riding fields.

Nokian Tyres also participated in an Eco-Efficiency research project that aimed at creating indicators and an application for measuring ecologic efficiency. The project reached its goal.

Accidents

The company's objective of "Zero tolerance for faults in all areas of safety" was not completely achieved in 2006: two accidents were reported to authorities during the year.

In early February there was a hypochlorite leak at the water plant. Approximately 1,900 kg of 10-percent hypochlorite solvent leaked onto the plant floor and into the water supply tank, where it was diluted and ran into cooling water pipes, mixed with water and ended up in the Nokianvirta river. Consequently, the concentration of hypochlorite in the water remained low. The leak was immediately reported to authorities and repair measures were initiated in order to prevent such leaks in the future. Hypochlorite is used for cleaning the river water before pumping it to the plant's cooling water system. Hypochlorite ends up in the river through the cooling water system even in normal operation but in much lower concentrations.

There was only one initial fire in 2006. It happened in early May when a mixed waste press caught fire at the inner plant yard. Plant personnel immediately started initial fire extinguishing, and the fire was put out in co-operation between the employees and the fire brigade. The fire brigade removed all contents from the press that was taken to a waste treatment facility and ensured that the fire was out. The fire caused no emissions to the environment, apart from the 2 m³ of extinguishing water and smoke caused by incomplete combustion. The fire may have started from a smouldering cigarette in an ashtray was emptied in the press. The incident was reported to the appropriate authorities.

The solvent incineration plant was bypassed for a total of 48 hours. On 23 July there was a 24-hour bypass due to a defective pressure sensor, and another 24-hour bypass on 31 July due to an adjustment valve that did not function correctly. One accident classified as serious occurred in January, when a part-time employee who had recently transferred to new tasks hurt his/her wrist during the induction period. The employee was feeding a rubber mat to the conveyor after a machine malfunction. When the rubber was fed to the wrong route, the employee's hands went through the drain that formed in this and the wrists were jammed under the control roll. The injuries – bruises and small fractures – seemed minor at first but required a year of treatment and rehabilitation. The incident was dealt with in co-operation with the local Occupational Health and Safety Inspectorate,

Summary of the achievement of environmental objectives

A summary of the environmental objectives set in Nokian Tyres' Environmental Programme for 2006 and the achievement thereof is presented in the table below.

O bject	Target for 2006	Achieved in 2006	Comments/results
Specifying obligations at the Vsevolozhsk plant	By the end of 2006	Specified	Objective achieved
Control of chemical handling in safety audits	Conducted as planned	Audits completed	Departmental audits twice per year
VOC emissions	< 0.7 kg/product ton, max. 27% of purchased solvents	< 0.7 kg/product ton, 31% of purchased solvents	Heavy tyre production has increased
Testing an alkali washer on the mixing machine for odour removal	Completed by the end of June	Tests completed on time	The washer did not bring about the desired results
Total amount of waste in Nokia	< 95 kg/product ton	102.7 kg/product ton	Amount of utilised waste and problem waste increased
Total amount of waste in Vsevolozhsk	< 103 kg/product ton	147.9 kg/product ton	The target value was an estimate
Non-vulcanised Vsevolozhsk	< 1000 t, of which >10% i.e. 100 t to be utilised	Non-utilised 815 t, utilised 39% of the total amount, i.e. 526 t	The utilisation value was exceeded thanks to newly discovered utilisation targets
Hazardous waste Other hazardous waste	< 3.0 kg/product ton < 0.5 kg/product ton	3.4 kg/product ton 0.85 kg/product ton	Amount of problem waste increased Amount of problem waste increased
Implementation of an automatic weighing system for small chemicals	By the end of 2006	Implemented	Objective achieved
Chemical training for new primary production employees	By the end of 2006	Provided	Objective achieved
Environmental training: new employees 100%, Welcome onboard day	By the end of 2006	Welcome onboard day and environmental training sessions arranged	Objective achieved
ISO14001 certificate for the Vsevolozhsk plant	July 2006	August 2006	Objective achieved
Internal cross-audits of Nokia and Vsevolozhsk	By the end of 2006	Completed in Vsevolozhsk	Audit in Nokia in February 2007.

Nokian Tyres' plant is located in Nokia, southern Finland. Nokia is a city of some 30,000 inhabitants. This is why we underline the importance of showing respect to our neighbourhood and environment.



