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BEFORE PRINTING THIS DOCUMENT.

NOKIA

NOKIA SUSTAINABILITY REPORT 2011

GREAT SUSTAINABLE MOBILE PRODUCTS

GOOD FOR PEOPLE, GOOD FOR PLANET

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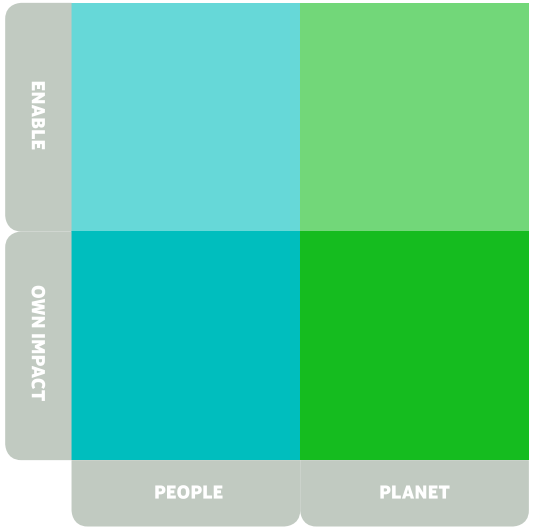
For Nokia, sustainability means maximizing the positive, enabling effect of our mobile technology on people and planet, while minimizing the possible negative impact of our activities.



Thank you for taking the time to read our report. Within these pages, you'll find a wealth of information about our efforts to create a sustainable business. Traditionally, sustainability means balancing economic, environmental and social priorities so that the needs of the present do not compromise the needs of the future. For Nokia, this means maximizing the positive, enabling effect of our mobile technology on people and planet, while minimizing the possible negative impact of our activities. Responsible environmental and social practices are integrated into everything we do. From the devices we build and the suppliers we choose, to our mobile solutions that enhance people's education, livelihoods and health. In sum, we strive to create value for people, planet and Nokia. Open and transparent reporting of our progress is a key part of our sustainability activities.

This 2011 report (for the fiscal year 2011) covers the key ethical, socio-economic and environmental areas most relevant to our business and our stakeholders. The activities are split into the themes of people and planet. For both, we first discuss our enabling effect and then our own impact.

REPORTING SCOPE

Nokia has published corporate responsibility reports annually since 2002 and we've reported our environmental activities continually since 1999. Nokia Siemens Networks (NSN), which is approximately 50% owned by Nokia, publishes its own detailed Sustainability Report on their website, and is excluded in this report unless otherwise indicated. In addition to the Nokia and NSN reports and our separate data tables, we have consolidated some key data from both companies (Nokia Group) in one data table, which can be found in the Key Data section of this report. For the materiality process and analysis, identifying the most relevant topics included into our sustainability scope and this report, turn to chapter 1.3.1, 'Identifying key sustainability topics'.

INTEGRATED REPORTING AND ADDITIONAL SOURCES FOR SUSTAINABILITY INFORMATION

As sustainability matters are not separate from other key corporate information, we have also integrated key sustainability related data into our annual report on Form 20-F for 2011. This has been filed with the United States Securities and Exchange Commission. During 2011, key sustainability issues have also been reported in the Operating highlights section of Nokia's quarterly results and in various press releases throughout the year. Details on our financial performance are published in quarterly results announcement and annual financial reports, such as in our Form 20-F, available on our website.

For quick reference, we have listed below some key sources of Nokia sustainability information:

- **NOKIA'S ANNUAL REPORT ON FORM 20-F**
- **CARBON DISCLOSURE PROJECT WEBSITE THAT PROVIDES DETAILED INFORMATION ON NOKIA'S CLIMATE CHANGE RELATED ACTIVITIES AND PERFORMANCE**
- **NOKIA SIEMENS NETWORKS' SUSTAINABILITY REPORT**
- **OUR GLOBAL WEBSITE THAT PROVIDES MORE DAY-TO-DAY INFORMATION ABOUT OUR ACTIVITIES**

Nokia also encourages its suppliers to report their sustainability performance, a topic discussed in the 'Nokia and suppliers' section of this report.

PricewaterhouseCoopers Oy (PwC) has provided assurance on selected Nokia's sustainability information included in this report . Please see 'Independent assurance'. For Global Reporting Initiative (GRI) index and compliance, please see chapter 5 at the end of the report.

YOUR FEEDBACK

We welcome your views on our activities and our performance. If you'd like to share your opinions, please contact the Nokia sustainability team at sustainability.feedback@nokia.com, or respond to the feedback questionnaire available on our website.

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HELLO THERE,

Nokia undertook a monumental shift in 2011, embarking upon a new strategy that reflected the sea change in the mobile industry and our intent to both stay ahead of, and capitalize on, the challenges facing us. I'm proud to say that even in a year of such big change, Nokia's commitment to sustainability remained firm. In fact, it was further strengthened by the new strategy, where we saw clear evidence of progress before the year was out.

