



nokian[®]
TYRES



Corporate Sustainability Report 2015

The contents on this PDF report are covered by the assurance performed by KPMG.

Contents

Sustainability	4
From the President and CEO	5
Materiality assessment at Nokian Tyres	7
Nokian Tyres in brief	17
Vianor in brief	20
Hakkapeliitta Way	22
Ethical guidelines	31
Value chain	37
Stakeholder work	42
Certificates, reports and awards	47
World on wheels	50
Management of product safety	51
Product safety and quality	53
Influencing as an expert	64
People	69
Human resources at Nokian Tyres	70
We build success together	71
Good HR management	74
Influencing local communities	94
Economy	97
Financial management at Nokian Tyres	98
Profitable but sustainable growth	101
Customer relations and delivery reliability	103
Effects on society	107
Planet	108
Sustainability management	109

The PDF version of the 2015 Corporate Sustainability Report is automatically generated based on the website content.

Safe production	116
Environmental impact of tyre plants	123
Your tyre selection matters – the environmental effects of tyres	134
Independent Assurance Report	139
GRI G4 Content comparison	141

Corporate Sustainability Report for 2015

We work for safer and more eco-friendly transportation. We care deeply about safety and well-being on the road as well as at work at Nokian Tyres. Together with our competent personnel, we are working on the different aspects of sustainability at Nokian Tyres with the aim of being the most ethical and profitable tyre manufacturer in the world.

The Corporate Sustainability Report for 2015 is part of our Corporate Sustainability site. The footers of all assured pages are marked as follows: The contents on this page are covered by the assurance performed by KPMG. The externally assured PDF report created at the time of publication can be found under [Certificates, Reports and Awards](#). The assurance report can be found [here](#).

World on wheels



We make products that improve the safety of driving even under demanding conditions.

People



Internal entrepreneurship, shared development of ideas, and active participation all support the development of competence, profitable growth, and strategic implementation.

Economy



A profitable business enables us to further develop our operations and it offers financial security, work, and well-being for our interest groups.

Planet



Good corporate citizenship is a matter of honour for us. As a socially responsible company, we ensure that our actions do not harm the environment or people but instead promote their well-being. We emphasise the good quality and safety of our products and we are an industry pioneer in environmental issues.

Sustainability requires transparency

In 2015, we implemented many changes and improvements throughout our group for supporting our profitable growth and improving transparency. In connection with reorganising our work on sustainability, we prepared a comprehensive sustainability development programme for the next three years, which comprises more than 50 separate work packages.

Last year, product development was one of the focus areas of internal auditing at Nokian Tyres. The audit uncovered some problems concerning our magazine testing policies. Once we had verified the results, we took the responsibility and published the findings ourselves in early 2016. We apologised because our past actions are against our principles. Transparency and sustainability lay the best foundation for the further development of our company.

We have revised our procedures and will not submit any tyres for magazine tests that are not intended for commercial production. I deeply apologise for our errors and guarantee that this will not happen again. We are working even harder than before on reinforcing trust and improving our work on sustainability in general. In addition to setting an example, we want to do everything that we can in order to establish transparency in terms of testing throughout the industry.

I have confidence in the future. In the past few years, our tyres that have succeeded in the independent comparison tests by motoring magazines are the same tyres that you can buy at our dealers.



Our strategy supports profitable growth – flexibility agreement improves competitiveness at the Nokia factory

Based on our strategic goals, we carried out several changes in our organisation late last year in order to strengthen our product and innovation leadership, our entire supply chain, sales and the management of our distribution chain and to ensure better opportunities for expansion, harmonise our processes and develop them further. Our revised strategy guides us to develop all the areas of our operations and incorporating the Premium aspect in everything that we do. Each of these is fundamental for Nokian Tyres' future success.

Unfortunately, we had to make some tough decisions last year. The weakened economic situation and production cuts at the Nokia factory created the need to carry out permanent structural changes in our organisations. At the end of the statutory negotiations, we offered training and support programmes above the legally required minimum level to the persons who were laid off from the Nokia factory in order to support their re-employment.

In early 2016, we signed a significant work time flexibility agreement with the personnel of the Nokia factory. The agreement improves the flexibility of our production and our company's competitiveness. It also ensures job security until June 2018 for our production personnel, during which time there will be no temporary or permanent layoffs due to financial or production-related reasons.

Developments in sustainability

Circular economy and efficient use of materials are currently two key themes in sustainability. We have always strongly invested in recycling and ensured the resource efficiency of our processes. One counterforce that naturally increases waste volumes is the increasing need for several different product types. In

the past two years, we have managed to reduce waste generation in our production more than 25% while growing our portfolio. Most of the waste that we generate is reused as construction materials, for instance.

More than 80% of a tyre's environmental impacts are generated during use. Fuel consumption alone accounts for more than half of this. The rolling resistance of a tyre significantly affects fuel consumption. We have conducted focused long-term product development efforts in order to reduce the rolling resistance of our tyres. In 2015, we introduced three different tyre models with the best class A wet grip and rolling resistance according to the EU tyre label. The proportion of the best class A-C tyres in our gross sales has already exceeded 90%.

These are some of the measures that enabled us to improve our performance in the 2015 DOW Jones Sustainability Index, where our score exceeded the average of the Automobiles & Components industry group in all 18 assessment criteria.

We are supporting the positive developments in various areas of sustainability. In December 2015, we signed the UN Global Compact sustainability initiative, whose ten principles are consistent with our ethical guidelines. We maintain open interaction with our stakeholders.

We are building our future success in an honest way while further improving the quality and eco-friendliness of our products and services. Together with our competent and hard-working personnel, we are making Nokian Tyres the best and most sustainable tyre manufacturer in the world. We humbly hope that we can restore the trust of our customers and other stakeholders through our actions and open communication.

We are already a tyre industry pioneer and we aim to be a forerunner in sustainability as well.

I hope you enjoy our report,
Ari Lehtoranta
President and CEO

Materiality assessment at Nokian Tyres

In April 2015, we reorganised our sustainability management. To coordinate the sustainability efforts in our company, we appointed an environmental and responsibility manager and a Sustainability Team, which comprises experts from various fields. The Sustainability Team invents and plans measures for improving sustainability and oversees their implementation.

In the spring, we also started a project for reviewing our current status with sustainability and identifying areas for improvement. Over the course of the project, we interviewed a total of 12 managers and experts in different aspects of sustainability. We also responded to the Dow Jones Sustainability Index survey for finding development needs. This resulted in a Sustainability Roadmap for 2015–2017, which comprises 51 different tasks. The tasks include specification and improvement measures regarding the procedures, risk assessments, purchasing chain, HR development and environmental aspects.

In 2015, the internal auditing of Product Development uncovered some problems concerning magazine testing policies. We discovered that, previously, Nokian Tyres had manufactured special tyres with improved characteristics and submitted them for tyre tests. In light of the evidence obtained from the audit, the company issued new procedures regarding magazine testing and published its findings in February 2016 in a magazine interview and a stock exchange release. More information about the topic is available [here](#). Our new procedures regarding tyre testing are available in the [World on Wheels](#) section of this report. We completed other tasks, such as the stakeholder review and stakeholder sustainability survey, according to the roadmap schedule in late 2015. We want to be a tyre industry pioneer also in terms of sustainability.

Scope, changes and measurement methods of the report

Starting in 2012, we have published sustainability reports in line with the GRI guidelines. The 2015 Corporate Sustainability Report is our company's third GRI G4 compliant report. We publish our Corporate Sustainability Report annually on our website, and it is possible to print out specific sections or the full PDF report.

Our Corporate Sustainability Report meets the CORE level requirements of the GRI G4 guidelines. The publishing platform and the GRI comparison table allow for easy navigation of the report and especially its General Standard Disclosures section.

As the indicators for our group's environmental responsibility are compiled and calculated by the same methods as in our earlier reports, this year's results are comparable to our previous reports.

In the social responsibility indicators, the figures for the Vianor chain are combined to cover all the companies in the chain, but the indicators are calculated by the same principles as in the earlier reports. Our reporting covers all the functions of Nokian Tyres plc, excluding the environmental responsibility indicators of Vianor outlets. The indicators for financial responsibility are based on our company's financial statement, which is prepared and presented according to the IFRS standards. The indicators for environmental responsibility are divided between our locations in Nokia and Vsevolozhsk. The EMAS reporting that was previously employed in Nokia has generated the current systems for calculation and data collection.

Reporting period and publication frequency

The Corporate Sustainability Report for 2015 is part of our Corporate Sustainability site. The footers of all verified pages are marked as follows: The contents on this page are covered by the assurance performed by KPMG. The externally assured PDF report created at the time of publication can be found under [Certificates, reports and awards](#).

In the autumn of 2015, Nokian Tyres Plc decided to have the Corporate Sustainability Report externally assured. The contents of the CSR from the 2015 reporting period have been verified by an independent third party, KPMG Oy Ab. Furthermore, the assurance confirms that the English sustainability report matches the Finnish original. KPMG's conclusions, findings and recommendations are presented in [the assurance statement](#). The assurance was an assignment from the executive management of Nokian Tyres plc.

Work on materiality

We revised our focus areas of sustainability in 2015 and conducted a comprehensive sustainability survey for our stakeholders late in the year. We sent out survey invitations to a total of 835 persons who represent the different stakeholder groups in our key markets. We received 345 responses, which we used

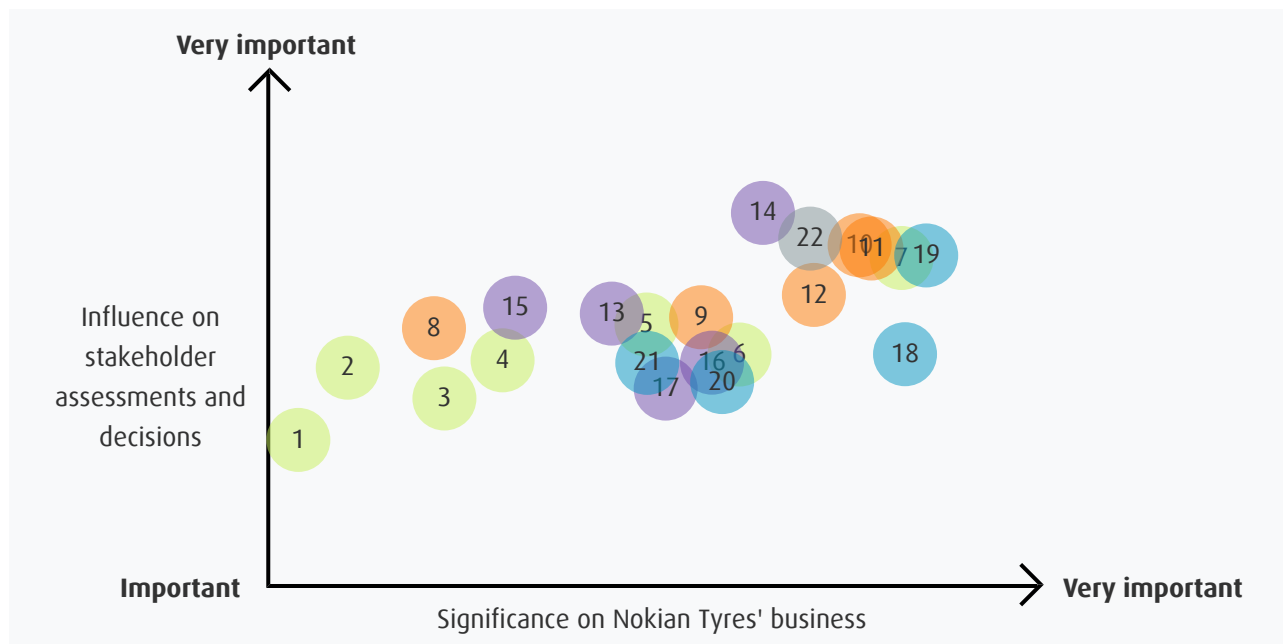
for determining the significance of different sustainability aspects to our stakeholders in the materiality analysis. The same questions were answered by the directors of our business units. Their answers were used for determining the aspects' significance to business operations in the analysis.

The survey included 22 sustainability topics (GRI G4 Topics) and eight of them were identified as very important for the company.

Focusing on the important: prioritisation of the relevant matters

The prioritisation of special topics enables us to develop our business, define the focus areas for Corporate Sustainability Reporting and improve our communication on sustainability to stakeholders. The identified special GRI G4 Topics are presented in the table below. The horizontal axis indicates the significance of a topic to Nokian Tyres and the vertical axis indicates the significance to stakeholders. Different stakeholder groups may have diverse and conflicting requests and demands and, likewise, their expectations for the company operations may vary. Instead of looking for synergies, the table separates stakeholders' expectations from those of the company. This avoids prioritising topics that are only important for both parties.

Significance of economic, environmental and social impacts of Nokian Tyres



Planet	People	Hakkapeliitta Way	Economy	World on Wheels
1. Reducing the use of water in tyre production 2. Preserving and improving biodiversity at the production sites 3. Eco-friendliness, energy efficiency and emissions in production 4. Reducing greenhouse gas emissions in transport and production 5. Reducing waste volumes in tyre production 6. Rolling resistance of tyres 7. Developing innovative and eco-friendlier products	8. Human rights in Nokian Tyres' business operations 9. Promoting equal treatment of people 10. High level of occupational health and safety in all operations 11. Ensuring employee satisfaction and motivation 12. Professional development of employees	13. Transparent and comprehensive reporting 14. Business ethics and compliance with the laws and regulations 15. Responsible purchasing of raw materials, goods and services 16. Good corporate citizenship (social support and work with organisations and communities) 17. Active stakeholder engagement in corporate sustainability	18. Ensuring profitable growth and maintaining a good profit level 19. Customer satisfaction 20. Sustainability as a competitive factor 21. Systematic business risk management, including sustainability	22. Giving the highest priority to product safety

Sustainability through value-based management

In order to ensure the continuous improvement of sustainability management and our operations, we have divided the special sustainability topics into five categories. These five categories comprise the themes of sustainability for our company.

- **Hakkapeliitta Way in corporate sustainability** is the theme for the sustainability principles that are seen throughout our operations. It is connected to our company's strategic goals and vision.

- **World on Wheels** comprises our work on product safety and quality as well as our impact on traffic safety and the future of the rubber industry via expert organisations.
- **Economy** focuses on the economic impacts of our operations.
- **People** form the community around us: our employees, local communities and subcontractors around the world.
- **Planet** describes our environmental footprint.



Chart: Values, strategy and targets

Hakkapeliitta Way in corporate sustainability

The Hakkapeliitta Way category comprises five sustainability principles that are seen throughout our operations and connected to our company's strategic goals and vision.

Transparent and comprehensive reporting

As a public company, Nokian Tyres is bound by the statutory requirements and the rules of the stock exchange on the publicity of information which is relevant to the company's business. In order to meet our stakeholders' expectations, we follow the 'transparency imperative' concept of the Global Reporting Initiative guidelines. Based on this concept,

we aim at meeting all of the reasonable requirements that our stakeholders have on corporate sustainability. In this respect, Nokian Tyres' communication on sustainability exceeds the minimum communication requirements for public companies.

Business ethics and compliance with laws and regulations

We follow the board-approved **ethical guidelines** in operations throughout the Nokian Tyres group. The document has been published in several languages, and it specifies the ethical guidelines for Nokian Tyres' business, instructions for ethical issues and a procedure for the group personnel. Furthermore, the document discusses the enforcement and supervision of the rules. While local and international documents provide additional instructions, the ethical guidelines establish a strong foundation and we expect all employees to follow them. This ensures ethical business practices at all of the levels of our operations.

We follow the law in letter and spirit in every country of operation. Our ethical guidelines provide every employee with instructions in case they see something in our operation that may conflict with the applicable legislation.

Responsible purchasing of raw materials, goods and services

We follow the UN Global Compact principles as well as our own ethical guidelines, which also address the issues of responsibility in the purchasing chain. Furthermore, we require all of our raw material suppliers to adhere to our Supplier Code of Conduct that both parties sign and to have an ISO 9001 certified quality management system in place. We also prefer suppliers with valid ISO 14001 certification. The basic raw material for tyres is natural rubber. As an agricultural product, it is the livelihood of many families living in countries where

the local legislation and working conditions have not been fully developed. Nokian Tyres only purchases natural rubber from processors that we have approved. We supervise their activities through audits and collaboration with local parties.

Nokian Tyres participates in the Sustainable Natural Rubber Initiative (SNR-i, IRSG), which promotes sustainable development throughout the supply chain of natural rubber and commits everyone in the supply chain to mutual goals.

Good corporate citizenship

We are a member of various industrial and employer organisations. Our participation in such organisations depends on the current topics and our opportunities to offer our expertise. Nokian Tyres is also a member of various communities and organisations that participate in the development of the legislation and political decision-making. Nokian Tyres is not involved in political activities, fundraising or political contributions as per our ethical guidelines.

In addition to trade associations, Nokian Tyres supports various non-profits and charities. We also offer expert services for communities free of charge. In Finland, for example, we provide the police with technical support in investigations of accidents that may have been caused due to the poor condition of tyres and we produce training materials on occupational health and safety for the rubber and tyre industry together with the Centre for Occupational Safety.

As an internationally expanding company, our impact on our surroundings is increasing and we continue to be a significant job creator and developer of local infrastructure. We support the development of local communities and the improvement of working conditions at the start of our value chain, when possible.

Active stakeholder engagement in corporate sustainability

Active stakeholder engagement helps us to better understand our stakeholders' expectations. Different stakeholders may have conflicting expectations towards sustainability in our operations. This poses a communication challenge in stakeholder engagement.

World on wheels

Product safety

Product safety is the most important area of sustainability with regard to our company as well as our customers and end users. We develop safety through continuous product development and testing. Extreme weather phenomena that are caused by climate change increase the importance of tyre safety and especially contribute to the increased use of winter tyres. As a leading manufacturer of winter tyres, we have a special responsibility for making transportation better and safer.

Economy

Ensuring profitable growth and maintaining a good profit level

In industrial operations, the positive development of productivity is a prerequisite for a company's success. In tyre manufacture, capacity utilisation is crucial in terms of productivity: the higher the capacity utilisation, the better the productivity. Automation of machinery and process improvements also contribute to productivity. Our indicator for measuring production efficiency is kg/effort-hour.

Furthermore, we focus our production on core products with a good margin and invest in the continuous development of quality, productivity and logistics. Profitable growth requires that we continuously expand our capacity, and we invest in

new production capacity according to our growth targets and the development of the market. Productivity increases support profitability, which benefits our stakeholders as higher salaries or dividends, for example.

Customer satisfaction

Customer satisfaction refers to Nokian Tyres' direct customers as well as the end users of our products. We aim for continuous improvements of customer satisfaction through innovative new products, flexible and smooth logistics, regular product testing, safe, high quality products and excellent service. We measure our success through customer satisfaction surveys and use their results for the further improvement of our operations.

Sustainability as a competitive factor

As a manufacturer of high-quality, innovative premium tyres designed for demanding conditions, we want to be an industry pioneer also in terms of sustainability. We invest in eco-friendly products and processes. We have developed tyres with the best A class rolling resistance according to the EU tyre label system and use eco-friendly raw materials in their production. The more often our brand is associated with sustainability in addition to safety and high quality, the more we can attract sustainability-conscious customers. Improved competitiveness also in sustainability supports our primary goal of profitable growth.

Systematic business risk management, including sustainability

The basic functions of every sustainable company include risk management, which involves identifying and prioritising the applicable risk factors and preparing for the main risks. At Nokian Tyres, Corporate Risk Management (CRM) also includes sustainability aspects. We have started in-depth assessment of sustainability risks in accordance with our roadmap and will revise our risk assessment regarding sustainability during 2016.

People

Human rights in Nokian Tyres' business operations

Wherever we conduct business, we follow the local laws and regulations as well as good Western business practices and the local customs. In addition to the law, our operation must follow the group's internal rules and guidelines. We respect the privacy of our personnel, and we handle personal information according to this principle. Employment in our group is based on employment contracts in accordance with the local legislation and any collective agreements. Our salaries are equal to or above the statutory local minimum wage. Furthermore, our employee stock options and bonus programmes cover everyone employed by the group. We respect our employees' right to organise and we co-operate with the appointed representatives of trade unions.

Promoting equal treatment of people

Through commitment to our ethical guidelines, local legislation and external social responsibilities, we ensure equal opportunities for all of our employees and promote equal treatment in each of our locations.

High level of occupational health and safety in all operations

The health, safety and well-being of our employees and partners are essential matters for everyone at Nokian Tyres. We are committed to arranging a safe work environment for our employees and partners and ensuring that they get to go home healthy every day. We believe that every accident can be prevented and work towards a workplace with zero accidents. Through better working conditions and arranging training for our personnel and partners, we are continuously further improving occupational health and safety.

Ensuring employee satisfaction and motivation

Our company develops and maintains a company culture that promotes fair and equal treatment and respect. Everyone contributes to our profitable growth and success regardless of his or her position. All of our employees can contribute to further developing their own work and the working environment.

For us, personnel well-being comprises physical and mental well-being as well as cognitive and social well-being. Work that focuses on inventiveness is one way to support leadership and the active participation of our personnel in line with our company culture. We develop competence in a strategic and proactive manner that addresses future needs.

Professional development of employees

Producing safe and high-quality products requires a high level of professional competence. With the automation of the industrial environment, work is becoming even more demanding. This emphasises the need for professional development of employees. Development opportunities also contribute to job satisfaction.

Planet

Reducing the use of water in tyre production

There is a global water shortage, and we also want to reduce the use of water in our production. Tyre production uses high volumes of cooling water: Our factory in Nokia takes the cooling water from the nearby river and our factories in Vsevolozhsk use a closed recirculating cooling water system that minimises water consumption.

Preserving and improving biodiversity at the production sites

Like many other manufacturing industries, we also greatly care about biodiversity, as all the raw materials for our products come from nature. Harm to

biodiversity can result in the shortage of some raw materials. We also care about maintaining the biodiversity of our surrounding environments and preserving endangered species such as the asp, freshwater pearl mussel and red-throated loon.

Eco-friendliness, energy efficiency and emissions in production

We see the regulations established by the authorities as minimum requirements. Therefore, we actively follow the development of environmental and safety regulations in Finland, the EU and Russia for anticipating the effects of pending legislation.

We are committed to reducing GHG emissions caused by our operations. Furthermore, an EC directive requires corporations to carry out energy efficiency measures, such as energy audits. By increasing the proportion of renewable energy sources, we can cut down our greenhouse gas emissions caused by energy consumption. Improved energy efficiency will also result in cost savings.

Reducing greenhouse gas emissions in transport and production

Climate change is accelerated by greenhouse gas emissions, which are an essential issue for companies around the world. We are committed to reducing GHG emissions caused by our operations. We calculate the annual GHG emissions from our operations, including emissions from the transport of raw materials to us, and aim to reduce them systematically according to a plan. The new biomass boiler plant is a joint venture that will significantly reduce our GHG emissions in Nokia.

Reducing waste volumes in tyre production

Quantitatively, waste accounts for our highest environmental impact. In Nokia our factory reuse of almost all of the generated waste. The local infrastructure in Russia is not on par with our facilities in Nokia. We are, therefore, working towards ensuring the safety of waste management in our Russian factory.

Rolling resistance of tyres

The most significant environmental impacts during the use of a tyre are caused by the vehicle's fuel consumption. Lower fuel consumption reduces the quantities of greenhouse gases released into the air. Tyres with low rolling resistance can save fuel, thereby reducing CO₂ emissions. Through determined product development efforts we have managed to reduce the rolling resistance of our tyres, and our current product line includes several products with the best A class rolling resistance according to the EU tyre label system. We are continuing our efforts on further reducing the rolling resistance of our tyres.

Developing innovative and eco-friendlier products

In line with the product life cycle approach, in addition to safety, our company pays attention to environmental issues already when buying raw materials and designing our products. We work continuously towards reducing tyre noise as well as rolling resistance. Natural materials and safe, eco-friendly products that reduce fuel consumption, harmful emissions and rolling noise will also pave the way for us in the future.

Impact on the value chain

The GRI G4 reporting model requires the company to evaluate its sustainability footprint throughout the value chain of its business. In the following diagram, we have combined our special sustainability topics with our value chain. [Here](#), you can view our value chain closer.

Commitment to external CSR initiatives and organisations

In December 2015, Nokian Tyres joined the United Nations Global Compact initiative (UNGC). The ten

UNGC principles cover human rights, labour, environment and anti-corruption processes. The GRI G4 indicators that measure adherence to these principles can be seen in the GRI comparison table in this report.

Since 2012, Nokian Tyres has been a member of the OMX GES Sustainability Finland Index, which provides objective and reliable information for making responsible investments. The index comprises the 40 leading companies listed on Nasdaq Helsinki in terms of sustainability, and the index criteria are based on the international guidelines for environmental, social, and governance (ESG) issues.

We participate in various industrial and personnel organisations whose purpose is improving work throughout the industry. Our activity in their work depends on the topics that they address and our opportunities to offer our expertise.

For us, the most important organisations are the following:

- Chemical Industry Federation of Finland
- Rubber Manufacturers' Association of Finland
- National automotive and tyre industry associations in several countries
- ETRMA/European Tyre and Rubber Manufacturers' Association
- ETRTO/European Tyre and Rim Technical Organisation
- STRO/Scandinavian Tire and Rim Organization
- Finnish-Russian Chamber of Commerce
- International Chamber of Commerce
- Russian Tyre Manufacturers Association

- AEB (Association of European Businesses)
- AmCham (American Chamber of Commerce in Russia)
- Tampere Business Campus
- Corporate Responsibility Network FIBS.

We are engaged in international marketing collaboration with the International Orienteering Federation and the organisation behind the Tough Mudder events. Our agreement with the International Orienteering Federation provides us with high visibility during the annual World Orienteering Championships and World Cup events. Focused on Central Europe, our partnership with Tough Mudder supports the image that our specially reinforced SUV tyres deserve, and we have had diverse marketing visibility around Europe.

Tough Mudder organises obstacle course races that put strength, endurance, teamwork and mental grit to the test. The Nokian Tyres' brand and Tough Mudder both demonstrate the same mentality: succeeding under exceptionally demanding conditions through intelligence and relentlessness. These elements can also be found in the annual Swamp Soccer World Championships in Hyrnsalmi, Finland. We have been the main sponsor for the championships for nearly 10 years.

Furthermore, we have been one of the main sponsors of the youth road safety campaign "Turvassa tiellä" and the "Rosvopaisti" events for Finnish war veterans. We have also offered minor contributions to local activity clubs and organisations that focus on substance abuse prevention.

Expert in demanding conditions

Nokian Tyres designs and manufactures safe tyres for demanding conditions, while respecting environmental values. As the northernmost tyre manufacturer in the world, the company works relentlessly for safer, more comfortable, and eco-friendly transportation – year-round. The special Nordic expertise brings with it the ability to value and understand nature and its peculiarities. In freezing blizzards or heavy summer rain, Nokian tyres' products offer reliability, performance and peace of mind.

The reliable and innovative tyres for passenger cars, lorries, and heavy machinery are primarily intended for areas with snow, forest, and demanding driving and operating conditions due to changing seasons. Company tailors their products to different conditions, which is a unique approach in the tyre industry. The rough roads and extreme weather conditions of the north require different tyre structures and rubber compounds than the warmer climate in Southern Europe, for example.

Nokian Hakkapeliitta is the leading winter tyre brand in the Nordic countries and Russia. The position as the market and price leader is established by our most important competitive advantages: a quality image that is based on decades of user experiences, strong distribution network and competence in logistics.

Products are mainly sold in the replacement market. The key markets are the Nordic countries and Russia, where Nokian Tyres is the market leader in premium tyres. Central Europe and North America are other important markets in terms of profitable growth.

The group includes the Vianor tyre chain, which conducts wholesale and retail operations in Nokian

Tyres' key markets. Nokian Tyres has three factories in Finland and Russia. In 2005–2015, company have invested approximately one billion euro in the factories, and the facilities represent the absolute best in the industry in terms of productivity and quality.

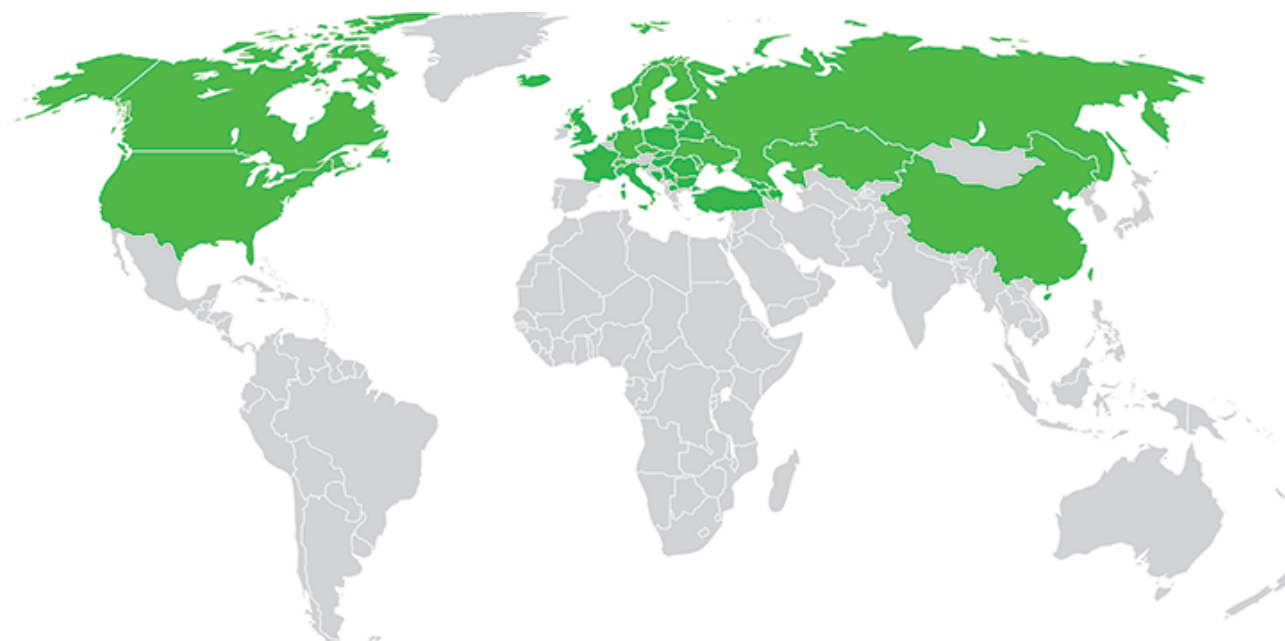
In 2015, Nokian Tyres had over 4,300 employees and net sales of approximately 1.4 billion euros. Nokian Tyres' share is listed on the Nasdaq Helsinki.