Long-term investment in the environment

Nokian Tyres has developed its own cost reporting system to reduce environment-related costs. There are no legislative requirements concerning the accounting of environment-related costs and therefore the current system is sufficient for monitoring these costs. The following table features a summary of the environment-related costs in 2006.

For Nokian Tyres, an environmental investment means an investment made to avoid or alleviate a negative impact on the environment or safety, or that mainly benefits environmental issues. The key environmental investments in 2005 included the microwave oven for primary production and automatic weighing system for small chemicals. The costs incurred from the use of safer production input – i.e. low-aromatic oil instead of high-aromatic oil – totalled approximately EUR 1,107,300 in 2006.

In addition to normal environmental operation costs, the company has no environment-related liabilities or debts falling due in the near future. The company does not possess any contaminated land, and its operations do not contaminate the soil or natural waters. Furthermore, no environmental liabilities have arisen through contracts. In order to avoid risks, comprehensive environmental audits are conducted in new co-operation targets before closing any agreements.

Costs of Nokian Tyres' environment-related functions:

Cumulative (1,000 EUR)	12/2006	% of total
1. Operating and maintenance costs of environmental protection equipment	108	0.8
1.1. Protection of outdoor air and climate	23	0.2
1.2. Cooling water treatment	85	0.6
2. Fees and other operating costs related to environmental protection	5,116	39.1
2.1. Control and monitoring costs	2	0.0
2.2. Effluent fees	86	0.7
2.3. Waste management fees	324	2.5
2.4. Costs of environmental management	152	1.2
2.5. Insurances	8	0.1
2.6. Research and development costs	4,515	34.5
2.7. Labour input for environmental protection	30	0.2
3. Energy costs	8,083	61.8
Production electricity	3,115	23.8
Facility electricity	852	6.5
Water supply	59	0.5
District heating	1,439	11.0
Production steam and heating	2,618	20.0
4. Revenue and cost savings gained with environmental protection	-230	1.8
Environment-related costs total	13,077.2	100



Management

The Hakkapeliitta culture

Nokian Tyres Plc is a respected and attractive workplace. The activities of the company's professional employees are characterised by the desire to continuously develop their personal skills and the company. Based on an open atmosphere and a spirit of co-operation, Nokian tyres' corporate culture is the result of long-term development. The company strives to further develop the culture to support the company's strategy and function optimally in the increasingly international organisation.

The activities and culture of Nokian Tyres and its personnel are best crystallised in the Hakkapeliitta spirit consisting of the following basic elements:

Entrepreneurship = The will to win

We thirst for profit, we are quick and brave. We set ambitious objectives and perform our work with persistence and perseverance. We are dynamic and punctual, and we always make customer satisfaction our first priority.

Inventiveness = The will to survive

We have the skill to survive and excel, even in the most challenging circumstances. Our competence is based on creativity and inquisitiveness, and the nerve to question the status quo. We are driven by a will to learn, develop and create something new.

Team spirit = The will to fight

We work in an atmosphere of genuine joy and action. We work as a team, relying on each other and supporting each other, offering constructive feedback when needed. We embrace differences, and we also encourage our team members to individually pursue winning performances.

The staff's activity, initiative and internal entrepreneurship provide good support for developing the Group's skills and strategy. In line with the Hakkapeliitta spirit, a number of various recreation and sport activities are arranged for the entire personnel every year.

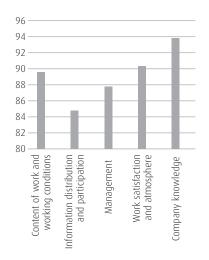
Inventiveness

Inventiveness activities have been an integral part of Nokian Tyres' corporate culture for a long time. Its success is based, above all, on developing the working environment and well-being at work by the entire personnel. Goals of the inventiveness activities include developing, successful business, continuous improvement of activities and a comfortable working environment. Annual goals, tied to the number of inventions, are set for inventiveness. The company has continuously occupied top positions in the national competition regarding continuous improvement. A total of 8,474 ideas were generated in 2006, and inventiveness activities are to be further expanded within the Group.