NEW STRATEGY

Nokia's strategy is based around three main areas. First, we are partnering with Microsoft to deliver industry-leading smartphones using the Windows Phone operating system. In October we already saw the first fruit of our labors with the launch of the Nokia Lumia 800 and 710, and we followed this up with further Lumia launches, the Nokia Lumia 900 and 610 in early 2012. All our new Lumia phones fully meet our strict environmental requirements.

Second, we aim to connect the next billion to the Internet and information, bringing consumers with limited economic means the full benefits of mobile communications. The lines between a smartphone and a feature phone are blurring, and people, regardless of where they are based, want to do more with their phones. At Nokia World we launched our Asha range of devices, which offer consumers the smartphone-like features desired in developed markets – touch screens, QWERTY keyboards and games – but at lower price points. We augmented our Asha line with further launches in February, 2012.

Finally, Nokia is focusing on what we call future disruptions – technology, business, and process areas that we have identified as having a profound influence on our industry. We will invest in these areas to ensure we are positioned as a leader in the next era of computing innovation and remain ahead of the competition.

SUSTAINABILITY IN FOCUS

From a sustainability point of view, these three pillars all have a role to play in helping us achieve our goal: to make great, sustainable mobile products; devices that incorporate the best environmental and social practices and enable people to improve their lives. Perhaps the greatest resonance, however, can be found in the work we are doing to connect the next billion.

Nokia strongly believes that access to communication and information is a right, not a privilege. Mobile communications technology has the power to strengthen public life and the role of citizens around the globe, and it has proven time and again that it can democratize the spread of information. This belief, this ethos, runs deep within all of our employees, and we had numerous examples of this on display in 2011.

In South Africa, we are very proud of the achievements of Nokia Mobile Mathematics, a free-of-charge service that turns your mobile device into a text and exercise book. Students get access to theory and a database of thousands of exercises, solutions, and competitions. Nokia has found that students who use the service show improvement in their grades, and teachers get a better understanding of their pupils' strong and weak points. In 2011, 25,000 Grade 10 students benefited from the solution, and Nokia plans to double this in 2012 to reach 50,000 Grade 10 and 11 students.

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1.1 GREETINGS FROM NOKIA'S CEO

Nokia is also active in driving environmental sustainability, working both with governments as well as with other multinational companies. According to the United Nations Environment Programme, about 50 million tonnes of electronic waste is generated each year, and E-waste is the fastest growing waste stream.

In Kenya, we commissioned a report in 2011 that showed only 14% of citizens are aware that mobile phones can be recycled, and only 2% actually recycle their old mobile phones. We followed this up with a campaign to drive awareness around mobile recycling, including advertising, press conferences, and an outreach to bloggers and citizens. Surveys show that Nokia is seen as the greenest brand in Kenya.

This is part of a broader global effort from us: Nokia operates the world's largest voluntary take-back program for old mobile devices, with more than 6,000 collection points in almost 100 countries. We accept all brands of phones, which are then collected and sent to approved Nokia recyclers, where they are recycled in a sustainable manner. Today, all Nokia mobile phones are made using materials that can be recovered and reused as materials, or to generate energy in the recycling process.

But sustainability means more than this. Following our strategy announcement, we announced a number of planned changes to our operations and, unfortunately, this had an impact on our personnel. We responded with the creation of the Bridge program, which aims to support employees during tough times by focusing on three areas in particular:

- Re-employment of employees affected by Nokia's change in strategy
- The local communities where our operations have changed
- The long-term of Nokia and how we create value for society at large

Bridge offers a wide range of possibilities, from traditional individual re-employment support to investments that encourage entrepreneurship, re-training and innovation which can fuel new growth for those communities impacted. The highest priority is the reemployment of Nokia employees, either inside or outside the company, or by promoting the creation of new businesses by those who are leaving. In Denmark, for example, thanks to Bridge we have seen the creation of over 20 start-ups following our announcement to close our facilities there, and the number is growing.

CHALLENGES REMAIN

These examples give just a taste of some of the work that we did during the year, and many more cases can be found in this report. I'd like to stress that while our change journey started in 2011, it is far from over. We entered 2012 in the heart of our transition, showing clear progress versus our strategy but operating in a fiercely competitive industry that is in constant flux.

On the sustainability front, challenges also remain. We are focused on honing the direction we give our suppliers and measuring their performance, ensuring that they closely follow our comprehensive set of Nokia Supplier Requirements for environmental and social performance.

And unfortunately the renewable energy market has developed more slowly than expected. That said, Nokia still showed progress on this front in 2011, installing fuel cells at our facility in Sunnyvale in the U.S. and a small biofuel station in Chennai, India. Nokia has increasingly purchased green electricity since 2006, and altogether, in 2011 our renewable electricity share was equal to 40%, which reduced our CO_2 emissions by 54,500 tonnes.