[Read more about the company's ownership structure](#)

More than one hundred years of competence and expertise

The roots of Nokian Tyres go all the way back to 1898, when Suomen Gummitehdas Osakeyhtiö was established. The factory in Nokia has stood by the Nokianvirta river since 1904. Nokian Tyres plc was listed on the stock exchange in 1995. The company established its second own production facility in Vsevolozhsk, Russia, in 2005.

In addition to its own production facilities, the company utilises contract manufacturing according to high quality standards. In 2015, contract manufacturing accounted for approximately 3 per cent of the total sales volume. Nokian Tyres has sales companies in Finland, Sweden, Norway, Russia, Ukraine, Kazakhstan, Germany, Switzerland, the Czech Republic, Belarus, Canada, the United States, and China. The company has obtained quality and environmental certification for its production facilities in Nokia and Vsevolozhsk as well as the Swedish sales company.



- *Nokian Tyres products were sold in 59 countries*
- *Russia, Finland, Germany, Sweden and Norway made up 70% of sales*
- *Vianor had 1,475 stores in 26 countries*

The world's first winter tyre, the Kelirengas ("weather tyre"), was developed in 1934 specifically for the Finnish roads, varying terrain, and winter conditions. The first Nokian Hakkapeliitta tyre was developed a few years later based on the Kelirengas. The story of the master of snowy roads has continued for 80 years.

[Learn more about the safety products under World on wheels](#)

Responsible tyre sales and diverse service near the customers

Vianor is the largest and most comprehensive tyre chain in the Nordic countries, Russia, and the CIS. At the end of 2015, the chain comprised a total of 1,475 outlets in 26 countries in Nokian Tyres' key markets.

The Vianor outlets sell tyres for passenger cars, delivery vehicles and lorries, as well as heavy tyres. In addition to the Nokian Tyres products, the chain sells other leading tyre brands and a variety of motoring products, such as rims, batteries, and shock absorbers. Apart from retail sales, Vianor conducts wholesale and fleet customer sales.

Vianor's services include tyre changes and mounting, as well as car servicing and tyre storage, depending on the location. Co-operation between Nokian Tyres' manufacturing and Vianor provides synergy benefits. Advanced data systems improve planning, monitoring, and reporting. Through Vianor outlets, Nokian Tyres can contact the end users and receive valuable information that can be used in the development of services.

As the leading tyre retail chain in its areas of operation, Vianor is building a basis for the permanent market share of the group's products. The Vianor concept offers several business-friendly services for entrepreneurs in the Vianor network, including strong brands, training, and technical support. Vianor outlets receive support for marketing and sales promotion.

The Vianor tyre retail chain spearheads the group's growth in Nokian Tyres' strategically important markets, as well as the partner network Nokian Tyres Authorized Dealers (NAD), comprised of 1,239 stores contracted at the end of 2015, in 19 Central European countries and China.

[Read more about Vianor tyre retail chain from here!](#)

Contact information:

Nokian Tyres plc, Head Office
Pirkkalaistie 7
FI-37100 Nokia
Finland

Vianor: Drive safely!

Vianor's operation is guided by the company's management system, Vianor Way, which is built around understanding the customers and helping them drive safely.

The sustainability management system complies with the ISO 9001, ISO 14001 and OHSAS 18001 standards. Sustainability is visible in the everyday work at Vianor: it is important to guide the customer to choose the safest tyres in the price category that the customer has decided on.

Tyre fitment is also a matter of safety. The processes have been developed over the course of many years, and all of Vianor's personnel are trained in their work. The tools are designed especially for changing tyres. For example, tyre fitters use calibrated torque wrenches, which is especially important with alloy wheels.

Enabling customers to drive safely has become a more comprehensive process than before. With car servicing, Vianor offers customers a way to take care of the entire car in just one location. The chain has a wide geographical coverage, and it aims to provide the right tyres to the customer within two business days from placing an order.

An important element of sustainability in Vianor's service is the inspection card that each customer receives after a tyre change. It contains information on observations made during the work, such as tyre pressure or any technical faults identified.

The tyre industry offers employment and opportunities for young people

In addition to the safety of its customers, Vianor will also ensure the well-being of its personnel and their competence development and safety. A safe working environment for Vianor's employees also guarantees high-quality services and products for its customers.

Vianor's business involves strong variation according to different seasons. In practice, this means varying workloads and numbers of employees. Vianor offers incentive systems for motivating all of its employee groups, for example. During peak season, tyre fitters can really increase their salary by working hard.

Vianor outlets offer work for both permanent employees and seasonal workers: Typically, servicing provides steady work throughout the year and evens out the seasonal fluctuation. During peak season, outlets employ twice as many people as during the rest of the year.

Systematic and careful induction to Vianor's processes is the most important thing for seasonal workers. It ensures good quality and enables the seasonal worker to do his or her work well and safely.

During the peak seasons, Vianor employs many young people, such as local students who get to earn a little extra. Many of these seasonal workers have worked for several seasons at Vianor outlets. Seasonal workers are also a part of the Vianor team and they fit well in the team.

Comprehensive and responsible customer service

The customers have started to ask more questions about the environmental impact of tyres. People are

more aware of rolling resistance and its effect on fuel consumption and, thereby, on the car's emissions. One reason for this is that the new tyre label system displays the difference between tyres easier than before.

The Hakka Guarantee is an important way to make driving safer. It ensures that the customer will always reach their destination and that assistance is always available nearby.

Vianor is more than just a tyre outlet: Car servicing and tyre storage services offer comprehensive care. The demand for tyre storage services has grown steadily. Car tyres are larger than before, and a single SUV tyre fitted on a wheel may weigh more than 25 kg. Moving a set of tyres to a storage locker and back is not as simple as it used to be. Furthermore, the storage of tyres in the storage areas of housing cooperatives may be prohibited due to fire hazard regulations.

Vianor's tyre storage service also involves a safety aspect: outlets clean and inspect the tyres that they store and, if they are at the end of their service life, they notify the customer and help him or her purchase a set of new, safe tyres.

Tyre recycling is a natural part of our business

Part of Vianor's business is formed by tyre recycling. In Finland, Vianor's tyre recycling partner is Finnish Tyre Recycling Ltd, whose operation is funded with the disposal fees included in the price of new tyres.

The Nordic countries are pioneers in tyre recycling based on producer responsibility. Sweden and Norway use a recycling system similar to that of Finland. The current collection rate of used tyres is 100 per cent, because all used tyres are collected at some point.

In the EU, the tyre recycling rate has grown strongly in the past decade, and is currently more than 95 per cent. Typically, consumer tyres are recycled approximately six years after their purchase. Tyre recycling is already natural for Vianor's customers: very few consumers ask where their old tyres will end up.

Professional drivers require a specialised service

Availability is key when providing service for heavy equipment and professional drivers. The majority of Finnish Vianor outlets offer heavy equipment service. The turnaround time is also essential for professional drivers. In Finland, Vianor provides a national 24/7 on-call service.

Retreading heavy tyres reduces raw material consumption, and it is an economically responsible practice. Vianor has six retreading plants in the Nordic countries: three in Finland, one in Sweden and two smaller plants in Norway.

The tyre bodies are transported for retreading from the service outlets and refitted after retreading at the same outlet; Vianor's process ensures that the customers receive their own bodies back with the desired tread.

Hakkapeliitta Way guides our operations

Sustainability is a natural part of our business: this means sustainable product development, safe and eco-friendly products, high standards of quality and taking into account various stakeholders. Sustainability is an important part of our management and action plans, and it is reflected in our everyday work.

Inventiveness

We have the skills needed 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.

Entrepreneurship

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.

Team spirit

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.

Our values lead us to success

Our company culture, which we call the “Hakkapeliitta Spirit”, lays a solid foundation for building success and developing our company further. The basic elements of the Hakkapeliitta Spirit are our values, which guide and support the implementation of our strategy.



Strategy of focus areas

Our company exists so that people would have the safest, highest-quality, and most eco-friendly tyres. We want to be the best in everything we do: a pioneer in making safe tyres for demanding conditions, a leader in key markets, the fastest-growing and most profitable tyre company in the world, and a work community with a unique company culture.

We revised our “strategy of focus areas” in 2015. The strategy directs the choices that we make. Our

operations are guided by the group strategy, which acts as a basis for unit strategies, action plans, the measures that we implement and our management work. Based on our values and strategy, we have identified our Must Win Battles – the key development needs and targets that will keep us on the path to profitable growth. We build our success together through hard work and further improvement of our procedures and products. Our aim is to be the most ethical and profitable tyre manufacturer in the world.

1. Demanding conditions

As the northernmost tyre manufacturer in the world and an expert in challenging conditions, we

promote and facilitate safe transport. In freezing blizzards or heavy summer rain, our tyres offer reliability, performance and peace of mind. We are the only tyre manufacturer that focuses on products and customer needs for demanding conditions.

2. Innovative core competence

We are focusing our core competence on a narrow product line, the replacement markets and three business areas: 1) passenger car, SUV and van

tyres; 2) heavy special tyres and 3) tyre and car servicing. We develop and manufacture premium tyres whose unique innovations provide added value in different applications from forestry work to safe driving on highways.

3. The most satisfied customers

We want the users of our products and services, as well as our dealers, to be the most satisfied customers in the tyre industry. A committed and extensive distribution network and effective logistics help us ensure the good availability of our

products throughout the peak season. The Vianor chain spearheads our distribution channels and its direct contact with consumers provides us with valuable information about the needs and wishes of the end customers.

4. Select markets

We are focusing on regions where the driving conditions are demanding due to the changing seasons. Our key markets are the Nordic countries

and Russia, where we are the market leader in premium tyres. Central Europe and North America are other important markets for us in terms of profitable growth. We sell most of our tyres in the replacement markets.

Key strategic objectives

The focusing strategy establishes clear goals that we work towards with determination.

Market leadership and the best processes in the industry

- We are the market leader in premium tyres in the Nordic countries, Russia and other CIS countries.
- We have a strong market position in North America and Central Europe with our core products and with our special products internationally.
- We are the undisputed pioneer in winter tyre technology as well as the manufacturer of the best premium summer tyres and special tyres in the world.
- Our key processes and business networks are efficient and the best in the industry.

Profitable growth faster than the market

- Our annual growth exceeds that of the market.
- We continue to be the world's most profitable tyre company. Our operating profit will remain the best in the industry, at 22% at a minimum.
- We have an efficient organisation with sales growing faster than our fixed costs.

Satisfied stakeholders

- We offer the industry's best products and services that help people drive more safely and comfortably.
- We know our customers and their wants and needs.
- For shareholders, we offer stable dividends and a consistent dividend policy.
- We are a valued and desired employer.
- Our personnel are skilled and highly motivated people who want to further improve their personal competence as well as our company as a whole.

Must-Win Battles in 2016–2018

The group-level Must-Win Battles that support our goals are the key challenges that we must overcome in order to advance on the path to profitable growth.

WE MUST:

1. Be the first choice for consumers

Increasing consumer loyalty and satisfaction as well as our company and product awareness especially in growth areas.

2. Be preferred partner for customers

Investing in long-term partnerships with customers based on mutual benefit. Improving the quality of all services.

3. Manufacture world's best tyres and services

Solid flow of innovations and world's safest tyres. Growing portfolio of new services for sales support, distribution partners and consumers.

4. Reach strong growth in Central Europe and North America

Clear improvement in our brand recognition and market share. Gradual growth of our price position in Central Europe.

We have summarised our values, strategy, and goals in this one figure that depicts how we, together, build our success responsibly and further improve our operations every day.



Sustainability through value-based management

Sustainability is part of our company culture, strategy and goals. In order to ensure the continuous improvement of sustainability management and our operations, we have divided sustainability into five clear categories.

The principles that we implement throughout our business form the backbone of our corporate sustainability. They incorporate our voluntary sustainability commitments as well as our principles concerning ethical business operations.

In addition to sustainability management at the group level, our work on sustainability comprises four areas of operative management: World on Wheels, Economy, People and Planet.



Chart: Values, strategy and targets

Hakkapeliitta Way in corporate sustainability

The Hakkapeliitta Way category comprises five sustainability principles that are seen throughout our operations and connected to our company's strategic goals and vision.

Transparent and comprehensive reporting

As a public company, we follow the statutory requirements and the rules of the stock exchange on the publicity of information that is relevant to our business. In order to meet our stakeholders'

expectations, we follow the principle of transparency in line with the Global Reporting Initiative guidelines and aim at meeting all of the reasonable requirements that our stakeholders have on corporate sustainability.

Business ethics and compliance with the laws and regulations

We follow the board-approved **ethical guidelines** in our operations throughout the group. The document has been published in several languages, and it specifies the ethical guidelines for our business, instructions for ethical issues and a procedure for the group personnel. While local and international documents provide additional instructions, the ethical guidelines establish a strong foundation and we expect all employees to follow them. This ensures ethical business practices at all of the levels of our operations.

We follow the law in letter and spirit in every country of operation. Wherever we conduct business, we follow the local laws and regulations as well as good Western business practices and the local customs. In addition to the law, our operation must follow the group's internal rules and guidelines. We respect the privacy of our employees, and our employment is always based on clear and unambiguous employment contracts in accordance with the local legislation and any collective agreements.

Responsible purchasing of raw materials, goods and services

We follow the UN Global Compact principles as well as our own ethical guidelines, which also address the issues of responsibility in the purchasing chain. Furthermore, we require all of our raw material suppliers to adhere to our Supplier Code of Conduct and to have an ISO 9001 certified quality management system in place. We also prefer suppliers with valid ISO 14001 certification.

Good corporate citizenship

In global business and under constantly changing circumstances, identifying problems, obtaining the necessary information and making the right decisions may be challenging at times. However, we are committed to supporting good corporate citizenship, sustainable development and continuous improvement. We want to take care of our stakeholders, financial standing and environment as well as to produce premium products and offer first rate service.

Active stakeholder engagement in corporate sustainability

Active stakeholder engagement helps us to better understand our stakeholders' expectations. Different stakeholders may have conflicting expectations towards sustainability in our operations. This poses a communication challenge in stakeholder engagement.

World on wheels

Product safety is essential for our business. Extreme weather phenomena that are caused by climate change increase the importance of tyre safety and especially contribute to the increased use of winter tyres. As a leading manufacturer of winter tyres, we have a special responsibility for making winter traffic better, safer and more eco-friendly. We are an expert organisation that influences both traffic safety and the rubber industry.

Economy

We aim to develop our business in order to ensure steady shareholder value and predictable future developments as well as to provide our employees with job security and personal development opportunities. The salaries and taxes that we pay support the structures of society and improve the quality of life for thousands of people. Furthermore,

we focus our production on core products with a good margin and invest in the continuous development of quality, productivity and logistics. We must be able to produce high-quality products, provide excellent service and ensure timely deliveries.

People

Our company develops and maintains a company culture that promotes fair and equal treatment and respect. Everyone contributes to our profitable growth and success regardless of his or her position. As an internationally expanding company, our impact on our surroundings is increasing and we continue to be a significant job creator and developer of local infrastructure.

Planet

In line with the product life cycle approach, we pay attention to environmental aspects already when buying raw materials and designing our products. We work on ensuring the best possible safety, continuous improvement and sustainable development and aim for zero accidents in all areas of safety. We actively follow the development of environmental and safety regulations in Finland, the EU and Russia for anticipating the effects of pending legislation.

[Learn more about the different areas of sustainability management and their materiality!](#)

Nokian Tyres ethical guidelines

1 Purpose and Limitations

This document describes the basic ethical rules and guidelines Nokian Tyres plc upholds, aiming for good corporate social responsibility and sustainable development. At the same time, this document describes the values and norms Nokian Tyres plc expects all of its employees to conform to when working for or acting as representatives of Nokian Tyres plc.

2 Scope

This document applies to all of Nokian Tyres plc and all companies in the Nokian Tyres group, including all sales companies and equity-owned Vianor stores, in all countries. All of these units are commonly referred to as Nokian Tyres in this document.

3 Responsibilities

The key responsibilities are listed in the table below.

Task		Responsibility										
		1	2	3	3.1	3.2	3.3	3.4	3.5	4	5	6
1	Group level guidelines (this document)	X	X									
2	Distribution of this document				X	X	X					
3	Implementation of the guidelines		X	X	X	X	X	X	X	X	X	X
4	Detailed policies, operational manuals and guidelines for different areas of operations or different tasks			X						X		
5	Internal and external communications on ethics				X					X		
6	Financial information and control					X				X		

7	HR, Labour and safety						X			X		
8	Quality, environmental and responsibility issues							X				
9	Management of supplier networks								X	X		
10	Reporting possible deviations to supervisors or specialists										X	
11	General monitoring		X									X
<p>Responsibilities:</p> <p>1 = Board of Directors (NT plc)</p> <p>2 = CEO and President (NT plc)</p> <p>3 = Named Vice presidents or other persons within Nokian Tyres</p> <p>3.1. Vice President, Marketing & Communications (NT plc)</p> <p>3.2. CFO (NT plc)</p> <p>3.3. Vice President, HR (NT plc)</p> <p>3.4. Vice President, Quality, sustainability and process development (NT plc)</p> <p>3.5. Vice President, Supply Operations (NT plc)</p> <p>4 = Management, All companies in Nokian Tyres Group</p> <p>5 = Personnel</p> <p>6 = Internal auditing</p>												

4 Ethics policy

When working for Nokian Tyres or representing the company, all personnel should aim at the correct ethical and moral behaviour. Local and International laws must be followed at all times. When facing moral questions or dilemmas, members of staff can ask for support from supervisors and management, or from the various specialists in the service functions. When it is impossible to ask for help, individuals should trust their own judgement.

All stakeholders connected with Nokian Tyres should be able to trust the moral and ethical behaviour of Nokian Tyres and its personnel. In global business and a rapidly changing world, morality and ethics are acknowledged as difficult subjects. Identifying problems, acquiring all the necessary information and making the right decisions can be difficult. Regardless, Nokian Tyres is committed to aiming at good corporate social responsibility, sustainable development and continuous improvement.

Should any indications or accusations of possible violations to these principles appear, Nokian Tyres is committed to investigating any allegations and taking the necessary actions to correct all unclear situations. All Nokian Tyres personnel are encouraged to bring forward their concerns related to the realization of this document.

5 Operational Principles

Nokian Tyres is committed to good corporate citizenship and follows these principles in all of its operations. These principles are available to all Nokian Tyres personnel, who are expected and encouraged to uphold these principles when working for the company.

Nokian Tyres aims to be a profitable company and to ensure sustainability. At the same time, the company aims to minimize the use of common resources and negative impacts on the social, economical and environmental surroundings.

Local legislation and norms must be followed in all operations. In a case of nonconformity, development plans must be created to correct the situation as soon as possible. If necessary, the authorities must be informed and included in the development work.

Besides local legislation, the internal rules and guidelines concerning the whole of the Nokian Tyres group must be followed at all times. As well as good Western business practices and customs, the local customs and legal practices must always be respected.

Nokian Tyres follows the local requirements for accounting and financial control as well as the IFRS standards for consolidated accounts in all of its bookkeeping.

Nokian Tyres only gives truthful information and aims at a comprehensive and timely description of current events in its internal and external communications. The rules set for publicly listed companies are followed in all communications.

Nokian Tyres designs and tests all of its products to ensure good quality and conformity to the law. Nokian Tyres aims to be a forerunner with regard to the safety and environmental aspects of its products.

Nokian Tyres supports and respects the protection of human rights as stated in *The United Nations Universal Declaration of Human Rights*. Nokian Tyres will never approve of or willingly participate in any abuse of human rights under any circumstance.

Nokian Tyres recognizes the internationally proclaimed rights of Indigenous peoples.

Nokian Tyres is committed to the protection of environment and sustainable development. Nokian Tyres wants to act as a forerunner in environmental issues.

Nokian Tyres believes that open communication with public offices and honest co-operation with the officials is the best way to ensure the best results for both the company and society. Nokian Tyres does not approve of corruption in any form, including giving or accepting bribes, extortion or misuse of public position.

As a non-political entity, Nokian Tyres does not take part in political activity, fund-raising or political donations.

Nokian Tyres does not approve of giving or approving gifts or service, other than those of low or nominal value that can be considered to be within normal marketing and business customs, and carry no commitments or obligations. Consideration and local legislation must be followed at all times, including possible local legislation forbidding any presents.

All personnel working at Nokian Tyres are entitled to fair and proper treatment at work at all times. All forms of discrimination, harassment or abuse are strictly forbidden.

Nokian Tyres embraces the idea of equality between all humans, regardless of gender, age, race, education, status, religion, political opinion, appearance or other external factors.

Everyone working at Nokian Tyres has the right to contact their supervisors when necessary, to make initiatives and suggestions, and to get feedback on their ideas and concerns. When making suggestions or reporting possible problems, members of staff can by-pass the normal chain of command in order to directly contact the people in charge.

When reporting possible violations to these codes or other group policies, a wide array of communication channels are available for use, as described in the group manual for whistleblowing practices. In addition, the personnel can also contact the CEO at all times, should the gravity of the matter so demand.

Nokian Tyres respects the privacy of all personnel, and has organized the handling of personal information accordingly.

Employment at Nokian Tyres is always based on clear and unambiguous labour contracts, which are drawn up in conformity with the local legislation and any applicable collective agreements. Nokian Tyres never pays less than the minimum wage set in the local legislation.

Nokian Tyres upholds freedom of association and works in co-operation with any duly named representatives of labour unions.

Nokian Tyres does not approve of child labour or the use of forced or slave work. Penal servitude work is only allowed when it is done within an approved legal context and the funds are collected for the personal use of the penitents.

Nokian Tyres expects a high moral standard from its partners as well, including materials suppliers. Nokian Tyres monitors all partners on a general level, as applicable. Should there be any doubt or suspicion regarding the morality of a partner, Nokian Tyres is committed to investigating the accusations and taking any measures necessary to amend the situation.

When disciplinary measures are necessary, local legislation and normally accepted or agreed methods are used. However, Nokian Tyres does not

allow any form of physical or mental violence as a disciplinary action. Furthermore, the person accused of the offence must always be allowed to defend or explain his or her actions before any decisions on disciplinary measures are taken.

6 Code of conduct for personnel

All persons working for Nokian Tyres or representing Nokian Tyres are expected to act in an ethical and moral way at all times. These basic rules are listed to advise the personnel of proper conduct at work:

- All personnel must follow the law and company policies at all times.
- All fraudulent abuse of one's status, power or possibilities at work is forbidden.
- All forms of discrimination, bullying or harassment are forbidden.
- While open discussion of all matters related to work or the working community is encouraged, consideration and courtesy are expected at all times.
- Most information concerning work or individuals at the workplace is to be considered confidential at all times. Confidentiality must be followed in the distribution of information both internally and outside the company.
- All personnel are expected to inform their supervisor and ask for permission if they intend to initiate or participate in any uncommon non-work-related activities at their workplace, such as trade, political or religious activities.
- The personnel are not allowed to accept or give any major or uncommon gifts, i.e. any gifts or services other than those of low or nominal value that can be considered to be within normal marketing and business customs, and carry no commitments or obligations.

These rules also apply when a person is representing Nokian Tyres outside of the normal working situation, for example in the social media or in gatherings of people where the person is strongly identified as a representative of Nokian Tyres. All personnel are expected to identify such situations and act accordingly. In addition, the confidentiality of work-related information applies at all times.

Should any member of staff witness violations to these rules, he or she is expected to inform a supervisor or other named person of the violation.

7 Implementation, control and monitoring

It is the responsibility of each manager and employee to implement and monitor the realization of the principles presented in this document in the actual operations.

All personnel are entitled to give feedback, make suggestions and report any witnessed or suspected offences. The first point of contact should be the individual's own supervisor. There is a separate network of named support personnel who can be contacted on various specific issues (for example personnel, safety and environmental specialists). It is also possible to use the elected representatives to carry the messages.

Implementation of these rules, the results achieved and any breaches of the rules are monitored by the responsible parties. Many of the issues presented are included in the periodical external communications released by Nokian Tyres, especially in the annual reports and environmental reports. Nokian Tyres aims to improve the communications annually.

The final responsibility for putting these principles into practice is always with the President and CEO of Nokian Tyres plc, Vice Presidents and Top Management within the Nokian Tyres group.

The general realization of these principles, and any violations are also monitored by the internal auditors, who report their findings to the Board of

Directors. If the normal communications channels cannot be used for any major offences, it is possible for the personnel or external parties to directly contact the internal auditors, CEO or Board of Directors to report any findings.

From the rainforests onto the riding arenas:

Nokian Tyres' value chain

A tyre is a genuinely global product. Its journey begins deep in the rainforests of Indonesia and Malaysia, and at the manufacturers of industrial components from everywhere in the world. The different parts are then assembled by the tyre

manufacturers which send their products back out into the world. During the last stage of its life, a tyre may be recycled for use as foundation for riding arenas, where it provides a flexible ground for the horses to run on.

In the following diagram, we have combined our special responsibility topics with our value chain. **We have defined our value chain as follows:**

Nokian Tyres' value chain

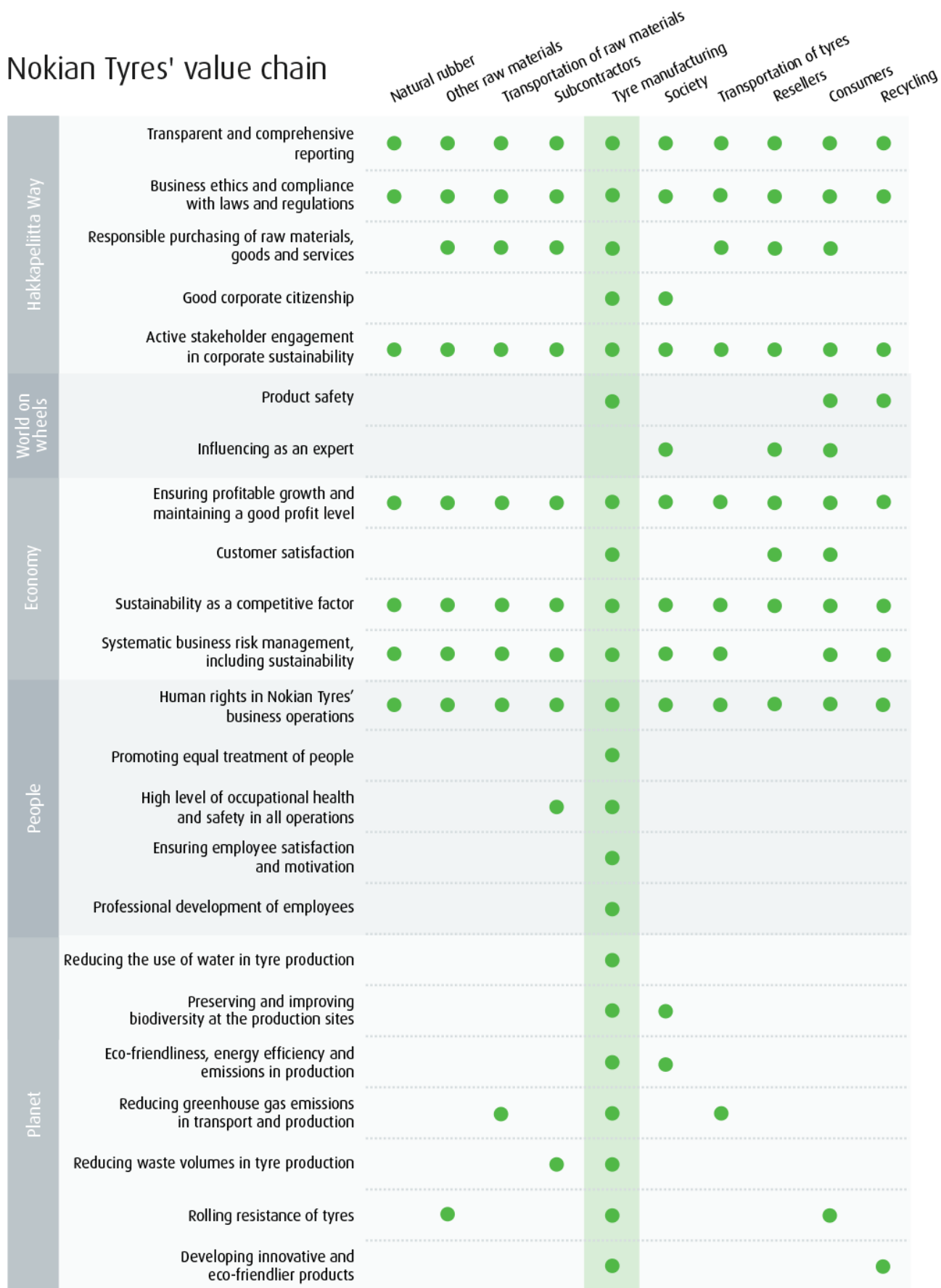


Chart: Nokian Tyres' value chain

1. Raw materials

The main raw material groups in tyre manufacturing are synthetic rubbers, fillers, chemicals, reinforcing materials and natural rubber, which forms one fourth of a tyre's raw materials. We use more than a hundred different raw material suppliers that all follow the same rules. We only use suppliers that have passed our demanding approval processes. The raw materials for tyres come from around the world, and all our suppliers are committed to our purchase terms. In accordance with our purchasing policy, our raw material procurement process includes determining the suppliers' commitment to environmental issues. In 2015, 60 per cent of our raw material suppliers had the ISO 14001 certification. Here is an example of the value chain of natural rubber.

1.1. Rubber production

Natural rubber forms one fourth of a tyre's raw materials. As an agricultural product, it differs from the other materials by its means of production. Most of the natural rubber that we use originates from Malaysia and Indonesia. The production of natural rubber is forestry, and the farms are often very small. Over 85 per cent of the world's natural rubber originates from small farms that are less than two hectares in size;

their daily output may be two kilograms of crude rubber. Some of the crude rubber that Nokian Tyres purchases from traders has been produced by larger companies on their plantations.