Well-being at work survey

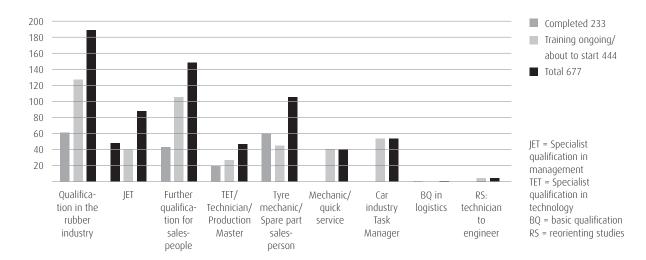
Nokian Tyres has conducted internal surveys on Well-being at work at the Nokia plant systematically since 1991, and corresponding surveys covering the entire Group have been conducted since 2005. The survey aims at surveying how the employees experience their work and tasks, the activities of their workgroup, supervisors' work, the organisation's practices and the development of well-being. In addition, free-form feedback given in the survey has provided suggestions for improving the work atmosphere. The survey results serve as an important tool in the development of supervisory work. The following table presents the results of the latest occupational well-being survey.

Nokian Tyres Plc, Occupational well-being survey. Respondents happy with the area in question, % of all respondents



Equality policy

Nokian Tyres' equality policy aims to support the company's strategy by promoting equal, fair treatment of the entire personnel. The company has participated in university-coordinated development projects focusing on equality surveys, and the results of these surveys have been utilised in the



Qualification training arranged by Nokian Tyres

company's equality plan. The equality plan has been compiled to create a means of further developing a corporate culture that nurtures equal treatment, respect and care for others. In addition to equality between men and women, the equality plan addresses factors related to age, education, position, race and religious and political convictions. The company believes that an equal working community enhances motivation and, consequently, the company's profitability and competitiveness.

The equality plan is divided into sub-entities focusing on the working atmosphere, management, salaries, training, level of demand in women's and men's tasks, independence at work, opportunities to influence, as well as feelings of exclusion and inequality. The HR department, company management, the co-operation committee and representatives of various personnel groups monitor the realisation of the equality plan using specific indicators. Equality issues are addressed in the monthly management team meetings, which are also attended by representatives of personnel groups.

HENRY ry and the insurance company Ilmarinen awarded Nokian Tyres with the Personnel Deed of the Year prize in 2005 for the successful implementation of the "Tyres in balance" campaign. The campaign widened the traditional concept of equality to a much wider outlook and aimed at taking people of different ages, backgrounds and career paths into account and identifying measures that promote successful work performance. The campaign resulted in more than 500 initiatives from employees. The campaign did not only arouse thoughts; it also helped recognise concrete issues that can be implemented in practice. It generated a new kind of co-operation across department borders and had a significant impact on people's attitudes towards equality.

Recruitment and rewarding

Nokian Tyres aims at recruiting people who support the company values and strategy. Recruitment is based on systematic planning and close co-operation between supervisors and the HR department.

Production employees have been recruited in close cooperation with the Employer Services of the Tampere Employment Office. Office employee recruitment is sup-



According to our environmental system, every new Tyres employee is also familiarised with environmental issues.

ported by co-operation relationships with leading experts in the field. This co-operation helps the company to not only assess job applicants' knowledge and skills but also evaluate the candidate's applicability for the job applied for and the Hakkapeliitta culture as objectively as possible. The fact that employment contracts have quite rarely been terminated during the trial period proves that recruitment processes are successful. A total of 214 new employees were hired at the Nokia site during 2006. Recruitment was flawlessly connected to the induction process that focused on making the new employee familiar with his/her work and supporting his/her career development, as well as assessing the recruitment result.

Nokian Tyres' wage and reward system is based on internal fairness, external competitiveness and encouragement. Material and immaterial incentives support the achievement of goals and top performance at the individual and group level.

A total of 157 new employees were hired at the Vsevolozhsk plant during 2006. Local expert networks are also utilised for recruitment in Russia. In Russia, job applicants' language skills play a key role. It is also essential to anticipate human resource needs well in advance because induction periods are long.

Personnel statistics

Nokian Tyres' personnel statistics indicate strong growth in the number of employees over the past few years. In 2006, production employees accounted for 71.4% of the entire personnel. The proportion of women was 26.6%. At the Nokia site the proportion of women was 29.0%. Among office employees the proportion of women is slightly higher, 32.2%. Correspondingly, at the Vsevolozhsk plant the proportion of women in the entire plant personnel was lower, only 15.4%. As is the case with Nokia, in Vsevolozhsk women are also better represented among office employees with 42.2%.