Like all Nokia employees, I take great pride in the work we do to improve people's lives around the world. And yet, in many areas, we've only scratched the surface in terms of what we can do. It's the scale of this challenge that drives and motivates us on a daily basis, and I look forward to sharing more of our progress and good news with you in the future.

Best regards,
Stephen Elop

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WHO WE ARE

Nokia is a global leader in mobile communications whose products have become an integral part of the lives of people around the world. Every day, more than 1.3 billion people use their Nokia to capture and share experiences, access information, find their way or simply to speak to one another. Nokia's technological and design innovations have made its brand one of the most recognized in the world. Nokia Siemens Networks, jointly owned by Nokia and Siemens, is one of the leading global providers of telecommunications infrastructure hardware, software and services.

We operate a global network of production facilities for mobile products and network infrastructure in eight countries as well as a global network of sales, customer service and other operational units. For mobile products, we have sales in more than 160 countries. Nokia has made significant investments into research and development and has been one of the leading innovators in the industry over the past two decades. For mobile products, we operate several major research and development and software development facilities, with key sites in China, Finland, Germany and the United States.

STRUCTURE AT DECEMBER 31, 2011

We have three businesses: Devices & Services (which includes the Smart Devices and Mobile Phones business units), Location and Commerce and Nokia Siemens Networks.

We adopted our current operational structure during 2011. Smart Devices and Mobile Phones focus on the areas of smartphones and mass market feature phones, respectively, while Location and Commerce, which was formed by combining NAVTEQ with our Devices and Services social location services operations, focuses on the development of location-based services and local commerce.

STRATEGY

Nokia's strategy to generate sustainable long-term growth is centered on the creation of great mobile products. We create products for virtually every demographic and every geography worldwide. Our strategy has three core elements: i) to win in smartphones; ii) to connect the "next billion" to the Internet and information; and iii) to continue to invest in future disruptions through long-term exploratory research into the future of mobility and computing. We outlined this new strategy in February 2011 in conjunction with the announcement of changes to our leadership team and operational structure which are designed to accelerate our speed of execution.

2011 AT-A-GLANCE (NOKIA GROUP LEVEL)

- Head office in Finland; R&D, production, sales, marketing activities around the world
- Total number of employees at year-end: 130,050 (Nokia Group)
- Major R&D and software development sites in China, Finland, Germany and the United States
- Sales in over 160 countries

FIGURE	2011 (MILLIONS OF EUROS)	2010 (MILLIONS OF EUROS)
NET SALES (GROUP)	38,659	42,446
NET SALES: DEVICES AND SERVICES	23,943	29,134
NET SALES: NOKIA SIEMENS NETWORKS	14,041	12,661
NET SALES: LOCATION AND COMMERCE	1,091	869
OPERATING PROFIT[1]	-1,073	2,070
EARNINGS PER SHARE, DILUTED[1]	-0.31	0.50

More Nokia and Nokia Group data is available in the Key Data section of this report. More information about our financials, organization and other key corporate information can be found from Nokia's annual report on Form 20-F for 2011.

[1] Location and Commerce operating loss in 2011 includes a goodwill impairment loss of 1,090 million Euros.

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1.3.1 IDENTIFYING KEY SUSTAINABILITY TOPICS

This report highlights Nokia's performance in the areas where business practices most affect society and the environment. The identification of our key sustainability topics – also called the materiality identification process – as well as the selection of topics to this report is based on a combination of factors:

- Our long legacy and experience working on sustainability issues gives us guidance on the key topics. We also take into account public debate and media and analyst interest in issues.
- Regular engagement with stakeholders and partners, to understand the issues that are most important to them. In 2011, we also conducted an online stakeholder survey, to further improve our understanding of our stakeholders' expectations and to better align our sustainability efforts and reporting with their priorities. Stakeholder engagement is a key component in identifying sustainability topics, and therefore we have dedicated an entire chapter 2.2.5 for it.
- Analyzing the global macro trends and sustainability challenges, including the UN Millennium Development Goals, and how Nokia can be part of the solution driving positive change, is a part of Nokia's annual planning process.
- Risk and opportunity assessments that help align our approach with our core business. (See 'Risk and Opportunity management', chapter 1.5.3)
- Participation in the Global eSustainability Initiative (GeSI) materiality analysis, an initiative that defines areas where the ICT sector can make the greatest contribution, using a combination of stakeholder and company interviews, desk research and workshops
- Global Reporting Initiative (GRI) guidelines, which provide a foundation for reporting and add topics most relevant to Nokia and our industry. See the 'GRI Index' at the end of the report.

Based on these factors, we have analyzed the shared value to people, planet and Nokia, and this forms a basis for our sustainability strategy and related target setting. The results of the analysis are represented in the following table, which summarizes the key topics of our sustainability work and the high level structure of this report.