1.2. Wholesalers

Local wholesalers purchase the crude rubber from the family farms. Rubber production is an everyday process: the wholesalers travel from farm to farm and buy their harvest each day. You can try to put these small streams into perspective by comparing them to the natural rubber production in Indonesia in 2015, which amounted to over three million tonnes*. The wholesalers sell the crude rubber to the processors. (*source: IRSG, International Rubber Study Group)

1.3. Processors

The processors wash the incoming raw materials, after which they refine and package the rubber for further use.

1.4. Traders

From the processors, the rubber passes into the international market via traders that Nokian Tyres also uses to purchase rubber. The price of rubber is determined in commodities exchange in Singapore and other locations. Nowadays, even the family farms are using their mobile phones to check the daily market value.

Supervision of natural rubber production and ethical principles



We supervise the activities of our own raw material suppliers with audits and a Supplier Code of

Conduct that the suppliers must commit to. We set specific terms for the chain up until the raw materials processors, but some of our long-term plantation farmers also commit to them. The large number of wholesalers and family farms prevents us from setting terms for their operations. Furthermore, the natural rubber from different farms is already mixed by the wholesalers, which makes tracing its origin practically impossible before the processing stage. We also help the processors further develop their activities.

2. Transport

Most of the raw materials for tyres are transported as sea freight to the large ports in Europe, Hamburg and Rotterdam, from where they are shipped to Finland and Russia. Both of our factories use similar raw materials from the same sources, which allows us to ensure the quality of our tyres regardless of the site of manufacture: the tyres are marketed everywhere in the world and, therefore, it is only by using similar raw materials and methods of manufacture that we can ensure that the consumer can experience the same level of quality anywhere in the world.

3. Subcontractors

We work globally with several subcontractors in various fields, such as construction, security, cleaning, data administration, maintenance and logistics. Especially our factories in Nokia and Vsevolozhsk are frequented by dozens of subcontractors. We require our regular subcontractors to sign a contract by which they commit to our sustainability policy and ethical guidelines. We compare and select our subcontractors carefully. Close partnership with our subcontractors ensures strong relationships that benefit everyone.

4. Tyre manufacturing

We manufacture tyres at two locations, in Nokia, Finland and Vsevolozhsk, Russia. Each day, our

employees, who number more than 4,000, share their expertise and ideas in the interests of continuous improvement. The Hakkapeliitta Way is our way of working, and it can be seen in how we do our jobs.

5. Society

Our effect on the surrounding society is most visible at our factory locations in Nokia and Vsevolozhsk. We are a large local employer, and we operate as a stable part of our surrounding communities: We offer tyre industry training in Nokia, and in Vsevolozhsk, the Hakkapeliitta Village is a concrete example of the effect that we are having. The cash flow diagram in the report visualises the financial effects of Nokian Tyres. The purchases, salaries, taxes, and dividends paid to our owners contribute to well-being all over the world.

6. Transport

The expansion of the Vianor retail chain and the requirements of the car dealer business have brought about changes concerning the logistics chain for our tyres as well as our consumer insight. Previously, we delivered tyres to large wholesalers, but nowadays, distribution is increasingly divided into smaller product lots and smaller warehouses. Logistics planning becomes even more important as the need for individual transport increases.

7. Resellers

The Vianor chain of tyre retailers that we own and operate is the largest and most comprehensive business in its field in the Nordic countries, Russia, and the CIS. At the end of 2015, it included 1,475 sales outlets, of which 198 were owned by Nokian Tyres, while the rest operated on a partner or franchising principle. The Vianor chain has expanded to 26 different countries in Nokian Tyres' main markets. Vianor is building the foundation for the permanent market share of the group's products and it spearheads its growth; in these tasks, it is assisted by the new partner network Nokian Tyres Authorized Dealers (NAD). Our tyres are also sold by car and tyre dealerships all over the world.

8. Consumers

Consumers – the people who use our tyres – are the most important link in our value chain. The safety characteristics, premium quality and unique innovations of our tyres are designed to ensure trouble-free trips under all road conditions. More than 85% of a tyre's carbon footprint is generated during its use, which means that our product development efforts for improving the tyres' safety and reducing their environmental impacts are measured during their use by consumers.

9. Recycling

Most tyres are recycled as materials, i.e. they are crushed and ground and then used to replace rock in different road construction and landscaping projects. Ground tyres form a light material that seals off moisture and maintains its physical shape; it works well in supporting road foundations and reducing asphalt noise. The flexible properties of rubber can give it a new life as foundation for sports arenas, where it puts more spring in the steps of horses.

Retreading a tyre is one of the best forms of recycling. A tyre with an intact body can be retreaded, and for bus and truck tyres, the process can be repeated up to 2–4 times. Tyres can also be incinerated in order to produce energy, since the thermal value of tyres is nearly equivalent to oil. New recycling methods and means of utilisation are constantly being sought.

[Read more about Finnish Tyre Recycling Ltd](#)

Stakeholder work

Today, with sustainability still developing in civil society and social media enabling immediate feedback and public discussion, stakeholder engagement is more important than ever. Stakeholder engagement is part of our business, and it is guided by our internal instructions on stakeholder engagement as well as our ethical guidelines. Business unit Vice Presidents, Communication department and, ultimately, the President and CEO are responsible for managing stakeholder engagement.

Our stakeholder engagement follows the principle of openness and the special requirements for public companies. We aim to address the expectations of all stakeholders concerning sustainability in particular. We do understand, however, that different stakeholder groups may have conflicting requests, especially for corporate sustainability.

In autumn 2015, we revised the definition of our stakeholders by conducting a survey where our

group's key persons listed the different stakeholder groups in the order of importance. The survey did not result in significant changes compared to our previous stakeholder definition. In December 2015 we surveyed our stakeholders about the material aspects in Nokian Tyres' sustainability work. We sent out survey invitations to a total of 835 persons who represent the different stakeholder groups in our key markets and we received 345 responses. The table below shows the survey results with the topics prioritised by shareholder group. We first used the results for improving our sustainability efforts and defining the material sustainability topics for Nokian Tyres. You can follow the results of our efforts in the "Relevant for us" section.

Improving the reporting on the results of stakeholder engagement is part of our sustainability topic "Transparent and comprehensive reporting", with the objective of even more open and comprehensive interaction with our stakeholders.

Stakeholder group	Expectations in the order of importance	Nokian Tyres' actions
Customers	Customer satisfaction Product safety Developing innovative and eco-friendlier products Professional development of employees Ensuring employee satisfaction and motivation	We continuously develop new, safe, state-of-the-art products. We provide personal service and communicate openly. Our products offer good value for money. Our experienced points of contact provide excellent service.

Consumers	<p>Customer satisfaction</p> <p>Product safety</p> <p>Business ethics and compliance with the laws and regulations</p> <p>Developing innovative and eco-friendlier products</p> <p>High level of occupational health and safety in all operations</p>	<p>We continuously develop new, safe, state-of-the-art products.</p> <p>We provide excellent service and communicate openly.</p> <p>Our products offer good value for money.</p> <p>We continuously offer new services and programmes, such as the Hakka Guarantee and Aramid Guarantee.</p>
Shareholders, investors and financing	<p>Ensuring profitable growth and maintaining a good profit level</p> <p>Transparent and comprehensive reporting</p> <p>Business ethics and compliance with the laws and regulations</p> <p>Systematic business risk management, including sustainability</p> <p>Product safety</p>	<p>We pay out a minimum of 35% of our net profit as dividends.</p> <p>We serve investors according to our promises.</p> <p>We manage our risks and follow our procedures.</p> <p>We conduct business in a reliable and sustainable way.</p>
Personnel	<p>Customer satisfaction</p> <p>Ensuring employee satisfaction and motivation</p> <p>High level of occupational health and safety in all operations</p> <p>Product safety</p> <p>Business ethics and compliance with the laws and regulations</p>	<p>We promote the well-being of our personnel by providing a safe working environment that motivates them.</p> <p>We commit our personnel to operative planning.</p> <p>We develop the personal competence of our personnel.</p> <p>We respect the individual cultures and values of individuals and groups and promote equal treatment.</p> <p>We regularly improve our leadership and supervisor work.</p>

Subcontractors and suppliers	<p>Business ethics and compliance with the laws and regulations</p> <p>Customer satisfaction</p> <p>High level of occupational health and safety in all operations</p> <p>Ensuring employee satisfaction and motivation</p> <p>Responsible purchasing of raw materials, goods and services</p>	<p>We offer strong, long-term partnerships.</p> <p>We conduct business in a reliable and sustainable way.</p> <p>We contribute to ensuring a safe work environment for subcontractors who work in our units.</p>
Authorities	<p>Business ethics and compliance with the laws and regulations</p> <p>High level of occupational health and safety in all operations</p> <p>Product safety</p> <p>Responsible purchasing of raw materials, goods and services</p> <p>Reducing greenhouse gas emissions in transport and production</p>	<p>We comply with the laws and regulations.</p> <p>We maintain active, regular and open communication and reporting</p> <p>We support decision making.</p>

Non-governmental organisations	<p>Business ethics and compliance with the laws and regulations</p> <p>High level of occupational health and safety in all operations</p> <p>Responsible purchasing of raw materials, goods and services</p> <p>Reducing greenhouse gas emissions in transport and production</p> <p>Product safety</p>	<p>We communicate openly and actively.</p> <p>We provide up-to-date information on corporate sustainability on our website.</p>
Universities and research institutes	<p>High level of occupational health and safety in all operations</p> <p>Business ethics and compliance with the laws and regulations</p> <p>Product safety</p> <p>Preserving and improving biodiversity at the production sites</p> <p>Reducing waste volumes in tyre production</p>	<p>We offer strong, long-term partnerships.</p> <p>We offer students trainee positions, thesis collaboration and expert knowledge.</p>
Media	<p>Product safety</p> <p>Developing innovative and eco-friendlier products</p> <p>Business ethics and compliance with the laws and regulations</p> <p>Customer satisfaction</p> <p>Ensuring employee satisfaction and motivation</p>	<p>We communicate openly and actively.</p> <p>Our experts are available for comments on road safety and our products.</p>

Neighbours	<p>Business ethics and compliance with the laws and regulations</p> <p>Transparent and comprehensive reporting</p> <p>Reducing waste volumes in tyre production</p> <p>Human rights in Nokian Tyres' business operations</p> <p>Responsible purchasing of raw materials, goods and services</p>	<p>We are a good employer and neighbour.</p> <p>We communicate openly and actively.</p> <p>We support local organisations.</p> <p>We follow our procedures and ensure good risk management.</p>
-------------------	---	---

Certificates, Reports and Awards

Nokian Tyres can be considered a forerunner in the tyre industry with regard to the long-term development of safety and environmental issues. Responsibility means more to us than just meeting the requirements and norms of society.

The core stepping stones for our actions are safe and environmentally-friendly products, industry-leading production processes, safe work environments and personnel well-being.

Nokian Tyres has signed the United Nations' Global Compact initiative and registered as a supporting member of the initiative as of December 23, 2015



Signing the initiative further strengthens the Group's commitment to profitable business and responsible methods. More than 8,000 companies around the world are involved along with around 4,000 other participants such as citizens' associations and public-sector organizations. The ten principles of the initiative are consistent with Nokian Tyres' code of ethics and promoting these principles will reinforce our position as a responsible premium manufacturer.

Nokian Tyres has committed to the Chemical Industry Responsible Care programme January 1, 2015



The programme covers all fields related to the sustainability. The key areas of focus are the sustainable use of natural resources, the sustainability and safety of production and products, the wellbeing of the employees, and open dialogue and cooperation.

Nokian Tyres plc has qualified to the OMX GES Sustainability Finland index 12/2012



The index is designed to provide investors with a liquid, objective and reliable benchmark for responsible investment. The benchmark index comprises of the 40 leading Nasdaq Helsinki listed companies in terms of sustainability. The index criteria are based upon international guidelines for environmental, social and governance (ESG) issues. The index is calculated by Nasdaq Helsinki in cooperation with GES Investment Services.

Corporate Sustainability Report 2014

31.3.2015

Nokian Tyres plc has published its GRI G4 compliant Corporate Sustainability Report, which is available at www.nokiantyres.com/company/sustainability. The report describes the activities of Nokian Tyres from the perspective of environmental, social and economic responsibility as part of an international value chain.

[Corporate Sustainability Report 2014](#)

Corporate Sustainability Report 2013

12.6.2014

The renewed Corporate Sustainability report, which has been implemented according to the revised GRI G4 guidelines, has been published as a web version. The report can be browsed through traditional navigation tools or through links in a GRI comparison table. The report can also be easily printed, either as a whole, or just by necessary sections defined by the user.

[Corporate Sustainability Report 2013](#)

Corporate Sustainability Report 2012

12.06.2013

Nokian Tyres published its first Corporate Sustainability Report that was drawn up according to the GRI (Global Reporting Initiative) guidelines; it describes the goals, plans, actions, and results of the group's sustainability programme in 2012. Added perspective has been introduced by describing Nokian Tyres' activities from the past few years.

[Corporate Sustainability Report 2012](#)

EMAS Report 2011

23.08.2012

[EMAS Report 2011, pdf](#)

EMAS Report 2010

20.05.2011

[EMAS Report 2010, pdf](#)

Environmental Report 2009

15.06.2010

[Environmental Report 2009, pdf](#)

EMAS Report 2008

01.07.2009

[EMAS Report 2008, pdf](#)

EMAS Report 2007

01.06.2008

[EMAS Report 2007, pdf](#)

Environmental Report 2006

15.04.2007

[Environmental Report 2006, pdf](#)

EMAS Report 2005

10.04.2006

[EMAS Report 2005, pdf](#)

Environmental Report 2003

14.04.2003

[Environmental Report 2003, pdf](#)

Nokian Tyres' certificates:

- [ISO 9001:2008 \(pdf\)](#)
- [ISO 14001:2004 \(pdf\)](#)
- [ISO/TS 16949 \(Nokia\) \(pdf\)](#)
- [ISO/TS 16949 \(Vsevolozhsk\) \(pdf\)](#)
- 1994 ISO 9001 Certificate (quality), Nokia factory

- 1995 BS 7750 Certificate (environmental), Nokia factory
- 1998 ISO 14001 Certificate (environmental), Nokia factory
- 2006 ISO 9001 and 14001 Certificates, Vsevolozhsk factory
- 2008 ISO 9001 and 14001 Certificates, Nokian Däck Ab
- 2013 ISO/TS 16949:2009 Certificate (quality), Nokia
- 2013 ISO/TS 16949:2009 Certificate (quality), Vsevolozhsk

Examples of awards:

- Many wins and awards in Environmental reporting
- In year 2006 Honourable Mention in "Environmentally friendly tyres" in the European Business Awards for the Environment (EBAE) contest's
- Finnish series



World on wheels

A background image of a snowy street scene. In the foreground, a dark car is partially visible on the left, covered in snow. In the middle ground, a white car is driving away. On the right, a person in a red jacket and dark pants is walking through the snow. The sky is overcast and it appears to be snowing.

Management of R&D and product safety

Our mission is to develop and manufacture the safest, highest-quality, and most eco-friendly tyres in the world. Our development efforts are guided by the principle of sustainable safety: the safe characteristics of a tyre need to remain virtually unchanged throughout the lifecycle of the product. We renew regularly our comprehensive product range that we carefully tailor to different markets and test our products in authentic environments in order to ensure their safety and reliability under diverse and demanding conditions.

Management of product safety

Management of product safety

Our mission is to develop and manufacture the safest, highest-quality and most eco-friendly tyres in the world. Our development efforts are guided by the principle of sustainable safety: the safe characteristics of a tyre need to remain virtually unchanged throughout the lifecycle of the product. We periodically renew our comprehensive product range that we carefully tailor to different markets and test our products in authentic environments in order to ensure their safety and reliability under diverse and demanding conditions.

Management of R&D and product safety

Our goal is to develop and manufacture the safest, highest-quality and most eco-friendly tyres in the world. Our development efforts are guided by the principle of sustainable safety: the safe characteristics of a tyre need to remain virtually unchanged throughout the lifecycle of the product. We regularly improve our comprehensive product line that we tailor to different markets by analysing and examining our products with a variety of methods and testing them under authentic conditions. This way, we can ensure their safety and reliability under changing and demanding conditions.

We actively renew our product line so that new product models (launched up to two years ago) account for approximately 30% of our annual sales. Our tyres are the result of advanced technology and dedication to produce ever safer high-quality products. Product development is very important for our business. The Vice President of Research and Development is a member of the company's management team and reports directly to the President and CEO.

Our Research and Development comprises the following key functions: materials development, tyre technology, tread model and structural design and testing. Materials development is responsible for the materials that are used in passenger car tyres, heavy tyres and retreading materials. The results of the department's work can be seen in all the characteristics of a tyre, from the tread compound that contacts the road surface all the way to the components that ensure the high performance of the tyre. We further improve our newest premium products by applying the latest solutions of materials technology to new innovations. Tyre technology's work includes determining the final recipes that ensure the high quality of our products, introducing new tyres to production and designing and manufacturing tyre series for testing. Structural design selects the different tyre components that affect rolling resistance, handling and tyre noise, for example. Tread model design creates the tread patterns and sidewall designs for new tyres. The testing department puts test tyres through extreme indoor tests: the speed durability, wear durability and rolling resistance are determined with precision using state-of-the-art testing equipment. The tyres with superior characteristics undergo several rounds of testing that provide us with as much information as possible on their performance. Not even the best computer software can observe the driving experience and feel of the tyre like a test driver. The tyres are then fine-tuned based on the outdoor tests.

Our products have a significant impact on road safety. We set measurable goals to the safety features of our new products, such as grip and aquaplaning prevention. We measure product characteristic through extensive testing. Most of a tyre's environmental impacts are generated during use by

the vehicle's fuel consumption. Therefore, reducing rolling resistance is one essential goal in our product development. We set rolling resistance targets for all new tyres and measure the rolling resistance of all products.

In late 2015, our internal auditing uncovered discrepancies regarding our participation in magazine testing, and we published the findings ourselves in

early 2016. We revised our procedures and are now promoting better transparency in terms of testing throughout the industry. We are now working hard in order to strengthen the consumers' trust and improve our operations in sustainability. We will cover our testing policies and operations more extensively in our report for 2016.

[Read our test tyre policy here!](#)

Product safety and quality

For more than 80 years, our solid experience and open mind in product development have resulted in patented solutions that improve safety and driving comfort in the demanding conditions.

Our company invests in the latest technology and materials. This is demonstrated by the periodic renewal of our comprehensive product range that we tailor carefully for different markets: new products comprise at least a quarter of our annual turnover.

The basic principle of our product development has remained the same for more than 80 years: our tyres are designed for the challenging conditions and for consumers who demand safety, durability and comfort under all conditions.

Consumers' tyre choice is based on the tyre's suitability for their use scenario and way of driving. For example, a contractor that operates heavy machinery requires a different type of tyre than someone who drives a passenger car. Contractors look for efficiency improvements and a longer service life. In line with our global product policy, we offer tailored products and precision innovations for different circumstances and markets. Our development efforts are guided by the principle of sustainable safety: the safe characteristics of a tyre need to remain virtually unchanged throughout the lifecycle of the product.

In 2015, the Nordic winter tyres with high ice grip comprised 60.6% of our entire winter tyre range. The proportion of tyres that reduce fuel consumption through ultra-low rolling resistance was 85% (compared to 76% in 2014). A total of 90.4% of our summer tyre products were in the very high wet grip category. Our premium tyres with low rolling resistance and high wet grip correspond to categories A, B and C in the EU tyre label. The number of our active products also grew by 12% in 2015.

We build our products around green choices

Our principle of sustainable safety in product development incorporates our promise of developing eco-friendly products and production technologies. As a tyre industry forerunner, we have pioneered the development of products that use eco-friendly raw materials and minimise the environmental impacts during use.

In 2015, for example, we launched summer and winter tyres with the EU tyre label's class A ratings: The Nokian Hakka Green 2 and Nokian eLine 2 summer tyres as well as the Nokian WR SUV 3 winter tyre (size 265/50 R19 V) all have class A rolling resistance. Nokian WR SUV 3 is the world's first winter tyre with the EU tyre label's best class A wet grip and fuel efficiency ratings. The size ranges of Nokian Hakka Green 2 and Nokian eLine 2 include several models with the EU tyre label's class A wet grip and rolling resistance. The EU tyre label's ratings vary within the same range of tyres.

We completely stopped using harmful high-aromatic oils in our production already in late 2004. We are not using any carcinogenic raw materials in production. Our example accelerated the use of purified low-aromatic oils in tyre production in Europe.

In addition to low-aromatic mineral oils, we only use plant-based oils in our products. Rapeseed oil is a renewable raw material that we add to rubber compounds for improving the tear strength of winter tyres as well as grip on snow and ice. In summer tyres, we use pine tree oil for improving wear resistance. Rubber compounds may contain up to 20% of oils.

In addition to the rubber compounds, we use steel and textiles in tyre production as reinforcing materials. The rubber compounds contain filler substances for natural rubber, synthetic rubber, and oils, such as carbon black and silica as well as sulphur and various chemicals.

In our production, we never use raw materials that our laboratory has not approved. When we receive a raw material batch, we take a sample for a laboratory analysis, and we only use the batch in the production of rubber compounds after it has been approved by our laboratory.

In accordance with our purchasing policy, we purchase our raw materials from internationally reliable suppliers, and our product procurement process includes determining the suppliers' commitment to environmental issues.

We recycle the packaging of all raw materials that we receive and, for example, we return some of the pallets to the suppliers for reuse.

The tyre choice matters



Tyre tests by motoring magazines thoroughly compare the different studded and non-studded winter tyres on the market and their performance on ice, snow and wet roads. Whether you are choosing winter or summer tyres, you should keep in mind the following:

- As well as the overall score, pay attention to the subtests for different properties, such as ice grip, driving comfort or fuel economy.
- Consider the other users of the car and their driving experience in addition to your own preferences when choosing new tyres. For improved safety, the tyres for a shared family car should be chosen to suit the least experienced driver.
- Moreover, the tyre tests show how much the tyres on the market differ in terms of road safety. The difference in braking distance, for example, may be more than 20 metres between the best and poorest tyre in the test.
- The costs of driving are another reason why tyre tests should be examined more closely, as rolling resistance amounts to approximately 20% of the vehicle's fuel consumption. The lower the rolling resistance, the lower the fuel consumption. Despite the common misconception, usually winter tyres have lower rolling resistance than most summer tyres.
- The tyre choice may also affect driving comfort. The softer rubber compound makes non-studded winter tyres quieter than studded winter tyres. However, modern stud technology has significantly reduced the noise of studded tyres.

Lower rolling resistance is good for the environment

The most significant environmental impacts during the use of a tyre are caused by the vehicle's fuel consumption. Lower fuel consumption reduces the amount of greenhouse gases released into the air. Tyres with low rolling resistance may save even more than 0.6 litres of fuel per 100 kilometres and reduce CO₂ emissions by 14 g/km. In 2015, the proportion of our tyres with low rolling resistance that reduce fuel consumption was 85%.

One factor that affects the rolling resistance is the weight of the tyre. Lower tyre weight also reduces raw material and process energy consumption. Through determined, long-term product development, we have managed to further reduce the rolling resistance of our new products and create tyres that roll lighter than ever before.

Currently, passenger car winter tyres have lower average rolling resistance than summer tyres. We have achieved this by improving the tread patterns and surface rubber compounds. We continue our efforts on further reducing the rolling resistance of our tyres.

Nokian WR SUV 3: The EU tyre label's best A rating now in a winter tyre



In autumn 2015, Nokian Tyres introduced in the Central European market the world's first winter tyre that provides the best class A wet grip and fuel efficiency according to the EU tyre label. The

Nokian WR SUV 3 (size 265/50 R19 V) is a winter tyre that can reduce the braking distance on a wet road up to 18 m and reduce fuel consumption by 0.6 l/100 km. The lightly rolling tyres also reduce CO₂ emissions by 14 g/km.

The new tyre uses the Nokian Twin Trac SUV Silica rubber compound, which we have specifically adapted for SUV use, and the Nokian Aramid Sidewall technology. It offers the best snow and wet grip and fuel efficiency in the market, precise handling and excellent durability for the varying Central European winter conditions.

[Read more about the class A winter tyre!](#)

Quieter tyres improve road safety

While the reduction of road noise improves overall comfort, it also affects the driver's alertness and thus road safety.

We work continuously on reducing tyre noise, and one of our goals in product development is designing quieter tyres. The surface patterns of our products feature several inventions that reduce noise, including the placement of tread blocks, protrusions in longitudinal grooves, and noise cavities.

Natural materials and eco-friendly products that reduce fuel consumption, harmful emissions, and rolling noise will also pave the way for us in the future.

[Read more about the environmental impacts of tyres and how your tyre choice can affect the environment!](#)

Careful testing

Our products' wear resistance is based on careful structural development and testing. Product testing in authentic environments and thoroughly understanding the winter and product characteristics are important for us. Our Ivalo Testing Center focuses on demanding winter testing from October to May. High-quality equipment, diverse tests, and competent product development teams and test drivers ensure that all of the extreme conditions of winter driving are explored in Ivalo.

At our test centre in Nokia, we test tyres from spring until late autumn. It provides unique conditions for slush-planing tests, for example, which we were the first in the world to introduce in 1996.

In order to obtain sufficient test results, we also test our tyres on international tracks. Additionally, our tyres are tested indoors using testing equipment that measures structural strength and high-speed

endurance. We use repetitive tests for monitoring the flawlessness of the tyres and for ensuring the high quality and technical reliability of our products. In order to ensure comprehensive knowledge, we engage in testing co-operation with many of our customers in all product groups and we welcome customer observations. Close co-operation with leading car manufacturers ensures that the products optimise the use of state-of-the-art technology. The development process of an entirely new passenger car tyre takes 2 to 4 years.

Climate change introduces new requirements for winter tyres, which must ensure safe grip on snow and ice as well as on slush and wet roads. We take the challenges imposed by climate change into consideration in our design and testing operations.

Our group has not had any major product recalls in more than 15 years, which demonstrates our careful product testing, thorough quality control, and high-quality raw materials. Furthermore, our company has not been involved in any legal proceedings regarding product liability.

It's all in the feel – you can only judge a tyre by driving on it



Even the best instruments cannot measure the driving feel of a tyre. Each year, Nokian Tyres' test drivers cover hundreds of thousands of kilometres, feeling, sensing and evaluating. Once the vehicle has become part of the body, the test driver knows what a tyre feels like.



In addition to Finland, we perform tyre testing worldwide, on different roads and in rapidly changing weather. The world's best test drivers, thorough testing and versatile testing equipment guarantee that our tyres will work in the best possible way under varying and even extreme conditions.

[Read more about our testing!](#)
[Download the testing brochure!](#)

The Hakka Guarantee ensures that unexpected tyre damage does not end your trip

Our Nokian Hakka summer tyres provide optimal grip on the rough Northern roads in a range of temperatures from early spring until late autumn. Our unique Hakka concept includes the Hakka Guarantee and the related roadside assistance service, which provide more peace of mind for the Northern roads year-round.

The Hakka Guarantee is a unique service that we offer in connection with a new set of Nokian Hakka and Nokian Hakkapeliitta tyres: if a tyre that has been used appropriately becomes accidentally damaged beyond repair, we will replace it with a corresponding new product free of charge at a Nokian Tyres dealer, for example in Finland, Sweden, Norway, or Russia.

The Hakka Guarantee is valid for up to one year from the date of purchase or to a groove depth of 4 millimetres. The Hakka Guarantee includes a roadside assistance service which ensures that the customer will reach his or her destination even on the worst possible day. If the tyre is broken while on the road, a phone call is sufficient, and the roadside assistance service will be dispatched.

We also offer the Aramid Guarantee that covers accidental sidewall damage for the Nokian Line SUV, Nokian zLine SUV, Nokian WR SUV 3, Nokian Weatherproof SUV and Nokian Hakkapeliitta R2 SUV tyres, which use the Aramid Sidewall Technology. The consumer can have the damaged tyre replaced with a corresponding product at any dealer that participates in the Nokian Tyres Aramid Guarantee programme.

[Read more about Aramid Guarantee](#)

Tyre label for supporting the purchase decision

We actively follow the development of the environmental and safety regulations in Finland, the EU and Russia for anticipating the effects of pending legislation in our operations.

In Europe, tyres are ranked according to the EU tyre label on a scale from A to G. The green A is the best and the red G is the worst class. The label indicates how the tyre affects fuel efficiency and how it performs on wet roads. Furthermore, the external rolling noise of the tyre is displayed in decibels. In practice, moving from one class to a higher one means reducing the fuel consumption of the average passenger car by 2–3%. The EU tyre label's ratings vary within the same range of tyres.

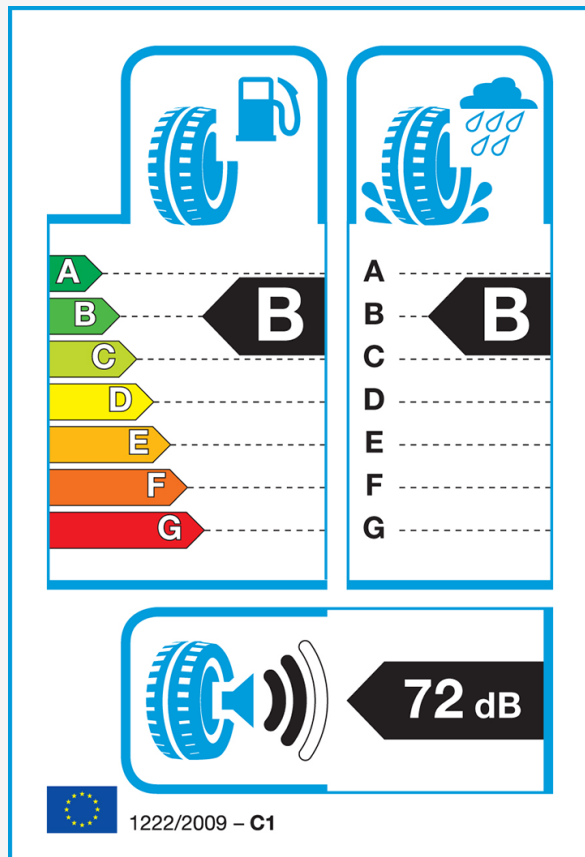
However, the tyre label does not take into account the actual winter conditions that are typical in the Nordic countries. The label applies to non-studded winter tyres but not to studded tyres. The only safety parameter indicated by the label is the wet grip of the tyre. Emphasising wet grip is well suited to the road conditions in Central Europe, but the most important safety characteristics in the demanding and varying Nordic winter conditions are grip on ice and snow. In this respect, the current tyre label may be misleading to consumers and endanger road safety.