When looking at the age structure, a noteworthy point is the large proportion of the youngest group, 18-29-yearolds, who represent 29.7% of the entire personnel. This group is particularly dominant among the Russian personnel, where their proportion is as high as 51.0%. The oldest age group, employees over 50 years old, only accounted for 0.7% of the personnel. At the Nokia site the distribution of employees between the oldest and youngest age group was rather even: the youngest groups accounted for some 25% of the site's entire personnel, whereas the proportion of the oldest group was 3.8% smaller.

Personnel turnover rate at the Nokia site in 2006 was low, 4.4%. The Vsevolozhsk site reported higher employee turnover, which was particularly due to the relatively high (17.5%) turnover among Russian production employees; the turnover of office personnel at the Russian plant was clearly lower, 5.3%.

Competence development

Nokian Tyres places a strong focus on developing the company personnel and its competence. In addition to internally tailored training and gualification courses, employees are provided with joint training through various networks, such as the Tampere Business Campus (TBC), through which Tampere-based companies have boosted their learning processes and shared good practices in competence development. Focus areas in personnel development include supervisory skills, internationalisation, financial and business skills, project management and realisation of immaterial assets. The company is also involved in various national and international personnel development projects and conducts wide-scale co-operation with education organisations of different levels by providing apprenticeship training. Qualification degrees completed or ongoing within the Group and co-ordinated by the Group's HR management over the past five years were analysed at year-end 2006 (see table). Vsevolozhsk is visibly represented particularly in the number of vocational qualifications in the rubber industry.

Induction

New Nokian Tyres employees start with an induction period that creates the foundation for safe, healthy and productive work. The induction period is divided into two sections: general and task-specific induction. Key employees of the Russian plant go through their induction period in Finland, and it also includes a special adjustment process aiming at supporting the new employee's adjustment to the general Group values and processes in a systematic, intense manner. When new office employees join Nokian Tyres' sales companies, their induction includes the compilation of separate, personal induction programmes that are co-ordinated at the Nokia site. The importance of safety, environmental values and quality is particularly underlined in induction. The process familiarises new employees with the parent company's practices.

The HR department is in charge of the general induction, induction processes and instructions. Task-specific induction is the responsibility of the new employee's supervisor, while the HR department supports the supervisor with induction planning. As the Group has expanded its operations over the past few years, international approach, culture knowledge, close group-based interaction and knowledge of local legislation have also gained a more visible role in induction.

Everyday work for safety

Sales arguments of Nokian Tyres products include safety and quality. Correspondingly, the company's goals are occupational safety, well-being and risk management in its production and other activities. The connection between safety and environmental affairs is particularly evident in matters related to occupational hygiene and the use of chemicals. In addition, occupational safety entails some specific areas of risk. Risk factors at the Nokia plant include the ageing of employees and problems related to the old facility.

The accident rate at the Nokia plant remains at an average level compared with corresponding tasks in Finnish statistics, but this is not in line with the company's goals. Accident rates had been going down for several years, but despite various development projects they increased in 2005-2006. Machinery-related accidents remained at a reasonable level because the company has invested in machinery development throughout the 21st century. The most common problems occurring at work are sudden musculoskeletal injuries (sprains and ruptures). Internal traffic within the plant also poses some challenges. The increased number of musculo-skeletal injuries can be attributed to the nature of the work, as well as the ageing and weaker physical condition of the employees. Even though some heavy work phases have been removed, the work still includes a lot of repetition and tasks requiring muscular strength. The problems related to traffic within the plant are caused by the labyrinthine structure of the facility, changes in alertness caused by shift work and the increased traffic due to production growth. The new Vsevolozhsk plant using similar machinery and the same instructions as the Nokia plant has only reported a few accidents during its operation. Most accidents are minor and cause shorter-than-average sick leaves.

Vianor's accident rate decreased significantly in 2006 compared with the previous years. The accident objectives were met thanks to a strong focus on training and equipment. Vianor Finland piloted the tyre safety card managed by the Centre of Occupational Safety in 2006. It is the first industry-specific safety card and designed to particularly address the key risks of the tyre industry, such as tyre pressurising and handling and work environment management.