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MATERIALITY MATRIX

Key topics and their impact to sustainable development, stakeholder interest and Nokia business.

The vertical axis represents the stakeholder view and the overall impact on sustainable development. The horizontal axis portrays the importance to Nokia's business. The topics most important to our stakeholders and to sustainable development, as well to our business, are therefore the ones closest to the top right hand corner. However, all the topics in this picture are very important in our sustainability work.

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1.3.2 OUR KEY SUSTAINABILITY TOPICS TABLE

In this table, we have summarized our key topics in 2011, their importance to sustainable development, stakeholder interest and Nokia's business. Also the key risk and opportunity areas are mentioned when relevant. Each subject is discussed in more detail in various sections of the report as indicated below.

NOKIA AND PEOPLE

TOPIC	IMPORTANCE
IMPROVING PEOPLE'S LIVES WITH MOBILE TECHNOLOGY	Nokia is uniquely placed to support people through its core business. Access to communication and information has huge benefits for people, and by connecting the next billion to the Internet and information, one of our strategic goals, we can bring those benefits to the ever-increasing number of people worldwide. Mobile technology can be harnessed to help in global sustainability challenges, having both major sustainability as well as business potential. Nokia already improves people's lives through services enabling improved education, health and livelihoods. With our products, we also positively contribute to accessibility, human rights and safety. See 'Enabling people with mobile technology', chapter 2.1
LABOR AND SOCIAL ISSUES IN OWN OPERATIONS	Our success depends on our employees. The key issues include: employee satisfaction, company values, diversity and inclusion, training and development, performance and rewarding, health, safety and well-being, labor conditions, human rights and ethics. Succeeding in these areas offers opportunities and is crucial in mitigating risks. During 2011, employee satisfaction and motivation were especially important due to a high level of operational restructuring. See 'Human rights', chapter 2.2.1 and 'Employees', chapter 2.2.3
SOCIAL ISSUES AND ETHICS IN SUPPLY CHAIN	We have thousands of direct and indirect suppliers. This gives us great responsibility and we're committed to ensuring that, in addition to environmental requirements, the highest standards of social responsibility is exercised throughout our supply chain. Succeeding in these areas offers opportunities and is crucial in e.g. mitigating reputation risk. Some suppliers are more advanced than others in managing their operations sustainably, which means our approach must meet different needs and build capacity over time. Our challenge is that the supply chain is long and complex – for example there are typically four to eight supplier layers between Nokia and any mining activities – and active work to increase transparency is needed in all these layers. See 'Nokia and Suppliers', chapter 3.4
CUSTOMER SATISFACTION, CUSTOMER PRIVACY AND PRODUCT SAFETY	Customer satisfaction, product safety and protecting customer privacy are top priorities for Nokia. Delivering customer satisfaction is not only about meeting needs, but about creating value for our operator customers and end users by increasing the sustainability of our devices throughout their life cycle. Our products must be safe for people and the environment. Protecting customer privacy has always been important to Nokia. It is even more important as we develop new services and bring more people online. These services enable consumers to use and share their personal information in new contexts. All these areas offer opportunities and are crucial in mitigating risks. See 'Customer engagement', chapter 2.2.4

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NOKIA AND PLANET

TOPIC	IMPORTANCE
ENVIRONMENTALLY LEADING MOBILE PRODUCT RANGE	During product creation, we focus on energy efficiency, sustainable use of materials, smart packaging, and creating environmental services which engage people to adopt more sustainable lifestyles. During the last decade, the greenhouse gas footprint of our phones has been reduced by up to 50%. At the same time, we have also introduced new features and capabilities that allow the mobile device to become a multifunctional product, and thereby reducing the need to buy multiple devices for different purposes. Another major positive impact comes from providing innovative solutions that enable people to reduce their own environmental impact related e.g. to travel and commuting. The implementation of environmental requirements, both legal and customer specific, have key importance for our business success and we go far beyond compliance with initiatives such as voluntary substance and materials requirements. See 'Environmentally leading mobile product range', chapter 3.1
TAKEBACK AND RECYCLING	As the number of mobile devices in the world increases, so does the concern about 'e-waste' from old devices. This fact, combined with a finite supply of raw materials available for producing new phones, demonstrate that the end-of-life of mobile devices is a major issue that impacts across our industry. Nokia has the world's largest recycling network. At the end of 2011, we had approximately 6,000 collection points in almost 100 countries. Yet, only about 9% of people say that they recycle their phones. Therefore, we work around the globe to raise awareness and to ensure proper and safe recycling and take part in collective recycling schemes. Currently, our challenge is to show people how recycling phones is both easy and beneficial and inspire them to take action. See 'Take-back and recycling', chapter 3.1.5
GREEN OPERATIONS AND FACILITIES	Although Nokia is not part of an energy-intensive industry and the CO_2 emissions and water use in our own facilities is relatively small, we still have possibilities to control and reduce our own environmental impacts. As the number of devices that can access Internet increases, the energy consumption of our data centers becomes increasingly important. The environmental impact of our own activities is an area where stakeholder interest, with various reporting requirements, has increased during the recent years. In extreme cases non-compliance with various regulations and customer requirements can cause risks to our operations. See 'Our environmental impact', chapter 3.3
GREEN SUPPLY CHAIN AND LOGISTICS	The vast majority of Nokia device life cycle environmental impact comes from our supply and logistics chain. Therefore, it is important for us to work closely with our suppliers and logistics service providers to reduce this environmental impact. Our main focus is on energy consumption, greenhouse gas emissions, waste generation, water use and recycling. We encourage our direct suppliers to set reduction targets and we follow up on their performance. We also require supplier sites to be ISO 14001 certified. The major challenge here is the long supply chain where Nokia or our first-tier suppliers are only part of the impact. See 'Nokia and Suppliers', chapter 3.4 and 'Green logistics', chapter 3.3.3