There are significant differences between Nordic and Central European non-studded winter tyres. Comparison tests by Nokian Tyres have demonstrated that the braking distance at 50 km/h is 60 metres with Nordic winter tyres but 78 metres with Central European winter tyres. You cannot tell by looking at a non-studded winter tyre whether it provides sufficient grip on ice. Already in 2013, VTT Technical Research Centre of Finland proposed a snow and ice grip label that would help consumers choose the right tyre for their needs and road conditions. As pioneers in safety, we aim to achieve a requirement for presenting verifiable data on the winter grip properties of approved winter tyres. An ice grip label would help consumers choose suitable tyres and improve road safety especially in the Nordic countries.

Although the tyre label makes it easier to compare different tyre models, it is best to support the decision by consulting professional tyre dealers, independent tests by magazines and tyre manufacturers. The most important aspect in terms of consumer safety is to buy the correct tyres for the given driving conditions.

[Read more about the tyre label and its applicability to the Northern winter conditions.](#)

EU tyre label testing



As of November 2012, consumers who are purchasing new tyres at a dealer have been able to see the mandatory EU tyre label on the tyre tread or next to the tyre when making a purchase decision. Tyre manufacturers also publish the information of the label on their websites and in their technical marketing materials, for example.

The tyre label shows a product's fuel economy, wet grip and external rolling noise classes. The EU tyre label regulation requires each manufacturer to test its tyres with the specified, internationally standardised testing methods and determine the classes for each product based on the test results. The manufacturer is not required to test every single product. Instead, it can group the products according to their characteristics, as necessary. Moreover, the regulation requires EU member states to conduct national market surveillance and provides instructions on verification testing. The European Commission has been assigned with coordinating national market supervision by the member states for achieving higher benefits throughout the EU.

In order to keep the fuel economy ratings as comparable as possible, the underlying rolling resistance testing may only be conducted with equipment harmonised with a European reference machine. The European Commission coordinates this extensive, international harmonisation process. All Nokian Tyres' rolling resistance test machines have been harmonised with the EU system.

New eco-friendly tyres

A good tyre is much more than just a hunk of rubber. It is a product of high technology that is produced with precision as the result of careful development work and comprehensive testing. The production of a reliable tyre involves chemical and technical competence, high-quality raw materials and structural solutions, and thorough testing.

The optimised structure and advanced raw material design improve the eco-friendly properties of modern winter tyres.

Nokian Hakkapeliitta 8 and Nokian Hakkapeliitta 8 SUV

The Nokian Hakkapeliitta 8 combines excellent winter safety with low road wear, which is important for the environment. This is made possible by our proprietary Nokian Eco Stud 8 concept which ensures that the tyre reduces road wear while providing even safer

winter grip properties. When the studs are properly cushioned, the road wear impact of the tyre is considerably lower than the limit defined in the Nordic stud legislation, the studs are more durable and the tyre noise is quieter.

The modern stud technology optimises winter grip and eco-friendly properties, and it enabled us to increase the number of studs in the tyre. While the tyre is easier on the road surface, it has, on average, 50% more studs when compared to previous generation tyres. Furthermore, the symmetric tread pattern and unique innovations of the tyre reduce the tyre noise.

[Learn more about our next-generation anchor stud with improved eco-friendly properties, which we are also using in the studded Nokian Hakkapeliitta 8 SUV!](#)

Developed for SUVs, the Nokian Hakkapeliitta SUV 8 is the result of careful product development over the course of nearly four years. As a result of determined testing in our testing centres in Ivalo and Nokia, the Hakkapeliitta 8 SUV can bear and manage its high wheel loads in a stable and confident fashion on icy, snowy, slushy and dry roads. Additional challenges for drivers are posed by freezing ground, which damages roads and makes them uneven, and the sharp edges of the kerb.

According to studies, SUV tyres are most often damaged by impacts to the tyre sidewall. The studded Nokian Hakkapeliitta 8 SUV as well as several others of our SUV products maximise the impact and cut protection with the Nokian Tyres Aramid Sidewall technology. The sidewall compound contains the extremely strong aramid staple fibre and provides exceptional protection against wear and cuts. The same material is utilised by the aerospace and defence industries. The aramid fibre stiffens and reinforces the sidewall to even better withstand external impacts and pressing against the wheel flange.

[Take a look at our full tyre range!](#)

Nokian Hakka – cool performance

In the north, the summer is a time of surprising changes in the weather. For this reason, we developed the Nokian Hakka summer tyres. Uneven and rough road surfaces as well as rapidly changing weather conditions are typical of the North, and they require special features from a tyre. We have developed the rubber compounds and tyre structures for our Hakka summer tyres for the demanding and varying summer conditions. Our Hakka summer tyres perform predictably across a wide temperature range and they have a high tolerance for wear and the occasionally poor road conditions.

The newest member of the Hakka summer tyre range, the Nokian Hakka Green 2, has the EU tyre label's best class A rolling resistance rating in various sizes.

The Nokian Hakka summer tyres are also covered by the Nokian Tyres Satisfaction Promise. If you are not satisfied with your Nokian Hakka summer tyres, you can exchange them for another set. [Read more!](#)

Respecting the fields and forests

Nokian Heavy Tyres, which is part of the Nokian Tyres group, is one of the most well-known and successful manufacturers of special tyres in the world. Our unit designs, develops, and manufactures high-quality and eco-friendly tyres and retreading materials for the industry, heavy truck and trailer combinations, lorries, and buses. Our product range also includes special tyres that are designed for agriculture, earthmoving, road maintenance, military vehicles, ports, and the mining industry. Nokian Heavy Tyres is a market leader in forestry tyres.

The rubber compounds, tread patterns, and structures of the Nokian special tyres are designed to withstand heavy-duty use, which ensures more operating hours

and reliable functionality under all conditions. Our thorough field testing and research guarantee the desired properties of the tyres. The eco-friendliness and high quality of raw materials are also essential in the manufacture of all heavy tyres.

An incredible tractor world speed record – 130.165 km/h!



The two professionals in the Northern conditions, Nokian Tyres and Valtra, joined forces to set the new tractor world speed record. The record attempt took place on a snowy and icy road in Finnish Lapland on 19 February 2015. At the wheel of the tractor was the multiple Rally World Champion Juha Kankkunen. The new world record is 130.165 km/h (80.88 mph). The record speed was set with the world's first winter tyre for tractors, the Nokian Hakkapeliitta TRI (440/80R28 151D & 540/80R38 167D), and the Valtra T234 tractor.

Nokian Tyres extended its comprehensive winter tyre range to tractors with the launch of the Nokian Hakkapeliitta TRI. Its unique tread model, winter rubber compound and sipes are designed to maximise grip and effective performance. The diagonal sipes in the tread blocks ensure a high number of gripping edges and improve traction in the rolling and lateral directions.

Testing under extreme conditions is at the core of our operations, and it requires unique expertise. Such high speeds on winter roads demand tyres that provide uncompromising stability, grip and handling. These are exactly the characteristics that we focused on in the development of the Nokian Hakkapeliitta TRI.

[Read more!](#)

Safe driving with articulated vehicles

The Nokian truck tyres and the Nokian Noktop retreading materials are designed for demanding professional use under varying conditions. All Hakkapeliitta and Hakka truck tyres have an official winter tyre marking, which makes it easier to choose a tyre for the Northern conditions. For example, there are very few trailer tyres on the market that would meet the requirements of winter conditions.

We are actively involved in the improvement of heavy vehicle safety and the reduction of their environmental impact. We work closely and in strict confidentiality with bus and transport companies in order to enable effective product development. In Ivalo, for example, we have arranged an event for testing the behaviour of new winter tyres and new All Season tyres, which are typically used in Central Europe, and comparing their performance under winter conditions.

Based on the test results, the difference between the winter tyres and All Season tyres was more than 20 per cent in favour of the winter tyres in terms of both

braking distance and acceleration. Due to the heavy loads, trailers account for most of the rolling resistance in full trailer trucks. Research has showed that the right choice of tyres can keep the rolling resistance low and significantly reduce the swinging of the trailer. We immediately applied these results to our tyre recommendations.

However, under Northern conditions, simply minimising rolling resistance is not the solution in terms of safety. Rather, choosing the right tyres for the entire truck and trailer combination has a significant impact on winter road safety. The right choice of tyres and retreading materials can achieve the best solution in terms of both economy and safety.

Nokian Hakka Truck Drive receives German innovation award



At the end of 2015, Nokian Hakka Truck Drive won the German innovation award “Innovation des Jahres 2016” in a vote by the readers of the Busplaner magazine. The award was given at Busworld, Europe’s largest bus and coach exhibition held in Kortrijk, Belgium.

Nokian Hakka Truck Drive received 43% of the votes. One of the reasons was the V-shaped tread pattern that improves the self-cleaning properties of the tyre, thereby preventing the accumulation of slush and snow in the grooves.

The Nokian Hakka Truck Drive is an all-season drive-axle tyre for cargo and bus traffic, tailored for long and medium haul use in the varying Central European and Nordic conditions. The tyre offers excellent wear resistance, grip and stability without any compromises.

Nokian Noktop rolls lightly

The Nokian Noktop retreading materials are exported to approximately 20 countries around the world. All in all, our portfolio includes 25 different Nokian Noktop treads and, considering the different width, there are more than one hundred different products. We have an industry-leading portfolio especially in terms of winter products.

Our production technology considers nature and environmental values, minimising the direct and

indirect environmental impact in the manufacture of Nokian Noktop materials. Retreading tyres is in itself an eco-friendly measure. The CO₂ emissions of retreading a tyre are significantly lower compared to producing a new tyre. In addition, the Nokian Noktop production process meets the requirements of the ISO 14001 environmental standard.

Retreading reduces both costs and the environmental impacts. Even though the times are changing, it is still relevant to companies looking for cost savings.

Nokian Noktop: 40 years of the best retreading materials



2015 marks the 40th anniversary of the Nokian Noktop retreading materials. The story of Nokian Noktop started in the 1970s when a new retreading method, cold process retreading, became more common around the world, including in Finland. The new technology also attracted the interest of Nokia Ab Kumitehdas, the company known today as Nokian Tyres.

The Nokian Noktop brand was created as the result of a name contest for company employees. The name combines references to “Nokia Kumitehdas” and its expertise as well as the tyre’s tread and high quality. Nokian Tyres started its cold process retreading business under its own brand in 1975. This is also where the history of the Nokian Noktop product line begins.

Through determined communication and advertising campaigns by the tyre industry, end users soon understood that the best way to cut tyre costs was taking care of the tyre body. Now, a tyre with worn tread was no longer considered waste but rather an asset with utility value.

Professional drivers require a specialised service

Availability is key when providing service for heavy equipment and professional drivers. The majority of Finnish Vianor outlets offer heavy equipment service. The turnaround time is also essential for professionals. In Finland, Vianor provides a national on-call service 24/7.

Retreading heavy tyres reduces raw material consumption, and it is an economically responsible practice. Vianor has six retreading plants in the Nordic countries: three in Finland, one in Sweden and two smaller plants in Norway.

Service outlets take the tyre bodies to retreading, and the retreaded tyres are reinstalled by the same outlet: Vianor’s process ensures that the same tyre bodies are returned to the customer, retreaded as requested.

Many ways to make a difference

Have you ever considered that your car's only contact point with the road is made up of exactly four palm-sized patches – your tyres? A safe and high-quality tyre is the result of collaboration by experts in various fields. As the creator of industry-leading innovations and a pioneer in safety, we see that it is our right and obligation to promote road safety through our role as an expert.

Being a pioneer requires expertise

To us, it is self-evident that developing and producing safe tyres according to high standards of quality involves carrying our responsibility for improving road safety and for educating consumers about tyres and other issues that contribute to safe driving.

Sponsoring the “Turvassa Tiellä” road safety campaign



The “Turvassa Tiellä” campaign is a great opportunity for Nokian Tyres to influence young drivers by nurturing and supporting the understanding, knowledge and skill that are ultimately learnt at the wheel of a car. Driving under Northern conditions requires solid teamwork in order to ensure safe and smooth transportation for everyone.

Led by the Finnish motorsport organisation AKK-Motorsport and its marketing company AKK Sports, the “Turvassa Tiellä” campaign is part of the global

FIA Action for Road Safety campaign. Awareness of road safety is raised in Finnish primary and upper secondary schools through lessons on road safety and controlling a car. The campaign is visible in various youth and traffic events as well as during national and international motorsport events.

As of 2013, the campaign has reached thousands of youths and large audiences during events, such as Neste Oil Rally and the “Meidän Viikonloppu” exhibition. In 2015, there were 17 campaign instructors working around Finland. The spokespersons of the campaign include the Finnish motorsport stars **Valtteri Bottas**, **Toomas Heikkinen**, **Esapekka Lappi** and **Laura Suvanto**.

Nokian Tyres has offered tyre products and its training track to be used as part of the campaign, and the company is prominently involved in the campaign events and themes around Finland.

www.turvassatiella.fi

Our experts comprehensively and actively discuss the different aspects of road safety, including the choice of tyres, their environmental impact and safe driving behaviour. We are proud to share this information in order to ensure road safety even under demanding conditions.

In addition to our own materials and expert interviews, we collaborate with the Finnish Driving

Schools Association and the Automobile and Touring Club of Finland, for example, on establishing a safe driving culture. Furthermore, we are a member of tyre and automobile organisations in different countries and work on improving road safety.

Traffic Safety 2025 – a joint road safety programme



Traffic Safety 2025 is a joint road safety programme by the Finnish Transport Agency, VTT Technical Research Centre of Finland and Nokian Tyres. The objective is to increase road safety competence and understanding in Finland and support decision making for meeting the national road safety goals.

The co-sponsored programme is led by VTT. One of the specific goals of the programme is that the annual number of road fatalities in Finland is no more than 100 in 2025.

Nokian Tyres has participated in the Traffic Safety 2025 programme right from the outset. The programme has studied the efficacy of winter speed limits, shortcomings with tyres in fatal accidents and the wear of winter tyres, among other things. The studies aim at providing information about the effects of different tyres on road safety, thereby improving road safety in Finland and other winter tyre markets. The results have been and will be presented in Nordic road safety forums, for example, which will extend the road safety contributions of the programme outside Finland.

The Hakkapeliitta Winter Driving School is one example of our efforts to make winter driving safer and more comfortable. It is a comprehensive and multilingual set of training material on winter driving. Our goal is to increase awareness and promote safe driving under winter conditions.

[Learn more about the Hakkapeliitta Winter Driving School!](#)

Stronger together

Our company is involved in international and local co-operation with organisations, companies, and educational institutes in different fields. The co-operation with educational institutions and expert organisations is very important in terms of product development and promoting road safety.

Our product development personnel work closely with technical universities and polytechnics. The co-

operation includes diploma theses written for our company as well as joint development projects concerning road safety, material development, and design. We offer students trainee placements in production and product development.

Close co-operation with educational institutions offers real, interesting, and practical projects for students

and new future experts for our company. Higher educational institutions and companies also have joint projects with Tekes (the Finnish Funding Agency for Innovation). We work with educational institutions in Finland as well as in Russia.

Experience in the working life for students and new perspectives for the company



Nokian Tyres' Product Development department carries out projects that are essential for maintaining our pioneering role. In addition to our in-house and partner projects, we work with educational institutions in projects that benefit the students as well as the company.

Each year, we complete a project with the Demola Innovation Platform. Demola brings together businesses and higher education students on project work for participating businesses. The multidisciplinary project teams are assembled from the three higher education institutions in Tampere with people of different backgrounds and cultures. Depending on the topic, the project team can include graphic design, business administration or programming students, for example.

– By bringing together experts from various backgrounds, we can keep up to date with the different fields and can provide the client companies with as inventive solutions as possible.

Our requirement for businesses is to have product development objectives or plans to grow. The students provide the client company with fresh perspectives and ideas, explains **Aino Siippainen**, Demola's facilitator.

Experts in the making

Nokian Tyres' Development Engineer **Teemu Soini** is the contact person for collaboration projects with Demola.

– The projects with Demola have been very successful: the students are committed, innovative and hard-working, and the projects have yielded results that we can use and develop further, Soini says.

The Demola projects are popular among students. Based on company and project descriptions, higher education students can apply for three projects of their choice. A project team is assembled based on student specialisations, skill sets and any ideas they might have already when applying for a project. One student can participate in one project. The students who participate in Demola projects are mostly nearing the end of their studies, such as persons who have already completed their bachelor's thesis.

– The projects are a unique way for the students to get to know and network with businesses. They also provide the students with highly valuable experience and train them for working life, **Siippainen** explains.

Many ways of combatting street dust

Our operations are driven by road safety. We develop safer and eco-friendlier studded and non-studded tyres for varying conditions. We will continue our long-term product development efforts that aim at reducing the road wear impact and particle emissions of studded tyres. To us, it is important to make every effort for combatting street dust without compromising road safety.

As a result of several years' product development, modern winter tyres contribute less to street dust than ever before. The new Nordic stud legislation applies to tyres that are manufactured after July 2013. Studded tyres that follow the new regulations have a significantly reduced road wear impact compared to older tyres.

The Hakkapeliitta Test Driver programme: Authentic experiences, aha moments, and earned trust

The Hakkapeliitta Test Driver programme is Nokian Tyres' way of promoting road safety by acting locally. Collecting user experience from everyday drivers' observations is one of the ways to develop new innovations and offer even safer tyres. The test drivers provide us with a window to the real, local driving conditions that motorists from all over the world experience. In addition to supporting our product development, our test drivers promote road safety locally by sharing their experiences in safe winter driving.

Through the Hakkapeliitta Test Driver Programme, we offer individuals an opportunity to gain experience in driving with the safest tyres and to learn how important tyres are for safety in the course of their everyday driving.

People

HR management at Nokian Tyres

The purpose of HR management is creating an effective and functional work community. Determined HR management efforts help our committed, motivated, and professional personnel to further develop their competence, support their well-being at work, and promote equal treatment. Managers implement our company and management culture into the everyday work of our personnel in a natural and consistent way. Well planned HR management provides the tools that are necessary for good management work and for improving leadership skills. The competence and inventiveness of our personnel are our most important resource that needs a safe and healthy work environment.

Human resources at Nokian Tyres

Human resources at Nokian Tyres

HR management at Nokian Tyres and our key focus areas for 2015–2016

We improved our procedure in several areas of HR management in 2015, and our work is not finished yet. When adjusting and improving the everyday leadership processes and tools, we make sure that there is always a genuine business need for the change. We also avoid making too many changes at once. Based on these principles, we are focusing on the following areas of HR management and occupational health and safety in the coming years.

- Creating a safety culture
- Leadership development
- Promoting well-being at work

Creating a safety culture is a long-term development effort. For several years, we have been working hard towards improving occupational health and safety in our company. We have achieved good results and made great leaps in several areas. However, despite all these positive developments, we still have work ahead of us in creating a comprehensive safety culture that covers everything that we do every day. Safety is one prerequisite for effective, high-quality work. In 2015, we focused on encouraging the use of personal protective equipment, recording and learning from near misses and safety observations and raising the general awareness of safety. Our key measures for 2016 include the global implementation of our simulation game on safety and teamwork as well as arranging the rubber industry's occupational safety card training to our personnel in Finland.

In leadership, we have defined corporate-wide principles. The leadership principles help us

communicate our expectations in terms of the type of leadership that we want to achieve at Nokian Tyres. This affects our HR development and training, managerial recruitment and performance management. In order to implement the leadership principles, we created the Hakkapeliitta Leader simulation game, which nearly all of our company supervisors played in 2015. We also applied the principles in our 360 degree supervisor assessments. In 2016, we will continue our work on the development and global implementation of leadership simulations. Leadership development requires individuals to observe their current working methods, analyse new models and apply them in their current behaviour at work. This is where simulations are better and more effective than traditional learning methods.

We approach well-being at work with a wider perspective than before with the aim to improve it on an individual and organisational level. Our focus is on the workplace. Previously, we mainly looked at the physical dimension of well-being but are now taking into account individuals' need for learning and development, social acceptance and the possibilities of influencing their own work. We identify areas for locally improving well-being with our annual Drive! survey, which helps teams and departments understand what works well in our company and where we still need to change and update our procedures. The Drive! survey also incorporates our leadership principles. This enables us to receive consistent feedback on our supervisor work. Leadership and supervision in our company are key factors in improving well-being at work.

[Read more about our HR management in practice!](#)

We build our success together

Everyone has an opportunity to grow and learn in our company. In accordance with our ethical principles, our company develops and implements a company culture that promotes fair and equal treatment and respect. Everyone contributes to our profitable growth and success regardless of his or her position.

Appreciation increases motivation and profitability

Fair and equal treatment of personnel is important to us. We believe that a fair work community is a motivating factor that improves our profitability and competitive ability.

One example of fair treatment in our company is that our employee stock options and bonus programmes cover all of our employees.

We appreciate the competence and ideas of our personnel. Our work on inventiveness is an important channel through which our personnel can further develop their work, the work environment and our business. It provides everyone with an opportunity to make a difference.

[Read more about our work on inventiveness!](#)

In 2015, after a few years' break, we celebrated employee anniversaries in Nokia. Similarly, the tenth anniversary of our Russian location marked employee anniversaries as well.

Employee anniversaries celebrate more than 4,000 years of combined experience



In spring 2015, we celebrated and rewarded our employees in Nokia who had been with the company for 20, 30 or 40 years. The employees with work anniversaries enjoyed good food and entertainment and took group photos with their colleagues and supervisors.



The speeches at the event reminded everyone that the ability to learn new things and having the right attitude are essential qualities in building success. Experience is gained on the job over time, and even long-term employment offers opportunities for developing personally as well as influencing the working environment. We celebrated more than 4,000 years of combined experience at the event.

We also marked employee anniversaries for the first time at our Russian location. The Vsevolozhsk factory celebrated its tenth anniversary, and some of its employees have been with our company the entire time. Such commitment is very significant for our company.

In Finland and Russia, we rewarded the employees with work anniversaries with Medals of Merit of Finland Chamber of Commerce.

Our traditional Hakkapeliitta of the Year award highlights Hakkapeliittas around the world

As the northernmost tyre manufacturer in the world, we make roads safer by developing innovative, premium-quality tyres designed for demanding conditions. Therefore, our employees' competence, inventiveness, boldness and relentlessness are important for building our success.

The Hakkapeliitta of the Year award is one of the ways of showing appreciation and rewarding persons whose actions and example contribute to the work environment, who go above and beyond what is required and who can also celebrate the success of others. We give out the award in Nokia and Russia, and the tradition has continued for more than a decade. The award is significant because our personnel can nominate others for the award and the winners are selected by an independent panel.

Good HR management supports well-being and improves our results

Our efforts focus on the generally recognised elements of physical and mental well-being as well as on continuous learning and the development of the work environment. Good management practices are essential for our operations. Work that focuses on inventiveness is one way to support leadership and the active participation of our personnel in line with our company culture. We develop competence in a strategic and proactive manner that addresses future needs. To improve the functionality of our work community, we track the well-being and commitment of our personnel as well as the level of service that we provide.

Good HR management improves our results

High standards of HR management help our committed, motivated, and professional personnel to further develop their competence, support their well-being at work, and promote equal treatment.

Managers implement our company and management culture into the everyday work of our personnel in a natural and consistent way. Functional HR management provides the tools that are necessary for good management work and for improving leadership skills. The competence and inventiveness of our personnel are our most important resources that need a safe and healthy work environment.

[Read more about our principles of HR management!](#)

Drive! – Making a difference

Our group's business aims at profitable growth and continuous success. The basis of our development efforts is a flexible and efficient organisation that promotes employee well-being and contributes to an open and healthy atmosphere.

In autumn 2013, we revised our personnel survey and conducted the new Drive! survey throughout the Nokian Tyres group. We set out to create an even better tool for identifying specific strengths and areas for improvement that would help us develop our organisation and company further. The survey was a success: the response rate grew to an astonishing 80 per cent and, according to our tracking system, we had implemented some 74 per cent of the 1,064 agreed development measures by the end of 2015.

One goal of the Drive! survey is to improve employee commitment with the company. The survey concept is built around engagement, which indicates the employees' attitude towards the organisation and the values it represents.

Determined work towards specific goals

We used the results of the Drive! survey to identify unit and group-level development needs which we have been working on for two years. One group-level area for improvement comprised improving internal communication and reducing rumours. Throughout the organisation, we have revised our communication processes and procedures, increased manager and supervisor communication and offered our personnel

more opportunities for open discussion. Furthermore, we have made an effort to explain complex issues in a more easily understandable way. Locally, we have also improved communication during negotiations between the employer and shop stewards.

Another area for improvement was leadership and supervisor work. We aim to further engage our personnel for improving our competitiveness. We have arranged training on coaching for our supervisors. We determined the leadership principles and started their implementation in 2015. Our first measure for implementing the principles was the Hakkapeliitta Leader game, which nearly all of our group supervisors had played by the end of 2015. As people reviews are an important part of good supervisor work, we improved our people review process and implemented the practice throughout the group.

The third area of improvement was the communication of the group strategy. For this purpose, we created a comprehensive communication kit, which included the "Hakkapeliitta Way – The Road to Success" online strategy course, rich presentation material to support the supervisors in communicating the strategy and a survey, created together with Aalto University, for determining the baseline for our personnel's strategy awareness.

The previous survey highlighted our success

The 2013 Drive! survey identified many positive things: the People Power® rating that describes employee engagement grew 2.3% above the reference level within the group and, in terms of commitment, leadership and performance, we were on a better level than the other benchmarked organisations. At the company level, more than 90% of the respondents strongly agreed that our company's values and goals are worth pursuing and that we handle our corporate social responsibility well. Our personnel believed strongly in what we do: nearly 95% of the respondents said that we produce high quality products and services.

Drive! 2015–2016

The survey was conducted in our Russian location in autumn 2015. We postponed the survey elsewhere due to the reorganisation that was taking place in our Nokia location and will be conducting it in Vianor outlets and other Nokian Tyres locations in February 2016. The group results will be ready in late March, after which individual units start processing the results and creating action plans. We will conduct the survey on an annual basis in the future.

New approach makes materials development more engaging



Development Manager **Harri Myllymaa** and Development Technicians **Johanna Niemi** and **Johanna Nieminen** work at Nokian Tyres in materials development, where a comprehensive new approach was implemented in 2015 based on the Drive! survey results. The new model has brought variety into everyone's duties and made work more satisfying and engaging.

Nokian Tyres' materials development creates new materials for tyres, provides QA and tests new rubber, raw materials and their compounds. Previously, one employee was in charge of one task for all compounds. Now, the employees are in charge of specific compounds throughout the process from the raw materials to the conclusions.

– One essential goal in renewing our approach has been to ensure new, innovative product launches also in the future, says Development Manager Harri Myllymaa.

According to the Development Technicians, the new approach makes their work more varied and engaging and provides more learning opportunities. They have developed a better understanding of the entire materials development process.

– Previously, I took samples myself but they were measured by the next person in the process. Now, I can better see how a change in the recipe affects the compound, Niemi says.

Both Niemi and Nieminen say that their work feels much more significant following the change. They also appreciate the increased responsibility and professional competence.

– I have enjoyed learning new things and it has been very rewarding to see that I can handle the new duties by myself. It is great that our competence is valued and that the company wants to train us further. I feel more useful professionally and I see the significance of my work more clearly, says Nieminen.

– I believe that now our department is even more attractive to potential new employees than before, Myllymaa adds.

A consistent leadership culture aims for the best results

Successful leadership is one of the most critical success factors for our company. Therefore, in late 2014 we initiated a project for improving leadership and supervision. It determines the concept of "good leadership" in our company in principle and on a practical level.

With this project, we want to develop our operations further as well as strengthen and harmonise the leadership culture in our group, so that we can also ensure the best results in the future. Poor leadership that does not address our needs results in reduced well-being at work, lower work performances and prevents us from reaching the best business results.

More than just a section in the annual report – a natural and integral part of practical work

The leadership principles are a practical tool for supervisors throughout the group and they establish a basis for improving and tracking leadership. This way, all supervisors know how we are assessing supervisor work, how they should improve their own supervisor work and how they should train their own team.

Creating a coherent company and leadership culture starts by ensuring consistent leadership and supervisor work that meets our company's needs but it is, ultimately, everyone's business.

Towards better leadership through mutual discussion



As part of developing leadership in our company, we arranged training days for our supervisors in order to implement our leadership principles in practice. We challenged supervisors to think about practical scenarios with a leadership game tailored for our company. The goal was to train them in applying the leadership principles to everyday decision making. We had created all the scenarios based on real-life situations together with a wide group of supervisors.

During the training days, all the supervisors in our group put their leadership to the test. The training day and leadership game were well received in all countries. The single most important and beneficial result of the Hakkapeliitta Leader game was the supervisors' discussions about their everyday work.

These Nokian Tyres' leadership principles lay the foundation for the Hakkapeliitta Leader game:

- **Lead by example**
Be a role model who promotes the Hakkapeliitta culture!
- **Develop your people**
Seek and offer your team opportunities to develop!
- **Show the way forward**
Set engaging goals and support your team's will to win!
- **Encourage continuous improvement**
Contribute to an innovative and open atmosphere!
- **Take responsibility for quality and results**
Inspire your team towards an entrepreneurial mindset!

360° supervisor assessments for supporting leadership development

We carried out 360° supervisor assessments in Nokia between June and September 2015. The assessment is primarily intended for supervisors as a tool for

improving their own leadership skills. The assessment is based on the Nokian Tyres leadership principles, and it forms a significant part of our global leadership development. An individual's assessment comprises feedback from his or her own supervisors, team and colleagues.

Each supervisor received personal feedback, which was used as the basis for personal improvement measures. Furthermore, we expect everyone to discuss the improvement measures with their own supervisor during their people review, for example. Individual units have gone through department-level summaries of the feedback with their HR Business Partner. These discussions are used as the basis for planning leadership development for the unit supervisors.