Work ability and sick leaves

Finnish employees' sick leave rates have been increasing for several years, and this trend is also strongly reflected in the Nokia plant. Sick leaves can be attributed to various problems, such as the ageing of the personnel, problems related to shift work and supervisory work. Supervisors should pay more attention to individual needs and problems that are assuming a bigger role than before. In order to better take individuals into account, the company has increased its supervisor resources. At the same time, typical characteristics of teamwork are to be maintained. The company is also deploying some development projects, for example, on controlling ergonomic risks and supporting physical exercise. Work ability management also emphasises the individual's own responsibility, particularly with regard to physical exercise projects and leisure time safety. Accidents occurring on the employees' free time account for some 80% of all accidents in the company, and the consequent sick leaves are increasing. On the basis of completed estimates, the company will continue to invest in age management and relocation of employees with musculo-skeletal problems or partial incapacity to work. The sick leave rates of office employees and Vsevolozhsk employees are at a good level.



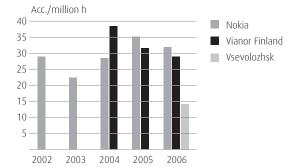
The tyre plant operates in five shifts without interruptions. The average number of operating days is 351 per year.

Co-operation with the personnel

Co-operation with different personnel groups has played a key role in the development of occupational safety and well-being at Nokian Tyres. The plant has elected labour protection delegates, and elected employees' representatives also participate in occupational well-being projects when needed. This co-operation is backed by open communication; for example, employees' representatives participate in management's meetings. The importance of cooperation is underlined throughout the Group. The representative selection procedures vary between sites, depending on the size of the site and the local legislation.

In addition to internal activities, the company values cooperation with external stakeholders, such as the sites' neighbours, municipalities and authorities. The company actively informs the stakeholders about its activities and safety factors related to it, as well as any significant changes in these factors. Regional emergency services are important co-operation partners. Emergency service employees are provided with opportunities to acquaint themselves with the plant premises, and joint emergency drills are arranged. This supports fire risk management, which is an important issue due to the burning property of rubber. The company has invested in property protection over the past few years, for example, by improving area guarding and fencing and deploying a new fire alarm system.

Accidents at work (over 3 days)





Responsible tyre trade close to the customer

The Vianor tyre outlet chain owned by Nokian Tyres is a growing chain focused on driving and tyre services. The chain comprises more than 260 outlets in Finland, Sweden, Norway, Latvia, Estonia and Russia. In addition, Vianor has two retreading plants in Finland, two in Norway, one in Sweden and one in Russia. Some of the Vianor outlets operate on the franchising/partner principle. The chain employs over one thousand tyre and fast fit service experts with solid professional skills and years of experience.

Vianor outlets provide tyre change and mounting services, and some outlets also offer replacement of parts and fast fit service, such as batteries, shock absorbers, exhaust pipes, brakes, a/c servicing, wheel alignment and oil change and car wash.

In addition, Vianor has a Tyre Hotel service, with which Vianor stores tyres for the customer. The tyre hotel service includes tyre handling, washing, storage and mounting. This reduces the number of tyres stored in residential buildings' basements, which improves the buildings' fire safety.

Vianor aims at providing its customers with products and services combining economies, customer satisfaction, quality, safety and environmental friendliness. Environmental and safety aspects are taken into account in all activities.

Vianor has its own quality, safety and environmental management system covering the Vianor outlets, franchising outlets and retreading activities. Designed to support Vianor's business, the system is an integral part of Vianor's whole management system. The system includes documented instructions for all activities that affect the quality of the products and services, the environment or occupational health and safety. The key principles of the system are in line with those of the parent company.

Vianor's management sets the goals pertaining to finances, the environment, health, safety and quality, and reserves sufficient resources to meet and maintain these goals. Vianor's management monitors the realisation of these goals and reports to Nokian Tyres' management. The EHSQ officers of Vianor units co-operate with the Nokian Tyres EHSQ team. Regular internal inspections and audits are conducted within Vianor, assessing the compliance with legislative requirements, regulations and instructions. The chain management is committed to creating work conditions in which individuals have good opportunities to influence the development of environmental and occupational safety and quality.

The basic operating principles are based on and comply with the ISO 14001, BS 8800 and ISO 9001 standards. Vianor is committed to observing the continuous improvement



principle, increasing customer satisfaction and preventing hazardous impacts on the environment and safety. Vianor familiarises its employees with its basic operating principles and the environmental impacts of the company's activities. Furthermore, employees are encouraged to promote safety, health and environmental protection in their activities.