1.4 KEY ACHIEVEMENTS AND CHALLENGES IN 2011

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These achievements and challenges highlight our sustainability performance in our key sustainability topics in 2011.

IMPACTING PEOPLE

Helping our employees affected by personnel reductions to re-employ

To accelerate the company's speed of execution in a dynamically competitive environment, we announced a new strategic direction and operational structure in February, 2011. These changes have had an impact on Nokia's operations and personnel, including announcing painful but necessary plans to reduce personnel and close sites. To minimise the negative impact on our employees, we started a comprehensive social responsibility program called Bridge for employees and communities affected by the personnel reductions. The program is led locally, with local partners and stakeholders, and Nokia's senior management support. It is tailored for different markets to help people affected prepare for the future in wide variety of ways.

Focus on bringing Internet and information to the next billion

In 2011 we approved a new strategy that focuses on providing the next billion people the benefit of access to technology, Internet and the wealth of information. This also means new opportunities for a vast number of people to create locally relevant apps and content. It also provides a unified platform for developers and operators to create an even more compelling offering.

40 million people have experienced Nokia Life (known as Nokia Life Tools in 2011)

Nokia Life is a SMS service especially for people in emerging markets. It helps them in their daily lives by providing services in areas like education, healthcare, agriculture, and entertainment. By the end of 2011, 40 million people had experienced the service.

Open sourcing of Nokia Data Gathering lead to its rapid expansion

After being open-sourced in 2010, the number of organizations using Nokia Data Gathering (NDG) doubled in 2011. This free software allows any organization to collect data using mobile phones. There are already numerous examples of NDG improving health and the environment. We've also seen businesses offering services based on NDG, contributing to their own success, while helping the software reach even more people.

Making progress on the challenge of tracing the origins of raw materials

In 2011, Nokia made good progress in improving the traceability of metals in the supply chain. The GeSI Extractives group, of which we are an active member, published its first list of third party validated conflict-free Tantalum smelters. At Nokia, we expressed our stance regarding the illegal trade in natural resources by publishing Nokia Policy against Illegal Trade of Natural Resources, which our suppliers need to respect. To complement the policy, we also included requirements regarding due diligence to our supplier requirements. As a forerunning company, Nokia takes seriously the continuous challenge to ensure that metals from conflict areas, such as the Eastern part of Democratic Republic of Congo, do not enter our supply chain.

Reaching full traceability of minerals requires time and effort across the industries and collaboration from all actors in the supply chain. While we want to ensure that our products are free of conflict minerals, we wish to avoid an embargo on Central Africa and support legitimate trade. Therefore we joined the Public-Private Alliance for Responsible Minerals Trade (PPA). To support development of responsible supply chain management, we participated in the OECD pilot implementation phase of the OECD Due Diligence for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

Making a commitment to ensure our mobile products are more accessible

All people, without discrimination, should be able to communicate. Worldwide there are about 600 million people with a recognized disability or need for improved accessibility. Nokia wants to give the possibility to connect to the Internet and information for all people, including those with accessibility needs regarding vision, hearing, speech, mobility or cognition. To really engage our stakeholders in this discussion, we organized the Nokia Accessibility Summit. Driven by a clear customer need, we also launched the Nokia Screen Reader, for people with visual impairments, and the Accessibility Channel in the Nokia Store for accessibility applications during 2011.

NOKIA WANTS TO GIVE THE POSSIBILITY TO CONNECT TO THE INTERNET AND INFORMATION FOR ALL PEOPLE, INCLUDING THOSE WITH ACCESSIBILITY NEEDS REGARDING VISION, HEARING, SPEECH, MOBILITY OR COGNITION.