In late 2015, we conducted the 360° assessments also in our sales companies, and they will take place in Vianor in summer 2016. In Russia, the assessment is carried out every other year. Systematic utilisation of the 360 assessment tool is part of our leadership development efforts.

Towards better leadership, work community and safety

We have made systematic efforts for improving leadership in our company. As part of this theme, we want to commit key persons and support their professional development globally by offering them our own supervisor training programmes. We will continue the development efforts in our company and

challenge our supervisors to improve their leadership skills also in 2016. We are planning simulation training for all employees with the aim of building stronger work communities and ensuring better safety.

People Reviews

Performance reviews are an important part of immediate supervisor work. In early 2015, we harmonised our performance review model throughout our group and trained all group supervisors on the global People Review process. All employees attend at least one People Review per year. Our office personnel in Nokia and Russia, however, attend a minimum of two People Reviews per year, one of which can be a team session. The performance reviews cover our entire personnel, regardless of gender or staff group.

The People Reviews look at overall performance in line with our values, assess how well the set goals have been reached, set new goals for the coming year and discuss the prerequisites for success and professional development needs in terms of the set goals and future needs of the company. The conducted People Reviews are recorded in an electronic tool and reported to the management biannually. The revised model enables us to track and support our employees' performance and development better than before.

People Reviews (realisation/target, %)

	People reviews implementation %
Nokian Tyres, Nokia	79.4 %
Nokian Tyres, Vsevolozhsk	100.0 %
Vianor	79.7 %
Sales companies	37.6 %

Reorganisations in 2015

In autumn 2015, we had to make a difficult decision due to the weakened economy and the planned production cuts at the Nokia factory. We had to rationalise our operations and carry out permanent structural changes in our organisations.

In September, at the end of statutory negotiations that lasted a little more than six weeks, we had to lay off a total of 122 production employees and office personnel in Nokia.

Despite the cuts, our factory in Nokia will maintain a significant role especially in the development of new products and production methods but in tyre production as well.

Support measures after the layoffs

We offered training and support programmes above the legally required minimum level to the persons that were laid off at the end of the statutory negotiations in order to support and facilitate their re-employment.

Between October and November, we arranged briefings on job seeking and education together with the Employment and Economic Development Office, where everyone had the opportunity to receive personal consultation. To help with job seeking, we arranged an optional two-day training for everyone interested, which discussed job application materials and the current status of the labour market.

Based on a survey by an outside expert, we created support options for job seeking, education and entrepreneurship. Together with the local Centre for Economic Development, Transport and the Environment, we will sponsor a range of tailored upper secondary education programmes, which will start in early 2016.

Persons interested in entrepreneurship could attend a course during which they created a business plan for a new company. Moreover, our company has offered

to sponsor new companies established by our former employees, which show the most potential based on expert opinion. We also sponsor local businesses that employ laid off workers for a fixed term. The purpose of these measures is to support the future plans for everyone laid off from our factory.

Developing competence for the future

We develop the competence of our personnel in a strategic and proactive manner that addresses future needs. Our strategy process in 2015 included determining the critical competence areas and preparing a plan for developing select areas.

The people reviews are essential for competence development. They include identifying development needs and preparing a development plan together with the supervisor. We have also encouraged employees to communicate their career goals and development needs to their supervisor. During a review session, the supervisor and employee discuss the employee's personal strengths, areas for improvement and career goals and agree on the specific aspects, goals, measures and schedules for development. Improvement of leadership skills forms an important part of the competence development plan, which is supported by the 360 degree assessments of all supervisors in the group.

Most of the competence development comes from on-the-job learning during various projects, problem solving, job rotation and new duties.

One essential tool for competence development is our international Hakkapeliitta eAcademy online portal, whose services are accessible by our personnel as well as our retailers and partners. We continually develop the content of Hakkapeliitta eAcademy: currently, we offer nearly 70 courses in up to 20 different languages. Our eLearning resources range from internal strategy and insider courses to product training and tyre fitment courses.

Vianor competes through competence



Vianor makes sure that our customers can drive safely. For corporate clients, this means a safe partnership, and for motorists this means peace of mind on the road. Succeeding in this task is demanding. The teams in our outlets must be able to work well together and develop their competence continuously in order to ensure the safety of our customers and earn their trust. Their teamwork skills and competence are put to the test

in the traditional Pitcrew Challenge, where teams compete against other Vianor outlets. This is just one of the many ways in which we are improving our competence and the ability to serve our customers.

All finalists must pass a tight preselection process that is conducted over the course of nearly one year. The outlets are benchmarked for quality, customer service and performance, and the most successful and best developed outlets send a team of four to the final. The final really tests the teams' co-operation skills, competence and ability to work under pressure. The best teams will receive motorists' dream prizes in an award ceremony, but perhaps their peers' respect is even more enjoyable for our competitive professionals.

Well-being at work: practical measures for creating a better work community!

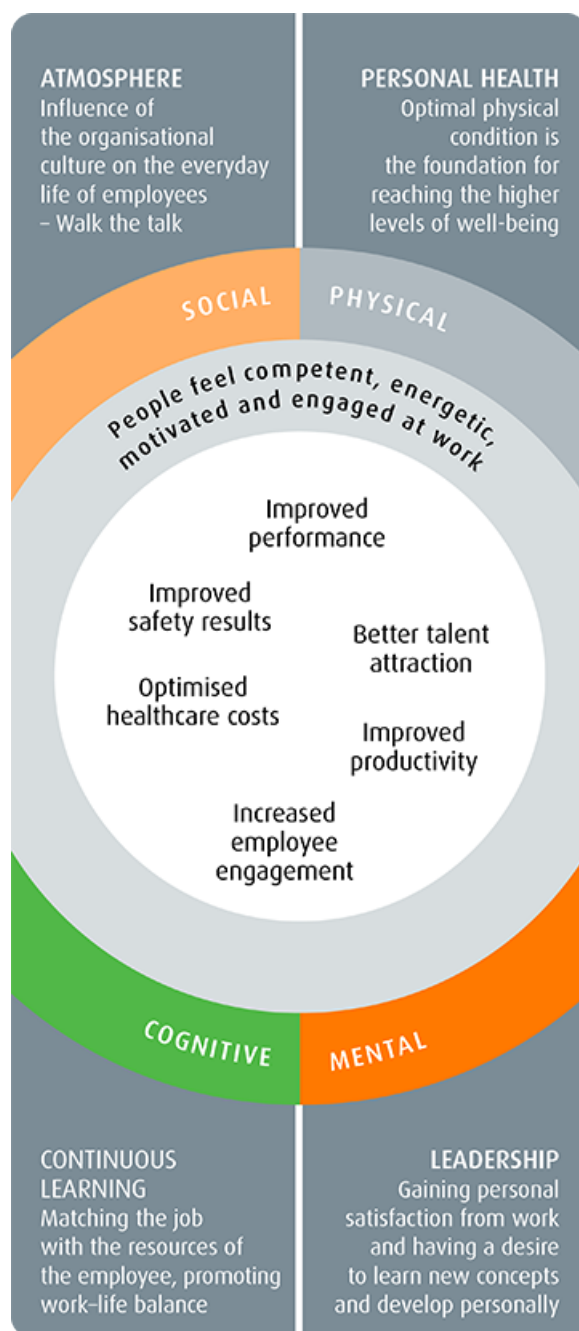
We want to improve well-being at our different units and focus on the workplace. We consider the physical, mental, cognitive and social dimension of well-being. This means preventing fatigue and taking into account the individuals' need for learning and development, social acceptance and possibilities to influence their own work.

We identify areas for improving well-being with the Drive! survey, which helps the different organisations understand what works well in our company and which areas still need more work. The work also incorporates our leadership principles because supervisor work and the way we lead people have a significant role in improving well-being at work. We want to support the competence, energy, motivation and commitment of our personnel.

Our well-being model in a nutshell

We address absences and thereby improve well-being on an individual level according to four main principles:

1. We become concerned about a person's well-being/working ability if his or her absences start adding up or if his or her abilities/competence have clearly decreased. A supervisor must act, at the latest, if an employee is absent for 25 workdays during one year.
2. During a well-being discussion, the supervisor and employee fill in the relevant forms and select appropriate further measures, such as working on competence or leadership or conducting a detailed review of the individual's health or the work community. The discussions take place between the individual and supervisor and, as necessary, representatives of occupational health care and HR.
3. The discussions are documented centrally by occupational health care, which records an action plan with specific schedules and responsibilities. We seek external assistance if our own resources are not sufficient.



4. An assigned occupational health nurse monitors the situation and contacts the supervisor, employee and a health care professional if the situation does not advance according to plan. The nurse also creates an indicator for assessing the efficacy of the measures.

In the future, we will improve the process periodically with occupational health care, supervisors and shop

stewards. We follow the overall situation by tracking the number of sickness absence days and persons receiving disability pension. We prepare early intervention action plans for our employees, if needed. Now, supervisors can also see the total number of sickness absence days in real time.

The “KunnonMies” project aimed to improve physical fitness and motivation



In spring 2015, we started the “KunnonMies” well-being project in Nokia with the aim to improve employee well-being, motivation and commitment and reduce the number of sickness absences. The comprehensive project addressed physical and mental well-being as well as the social, emotional and psychological aspects.

The project was primarily aimed at male employees who are not actively taking care of their

physical condition and well-being and who are facing challenges with one or more aspects of well-being, including physical exercise, nutrition, personal finance and relationships. We determined the baseline and tracked the results of all the participants. We set targets for the entire year, and one of the main functions was the continuous monitoring of progress.

Development Technician **Mikko Lehtonen** was one of the four persons whose results improved the most. For him, a turning point was learning the right breathing method early on in the programme, which doubled his physical performance and helped recovery after workout. The participants were happy with the project and found out that even seemingly minor things can contribute a lot to well-being.

Absenteeism by company and by gender

	Nokian Tyres, Nokia		Vianor						Nokian Tyres, Vsevolozhsk	
	Nokian Tyres (FI) *)	Nokian Heavy Tyres *)	Vianor Holding Oy *)	Vianor Oy *)	Vianor AB	Vianor AS *)	Vianor AG	000 Vianor SPb	000 Nokian Shina	000 Nokian Tyres
Sick absences % (total)	5.26%	7.54%	0.59%	5.30%	3.61%	5.10%	0.00%	1.07%	2.10%	3.93%
Sick absences % (women)					3.53%		0.00%	0.00%	3.14%	6.52%
Sick absences % (men)					3.61%		0.00%	1.25%	1.25%	3.69%

*) Information of absenteeism by gender not available

Nokian Tyres Russia took first place in the People Investor 2015 contest



Nokian Tyres Russia participated in the People Investor 2015 contest with its “Victory Over Yourself” health programme. The People Investor award is given to companies that implement the best practices in corporate social responsibility and sustainable development. Nokian Tyres Russia was the best in the Personnel Health category.

The programme has been implemented in Nokian Tyres Russia since 2013. The comprehensive programme includes a 24/7 first-aid post, a juice bar that supports a healthy diet, flu vaccination and raising awareness on personal health, fitness and stress management, among

other things. Various medical examinations and specialist consultation have been arranged as part of the programme.

We also offer a range of sports opportunities for our employees in Vsevolozhsk, including instructed gym training, yoga, fitness and tennis lessons and sauna. There are also swimming, volleyball and basketball sessions and an ice rink session for the hockey team. Over the course of the year, we hold tournaments in seven different sports.

The Managers Association has organised the People Investor contest in Russia since 2008, attracting companies that operate in Russia and consider the intangible assets – the personnel, competence, reliable partnerships and reputation – as the key to success. The People Investor 2015 contest was held in six categories: HR Management, Building Relationships with Partners and Customers, Development of Local Communities, Environmental Efficiency, Personnel Health and People’s Choice. The competition comprised many well-known international corporations.



Hakkapeliittas in the hockey rink



The first exhibition match between Nokian Tyres' Finnish and Russian hockey teams took place in Russia in 2014, and this time in 2015 the venue was Nokia, Finland. You could feel the tension in the audience when the hockey all stars of both factories gave it their all on the ice. The match was tough but it raised the colleagues' team spirit. This time, the Nokia team took first place. Watch the video to experience the event!

Watch a video from YouTube:
<https://youtu.be/PgoUZ6-54e0>

Measures and tools for improving the safety culture

A safe and comfortable work environment is integral for our operations. We promote occupational safety through risk management, continuous improvement of our processes and new investments. The purpose is improving the safety of the work environment even

further as well as ensuring risk management in our production and functions. The interconnection between safety and environmental aspects is especially apparent in matters that are related to work hygiene and the use of chemicals.

Our goal is to further improve the safety of our operations and aim for zero accidents. In 2015, we introduced the Safety Walk audits in Vsevolozhsk in addition to Nokia. The main purpose of the Safety Walks is to improve the level of safety and culture. They are a good way to see how current issues affect the field and identify the need for concrete measures. In the future, we will implement Safety Walks globally on the group level. Furthermore, we have determined targets for equivalent audit walks for all production supervisors.

Safety walks by the management are for discussions and observations



In the first safety walk of 2015, President and CEO Ari Lehtoranta observed safety with Vice President, Quality and Process Development and production personnel. From the left operator Ari Kantanen and Ari Lehtoranta.

The safety walks by the management are conducted for evaluating the employees', supervisors' and specialists' competence and their attitudes towards safety, for identifying areas for improvement based on feedback and the observations made, and for reviewing how the measures determined during previous walks have been implemented. For each safety walk, we also publish the essential observations and assign the parties responsible for the related actions through our internal channels. The management plans to organise three safety walks per year in our factories in Finland and Russia.

In 2015, we focused our efforts on investigating accidents, safety observations and near miss reports. Our campaigns had a positive impact on the safety culture: we improved the reporting rate of safety observations and near misses; the number of near miss reports grew more than 35% compared to the previous year.

In 2015, we also established the Safety Management group, which convenes on a daily basis to immediately process any accidents and other reported deviations. Safety Management comprises representatives of management, middle management, supervisors, employees and our expert organisation. We conducted systematic safety reviews and made significant efforts in terms of the investigation of accidents.

We also use other new action models for improving the safety culture. For example, we report all accidents periodically to the management team. In Nokia, the department-specific occupational safety teams now meet more often in the future; four times per year. The meetings discuss any deviations that occur in the department and other areas for improvement.

We communicate and discuss safety visibly in our company, which has made our personnel more active. Near miss reports and safety observations are highly significant in terms of accident prevention and the improvement of the safety culture. Everyone has access to our investigations, and we communicate more openly than before. In 2016, we will continue to develop our safety culture even more comprehensively throughout the group.

Accident rate (more than 3 days absence / million working hours)

	Vianor Nordic	Nokian Tyres (Nokia)	Nokian Tyres (Vsevolozhsk)	The ratio of all listed companies
2015	17	15	3	10

Equal treatment and compensation

The well-being and equal treatment of our personnel are important to our operations, and we have a long history in their development. Our ethical guidelines comprise several principles regarding the treatment of our personnel, and we promote equality at work.

Every employee of our company is always entitled to fair and appropriate treatment at work. All kinds of discrimination, harassment and hostility are absolutely forbidden, and we take immediate measures in case of violations.

Employment in our group is based on employment contracts in accordance with the local legislation and any collective agreements. Our salaries are equal to or above the statutory local minimum wage. Furthermore, our employee stock options and bonus programmes cover everyone employed by the group.

Summer workers brought variety



Nokian Tyres participates in the “Tutustu työelämään ja tienaa” summer worker programme, which brought more than 30 summer workers to the Nokia location. The youth worked in two week periods inside and outside the office and in assisting maintenance positions. **Pinja Teikari** worked in Marketing and Communications and in the administration of the Passenger Car Tyres unit. She wrote about her own and other summer workers’ experiences in the personnel magazine.

– I have almost completed my two week summer work period at Nokian Tyres. I have gained varied work experience here. My duties have included data entry and comparing Excel spreadsheets, archiving magazines, cleaning cabinets and the storeroom and writing a few short articles. The best parts of my work period have been interviewing other summer workers and cleaning the storeroom. Perhaps the most boring thing has been data entry or comparing the Excel spreadsheets, or the fact that I was the only summer worker here at these departments. I have really enjoyed my time here but, in the future, I would not see myself working at these departments because I would rather not work with a computer this much. One of my tasks was to interview other summer workers about their two week period, and their interviews were published in the company’s internal channels.

Inventiveness is a strong part of our company culture

Inventiveness has a long tradition in our company, and it is an important part of our company culture. Our inventiveness and suggestion procedure is a way to encourage everyone to actively participate in the development of their own work and the operation of

our company. The outset of inventiveness is continuous improvement of work and questioning the current state of things. Suggestions for improvements and new solutions can be made by individuals or groups

We welcome suggestions for increasing efficiency and productivity and for improving the quality of our operations and products, occupational safety and well-being at work. Starting in 2015, inventiveness in our Nokia factory also involves observing and recording safety issues.

Caused by a significant drop in Nokia, the total number of ideas in 2015 decreased some 40% compared to the year before. However, in Russia, the number of ideas grew approximately 20% from the year before. The proportion of implemented ideas remained on the same level compared to the total number of ideas.

Waste is not wasted



HR Business Partner Anna Kujanpää discovered Globe Hope online. The design company uses discarded materials to create new products that conserve and reuse natural resources and comply with ethical principles.

When Anna learnt that Globe Hope can use a company's own materials for producing promotional gifts, she wanted to find out what kind of reusable products Nokian Tyres' warehouses hold. There has been a need for finding small, unique items as prizes for personnel contests, so the idea of using the company's own recyclable materials for creating them was well received.

Anna submitted her idea in the Nokian Tyres suggestion system in March 2015, and the first items created from Nokian Tyres' discarded materials arrived before Midsummer.

– We have given out the items as prizes in personnel events and contests. The comments have been very positive, Kujanpää says.

Globe Hope's products are made by subcontractors of different sizes from small sewing shops to larger businesses. For example, the Nokian Tyres' Nasta (Stud) pouches are made in Nokia by Nokian Nahkatuote Oy. The materials for the pouches include old Nokian Tyres T-shirts and old ski boot liners that Globe Hope had in stock.

Inventiveness summary

	Created ideas	Created ideas/person	Realised ideas	Realised ideas/person
Nokian Tyres, Nokia	2,263	2.1	1,728	1.6
Nokian Tyres, Vsevolozhsk	1,596	1.2	630	0.5
Vianor	465	0.3		
In all:	4,324	1.0		

Total workforce by employment type, employment contract and region, broken down by gender

	Nordic	Russia and CIS	CE and Eastern Europe	North America	The rest of the world	Total
Total workforce on 31.12.2015	2,637	1,349	145	187	13	4,331
Women	417	192	47	18	7	681
Men	2,220	1,157	98	169	6	3,650
Total number of own employees	2,548	1,349	145	187	13	4,242
Women	390	192	47	18	7	654
Men	2,158	1,157	98	169	6	3,588
Number of supervised workers	89	0	0	0	0	89
Women	27	0	0	0	0	27
Men	62	0	0	0	0	62
Total number of seasonal employments in Vianor during 2015	1,145	0	0	0	0	1,145

Permanent	2,442	1,311	132	185	0	4,070
Full-time	97.5 %	100.0 %	90.9 %	96.2 %	100.0 %	98.0 %
Part-time	2.5 %	0.0 %	9.1 %	3.8 %	0.0 %	2.0 %
Women	14.9 %	12.3 %	34.1 %	9.7 %	45.5 %	14.5 %
Men	85.1 %	87.7 %	65.9 %	90.3 %	54.5 %	85.5 %

Total number and rate of new employee hires and employee turnover by gender, age group, and region

	Nordic	Russia and CIS	CE and Eastern Europe	North America	The rest of the world	Total
Total number of new employees*	301	121	38	24	3	487
Number of women	47	30	16	2	1	96
Number of men	254	91	22	22	2	391
Number of under 30 years old	127	92	15	11	0	245
Number of 30-50 years old	148	29	22	9	0	208
Number of over 50 years old	27	0	1	4	0	32
New employee hires rate (Total)	11.8 %	9.0 %	26.2 %	12.8 %	23.1 %	11.5 %
Percentage of women	1.8 %	2.2 %	11.0 %	1.1 %	7.7 %	2.3 %
Percentage of men	10.0 %	6.7 %	15.2 %	11.8 %	15.4 %	9.2 %
Percentage of under 30 years old	5.0 %	6.8 %	10.3 %	5.9 %	0.0 %	5.8 %
Percentage of 30-50 years old	5.8 %	2.1 %	15.2 %	4.8 %	0.0 %	4.9 %
Percentage of over 50 years old	1.1 %	0.0 %	0.7 %	2.1 %	0.0 %	0.8 %
	Nordic	Russia and CIS	CE and Eastern Europe	North America	The rest of the world	Total
Total number of terminated employees (fixed terms not included)	217	108	16	29	2	372
Number of women	20	19	6	2	0	47

Number of men	197	89	10	27	2	325
Number of under 30 years old	30	57	4	10	0	101
Number of 30-50 years old	122	49	8	18	0	197
Number of over 50 years old	65	2	5	1	0	73
Turnover rate (Total)	8.5 %	8.0 %	11.0 %	15.5 %	15.4 %	8.8 %
Percentage of women	0.8 %	1.4 %	4.1 %	1.1 %	0.0 %	1.1 %
Percentage of men	7.7 %	6.6 %	6.9 %	14.4 %	15.4 %	7.7 %
Percentage of under 30 years old	1.2 %	4.2 %	2.8 %	5.3 %	0.0 %	2.4 %
Percentage of 30-50 years old	4.8 %	3.6 %	5.5 %	9.6 %	0.0 %	4.6 %
Percentage of over 50 years old	2.6 %	0.1 %	3.4 %	0.5 %	0.0 %	1.7 %

*) The number of new employees includes those who have been transferred within the company.

Composition of governance bodies and breakdown of employees per employee category according to gender and age group

	Nordic	Russia and CIS	CE and Eastern Europe	North America	The rest of the world	Total
Number of individuals within the top management	16	2	4	2	1	25
Number of women	2	0	0	0	0	2
Number of men	14	2	4	2	1	23
Percentage of women	12.5 %	0.0 %	0.0 %	0.0 %	0.0 %	8.0 %
Percentage of men	87.5 %	100.0 %	100.0 %	100.0 %	100.0 %	92.0 %
Number of under 30 years old	0	0	0	0	0	0
Number of 30-50 years old	9	2	2	2	0	15
Number of over 50 years old	7	0	2	0	1	10
Percentage of under 30 years old	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Percentage of 30-50 years old	56.3 %	100.0 %	50.0 %	100.0 %	0.0 %	60.0 %
Percentage of over 50 years old	43.8 %	0.0 %	50.0 %	0.0 %	100.0 %	40.0 %

Number of white collars	1,017	357	114	64	12	1,564
Number of women	224	150	47	15	7	443
Number of men	793	207	67	49	5	1,121
Percentage of women	22.0 %	42.0 %	41.2 %	23.4 %	58.3 %	28.3 %
Percentage of men	78.0 %	58.0 %	58.8 %	76.6 %	41.7 %	71.7 %
Number of under 30 years old	72	134	19	7	2	234
Number of 30-50 years old	685	213	78	35	10	1,021
Number of over 50 years old	259	10	18	22	0	309
Percentage of under 30 years old	7.1 %	37.5 %	16.7 %	10.9 %	16.7 %	15.0 %
Percentage of 30-50 years old	67.4 %	59.7 %	68.4 %	54.7 %	83.3 %	65.3 %
Percentage of over 50 years old	25.5 %	2.8 %	15.8 %	34.4 %	0.0 %	19.8 %
Number of blue collars	1,473	991	27	121	0	2,612
Number of women	162	42	0	3	0	207
Number of men	1,311	949	27	118	0	2,405
Percentage of women	11.0 %	4.2 %	0.0 %	2.5 %	0.0 %	7.9 %
Percentage of men	89.0 %	95.8 %	100.0 %	97.5 %	0.0 %	92.1 %
Number of under 30 years old	274	393	16	33	0	716
Number of 30-50 years old	865	570	8	49	0	1,492
Number of over 50 years old	334	28	3	39	0	404
Percentage of under 30 years old	18.6 %	39.7 %	59.3 %	27.3 %	0.0 %	27.4 %
Percentage of 30-50 years old	58.7 %	57.5 %	29.6 %	40.5 %	0.0 %	57.1 %
Percentage of over 50 years old	22.7 %	2.8 %	11.1 %	32.2 %	0.0 %	15.5 %
Composition of the Board	6					
Number of women	2					
Number of men	4					
Percentage of women	33.3 %					
Percentage of men	66.7 %					
Number of under 30 years old	0					
Number of 30-50 years old	1					

Number of over 50 years old	5					
Percentage of under 30 years old	0.0 %					
Percentage of 30-50 years old	16.7 %					
Percentage of over 50 years old	83.3 %					

Even small actions matter

We pay salaries and taxes, and we have built homes and a day-care centre for the personnel of our location in Russia. Furthermore, we support local sports clubs with minor contributions and sponsor a school in Nokia. Our tradition of giving back to our communities goes back to the early 1900s when our company built housing for the personnel. We at Nokian Tyres believe that even small actions matter.

Our long tradition in influencing local communities

We affect our local communities in many ways: In Nokia, we are one of the major employers. In Russia,

we have built housing for our personnel. We annually support the Finnish war veterans' celebrations. The taxes that we pay support the well-being of people in different countries. We are also actively involved in making road traffic safer. Furthermore, our small actions – such as our dialogue with our neighbourhood, co-operation with educational institutions and minor contributions for local sports clubs – affect individual persons and communities alike.

The first graders of Nokia-Vihola comprehensive school received exercise books about traffic



In late 2015, Nokian Tyres helped keep the Nokia-Vihola pupils safe in traffic by providing the first graders with exercise books about traffic for personal use over several years. The purpose was to help make a difference and change the sad statistics involving small children.

The children will be using the exercise books personally through grades 1 to 6. The books help children to better understand the themes of traffic that are discussed in class with the teacher and to learn the rules of the road by working on assignments involving various traffic scenarios. The book explains the proper way to behave on the road and in public transport, provides boating safety instructions and teaches the basic road signs. It also covers heavy traffic and the blind spots of vehicles.

When possible, we try to contribute to the well-being of communities throughout our value chain, whether by improving the functions of rubber processors or the well-being of our personnel. In addition to

employing several thousand persons in-house, we indirectly create thousands of jobs internationally. For example, our factories in Nokia and Russia employ experts in different fields, such as security, cleaning, construction and logistics.

Our tradition of giving back to our communities goes back to the early 1900s when our company understood that its personnel are the most important

resource. Despite the tough economy, our company emphasised personnel well-being and, for example, constructed hundreds of apartments for the employees. Although the world has changed drastically in the last hundred years, we still find it important to support the well-being of our personnel as well as our local communities.

Bicycles removed from production bring joy to children



For safety reasons, we stopped using bicycles inside our factory in Nokia as of spring 2015. The



cheerfully coloured Jopo bicycles that were removed from production were still in good condition, so we decided to surprise several children in the Tampere Region by giving the bicycles out under the Save the Children Finland's Sporttikummi programme.

Mentoring and student collaboration

We continuously work with educational institutions through thesis collaboration and company visits, for example. We offer various thesis assignments and trainee positions in fields such as R&D, production, finance and maintenance. We also host factory visits for dozens of student groups each year.

We also participate in various student projects and events, such as the Let's Work programme and Kampuskamari project in 2015. The Mentors of Finland Association partnered with 16 large Finnish

employers to offer graduating or recently graduated young people a paid six-month trainee position. The project enabled the trainees to participate in interesting projects, learn new skills and attend three seminars on the working life.

The Tampere University School of Management and the Tampere Chamber of Commerce partnered in the Kampuskamari project, which brings together economics students with member companies of the Chamber of Commerce. The partnership includes student assignments as well as company visits. Nokian Tyres participated in two courses on the current themes in HR management and retail sales concepts.

[Read more about our student collaboration in product development!](#)

Hakkapeliitta Village – the residential area for our Hakkapeliittas

We built the Hakkapeliitta Village, high-quality homes for the employees of our Russian location, only 15 minutes away from our factories. We offer our personnel the opportunity to work and live in excellent, European conditions, and we want to use this as a way of committing our key resources to long employment relationships. We also want them to utilise the career advancement opportunities that our company offers. Hakkapeliitta Village is a social project the likes of which have not been commonly seen in Russia.

All of the apartments in the Hakkapeliitta Village are only sold to the personnel of Nokian Tyres' Russian location, and anyone can apply for an apartment, regardless of his or her job position. Participants in the housing programme receive control of the apartment after a set period of time; if they end their employment before the time has passed, the investment is returned.

We have handed over the day nurseries that we built in connection with the Hakkapeliitta Village to the municipality. The day nurseries have room for sleeping, playing and other activities. Modern sleeping rooms and playrooms, high-quality sports equipment, good care and good opportunities for the children to develop have received high praise from the Hakkapeliitta Village's parents and children alike.

Economy

A perspective view of a long, brightly lit tunnel. The road is illuminated by a series of bright lights along the ceiling and sides, creating a strong sense of depth and leading the eye towards a bright light at the far end of the tunnel. The walls of the tunnel are made of concrete and show some texture.

Financial management at Nokian Tyres

In our company, financial management actively influences our operations and decision-making thereby enabling us to reach our objectives. Our finance function extensively collects information on the operating environment as well as the different stages and results of the company's business processes. By processing this information, we aim at forming an understanding of the impact that our business decisions will have. Good financial management provides our company with the best opportunities for planned and foreseeable operations as well as for finding the best operating models in different situations.

Financial management

Financial management at Nokian Tyres

Focus areas of financial management for 2016–2018

In our company, financial management actively influences our operations and decision-making, thereby enabling us to reach our objectives. Our Finance function carefully collects information on the operating environment as well as the different stages and results of the company's business processes. By processing this information, we aim at forming an understanding of the impact that our future business decisions will have. Good financial management provides our company with the best opportunities for planned and foreseeable operations as well as for finding the best operating models in different situations.

Reflecting on our revised group strategy, the goals of Finance in the coming years include enabling new projects and investments by ensuring sufficient cash and credit limits. Finance is closely involved in the implementation of the company's potential structural changes, including the assessment and management of the related risks and opportunities, while adapting the financial reporting according to the company's business needs. Product and customer profitability guide the company's operations, which are developed together with the business units. Finance is also actively involved in developing global processes that enable the best possible service for Nokian Tyres' customers.