In 2006, internal audits within Vianor Finland covered both retreading plants and 28 outlets. In addition, the Vehicle Administration Centre conducted a control visit to the Kuopio retreading plant in accordance with the E109 regulation. In Norway, 44 outlets, both retreading plants, central storage and administration underwent an internal audit in 2006. In Sweden, audits will be initiated in 2007.

A number of serious occupational accidents have occurred in the tyre industry over the past few years. Therefore, Vianor has invested in occupational safety training in order to improve its employees' awareness of the risks of their work and managing them. Approximately 150 Vianor Finland employees completed the piloted Tyre Safety Card training in conjunction with the creation of a nationwide training system in 2005–2006. Vianor's employees in other countries have also been trained in the field of occupational safety and the quality of mounting work.

The biggest environmental burden at individual Vianor outlets comes from waste. This burden is minimised with the "doing it right once" attitude and efficient sorting of waste. The biggest waste item is formed by customers' discarded tyres. In Finland, Sweden and Norway local tyre recycling organisations handle the recycling of discarded tyres in accordance with the producer responsibility principle.

Abbreviations

DSI (Driving Safety Indicator)

The Driving Safety Indicator is a technical feature of the tyre that improves its safety. The wear indicator on the centre rib of the tyre indicates in clear numbers how many millimetres of tread are left on the main grooves.

ECE 109

ECE109 is a regulation stipulating the quality requirements for the treading process and product inspection. It is Rule number 109 of the UN's Economic Commision for Europe (UN-ECE) that states the uniform requirements applied to retreaded tyres and guarantees a high level of environmental protection.

EHSQ

Abbreviation from Environment, Health, Safety and Quality.

EMAS (Eco-Management and Audit Scheme)

EMAS is a voluntary environmental scheme for organisations. It is an environmental management tool for systematically accounting for the environmental aspects in all activities. So far, EMAS only concerns activities in EU or EEA member states.

HR

Human Resources, i.e. personnel issues

ISO 14001

An environmental system standard of the International Organization for Standardization (ISO).

ISO 9001

An quality system standard of the International Organization for Standardization (ISO).

REACH

Registration, Evaluation and Authorisation of Chemicals. REACH constitutes the EU's new chemicals legislation.

STTV

The National Product Control Agency in Finland, STTV is responsible for overseeing and steering the implementation of the Alcohol Act, the Chemicals Act, the Tobacco Act and the Health Protection Act at the national level, and for supervisory activities according to the Gene Technology Act.

TPM (Total Process Management)

TPM is a model implemented worldwide, aiming at developing production and office processes to be free of interruptions.

TUKES, the Safety Technology Authority

The authority controlling industrial processing and storage of chemicals. The Authority controls, develops and acts as an expert on technical safety and reliability.

VOC, Volatile Organic Compound

Volatile organic compounds are generated in solvent processing. These may react with nitrogen oxides in the sun and form harmful ozone in the lower atmosphere.

VTT

The biggest organisation for applied research in northern Europe. VTT offers versatile technology and research services for Finnish and international customers in the business and public sectors.

Sources

VTT Research Report RTE 4581/05, 2006

The Helsinki Metropolitan Area Publication Series B 2005:12. Studies on the composition and sources of urban road dust. Helsinki Metropolitan Area Council (YTV), Helsinki 2005.

Reduction of rolling noise. (VIEME) Preliminary study. Ministry of Transport and Communications, Helsinki 2006.

Accreditation

Accredited 8 May 2007 Pekka Alakylä Main reviewer DNV Certification Oy Ab, FIN-V-002 The published environmental report complies with the EMAS Regulation.





Together for the environment



Respect for the environment, promotion of safety and wellbeing and ensuring high quality are important values for Nokian Tyres. They apply to our products, employees and business alike. In line with our corporate culture – the Hakkapeliitta spirit – our goals are high in these areas as well: we want to be the industry leader with zero tolerance for accidents.

The above-mentioned values are emphasised as Nokian Tyres is becoming increasingly international and expanding its operations to new countries. We must work as a team, pull together and pursue our jointly set objectives in a goaloriented manner. We must guarantee the high quality of our products, services and activities and comply with uniform practices and ethical principles regardless of our geographical location. It is important for every member of the Nokian Tyres team to recognise these issues and assume responsibility for them.

We have solid faith in our ability to overcome any challenges we may encounter and to create new innovations that will help us continuously improve our activities.

Kim Gran President