Next generation cooperation with non-governmental organizations

By working together with other organizations, we can have an even greater positive impact. Nokia looks beyond traditional NGO cooperation, and seeks projects that bring value to communities and improves the environment with mobile technology. In 2011, we started global partnership with Oxfam GB, part of an international federation working on solutions to end poverty and related injustice. Our first project with Oxfam, striving to improve maternal health, combined mobile technologies and online community. Our other global partners include IUCN (International Union for Conservation of Nature), UNESCO (United Nations Educational, Scientific and Cultural Organization) and WWF (World Wide Fund For Nature)

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IMPACTING PLANET

Introducing new eco hero devices

While continuously improving the environmental credentials of all our products, we introduced five new eco hero devices, including the Nokia 700, an industry leader in the use of bio materials, recycled plastics and recycled metals. We also launched the Nokia Asha 200 and 201, the first eco hero devices available at a lower price point.

Making public transportation easier to use

Nokia Public Transport offers public transportation route planning for Nokia device owners in hundreds of places worldwide. It also highlights public transportation as being the environmentally sound travel option, and makes using public transportation easier.

Adjusting to green energy availability

We've been increasingly purchasing green electricity since 2006, but are still encountering the challenge of slower than expected renewable energy market development. In 2011, we put in place our first onsite installations for generating renewable energy: fuel cells at our facility in Sunnyvale in the US and a biofuel station at our factory in Chennai, India. Altogether, in 2011 our renewable electricity share was 193 GWh, which is equal to 40% and which reduced our CO_2 emissions by 54,500 tonnes.

Increasing focus on supplier performance

Even though our comprehensive set of Nokia Supplier Requirements provides clear guidance on what we expect from our suppliers in terms of environmental and social performance, we implemented several improvements to better direct and measure their performance. In 2011, we put more emphasis on the Environment, Labor conditions, Occupational Health and Safety, and Ethics in our supplier requirements. To make sure the requirements are taken into practice, we trained more social compliance assessors to monitor performance and risk assessed our key 1st tier direct supplier facilities. We also have reduction targets for energy, greenhouse gas emissions, water and waste for those hardware suppliers, which have the highest environmental impact or are strategically important to us.

1.4.1 NOKIA IN 2011 SUSTAINABILITY RANKINGS

ORGANIZATION	RANKING IN 2011
DOW JONES SUSTAINABILITY INDEXES REVIEW	Among 5 best scoring companies in Communications Technology category
GREENPEACE GUIDE TO GREENER ELECTRONICS	#3 for leading electronics manufacturers and #1 for mobile device manufacturers.
CARBON DISCLOSURE PROJECT	One of the top IT sector companies in both performance (#5) and disclosure (#8)
FORBES WORLD'S MOST SUSTAINABLE COMPANIES	#4 most sustainable out of 100 publicly traded companies
NEWSWEEK GREEN RANKINGS	#21 out of 500 largest companies in the world
TWO TOMORROWS	#2 in Information and Communications Technology category
OEKOM INDUSTRY REPORT FOR IT COMMUNICATIONS EQUIPMENT	Oekom Prime Status (absolute best-in-class approach). A report assessing a company's social, cultural and environmental sustainability
ENOUGH PROJECT RANKING	Among the top 5 electronics companies for progress on conflict minerals (12/2010)
FTSE4GOOD INDEX	Included since 2001

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1.5.1 SUSTAINABILITY GOVERNANCE AND MANAGEMENT

Nokia's sustainability governance and management practises are in place with the aim of ensuring that social and environmental matters are duly taken into account in everything we do. Sustainability issues are reviewed regularly at all levels, up to the highest decision making bodies of the company. The structure of the managerial sustainability governance levels can be seen in the graphic below.

The highest decision making levels at Nokia are the board of directors and ultimately the general meeting of shareholders. The Board provides the ultimate supervision of Nokia's sustainability performance, and during 2011, sustainability and related topics were reviewed in their meetings. In recent years, sustainability related questions have been discussed also in AGM.

HIGHEST DECISION MAKING, STRATEGIC DIRECTION AND SUPERVISION

CEO and Nokia Leadership Team

Discusses and agrees on strategic issues, priorities, resourcing, organization, key targets and measures for sustainability initiatives across Nokia.