The head of financial administration is Vice President of Finance, who reports to the company President and CEO. Together, they are in charge of investor relations. Major investments are discussed by the regularly convening Investment Board.

Corporate Governance in a nutshell

Our corporate governance is based on the annual general meeting, Board of Directors, President and CEO, group's management team, Finnish Limited Liability Companies Act and applicable regulations as well as the group's policies, procedures and practices. The board of directors has approved the corporate governance statement and the company's auditors verify that the statement and its related descriptions of the internal reporting controls and risk management correspond to the financial reporting process.

- **The annual general meeting** holds the highest decision-making power. The annual general meeting decides on matters such as verifying the company's annual accounts, profit distribution and discharging the board of directors and the President and CEO from liability. The annual general meeting also elects the members of the board and the auditors and determines their compensation. In addition, the annual general meeting can make decisions concerning amendments to the articles of association, issue of shares, granting warrants and acquisition of the company's own shares, for example.
- **Shareholders** have the legal right to propose matters for consideration by the annual general meeting by submitting a written request to the board of directors in time for including the matter in the invitation to the meeting.

- **The board of directors** is responsible for corporate governance and the appropriate conduct of operations. The board holds the general authority in company-related issues, unless other company bodies have the authority under the applicable legislation or articles of association. The guiding principles and key tasks of the board are specified in the Limited Liability Companies Act, articles of association and board's working order. The key tasks include consolidated financial statements and interim reports, proposals to the annual general meeting, appointing and dismissing the President and CEO and organising financial control.
- **The President and CEO** conducts the group's business and manages the company operations in accordance with the instructions and guidelines provided by the board of directors. The President and CEO may, considering the extent and nature of company operations, only undertake unusual or far-reaching actions with the board's authorisation. The President and CEO is liable for ensuring the legal compliance of the company's bookkeeping and for arranging reliable asset management.
- **The group's management team** assists the President and CEO in managing the company operations. In accordance with the group's meeting policy, the Management Workshop convenes once per month and it is attended by the President and CEO as well as the Business Unit Vice Presidents, service centre Vice Presidents, Vice President for Russian operations and chief audit executive (CAE).
- **The group's internal control** mechanisms are in place in order to ensure that the financial reports released by the company contain material and accurate information on the group's financial standing. The group has defined group-level instructions and policies for the key operative units specified below in order to ensure efficient and profitable company operations.

Risk management at Nokian Tyres

The Group has adopted a risk management policy, approved by the Board of Directors, which supports the achievement of strategic goals and ensures continuity of business. The Group's risk management policy focuses on managing both the risks pertaining to business opportunities and the risks affecting the achievement of the Group's goals in the changing operating environment.

The risks are classified as strategic, operational, financial, and hazard risks. Strategic risks are related to customer relationships, competitors' actions, political risks, country risks, brand, R&D, and investments. Operational risks arise as a consequence of shortcomings or failures in the company's internal processes, actions by its personnel or systems, or external events, such as legislative changes, unpredictable rulings by judicial systems or authorities, or changes in raw material prices. Financial risks are related to fluctuations in interest rates and currency markets, refinancing, and counterparty risks. Hazard risks are risks that may lead to injuries, property damage, production outages, environmental impacts, or liabilities to third parties.

The most significant risks related to Nokian Tyres' business are the country risks related to the Russian business environment, reputation risks, product and R&D risks, production outage risks, currency risks, and governance and data administration risks. Due to the company's product strategy, interruption risks that are related to marketing and logistics may have a significant impact especially on peak season sales.

The risk management process aims to identify and evaluate the risks and to plan and implement practical measures for each risks. Among other things, such measures may include avoiding the risk, reducing it in different ways or transferring the risk through insurance or agreements. Control functions and actions are control or back-up procedures applied to reduce risks and ensure the completion of risk management measures.

Risk management is not assigned to a separate organization; its tasks follow the general distribution of responsibilities adopted elsewhere in the organization and its business activities. The company's Board of Directors discusses the risks annually in connection with the strategic process.

Corporate Governance

Profitable but sustainable growth

As a commercial business, one of the key elements in our responsibility is ensuring financial success and being able to provide added value to our financial interest groups. Profitability enables us to further develop our business and it offers financial security, work, and well-being for our personnel as well as our shareholders.

Financial success benefits all interest groups

We seek growth and strong profitability for our business by producing premium-quality, special tyres. By focusing our efforts on improving our products, we can keep up with the industry's development, and gain lots of recommendations from consumers. This strengthens the reputation of our company and thereby drives our sales. We have been able to expand our product range and sales to new areas based on our strong expertise in the Northern conditions.

New products comprise some 30 per cent of our turnover. In addition to product development, we focus on the continuous improvement of our business models and processes. We focus systematically on quality, productivity and logistics. The management and functionality of the distribution chain are basic requirements for improving our sales and for receiving a good return on investment.

We aim for even further development and growth as we want to be the world's most profitable tyre manufacturer today and in the future. Profitability enables us to further develop our business and it offers financial security, work and well-being for our personnel as well as our shareholders. Financial success also makes our own business even more interesting and varied.

Sustainability at the customer interface

As a manufacturer of high-quality, innovative premium tyres designed for demanding conditions, we want to be an industry pioneer also in terms of sustainability. We invest in eco-friendly products and processes. We have developed tyres with the best A class rolling resistance according to the EU tyre label system and use eco-friendly raw materials in their production. The more often our brand is associated with environmental responsibility in addition to safety and high quality, the more we can attract sustainability-conscious customers. Improved competitiveness also in sustainability supports our primary goal of profitable growth.

View of the future

For more information on the development of our sales and our financial standing, please refer to our 2015 annual report at www.nokiantyres.com/company/publications/annual-reports/.

EUR million	2015	2014	change %
Net sales	1,360.1	1,389.1	-2.1
Operating profit	296.0	308.7	-4.1
% net sales	21.8	22.2	
Profit before tax	274.2	261.2	5.0
% of net sales	20.2	18.8	
Return on capital employed (ROI), %	20.3	19.2	
Return on equity (ROE), %	19.6	16.0	
Interest bearing net debt	-209.7	-164.6	-27.4
% of net sales	-15.4	-11.8	
Gross investments	101.7	80.6	26.2
% of net sales	7.5	5.8	
Earnings/share, EUR	1.80	1.56	15.1
Shareholders equity per share, EUR	9.24	9.07	
Equity ratio, %	70.8	67.5	
Taxes, EUR	33.5	52.8	
Wages, fees, social security contributions	195.5	196.6	

Customer relations and delivery reliability

Delivery reliability is one of the prerequisites for Nokian Tyres' success. The consumer sales of winter tyres are highly focused on seasons and that requires tyre manufacturers to employ flexible and rapid logistics. Long-term customer relationships that are based on trust offer both parties opportunities to improve and succeed.

We want to have the most satisfied customers

We want to be the first choice for our customers as their tyre partner. We want our customers to be highly satisfied with our products and services. Customer satisfaction and good partnership also form one essential area for improvement in our strategic development roadmap for the near future.

We want to establish long-term partnerships that benefit everyone. Through reliable distribution channels, we also want to secure our position as the best performing brand in terms of product availability. We are also working on improving our customer relationship management tools.

In order to reach this goal, we support our customers' business through commercial collaboration and our pricing policy. We also conduct joint promotions and marketing campaigns with our key customers and develop interesting sales concepts for franchise chains.

In 2015, we examined the customer satisfaction of tyre and car dealers in a survey, and our average score for overall satisfaction was 4.1 on a scale from 1 (Poor) to 5 (Excellent). The survey examined customer satisfaction with 12 different aspects as well as overall satisfaction with the partnership with Nokian Tyres. The results are based on the responses by approximately 1,400 customers in several countries. We track customer satisfaction each year and will be conducting a similar survey in spring 2016.

Close customer service and reliable partnership



For Nokian Tyres' business, it is essential that our customers know the company and the products we produce. Establishing strong product and company knowledge and earning mutual trust in all aspects make it easier for the customer to sell our products and conduct profitable business operations. Close and versatile collaboration plays a key role in building trust and partnership.

Nokian Tyres listens to its customers and invests in building stronger customer relationships. Over the course of a year, local sales managers carry out thousands of personal visits to tyre outlets and car dealerships. Launch events for new products, factory visits in various countries and tailored online training for retailers and other customers all improve in-depth product knowledge.

New product launches are arranged in our test centres in Nokia and Ivalo as well as locally in our key markets. New product launches are popular events as they let our customers experience the driving feel and behaviour of new tyres. Especially the Northern beauty and challenging winter driving conditions in Ivalo offer unique experiences.

In autumn 2015, we launched the Nokian Hakka Green 2 at our test track in Nokia, where more than 200 customers came to learn more about the new eco-friendly tyre over the course of five days. After spending a day with the new tyre, our customers enjoyed the relaxing and beautiful scenery of Lake Pyhäjärvi.

Deliveries according to contract

By delivery reliability, we mean that the right products are delivered according to contract in terms of the product quality, method of transport, delivery location, delivery time, and price. Delivery reliability is one of the prerequisites for Nokian Tyres' success. The consumer sales of winter tyres are highly focused on seasons and that requires tyre manufacturers to employ flexible and rapid logistics. Good availability

of tyres and quick delivery on time are increasingly important factors by which the customers select their suppliers. Nokian Tyres' delivery reliability is generally recognised in the field, and it contributes to reinforcing our price position in the market.

Development efforts for optimising transportation

Nokian Tyres products are sold in more than 60 countries by our in-house sales organisation and thousands of client companies. Our clientele includes tyre chains, car dealerships, tyre wholesalers and retailers, independent importers, machine and

equipment manufacturers, port and logistics companies, and haulage companies. The Vianor tyre chain and new NADs (Nokian Tyres Authorized Dealers) have an increasingly important role in the sales and seasonal management of Nokian Tyres. A significant part of the Group's sales are currently made through Vianor outlets.

Nokian Tyres and Vianor have, for a long time, worked together for improving and streamlining logistics. Our Group aims to avoid all unnecessary transportation and thus reduce the environmental impacts. To minimise the transportation distance and the consequent environmental impact, tyres are delivered from the production plants to our clients as directly as possible in fully loaded trucks.

Transportation is specifically one of Vianor's most significant environmental impacts, and the chain

strives to maximise the number of tyres in each delivery from the import warehouse and to minimise transportation between outlets. The chain monitors the weight of the deliveries from the warehouse and packs the tyre trucks as fully as possible, for example by 'lacing' the tyres densely.

Nokian Tyres' shipments in Central Europe use sea and rail transport as much as possible. From marine containers, we mainly deliver the tyres directly to the client by train or trucks. We prefer the largest container sizes (45' HC and 40' HC) in order to minimise our environmental impact. If at all possible, we use round-trip transportation to avoid return legs with empty trucks. Most of the time, haulage companies serve different clients on the outward and return legs, and trucks rarely have to drive back empty.

Sustainable logistics throughout a tyre's service life



The production process includes several stages that turn raw materials into finished tyres. From our factories, Logistics delivers the tyres to our customers. Effective logistics play a key part in the import of raw materials, machinery and spare parts as well as the distribution of finished products to the customers in a cost-efficient, eco-friendly and timely way.

Succeeding during the peak season is essential for Nokian Tyres' business. This means that forecasting delivery volumes to partners is, in many cases, the only way to ensure sufficient capacity.

– We need to be able to deliver orders as quickly as possible. Keeping track of global events, such as strikes and natural phenomena, helps us anticipate the changing conditions. By maintaining an extensive network and building long-term

partnerships, we can ensure good readiness to respond to changes, for instance by using alternative delivery routes or partners, when needed, explains **Jussi Juhola**, head of the Logistics unit.

We need to be forward-thinking: the raw materials may be supplied to our factories up to six months from purchase, tyre deliveries are planned 1 to 6 months in advance and inventory forecasts are made up to two years ahead.

– We work continuously with our subcontractors. We also want to ensure the high quality and reliability of our partner network because our customers' experience is also affected by the performance of the delivery company that we use, says Logistics Manager **Markus Huttunen**.

Our operations take into account the safety aspects, high quality and compliance with ethical principles. In logistics, consideration of the environmental aspects is an essential part of planning and organising deliveries: we use full containers where possible and choose the shortest delivery routes and the most eco-friendly modes of transport. We mainly use road, rail and sea transports.

The Nokian Tyres' warehouse network comprises more than 30 warehouses in 13 countries. Our largest warehouses are located near our factories in Nokia and Vsevolozhsk and in Central Europe in Czech Republic and Germany.

Effects on society

The salaries and taxes that we pay support the structures of society and improve the quality of life for thousands of people.

Job creator, taxpayer and safety expert

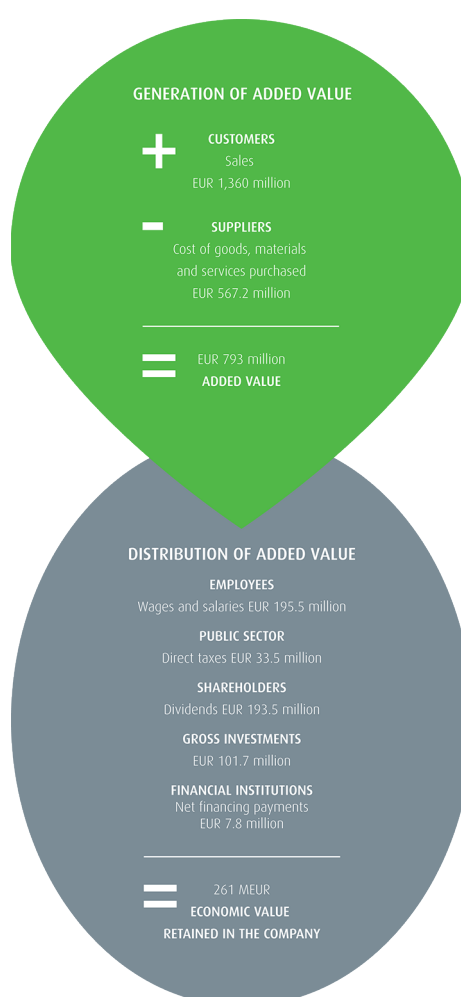
We directly employ over 4,300 people around the world, and our tyre factories are significant employers. When we also consider all of our subcontractors, our role as a job creator is even more significant. Our subcontractors employ construction workers, consultants and technical specialists, cleaning, security, restaurant and transportation workers as well as professionals in well-being services. The salaries and taxes that we pay support the structures of society and improve the quality of life for thousands of people.

The uncertainties of the global economy also affect our operations and cause indirect negative economic impacts on society. Our layoffs in Nokia in autumn 2015 will reduce the municipal tax income. The uncertain situation in Russia has postponed our investments in the Vsevolozhsk factory, which affects the cash flow to equipment suppliers and subcontractors. The weakened economy may also affect road safety if consumers are not able to afford premium tyres.

As a leading manufacturer of winter tyres, we have a special responsibility for making winter traffic better and safer. Nokian Tyres is also a member of various communities and organisations that participate in the development of the legislation and political decision-making. [Read more under Influencing as an expert!](#)

Nokian Tyres and the cash flow between interest groups

A good financial result has extensive effects on the interest groups of the company. The diagram below shows Nokian Tyres' economic footprint in terms of its interest groups.





Planet

Sustainability management at Nokian Tyres

The outset of our operations includes respecting environmental and safety aspects without compromises and ensuring high quality and a good customer experience. Our operations take into account ethical principles, diversity of nature, and sustainable development. We respect individual and cultural differences as well as differing opinions.

[Sustainability management](#)

Sustainability management at Nokian Tyres

Sustainability management and development actions 2015

Sustainability management at our company is handled at the Group level. When developing operations, we aim at solutions that are more advanced than the minimum required by the legislation and standards. Our activities follow the principles of sustainable improvement and are based on the social responsibility assumed by our company, as well as the strategic goals of our business. At the same time, we secure our business, create added value, and enhance its critical success factors: the development, manufacture, and marketing of tyres. We have especially strived to ensure the continuity of our manufacturing operations by promoting the EHSQ functions. By minimising risks and interference, we can ensure cost-efficient production.

We have a broad view on sustainability. We pay attention to the entire lifecycle of our products and to all of our company's activities. We emphasise the management of sustainability issues in our own operations as well as in our distribution chains. In terms of direct competitive advantages, this means safety innovations for tyres. Sustainable safety is an important dimension in our research and development activities, as well as our main argument in marketing.

In April 2015, we reorganised our sustainability management. To coordinate the sustainability efforts in our company, we appointed an environmental and

responsibility manager and a Sustainability Team, which comprises experts from various fields. The Sustainability Team invents and plans measures for improving sustainability and oversees their implementation.

In the spring, we also started a project for reviewing our current status with sustainability and identifying areas for improvement. Over the course of the project, we interviewed a total of 12 managers and experts in different aspects of sustainability. We also responded to the Dow Jones Sustainability Index survey for finding development needs. This resulted in a Sustainability Roadmap for 2015–2017, which comprises 51 different tasks. The tasks include specification and improvement measures regarding the procedures, risk assessments, purchasing chain, HR development and environmental aspects.

We completed the first tasks, such as the stakeholder review and stakeholder sustainability survey, according to schedule in late 2015. Several other tasks are already underway. We want to be a tyre industry pioneer also in terms of sustainability. Joining the UN's Global Compact initiative on 23 December 2015 is one of the indications of how important sustainability is for our company.

Our Quality and Sustainability policy comprises our promises regarding the environment, health, safety, and quality as well as our plans for keeping those promises.

Commitment to Quality and Sustainability

Our promise

We develop and manufacture high-quality premium products in the tyre industry. Their unique innovations offer users safe, economical and comfortable driving kilometres. We offer our customers the best service in the industry in all fields.

As a forerunner in the industry, we are continuously improving the quality, safety and environmental friendliness of our products and processes. In our operations, we take into account the product's entire life cycle.

How we fulfil our promise

One of the starting points of our operations is uncompromising respect for environmental and safety matters, as well as ensuring high quality and a good customer experience.

We guarantee the high quality of our products with controlled, efficient and closely monitored development, procurement and manufacturing processes. Our operations are customer-oriented and profitable.

We commit to complying with laws and regulations, as well as the requirements of our customers. In our operations, we take into account ethical principles, biodiversity, climate change and sustainable development. We respect different individuals, cultures and opinions.

When procuring raw materials and ordering work from external service providers, we only select partners who are assessed to be reliable and in good repute. We do not accept the use of child labour in our own operations or in those of our

service providers.

Our management is committed to creating work conditions in which individuals have good opportunities to influence the development of and responsibility for environmental and occupational safety and quality. We strive towards efficiency and zero accidents in all operating areas.

We familiarise our employees with our basic operating principles and goals and their responsibility for the impacts of their activities on quality and the environment. Furthermore, employees are encouraged to promote quality, occupational and chemical safety, and environmental protection in their activities.

Our management sets goals pertaining to finances, the environment, health, safety and quality, monitors their implementation and reserves sufficient resources to meet and maintain these goals.

We conduct regular internal audits, assessing the compliance with customer and legislative requirements, regulations and instructions, as well as the efficiency of our operational system.

Our operations are based on these international criteria

Our operations are based on and fulfil the requirements of standards ISO 9001:2008, ISO/TS 16949:2009, ISO 14001:2004, OHSAS 18001 and ISO 17025, as well as those of customers and authorities. In addition we are committed to UN Global Compact principles.

Ari Lehtoranta
CEO

Organisation

Environmental aspects, chemical safety and sustainability are assigned to Quality and Process Development, and our Vice President, Quality and Process Development coordinates their management globally. The goals of quality and sustainability management are accident prevention, uninterrupted production, ensuring high quality and good corporate citizenship in all areas of operation.

Management systems

We aim at managing the environmental impacts of our products over their entire lifecycle and addressing the safety and quality aspects of our operations in a comprehensive and systematic manner. The activity management system that encompasses the environmental, safety, and quality issues serves as a key tool for this purpose. The operations manual complies with the ISO 14001 standard in terms of environmental matters and with the ISO 9001 standard as regards quality. Our factory in Russia and the Swedish sales company Nokian Däck are also covered by the joint EHS and quality (EHSQ) system and included in the ISO 14001 and ISO 9001 certifications. The management system, furthermore, covers the safety management system that is referred to in the Finnish Government Decree 855/2012 (industrial handling and storage of dangerous chemicals, SEVESO II). In 2013, we received the automotive industry's ISO/TS 16949 approval for all of our production plants.

The Nokian Tyres' environmental and quality targets are specified in the company's quality and process development strategy, which is drawn up for a period of five years and updated annually. Vice President of Quality and Process Development participates in drawing up the strategy, along with the environmental and responsibility manager, who reports to the Vice President. Working together with environmental experts, the environmental and responsibility manager prepares an annual environmental programme for the factories, which

specifies detailed targets, measures, schedules and leading persons for the objectives presented in the strategy. This leadership covers all aspects of the environmental management system. Additionally, each unit has its own projects for developing the operations and processes.

We review the development of environmental and quality matters each month during the management meetings. The senior management provides direct feedback.

Authorities and permits

Nokian Tyres' environmental and safety operations are supervised by several authorities, with the most important in Nokia being the Pirkanmaa Centre for Economic Development, Transport, and the Environment (ELY), the Finnish Safety and Chemicals Agency (TUKES), the environmental protection and construction supervision units and other offices of the Town of Nokia, and the Tampere Regional Emergency Service. The most important authorities supervising the Vsevolozhsk factory's operations are the Ministry of Natural Resources and the Environment of the Russian Federation, the Committee on Natural Resources, Environmental Protection, and Ecological Safety of the Leningrad Region, and the Federal Service for Supervision of Consumer Rights Protection and Human Well-Being. The operations of other Nokian Tyres' units are supervised by the national authorities. We maintain continuous dialogue with various authorities in order to take any official requirements and requests into account in a timely manner. We immediately communicate any disruptions, accidents, or deviations from the terms and conditions of our permits to the authorities.

We see official permits as the minimum requirements and regard eco-friendliness as much more than simply complying with the permit limits. We are

committed to being a part of genuinely sustainable development. We actively follow the trends in environmental and safety regulations in Finland, the EU, and Russia, and anticipate the effects of pending regulation on our operations.

The Nokia unit has a valid environmental permit that was granted by the Regional State Administrative Agency for Western and Inland Finland in 2007, and the reviewed permit decision was issued in November 2014. In addition to the chemicals permits from TUKES, the Nokia unit has been granted permission by the Water Court to take cooling water from the river Nokianvirta. We obtained the numerous permits required for the Russian factory already during its construction and have since maintained them in compliance with the local legislation.

Chemical control operations

The chemical control operations of Nokian Tyres were started in the early 1960s. Our company complies with all the requirements of the EU chemicals legislation aimed at ensuring the safest possible use of chemicals for the employees, environment, and end users. To improve the level of chemical safety and to comply with the REACH directive, we continuously co-operate with component and chemicals suppliers and producers.

In our production, we never use carcinogenic chemicals or SVHC chemicals (Substances of Very High Concern) as per the EU's REACH regulation. Our contract manufacturers do not use any SVHC chemicals. All of our products fulfil the PAH related requirements set in the EU REACH directive. We also aim at ensuring that no goods sold at this time or in the future through the Vianor units include any such chemicals. We require all chemicals suppliers to provide a material safety data sheet (MSDS) in compliance with the valid legislation prior to the procurement of chemicals. The MSDSs of the chemicals in use are registered in a database that is made available to our personnel.

Nokian Tyres produces and sells adhesives and paints in Finland that are used by the rubber industry and it imports specific raw materials that are used in rubber compounds. Our company creates MSDSs for these chemicals and submits them to TUKES for verification and registration.

We test new raw materials that are to be used in rubber compounds for quality assurance and suitability in production under laboratory and production conditions in Nokia. We document the raw materials approved for rubber compounds in a list of approved raw materials. Our procurement staff are only allowed to purchase raw materials that are included in this list of approved materials. The raw materials used by the Russian plant are also tested and approved in Finland.

No booster chemical is taken into use at the Nokia plant before the chemical control team has issued a department-specific usage permit for the substance in question. The team includes the Environmental and Responsibility Manager, an environmental engineer, a chemist from the R&D laboratory, and an occupational physician. The purpose of this policy is to streamline the use of chemicals throughout the company and, whenever possible, to replace hazardous chemicals with safer ones. Each year, a chemical survey is carried out at our factory in Russia.

In 2015, our factory in Nokia introduced a new chemical information system, which stores the material safety data sheets for all the chemicals that are used at the factory. In the future, the system will be suited for chemical risk assessments. We have also started entering the data concerning the chemicals that are used at the Vsevolozhsk factory.

The persons involved in the early stages of production receive annual chemical safety training, which can be arranged to other personnel as needed. Finnish chemicals legislation has undergone significant changes in the past few years. As a result, in 2015, we arranged chemical safety training for all

production personnel of the Nokian Heavy Tyres unit as well as the employees in retreading materials production. In 2016, we also aim to arrange the training for the Passenger Car Tyres unit employees and supervisors.

Audits

Regular audits are an important part of our environmental, safety, and quality operations. Their purpose is to guarantee eco-friendliness in production and ensure a safe working environment according to high standards. The audits aim to verify if the operation under scrutiny complies with the legislation, EHSQ policy, and the instructions provided in our activity management system.

We carry out internal environmental and quality audits according to an annual plan. This ensures that each area of activity that is specified in our activity management system is audited at least once every three years. The annual plans are drawn up on the basis of a five-year schedule, taking into account the findings of the previous audits.

An internal safety audit includes an environmental audit and an occupational safety audit. The safety audit looks into machine guarding, fire safety, cleanliness and order, proper handling and storage of chemicals, occupational hygiene, working conditions, and waste management. The audit team also monitors the development of the departments' safety index. The audits that are carried out are reported to the management, enabling the planning of any new development measures that we deem necessary.

Audits carried out by customers and co-operation partners, such as the automotive industry, are also considered internal audits. The internal audits, furthermore, include the audit that is carried out in conjunction with the weekly management review.

An external auditor performs an audit once a year for assessing compliance with the relevant standards. We supervise legal and regulatory compliance annually or as required by the authorities and insurance companies.

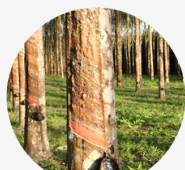
We want to be an industry leader

We want to be an international industry-leader in EHSQ matters. The principle of "A safe company means safe tyres" is an essential part of our company's identity and reputation. Corporate social responsibility is an integral part of the Finnish business culture, and we are not willing to compromise in this respect in our global operations. The awards and excellent reviews that our company and products have received demonstrate that environmental issues, quality, and safety are important for our customers and other interest groups. Therefore, our successful development projects guide the development throughout the industry.

We are a member of FiBS (Finnish Business & Society ry), a non-profit corporate responsibility network. The network's mission is to promote financially, socially and ecologically sustainable business in Finland.

In December 2015, we joined the UN Global Compact initiative, which is a significant milestone in our sustainability efforts. By signing the initiative, our group is even further committed to conducting profitable business in a sustainable way.

Taking care of biodiversity



RAW MATERIALS



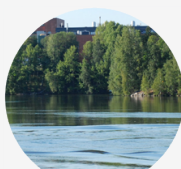
ENERGY



WATER & LAND USE



PROTECTION OF AIR

PROTECTION OF
WATER COURSES

BIODIVERSITY



In 2014, we participated in the Business & Biodiversity pilot programme organised by Corporate Responsibility Network FIBS, whose aim was to provide Finnish companies with information and support on comprehensively taking biodiversity into account. The programme included different training sessions and workshops which were mainly led by experts from the Finnish Environment Institute. In addition, the participating companies' representatives shared their best practices and offered peer support.

We have always considered biodiversity to be a part of our environmental aspects, even if we have not listed it specifically. The training programme confirmed our vision of the direction in which we are taking our company. Although our operations have little direct effect on biodiversity, we strive to take these aspects into account even better in what we do. We started reviewing biodiversity in our location in Nokia, which we then expanded to our facilities in Russia and our test track in Ivalo. In the future, we aim to introduce the review process also in the Vianor outlets and our test track in Nokia. Carrying out a thorough review throughout the group will make it easier to consider biodiversity also on a strategic level. According to the current assessment, Nokian Tyres has no direct impact on biodiversity.

The images marked with grey present the ecosystem services that we are utilising. Natural rubber and other raw materials are necessary for our operations, we utilise different forms of energy in our production, we use cooling water in our process and we need built-up land for our factories and test tracks.

The middle section with orange describes the most significant environmental impacts of our production, which we strive to minimise. It also describes the ecosystem services that we especially want to maintain.

The bottom row describes the potential effects of our production on the biodiversity of the close environment. The images represent the endangered species that live near our production facilities in Nokia: The asp and freshwater pearl mussel live in the lower reaches of the Nokianvirta river, and the red-throated loon nests near our Nokia test track. Our test track in Ivalo, Finnish

Lapland, is located in the reindeer herding area. We strive to minimise our impact on the habitat of these species. We want to do our part in maintaining the full diversity of nature for future generations.

Functional and safe production

We improve our EHSQ operations comprehensively in co-operation with the personnel, occupational health care, authorities, and experts. Our goal is to ensure a safe and efficient work environment that takes into consideration the physical, mental, and social well-being of our personnel. Our personnel actively participate in the voluntary, further development of occupational safety, processes, and environmental issues.

We improve our EHSQ operations comprehensively in co-operation with the personnel, occupational health care, authorities, and experts. Our goal is to ensure a safe and efficient work environment that takes into consideration the physical, mental, and social well-being of our personnel. Our personnel actively participate in the voluntary, further development of occupational safety, processes, and environmental issues. We work towards our goals with environmental and safety programmes, continuous auditing, and risk management surveys, for example. They form the outset for the systematic induction and training of our personnel. We provide training on working ability and ergonomics, chemical safety, and minimising fires and other risks.

We also have in place a technology policy that supports the achievement of our goals. We invest in the most advanced production technology possible in order to prevent harmful impacts on safety and the environment.

With a number of initiatives at the Nokia factory, we aim to improve the safety culture and halve the number of accidents in five years.

[Read more about our work on safety culture under People!](#)

This is how our production works!

Natural rubber and other raw materials travel a long and interesting way to finished premium tyres. It comprises thousands of hours of work, expertise, professional skill, and inventiveness. The tyre manufacture process has six main parts: buying and reception of raw materials, mixing, component manufacture, assembly, curing, and inspection. Furthermore, the storage, transportation, and retail sales of tyres are important for successful operations.

1. Buying and reception of raw materials

Raw materials for tyres include natural rubber, synthetic rubber, soot, various chemicals, and reinforcing materials. We buy these raw materials from around the world, but mainly from Europe, Asia, and Russia. From Finland we get, for example, rapeseed oil that is used in production. Some 50% of our raw materials are oil based and 20% renewable. Natural rubber makes up most of our renewable raw materials. The majority of raw materials are non-renewable. The only recyclable raw materials are the rubber waste materials from our own production. Each batch of raw materials is tested in our laboratory before it is used in a rubber mixture. Raw material costs comprise 24% of the manufacturing turnover and 59% of the production costs.



2. Mixing

In the early stages of production, we follow specific recipes to process the raw materials into rubber compounds that we then use in the manufacture and rubber-coating of tyre components. We test each 200-kg mixing batch in our laboratory before we put it into use. The recipes for the compounds depend on the intended properties of the tyre. Different components require different kinds of rubber compounds.



3. Component manufacture

In component manufacture, we use rubber compounds, textiles, and wires to make various components, like body plies, and the inner lining, bead, core, sidewall, sidewall wedge insert, and steel belt of the tyre. Most of the components are reinforcements, and one tyre may include 10 to 30 different components.



4. Assembly

The assembly machine begins to shape the tyre by assembling the components into the carcass and belt package. The carcass side of the assembly machine assembles the inner surface and the sidewall of the tyre and uses reinforcement ply as necessary. The belt side assembles the so-called 'tread package', which comprises the steel belt and surface rubber. Then, the machine mounts the cables, turns the sidewalls and rolls the tread package on the carcass package. This results in a green tyre, which is still soft and shapeable.



5. Curing

The assembled green tyres are placed into a curing press, in which the high steam pressure of the curing pad presses the green tyre against the heated mould. The tyres are cured at around 170 degrees Celsius for 8–20 minutes depending on the tyre size. Heavy mining tyres are cured for more than 7 hours. Curing vulcanises the rubber and provides the tyre with the intended properties, such as the tread pattern, sidewall markings, airtightness, grip that affects handling, and low tyre noise. The production of heavy tyres is similar to that of car tyres, except for the curing time.



6. Inspection

After curing, we inspect every tyre we produce both visually and by a machine. Tyres require a flawless tread pattern, pure raw materials, and an undamaged, symmetrical structure. Our trained operators inspect the tyre for flaws visually and by feel. Then, the tyre is pressurised in a testing machine and spun to inspect the roundness as well as lateral and radial force variation.



7. Sale, studding, storage, and shipping

The tread of a finished tyre is labelled by machine with the basic tyre information: name, size, load-bearing capacity, speed rating, product code, and EAN code. Specific tyres are studded, and then all tyres are stored. We have our largest warehouses and distribution centres in Nokia, Vsevolozhsk, Ejpvovice, and North America, but we have several smaller warehouses in our other important markets. Our tyres are sold in 62 countries by our in-house sales organisation and thousands of client companies. The delivery times range from 24 hours to four weeks. Successful seasons are essential for our business.

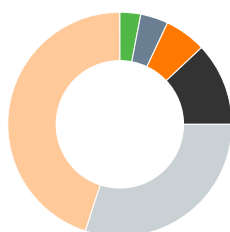


8. Good service ensures satisfied customers

At the end of our supply chain, the sales personnel of Vianor and other retailers find the right product for each customer, taking into account the customers' type of car and driving habits, among other things. We use internal and external testing for ensuring the excellent safety and world-class innovations of our tyres. This allows the salesperson to communicate openly and stand by the product that he or she is selling. Vianor plays an important part in product sales and the management of the season. In addition, direct contact with the consumer provides us with valuable information about the hopes and needs of our end-users. We want the users of our products and services to be very satisfied.



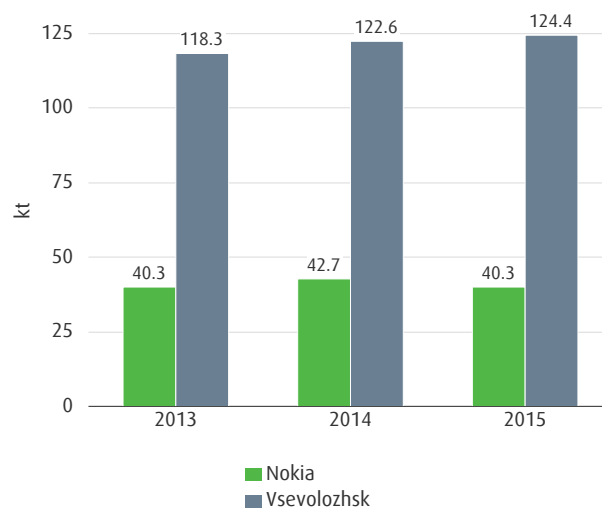
Raw material composition of rubber compound



Protective agents	3%
Booster chemicals	4%
Vulcanising agents	6%
Plasticiser	12%
Filler substances	30%
Rubber	45%

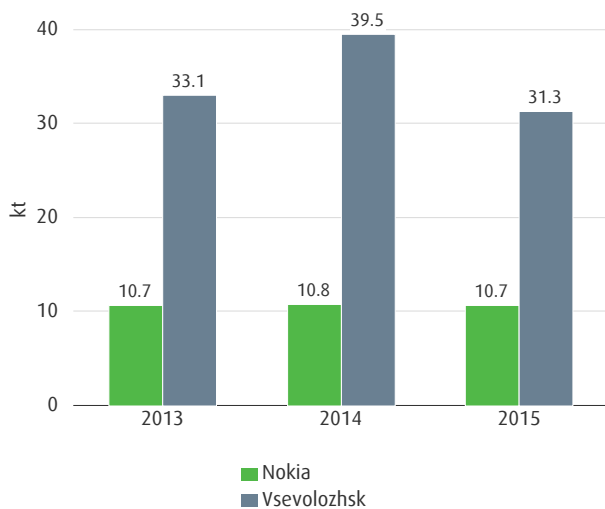
Raw materials

Non-renewable raw materials



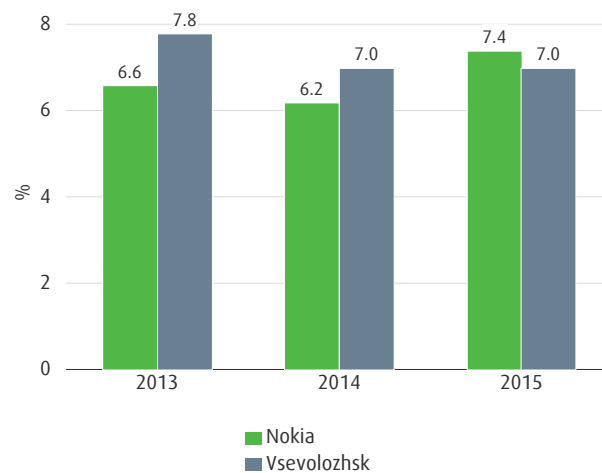
Raw materials

Renewable raw materials



Raw materials

Percentage of materials used that are recycled input materials



Energy

The Nokian Tyres' energy consumption can be divided into electricity, heating and steam. We buy the energy for our factory in Nokia from an external supplier. Renewable energy sources account for 40% of the

electricity that we purchase. We use natural gas as the energy source for heating and steam generation. Natural gas is the only energy source used in our Vsevolozhsk factory. We buy the electricity from an external supplier and use our own power station for the energy necessary for heating and steam.

Biomass power plant increases the proportion of renewable sources

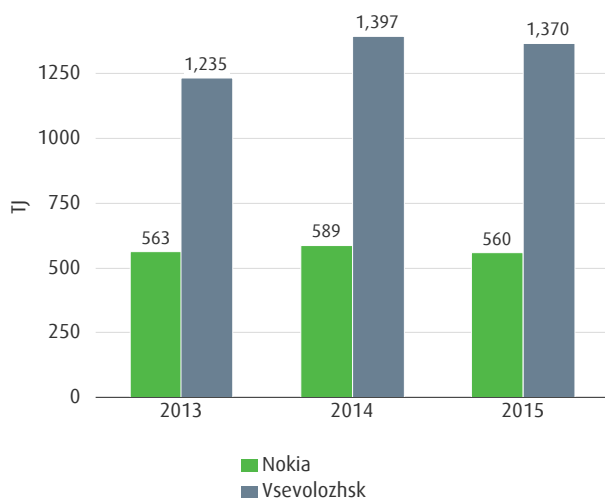


Nokianvirran Energia Oy has obtained an environmental permit for the construction of a new biomass boiler at the shore of the Nokianvirta river. The biomass power plant will be commissioned in 2016 and Nokian Tyres is an investor in the joint venture. The energy production unit will supply steam for Nokian Tyres and SCA's paper mill as well as district heating for the cities of Nokia and Tampere.

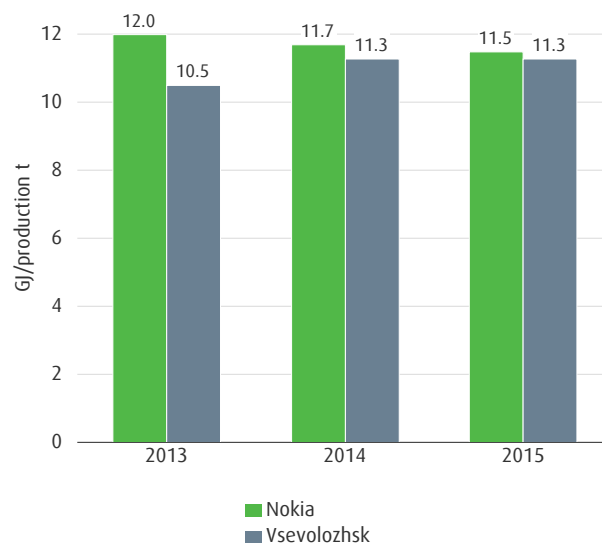
The new power plant will primarily use local wood-based fuels, such as wood chips and peat. The

boiler is also suited for burning fibre clay and sludge from the Nokia paper mill. The new plant is expected to reduce the use of fossil fuels, i.e. natural gas, in favour of local energy sources in the region. According to initial calculations by Nokian Tyres, the company could increase the proportion of renewable energy sources from the current 40% to approximately 70%.

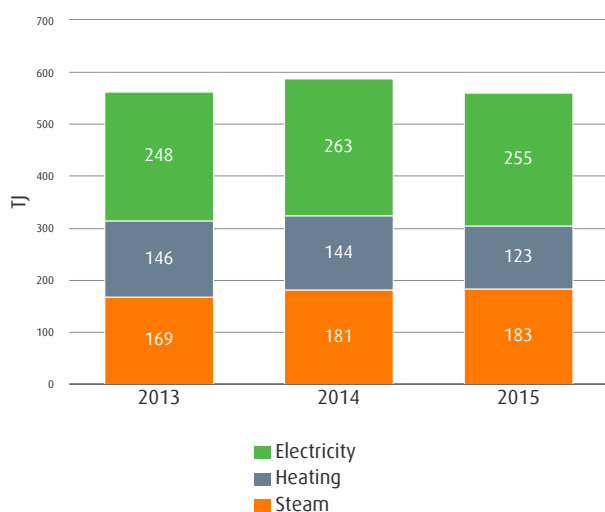
Energy consumption within the organisation



Energy intensity



Energy usage Nokia



You can find more information on personnel safety and our accident statistics under the section "Good HR management"!

Environmental impact of tyre plants

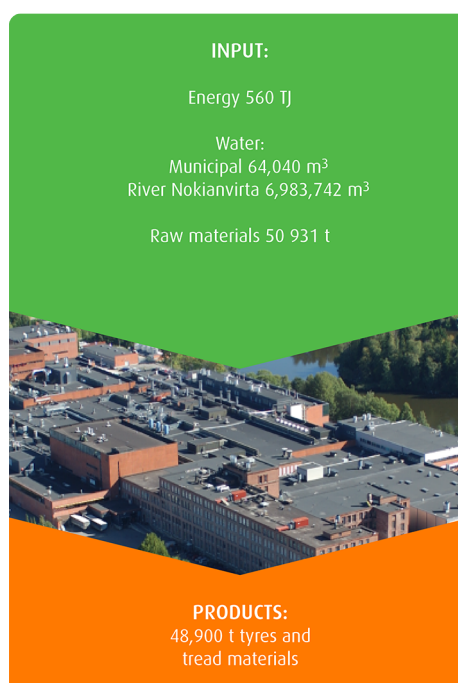
We aim at managing the environmental impacts of our products over their entire life cycle and addressing the safety and quality aspects of our operations in a comprehensive and systematic manner.

The environmental impacts caused by the production of vehicle tyres include odour, solvent and dust emissions, noise, waste, and consumption of energy. The most significant of these impacts are waste and, locally, odour. Solvent emissions (i.e. VOC emissions) are also a significant impact of the Nokia plant. In line with our quality and sustainability principles, we are aiming for zero errors in all EHSQ aspects.

We document the environmental impacts of our tyre plants in annual records and report them to the authorities as required in each country of operation. The Nokia plant has a separate register for the environment-related feedback received from the residents of the neighbourhood and the plant personnel. In connection with logging the feedback, the environmental expert specifies the corrective measures. A feedback form remains open until the necessary measures have been taken and the environmental expert closes and signs the form. Our goal is to handle environmental matters so effectively that people have no cause for complaints or comments. In 2015, we did not receive any environmental complaints. In the Vsevolozhsk plant, there is no need for registering neighbourhood feedback because the plant is situated far away from residence. Still, we use the same standards there as we do in Nokia.

Environmental impact of tyre plant in Nokia, Finland

SOLVENT EMISSIONS	PARTICLE EMISSIONS
VOC	< 1.0 t/v
69.3 t/a	
CO₂	NOISE
3,400	< 50 dB
kg CO ₂ eq/production (t)	ODOUR



WASTE:	WATER:
non-utilized (landfill) 27.4 t	into the sewage 122,958 m ³
utilized 4,600 t	into the Nokianvirta river
hazardous 200 t	6,924,744 m ³

Environmental impact of tyre plant in Vsevolozhsk, Russia

ALL EMISSIONS UNDER LIMITS
(measured at a distance of 300 m)

CO₂
2,500
kg CO₂eq/production (t)

NOISE
< 50 dB

INPUT:

Energy 1,370 TJ

Water:
Lake Ladoga 303,239 m³

Raw materials 155,766 t



PRODUCTS:
121,032 t

WASTE:

non-utilized
(landfill) 1,531 t
utilized 7,938 t

WATER:

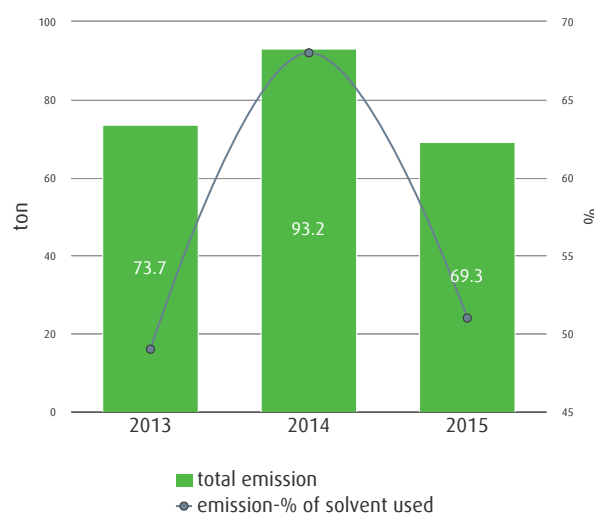
into the sewage 226,043 m³
into the drain 157,390 m³

passenger car tyres. Our company collects the VOCs from tread production and conveys them to a catalytic incineration plant. In 2015, our solvent emissions amounted to 69.3 tonnes, equalling 1.4 kg/tonne of products.

Our company aims at compliance with the total emission limit according to the EU's VOC directive, which is 25% of the solvents used. However, in 2015 our emissions amounted to 51%, which exceeded the emission limit according to the directive.

In late 2014, we installed an incineration plant in our Nokia factory for treating VOC emissions. The purpose of the plant is to reduce VOC emissions from the manufacture of heavy tyres and retreading materials and further improve the air quality of our production. Due to delays in commissioning the new plant, our VOC emissions exceeded their limits. The new technology enables Nokian Tyres to fulfil the legal obligations concerning VOC emissions in the future.

VOC emission Nokia



Emissions into the air

Volatile Organic Compounds, VOC

Solvents or volatile organic compounds (VOC) constitute the most significant emissions into the air. Solvents are used in the production of heavy tyres and treads for improving adhesion. Since 2012, we have not used any solvents in the production of

Emissions from energy production

At our factory in Vsevolozhsk, an independent company annually measures the nitrogen and sulphur emissions from energy production. The nitrogen and sulphur emissions are below the set emission limits.

NOx and SOx emissions

Vsevolozhsk



Greenhouse gas emissions (GHG)

During the lifecycle of a tyre, its use and decommissioning create the most greenhouse gas emissions (approximately 90%). Production accounts for approximately 10% of the greenhouse gas emissions.

In 2013, we prepared a plan for cutting greenhouse gas emissions and revised it in 2014 and 2015. A significant factor in cutting our GHG emissions will be the new power plant that uses wood chips as fuel. The plant will be commissioned in 2016. It will eliminate all greenhouse gas emissions related to the industrial water and steam generation in Nokia. Our aim is to reduce these emissions by 20% by 2020.

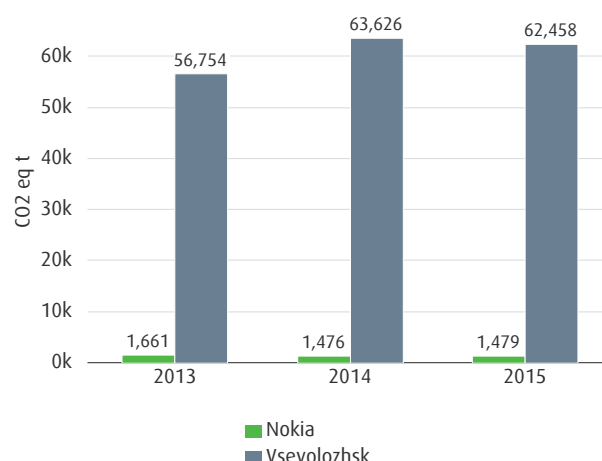
Carbon dioxide, CO₂

In 2011, we developed a CO₂ calculator for tyre production. Our calculations were carried out as a greenhouse gas assessment with the “cradle-to-gate” approach in line with the PAS 2050 standard. Now, we use this calculator annually for assessing the emissions. Further development of the calculations is still needed: for example, not all other indirect CO₂ emissions (so-called scope 3 emissions) are currently evaluated. Vsevolozhsk factory has its own energy production unit. Due to this the CO₂ scope 1 emissions are so much higher than in Nokia.

Renewable energy sources account for approximately 40% of electricity consumption at our factory in Nokia. Our Vsevolozhsk factory uses its own power station for generating most of the energy it needs. Therefore, its direct greenhouse gas emissions exceed those of the factory in Nokia. In 2016, we aim to reduce steam consumption by 5% during low production periods in Nokia. The Vsevolozhsk factory only uses natural gas for energy production.

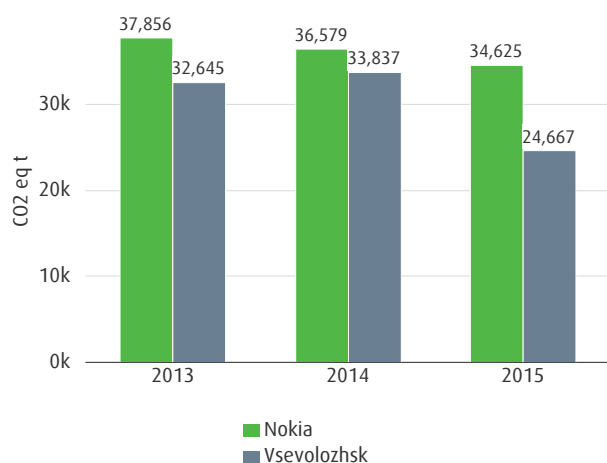
Direct green-house gas emissions

Scope 1



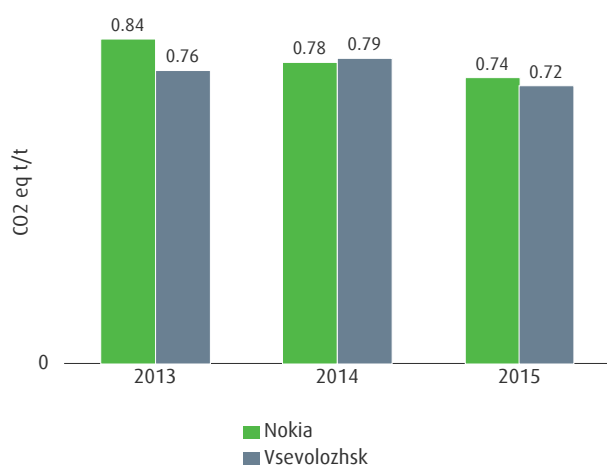
Indirect green-house gas emissions

Scope 2



Greenhouse gas emissions intensity ratio

Scope 1 + Scope 2/production tonne



Odour

According to surveys commissioned by Nokian Tyres, odour emissions are momentary. The mastication process for softening natural rubber causes discharges of compounds that are generated during the precipitation and dehydration phases of rubber milk, which results in an unpleasant odour in the neighbourhood. We use droplet separators for reducing the odours from mastication. We have also achieved a reduction of odours due to a decreased amount of separate mastication processes. Some

odours are generated during the tyre curing process. The quantity of the curing fumes released during the process is directly proportional to the quantity of cured rubber. The concentrations of individual substances in the fumes are extremely small. Currently, there is no cost-efficient system available for collecting and processing the curing fumes.

In 2015, we carried out a dispersion modelling of odour emissions in Nokia. The results indicate that the odour is the strongest at the eastern end of the factory. In the neighbourhood eastward from the factory, the percentage of odour hours in a year is 5–10%. However, the Vsevolozhsk factory received one observation about odour emissions from the authorities. With the aim to reduce odour emissions, we started a project in 2015 for conceptualising new odour control equipment for the early stages of production. We plan to commission the first odour control unit in Nokia in the summer 2016, which could provide odour elimination for two mixing lines. In the future, the plan is to expand the technology to other lines in Nokia and Vsevolozhsk based on the experience gained with the unit.

Particle emissions (dust)

Particle emissions are caused by the processing of powdery chemicals in the compound mixing department. We have replaced dust filters and selected state-of-the-art dust reduction technology for the expansion of the mixing plant. Our mixing equipment is fitted with efficient ventilation and dust collection devices. The best separating rates achieved by the water cleaners exceed 99%. We monitor particle emissions by means of particle concentration and differential pressure gauges. In addition, external specialists carry out regular concentration measurements. The measured particle concentrations have complied with the permit limits at both production plants. The dust that passes through the filter system mainly causes an aesthetic inconvenience and poses no harm to the environment or human health.

Noise

The environmental permit of the Nokia plant requires that the noise level in the yard areas of residential buildings remain below the equivalent continuous level of 55 decibels (L_{Aeq}) in the daytime. At night, the limit is 50 dB (L_{Aeq}). The figures refer to L_{Aeq} decibels, or in other words the mean noise level as detected by the human ear. According to the newest noise survey carried out by an external specialist in 2013, the 50 dB noise zone barely extends to the old residential area on the southeastern, eastern, and northeastern sides of the plant. We did not receive any noise complaints in 2015. The permit limit for the Vsevolozhsk plant is 50 dB at a distance of 300 metres from the plant. In the latest measurements, the actual noise level was 45 dB.

Emissions to water

Our objective is achieving zero tolerance with all environmental emissions. In 2015, approximately 200–400 litres of insulation liquid leaked into the Nokianvirta river. The leak was caused by exceptional circumstances, when the tanks containing the insulation liquid were emptied for introducing a new chemical. The insulation liquid was pumped into a separating pool, which filled up, and the overflowing liquid entered the river via the process water channel. The insulation liquid poses no threat to the environment and mainly caused aesthetic harm. Rescue services and Nokian Tyres personnel recovered the chemical from the river. The authorities approved the clean-up. The total cost of the emission was approximately €20,000. The largest individual expense was a claim for damages by a power plant located downstream the river. We immediately put corrective measures in place in order to prevent similar leaks in the future. The Nokia factory received no complaints concerning environmental emissions.

Waste

Waste is generated both in the production and support functions. We weigh all production waste and log the volumes in a monthly record. Other waste is logged in yearly reports. The waste volumes are weighed by waste management companies. We keep department-specific records on production waste. The generated waste is sorted at the plant according to separate waste management instructions. Most of the production waste is taken directly to specific locations for utilisation without any intermediate storage. Hazardous waste is stored separately at collection points in containers marked with warning labels. The waste generated can roughly be divided into three categories: landfill waste or non-recycled waste, utilised waste, and hazardous waste.

Waste utilisation

Waste that is suitable for utilisation or recycling is sorted at the point of origin and collected in separate, labelled containers. The recycling volumes are growing rapidly in our Russian plant: In 2011, the recycling rate was 64% of the generated waste, while in 2015 it was as high as 84%. At our Nokia factory, the waste utilisation rate is 99%.

Scrap tyres – i.e. tyres that do not meet our high standards of quality – are routed for utilisation directly from production. This is handled in Finland by Finnish Tyre Recycling Ltd. and in Russia by three partner companies.

Non-vulcanised scrap rubber is generated in the production stages preceding vulcanisation or curing. The non-vulcanised scrap rubber can be divided into two categories: compound mixing waste (scrap rubber) and other non-vulcanised rubber waste. Reuse applications for rubber include products with non-critical material requirements, such as impact padding and conveyor belts.

The sources of plastic waste include packaging materials and the plastic used for separating materials in the production departments.

We send wooden packages and pallets for reuse, energy generation, or composting. The main source of scrap wood is the raw material storage as much of the raw materials arrive at the plant on wooden pallets or in wooden boxes.

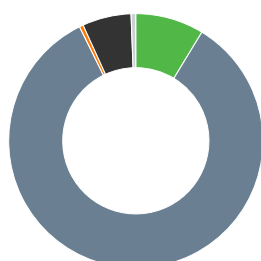
We mainly obtain scrap iron and steel from discarded machinery and equipment. We also recycle waste paper and cardboard and deliver biodegradable waste for composting.

Landfill waste

Mixed waste that cannot be utilised or recycled is taken to a landfill. A total of 27.4 tonnes of landfill waste were generated in our facilities in Nokia and 1,531 tonnes in Vsevolozhsk. We aim to reduce the amount of landfill waste even further by sending the waste we generate to recycling and reuse.

Wastes by disposal method

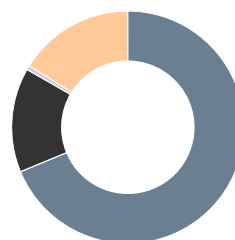
Nokia



Reuse	8.7%
Recycling	84%
Composting	0.5%
Recovery as energy	6.2%
Landfill	0.6%

Wastes by disposal method

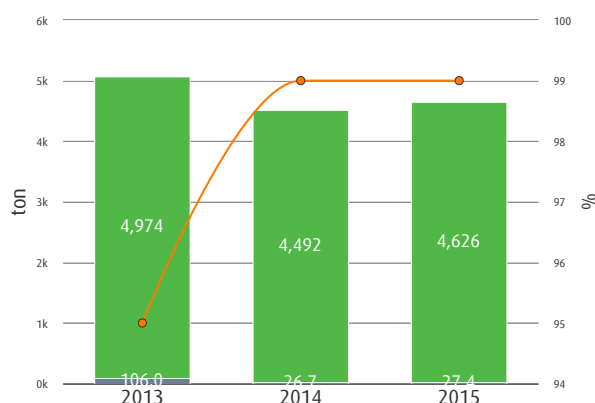
Vsevolozhsk



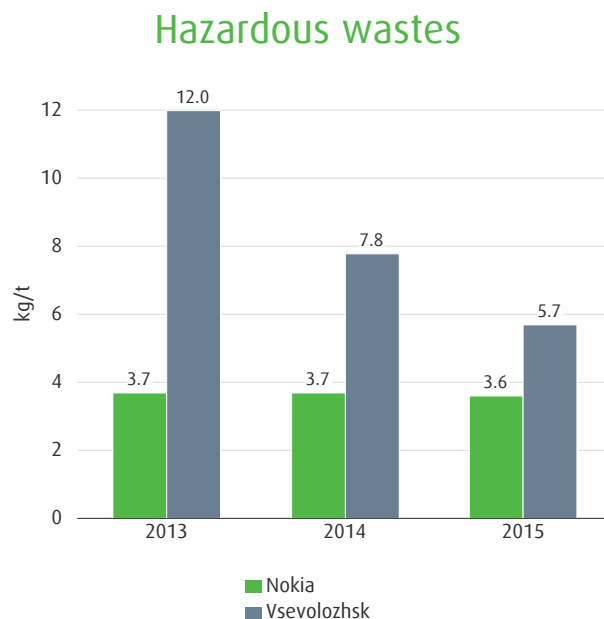
Reuse	0%
Recycling	68.7%
Composting	0%
Recovery as energy	14.5%
Incineration (mass burn)	0.6%
Landfill	16.1%

Amount of wastes

Nokia



Utilized wastes	
Landfilling	
Utilization %	



Hazardous waste

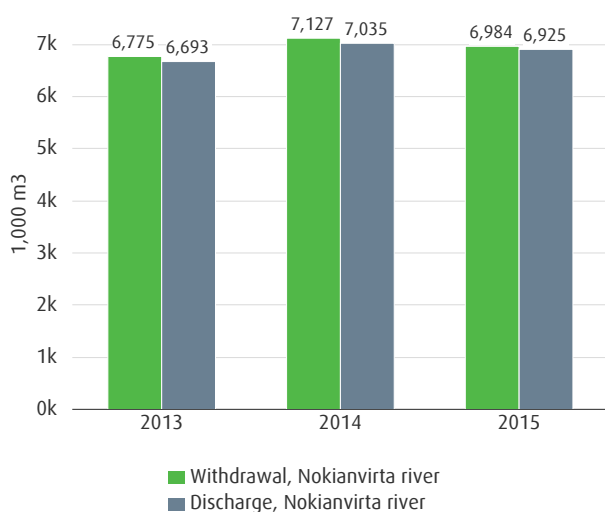
We deliver all hazardous waste to an authorised processing plant. In 2015, a total of 200 tonnes of hazardous waste were generated in our facilities in Nokia and 695 tonnes in Vsevolozhsk. Roughly half of this is blade seal oil from compound mixing machines (so-called box grease). The consumption of these oils is directly dependent on the manufactured rubber volumes. Other types of waste classified as hazardous include oily waste, waste chemicals, waste oil, fluorescent tubes, and batteries. Approximately 90% of the hazardous waste generated in our Nokia facilities is reused for energy.