Corporate Responsibility Steering Group

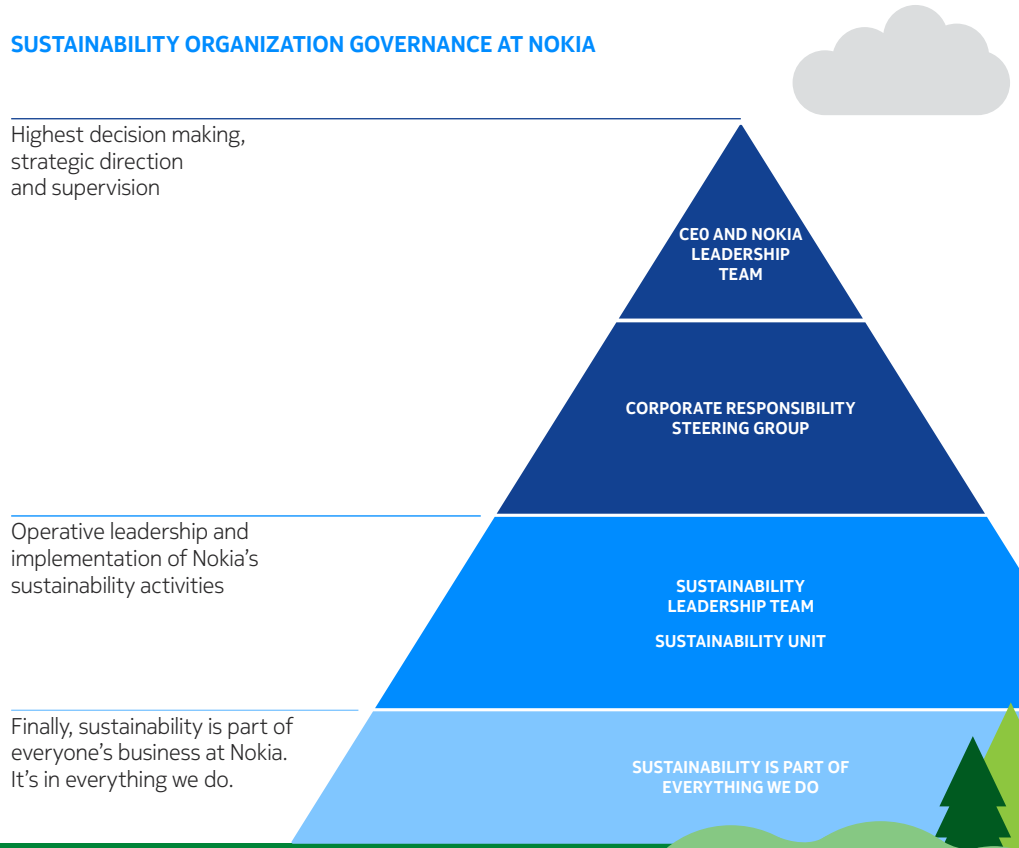
Headed by Nokia Leadership Team member, Executive Vice President Esko Aho, the steering group includes management representatives of major functions as members. Responsible for supporting sustainability initiatives across the business and encouraging open communication and cooperation, both internally and externally, and helping integrate sustainability into our core business.

OPERATIVE LEADERSHIP AND IMPLEMENTATION OF NOKIA'S SUSTAINABILITY ACTIVITIES.

Nokia Sustainability Leadership Team develops the group-wide sustainability framework containing strategy targets and priorities. It acts as the Operative Leadership team of **Nokia's Sustainability Unit**, which drive sustainability initiatives within the business and is responsible for building and implementing processes to achieve our environmental and social targets.

Finally, sustainability is part of **everyone's business** at Nokia. It needs to be in everything we do.

SUSTAINABILITY ORGANIZATION GOVERNANCE AT NOKIA



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1.5.2 SUSTAINABILITY TARGETS, MANAGEMENT SYSTEMS AND POLICIES

Nokia has company level sustainability targets and also each business unit has their more specific targets. The externally communicated key targets and our performance against them are described in the following table. More target and performance information is given in the relevant sections of the report. The 2011 Key data section at the end of the Report also gives detailed information on our sustainability performance.

Our sustainability related policies and management systems include e.g. the following:

- Nokia code of conduct
- Nokia global employment guidelines
- Nokia labor conditions standard
- Occupational health and safety policy
- Environmental policy
- Nokia supplier requirements
- Nokia policy against illegal trade of natural resources
- Nokia human rights approach
- Nokia privacy policy
- Environmental management systems
- Risk and opportunity management process