Wastewater and cooling water

Large amounts of water are used for cooling in the tyre manufacturing processes. Our Vsevolozhsk plant uses municipal water for cooling. The Nokia plant takes cooling water from the nearby Nokianvirta river and discharges it back into the river after use. The cooling water has no contact with chemicals at any stage and, therefore, is not contaminated when it returns to the river. The consumption of cooling water depends on the temperature of the river water, which makes it impossible to set a numeric target for it. Wastewater from the plant is conveyed to the municipal treatment plant of the town of Nokia. The amount of cooling water discharged into the river and wastewater discharged into the municipal sewerage are shown in the adjacent graph.

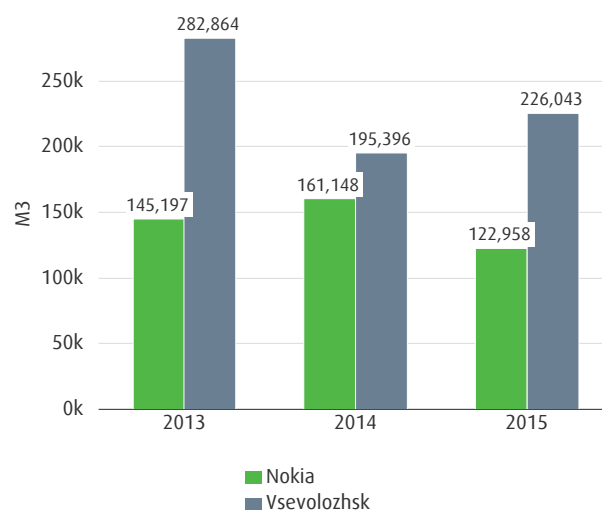
Cooling water

Nokia



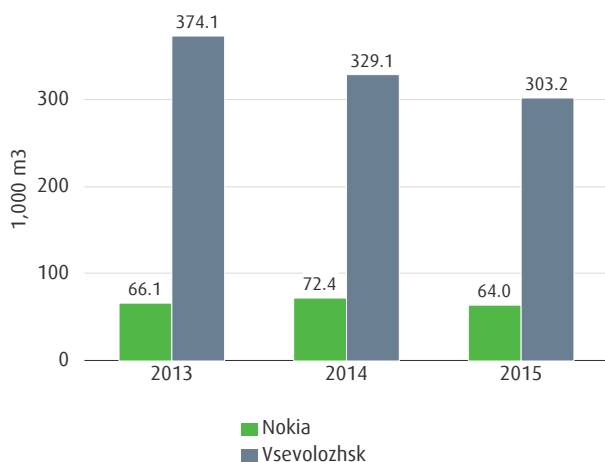
Water discharge

Sewage



Total water withdrawal by source

Municipal water



We take samples annually from the cooling water that is discharged into Nokianvirta as well as the wastewater that is conveyed to the municipal treatment plant in order to verify the water quality. The water pumped into the town of Nokia's sewerage system is fairly typical sanitation water. The water from all of the cooling water drains has been practically clean. No analysable amounts of oil or solvents or any other indications of effluent load were detected in 2015. Our Vsevolozhsk plant also regularly analyses the wastewater it discharges into the sewerage.

Continuous improvement

We have several ongoing waste reduction projects in various production departments. In recent years, our focus has shifted from one-off waste projects to continuous improvement efforts. We weigh production waste (non-vulcanised scrap rubber) separately for each category and enter the data into a database by using a bar code scanner. We use this database for monitoring the generated daily amount of waste per each category, which enables taking immediate measures if we detect any deviations. By utilising online reporting, the total amount of waste and the six most significant sources of waste are now reported each morning during the production staff

meeting, instead of the previous monthly reports. The amount of waste is one of the key indicators monitored daily by the management, and appropriate improvement measures are expected of production supervisors for lowering the volume of waste.

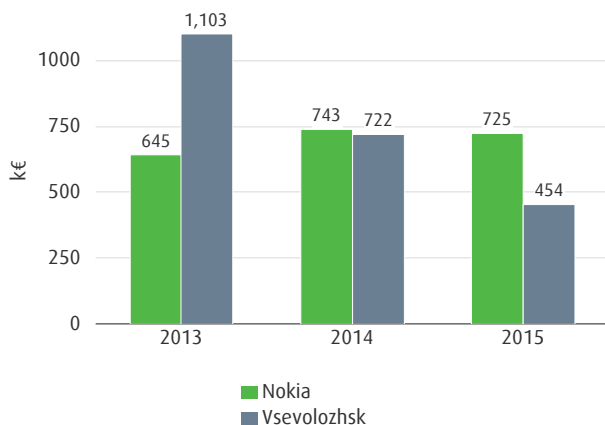
Environmental costs

Environmental costs comprise the expenses and investments that are related to air, soil and water protection, waste management, management of environmental issues and noise reduction. The graph below presents our environmental administration costs, emissions processing costs and the paid monetary compensation in relation to environmental permits and legislation.

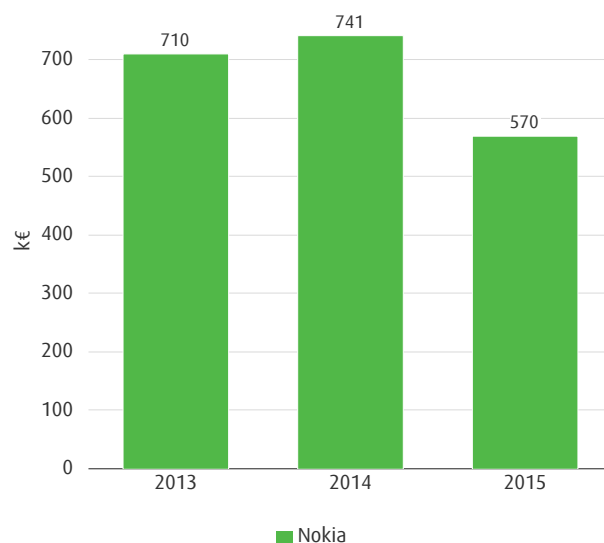
In 2015, our factory in Vsevolozhsk was issued a fine of €13,000 for exceeding the emission limit in waste water.

Total environmental protection expenditures

Waste disposal, emission treatment and remediation



EHS management costs



Key measures in 2015

A summary of the most significant targets of Nokian Tyres' 2015 environmental programme and their implementation and targets for the year 2016 are presented in the adjacent table.

Object	Target in 2015	Status in 2015	Explanation/outcome
Statutory requirements	Implementation according to the Nokian Tyres' environmental permits and legislation	Completed according to plan	
VOC emissions	Compliance with VOC-directive, ensuring usability of new incinerator	Not in compliance with VOC-directive, incinerator in use in late February	VOC emissions were 51% of the used solvent volume (the limit is <25%) mainly due to by-pass in January and February
Energy	Analysing energy saving potentials and the related action plan	Analysis and action plans done by departmental energy efficiency groups	We establish energy efficiency groups to every department, updating and implementation of action plans are on the responsibility of those groups
Environmental risks	Updating the environmental risk assessment (Nokia)	Implemented	No relevant changes
Wastewater	Reducing pollutants in wastewater (Vsevolozhsk)	Assessment done	Implementation of assessment results in 2016
Chemical safety	Updating MSDS database according CLP-legislation.	Implemented	
Safety audits and monitoring the use of chemicals	2 audits/department	Implemented	
Materials development	Ensuring that no Substances of Very High Concern as referred to in REACH are contained in the products	Implemented	No Substances of very High Concern are used in production
Increasing environmental awareness among the personnel	According to the plants' environmental programmes	Implemented	

Key measures in 2016

Object	Target in 2016
Statutory requirements	Implementation according to the Nokian Tyres' environmental permits and legislation
VOC emissions	Compliance with VOC-directive, ensuring usability of new incinerator
Energy	Implementing energy saving actions
Wastewater	Reducing pollutants in wastewater (Vsevolozhsk)
Chemical safety	Chemical safety report according to Seveso III directive for Nokia factory
Environmental audits and monitoring the use of chemicals	2 audits/department
Materials development	Ensuring that no Substances of Very High Concern as referred to in REACH are contained in the products
Increasing environmental awareness among the personnel	According to the plants' environmental programmes
Greenhouse gas emissions	Determining scope 3 emissions

Other locations

Each Vianor outlet complies with the local laws and regulations. Waste is sorted and delivered for reuse whenever technologically and economically feasible. The most significant environmental impacts of Vianor

outlets are waste and energy consumption. In relation with energy-efficiency audits in the group, we have decided to conduct a focused energy consumption assessment in three Vianor outlets in 2016. In addition, our sales companies and Vianor outlets pay attention to the efficiency of product deliveries.

Your tyre selection matters – the environmental effects of tyres

Everything that you see when you look around has been transported on tyres at least once. What kind of tyres do you yourself use to get somewhere each day? Most of a tyre’s environmental impacts are generated during use. We take responsibility for the environmental impacts of our operations and our products throughout their lifecycle.

The right tyre choices reduce the environmental impact

Tyres make the world go round – everything that we see when we look around has been transported on tyres at least once. We need tyres for transportation several times each week, and everyday life as it is today would not be possible without tyres. What kind of tyres do you yourself use to get somewhere each day?

The use of fossil fuels, gasoline, and diesel fuel comprise approximately three fourths of human

carbon emissions. Carbon dioxide is the most significant greenhouse gas that is generated by traffic. When a tyre rolls against the road surface, the generated friction is called the rolling resistance. The higher the rolling resistance is, the higher the fuel consumption. Therefore, the tyre has a direct influence on fuel consumption and traffic emissions. Fuel consumption during driving is the single most significant environmental effect during the use of a tyre. The right tyre choices lower fuel consumption and reduce the amount of carbon dioxide released into the air. The determined long-term development carried out by Nokian Tyres has strongly emphasised the reduction of the rolling resistance.

Your tyre choice affects

We all can influence our surroundings and the world by seemingly minor choices.

Your tyre choice matters	What you can do	What we are doing
Your safety <ul style="list-style-type: none">• The safety of everyone in your car as well as other people on the road	Demand <ul style="list-style-type: none">• Tyres with the best safety innovations	On the frontline of safety <p>Our uncompromising product development and testing result in technical innovations that improve the properties of tyres and increase the safety, comfort, and eco-friendliness of driving.</p>
Your well-being	<ul style="list-style-type: none">• Tyres that are quiet	Quiet tyres

<ul style="list-style-type: none"> • Driving comfort and peace of mind 	<ul style="list-style-type: none"> • Tyres that have been manufactured without any toxic or carcinogenic chemicals 	<p>After fuel consumption, tyre noise is the second most significant environmental effect during the use of a tyre. Our tread patterns feature a number of noise-reducing innovations. The placement of tread blocks, new types of tread compounds, protrusions in longitudinal grooves, and noise cavities all reduce tyre noise.</p>
<ul style="list-style-type: none"> • Noise levels in your car and the surrounding environment 	<ul style="list-style-type: none"> • Tyres that have been manufactured by only using purified, low-aromatic oils 	<p>Clean raw materials</p>
<ul style="list-style-type: none"> • Quantity and quality of road dust 	<ul style="list-style-type: none"> • Information about the raw materials used in your tyres, tyre makers' working conditions, and the environmental impacts of tyre production 	<p>We were the world's first tyre manufacturer to introduce a manufacturing method that only uses purified, low-aromatic oils. In order to improve grip in icy and wet conditions, we use a renewable raw material – canola oil – in our compounds.</p>
<p>Your finances</p>	<p>Drive wisely and rotate your tyres</p>	<p>Transparent operations</p>
<ul style="list-style-type: none"> • Fuel consumption per every kilometre 	<p>You can lower your fuel consumption by up to 0.3–0.5 litres per one hundred kilometres by regularly checking your tyre pressure and selecting tyres with low rolling resistance. To further extend the safe life of your tyres, rotate them mid-season.</p>	<p>We monitor all of our operations with sustainable development in mind. All of our raw material suppliers go through the same stringent process. In accordance with our purchasing policy, our product procurement process includes determining the suppliers' commitment to environmental issues. We require that our contract partners commit to our principles. Transparency also means fostering a spirit of fairness and enthusiasm in our work community, and being a good neighbour.</p>
<ul style="list-style-type: none"> • Wear resistance of tyres 	<p>Recycle</p>	

<ul style="list-style-type: none"> • Condition and durability of roads <p>You can also influence</p> <ul style="list-style-type: none"> • Raw material consumption • Overall consumption of energy and fuel • Amount of waste <p>Your choices influence your surroundings and the world!</p>	<p>The raw materials that have been used in your tyres deserve a second life. What you no longer need can be used elsewhere.</p>	
--	--	--

Rolling resistance impacts the environment as well as your finances

The rolling resistance of tyres may differ greatly. A difference of approximately 40% in rolling resistance results, on average, in a difference of 5–6% in fuel consumption. Such a difference may occur, for example, between tyres with a class A and class F fuel efficiency rating, respectively. Therefore, the right tyre can save the environment and money. With the current fuel prices, a tyre with a more economic

rolling resistance can save approximately €300 over a driving distance of 40,000 kilometres. A wise choice of tyres and a careful driving style also help to significantly reduce the CO₂ emissions that are generated during driving.

Rolling resistance means the energy consumed by the deformation during the road contact of the tyre. This deformation, and the amount of energy it requires, can be influenced with structural and material choices in tyre design. Examples of factors that increase energy consumption include the tyre temperature, tyre pressure, load index and tyre wear, as well as air resistance and turbulence due to the driving speed.

Rolling resistance affects the environment throughout the tyre's useful life. Light rolling corresponds to lower fuel consumption and CO₂ emissions. Rolling resistance is measured in terms of a rolling resistance coefficient: the greater the coefficient, the heavier the tyre rolls. At the moment, class C is the most common fuel efficiency rating for Nokian Tyres' passenger car tyres according to the EU tyre label. The EU tyre label reports fuel efficiency on a scale from A to G. In the near term, improving the fuel economy of tyres is one of the most significant product development targets in the company.

Only about 20–30 per cent of the energy in fuel can be used to move a vehicle. This energy is used in accelerating and braking, but also in overcoming rolling resistance and air resistance.

Tyre lifecycle

Lifecycle refers to the different stages a product undergoes from manufacture to use and to removal from service or, in other words, from raw material to waste. The lifecycle of a tyre begins from a caoutchouc tree in the southern hemisphere, in Indonesia or Thailand, for example. The lifecycle spans the manufacture of raw materials and products, storage, and several 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.

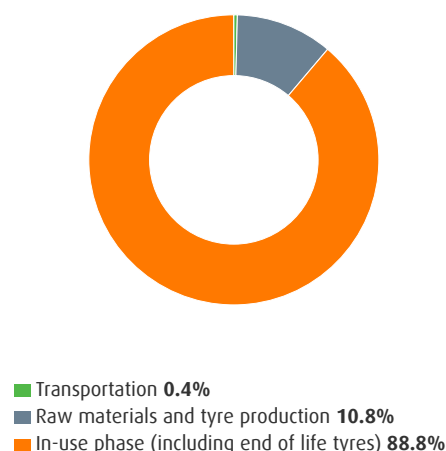
The outset for our environmental protection is the lifecycle approach. This means that we take

responsibility for the environmental impacts of our operations and our products throughout their lifecycle. In accordance with our purchasing policy, our product procurement process includes determining the suppliers' commitment to environmental issues. In 2014, 60 per cent of our raw material suppliers had the ISO14001 certification. All contract partners, such as contractors and subcontractors, must be committed to Nokian Tyres' principles.

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

The most significant life-cycle environmental impacts of a tyre are caused by the vehicle's fuel consumption, which also generates emissions into air. Therefore, the following graph presents the environmental impacts of a tyre as the carbon footprint.

Carbon footprint over a tyre's lifecycle



INPUT	PRODUCTION	USE	END OF LIFE
Raw materials ● ● ●	VOC ● ●	Fuel consumption ● ● ●	Impacts on scenery ●
Energy ● ●	Particles ●	Tyre noise ●	Tyre incineration ●
Water ●	Odour ●	Impacts on terrain ●	Utilisation of used tyres ●
	Noise ●	Road erosion ●	Retreading ●
	CO ₂ ●	Tyre particles ●	
	Utilized waste ●		
	Hazardous waste ●		
	Landfill waste ●		
	Cooling water ●		

● Low

● ● Moderate

● ● ● Substantial

Global

Regional

Local

Where do tyres end up after use?

Approximately 3.2 million tonnes of used tyres are discarded each year in Europe. The upside for the environment is that the tyres are not worthless and can serve various reuse or recycling applications. They can be used, for example, for building noise barriers on motorways or to form a component in the sub-course of a horse-back riding arena for increasing its elasticity.

If tyres are not appropriately recycled, they will end up in nature or pile up in people's garages. In 1995, Nokian Tyres and other companies in the tyre industry established the Finnish Tyre Recycling Ltd in order to promote the centralised collection and utilisation of tyres nationally. The recycling rate of tyres in Finland is close to 100%. In all of Europe, for example, 95% of tyres are recycled and non-recycled tyres are taken to landfills. In Russia, the tyre recycling rate is low,

and Nokian Tyres has been actively participating in discussions for improving this. In 2015, the discussions led to the completion of new recycling legislation. According to the newly enacted legislation, the share of tyres recycled in Russia must be, at a minimum, equivalent to 15% of the total sales in Russia.

Most of the recycled tyres are utilised for their material; they are crushed or granulated to replace rock materials in various highway construction and civil engineering applications. One of the best ways to recycle tyres is to retread them. If the carcass of a tyre is undamaged, it can be retreaded – up to two or even four times for bus and truck tyres. Another way to utilise recycled tyres is to combust them for energy, as the thermal value of tyres is close to that of oil. New ways to recycle and utilise tyres are constantly being sought.

Independent Assurance Report

This document is an English translation of the original Finnish assurance report.

To the Management of Nokian Tyres plc

We have been engaged by the Management of Nokian Tyres plc (hereafter "Nokian Tyres") to provide limited assurance on Nokian Tyres' corporate sustainability information from the reporting period 1 Jan – 31 Dec 2015, which has been presented on Nokian Tyres' website in a pdf-format report "Corporate Sustainability Report 2015" as well as on specifically indicated web pages (hereafter "Corporate Sustainability Information").

The evaluation criteria used for our assurance are the *Global Reporting Initiative (GRI) Sustainability Reporting Guidelines G4* (hereafter "Criteria").

The Management of Nokian Tyres is responsible for the preparation and presentation of the Corporate Sustainability Information in accordance with the Criteria. The Management of Nokian Tyres is also responsible for such internal control as the Management determines is necessary to enable the preparation of Corporate Sustainability Information that is free from material misstatement, whether due to fraud or error.

Our responsibility is to carry out an engagement to express an independent conclusion on the information subject to the assurance based on the work performed. We have conducted our engagement in accordance with the International Standard on Assurance Engagements ISAE 3000. We are independent from Nokian Tyres according to the ethical requirements in Finland and we have complied with other ethical requirements, which apply to the engagement conducted. We apply the International Standard on Quality Control 1 (ISQC 1) and accordingly maintain a comprehensive system of

quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We do not accept or assume responsibility to anyone other than Nokian Tyres for our work, for this assurance report, or for the conclusions we have reached.

Limitations of the engagement

Data and information related to corporate sustainability are subject to inherent limitations applying to data accuracy and completeness, which are to be taken into account when reading our assurance report. The presented Corporate Sustainability Information is to be considered in connection with the explanatory information on data collection, consolidation and assessments provided by Nokian Tyres. Our assurance report is not intended for use on its own in evaluating Nokian Tyres' performance in executing the corporate sustainability principles Nokian Tyres has defined. To assess the financial state and performance of Nokian Tyres, the audited Financial Statement of Nokian Tyres for the year ended 31 December 2015 is to be consulted.

The work performed in the engagement

Our assurance procedures are designed to obtain limited assurance on whether the Corporate Sustainability Information is presented in accordance with the Criteria in all material respects. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Corporate Sustainability Information, and applying analytical and other evidence gathering procedures,

as appropriate. The evidence gathering procedures mentioned above are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement.

In our engagement we have performed the following procedures:

- Interviews with members of the Management of Nokian Tyres to reassert our understanding of the connection between Nokian Tyres' corporate sustainability procedures and Nokian Tyres' business strategy and operations as well as corporate sustainability objectives;
- An assessment of the Corporate Sustainability Information's conformity with the principles of the Criteria for defining content and reporting quality;
- An assessment of coverage of the material aspects selected for the Corporate Sustainability Information and the definition of reporting boundaries in the context of Nokian Tyres' business operations and sector;
- An assessment of data management processes, information systems and working methods used to gather and consolidate the presented Corporate Sustainability Information, and a review of Nokian Tyres' related internal documents;

- A comparison of the presented Corporate Sustainability Information to underlying rules of procedure, management and reporting systems as well as documentation;
- A review of the performance data and assertions presented in the Corporate Sustainability Information, and an assessment of information quality and reporting boundary definitions from the reporting period and considering subsequent events;
- Testing of data accuracy and completeness through samples from the Group's information systems and original numerical information received from the Group companies;

Based on the assurance procedures performed, nothing has come to our attention that causes us to believe that the information subject to the limited assurance engagement is not properly prepared, in all material respects, in accordance with the Criteria.

Helsinki, 5 April 2016

KPMG Oy Ab

Lasse Holopainen
APA

Tomas Otterström
Partner

Nokian Tyres plc publishes its Corporate Sustainability Report in accordance with the CORE option of the GRI G4 Guidelines

Indicator G4	Content	Where to find?
	Strategy and analysis	
G4-1	Managing director's review	From the President and CEO
	Organizational profile	
G4-3	Name of the organisation	Nokian Tyres in brief
G4-4	Most important trademarks, products and services	Nokian Tyres in brief
G4-5	Location of the organisation's head office	Nokian Tyres in brief
G4-6	Area of operations	Nokian Tyres in brief
G4-7	Operational structure of the organisation	Nokian Tyres in brief
G4-8	Market areas	Nokian Tyres in brief
G4-9	Size of the reporting organisation	Nokian Tyres in brief
G4-10	Total number of employees by employment contract and gender	Good HR management
G4-11	Percentage of total employees covered by collective bargaining agreement	Data not yet cathered in corporate level.
G4-12	Organization's value chain	Value chain
G4-13	Signifi cant changes to the size, structure, or ownership structure of the organisation	No significant changes during the accounting period.
G4-14	Precautionary approach or principle addressed by the company	Sustainability management
G4-15	Commitment to external corporate social responsibility initiatives	Materiality assessment at Nokian Tyres
G4-16	Memberships in organisations	Materiality assessment at Nokian Tyres

	Identified material aspects and boundaries	
G4-17	Ownership structure and form of company	Financial Statement Bulletin 2015
G4-18	Defining the report content and aspect boundaries	Materiality assessment at Nokian Tyres
G4-19	Material aspects	Materiality assessment at Nokian Tyres
G4-20	Aspect boundary within the organization	Materiality assessment at Nokian Tyres
G4-20	Aspect boundary within the organization	Value chain
G4-21	Aspect boundary outside the organization	The report does not include an external accounting of the organization.
G4-21	Aspect boundary outside the organization	Value chain
G4-22	Causes for and impact of information deviating from previous reports	Materiality assessment at Nokian Tyres
G4-23	Most important changes to the scope of the report, its delimitations or measurement methods	Materiality assessment at Nokian Tyres
	Stakeholder engagement	
G4-24	Stakeholders of the organisation	Stakeholder work
G4-25	Definition and selection criteria for stakeholders	Stakeholder work
G4-26	Principles of stakeholder activities	Stakeholder work
G4-27	Topics brought up by stakeholders	Stakeholder work
	Report profile	
G4-28	Reporting period	Materiality assessment at Nokian Tyres
G4-29	Time of publication of the previous report	Certificates, Reports and Awards
G4-30	Report publication frequency	Materiality assessment at Nokian Tyres
G4-31	Contact information	Nokian Tyres in brief
G4-32	GRI content comparison	This table

G4-33	External assurance	Materiality assessment at Nokian Tyres
G4-33	External assurance	Independent Assurance Report
	Governance	
G4-34	Governance structure of the organisation	Financial management at Nokian Tyres
G4-48	Highest governance body approving organization's sustainability report	Top management approves sustainability report annually.
	Ethics and integrity	
G4-56	Organization's values, principles and standards	Hakkapeliitta Way
	Economic	
G4-DMA	Disclosure of the Management approach	Financial management at Nokian Tyres
G4-EC1	Produced and distributed direct financial added value	Profitable but sustainable growth
G4-EC1	Produced and distributed direct financial added value	Effects on society
	Indirect financial impacts	
G4-DMA	Disclosure of the Management approach	Finance
G4-DMA	Disclosure of the Management approach	Effects on society
G4-EC8	Key indirect financial impacts and their scope	Effects on society
	Materials	
G4-DMA	Disclosure of the Management approach	Sustainability management
G4-DMA	Disclosure of the Management approach	Sustainable safety
G4-DMA	Disclosure of the Management approach	Safe production
G4-DMA	Disclosure of the Management approach	Environmental impact of tyre plants
G4-EN1	Materials used by weight or volume	Safe production
G4-EN2	Percentage of materials used that are recycled input materials	Safe production

	Energy	
G4-DMA	Disclosure of the Management approach	Sustainability management
G4-DMA	Disclosure of the Management approach	Materiality assessment at Nokian Tyres
G4-EN3	Energy consumption within the organization	Safe production
G4-EN5	Energy intensity	Safe production
	Water	
G4-DMA	Disclosure of the Management approach	Sustainability management
G4-DMA	Disclosure of the Management approach	Materiality assessment at Nokian Tyres
G4-EN8	Total withdrawal by source	Environmental impact of tyre plants
	Biodiversity	
G4-DMA	Disclosure of the Management approach	Sustainability management
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	Sustainability management
	Emissions	
G4-DMA	Disclosure of the Management approach	Sustainability management
G4-DMA	Disclosure of the Management approach	Materiality assessment at Nokian Tyres
G4-EN15	Direct greenhouse gas emissions	Environmental impact of tyre plants
G4-EN16	Indirect greenhouse gas emissions	Environmental impact of tyre plants
G4-EN18	Greenhouse gas (GHG) emissions intensity	Environmental impact of tyre plants
G4-EN21	Nitrogen and sulphur dioxide emissions and other significant emissions	Environmental impact of tyre plants

	Effluents and waste	
G4-DMA	Disclosure of the Management approach	Sustainability management
G4-DMA	Disclosure of the Management approach	Materiality assessment at Nokian Tyres
G4-EN22	Total water discharge by quality and destination	Environmental impact of tyre plants
G4-EN23	Total weight of waste by type and disposal method	Environmental impact of tyre plants
	Products and services	
G4-DMA	Disclosure of the Management approach	Materiality assessment at Nokian Tyres
G4-DMA	Disclosure of the Management approach	Product safety and quality
G4-DMA	Disclosure of the Management approach	Your tyre selection matters
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	Your tyre selection matters – the environmental effects of tyres
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	World on Wheels
	Compliance	
G4-DMA	Disclosure of the Management approach	Sustainability management
G4-DMA	Disclosure of the Management approach	Environmental impact of tyre plant
G4-EN29	Monetary value of fines for non-compliance with environmental laws and regulations	Environmental impact of tyre plant
	Overall	
G4-DMA	Disclosure of the Management approach	Environmental impact of tyre plant
G4-EN31	Total environmental protection expenditures and investments by type	Environmental impact of tyre plants

	Environmental Grievance Mechanisms	
G4-DMA	Disclosure of the Management approach	Environmental impacts of tyre plant
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	Environmental impact of tyre plants
	Social labour practises and decent work	
G4-DMA	Disclosure of the Management approach	Good HR management
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	Good HR management
	Occupational health and safety	
G4-DMA	Disclosure of the Management approach	Good HR management
G4-DMA	Disclosure of the Management approach	Sustainability management
G4-LA6	Number of accidents and occupational diseases, lost working days and absences	Good HR management
G4-LA6	Number of accidents	Good HR management
G4-LA6	Type of injury, occupational diseases and total number of work-related fatalities, by region and by gender	Data not yet cathered in corporate level.
	Training and education	
G4-DMA	Disclosure of the Management approach	Good HR management
G4-LA10	Personnel expertise development programmes and learning action programmes	Good HR management
G4-LA11	Development discussions	Good HR management
	Diversity and equal opportunity	
G4-DMA	Disclosure of the Management approach	We build success together
G4-DMA	Disclosure of the Management approach	Good HR management
G4-DMA	Disclosure of the Management approach	Ethical guidelines
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	Composition of governance bodies
	Society	

G4-DMA	Disclosure of the Management approach	Impact on local communities
G4-S01	Operations with implemented local community engagement and development programs	It is not possible to calculate this indicator from our operations.
	Public policy	
G4-DMA	Disclosure of the Management approach	Materiality assessment at Nokian Tyres
G4-DMA	Disclosure of the Management approach	Ethical guidelines
G4-S06	Political contributions	Materiality assessment at Nokian Tyres
	Customer health and safety	
G4-DMA	Disclosure of the Management approach	Management of product safety
G4-DMA	Disclosure of the Management approach	Sustainable Safety
G4-PR1	Product and service categories for which health and safety impacts are assessed for improvement	Safe production
	Product and service labelling	
G4-DMA	Disclosure of the Management approach	Customer relations and delivery reliability
G4-PR5	Results of surveys measuring customer satisfaction	Customer relations and delivery reliability