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KEY TARGETS AND PERFORMANCE

TOPIC	TARGET	PERFORMANCE
NOKIA CODE OF CONDUCT	All Nokia employees are required to take part in the company Code of Conduct training.	By the end of 2011, 98% of eligible non-manufacturing-based employees completed their training.
CHARGER POWER CONSUMPTION	Continue to reduce the charger no-load power consumption with new target that is a 75% reduction by end of 2012 from the 2006 baseline.	Over the last decade, we have reduced the no-load consumption of our chargers by over 80% and of our best-in-class chargers by over 95%. We continue to reduce the charger no-load power consumption and are heading for the new target of 75% reduction by end of 2012 from the 2006 baseline.
TAKE-BACK AND RECYCLING	Strong focus on take-back and recycling.	We operate the world's largest mobile phone and accessory recycling system. The number of take-back points – in almost 100 countries – increased to more than 6,000 during 2011. We collected 661 tonnes of used mobile phones, batteries and accessories. That is an increase of almost 60% compared to the previous year.
GREENHOUSE GAS EMISSIONS	Reduce CO_2 emissions in our offices, R&D sites and manufacturing facilities by a minimum of 30% by 2020 (2006 baseline, assuming no major business volume or headcount changes). Reduce greenhouse gas emissions per person working in Nokia offices and R&D by a minimum of 15% by the end of 2012 (2006 baseline). Maintain annual air travel-related CO_2 emissions, both total and per employee, clearly below 2008 level.	In 2011, Nokia facilities' CO_2 emissions decreased by 17%, compared with the 2006 level. In 2011, we reduced greenhouse gas emissions from offices and R&D premises by 15% per person, compared to 2006. In 2011, Nokia's CO_2 emissions from air travel have been reduced by 36% from 2008 base level – but are 2.8% more than in 2010.
WASTE	Reduce all Nokia waste to a minimum and find alternative ways to reuse it. Halve the landfill waste from our factories each year, starting from 2008. This will lead us close to 100% waste utilization by the end of 2012.	In 2011, Nokia total waste amount was reduced 23% in comparison to 2010. We also managed to continue our trend of sending less waste to landfill. However we're slightly behind our factory target of halving landfill waste each year.
SUPPLIER CODE OF CONDUCT	All Nokia direct hardware suppliers to have a code of conduct in place that meets our requirements.	98% (92.9% in 2010) of our direct hardware suppliers had a code of conduct policy in place that met our requirements. Suppliers not meeting our expectations have been requested to take corrective actions.
SUPPLIER HEALTH AND SAFETY	All strategically important hardware suppliers to report on our health and safety metrics.	97% of our strategically important hardware suppliers report on our new health and safety metrics introduced in the 2011.
SUPPLIER ENVIRONMENTAL MANAGEMENT	All Nokia direct hardware suppliers' sites to be ISO 14001 certified.	In 2011, 91% of our direct hardware suppliers' sites serving Nokia were certified to ISO14001. Nokia's direct hardware suppliers have maintained a high level of certification since 2008.

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1.5.3 RISK AND OPPORTUNITY MANAGEMENT

Nokia has a common and systematic approach to risk management across business operations and processes. Material risks and opportunities are identified, analyzed, managed and monitored as part of business performance management. Relevant key risks are identified against business targets either in business operations or as an integral part of long and short-term planning. Nokia's overall risk management concept is based on visibility of the key risks preventing Nokia from reaching its business objectives rather than solely focusing on eliminating risks.

The principles documented in Nokia's Risk Policy and accepted by the Audit Committee of the Board of Directors require risk management and its elements to be integrated into business processes. One of the main principles is that the business, function or category owner is also the risk owner, but it is everyone's responsibility at Nokia to identify risks, which prevent Nokia to reach its objectives. Risk management covers strategic, operational, financial and hazard risks.

Key risks are reported to the Group level management to create assurance on business risks as well as to enable prioritization of risk management activities at Nokia.

In the sustainability area we monitor primarily political, social, human rights, and environmental risks. We follow the precautionary principle, especially in the areas involving environmental risks. The most important risk factors as well as the principal factors and trends affecting our operations are discussed in our annual report on Form 20-F for 2011. These include sustainability related risks such as:

- Risk of non-compliance with regulations or our supplier requirements
- Violation of code of conduct and related regulations
- Risks related to privacy, product safety, health and security as well as to environment
- Regulations that can increase the total cost of mobile product ownership
- Labor unrest and strikes. Employee motivation and loss of key personnel
- Purchasing boycotts, public harm to our reputation and Nokia brand

Some of the key risks and opportunity areas are also identified in chapter 1.3, 'Key Sustainability Topics'.

Sustainability is part of our business strategy and we systematically analyze sustainability related opportunities. Our innovations hold the potential for changing the way we live, from improving livelihoods to embracing more sustainable lifestyles. More than a billion people use Nokia mobile devices, and we believe that even small changes can make a big difference. Our vision is to further realize the potential of mobility by extending access to mobile communications. Various examples of the sustainability related opportunities are described especially in the sections where we talk about our enabling effect.

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Nokia is uniquely placed to support people through our core business. We provide affordable services to both emerging and developed markets. What's more, we address the fundamental needs of connectivity, affordability and relevance for a broad range of consumer groups.

In the following chapters, we cover our positive, enabling effect on people through mobile technology, as well as our impact on our important stakeholders; our employees, customers, suppliers and others, including our economic impact. From the perspective of our employees, 2011 was characterized by the restructuring of the company and our new strategy, covered in detail in chapter 2.2.3, in 'New strategy and our employees'.

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ENABLING PEOPLE WITH MOBILE TECHNOLOGY

With over 1.3 billion customers using Nokia devices, we have an opportunity to make a real difference to people's lives. In this section, we talk about the benefits of providing access to Internet and information, harnessing mobile technology to help in global sustainability challenges – namely those of education, health and livelihoods – and accessibility of Nokia products, making them usable and accessible to the greatest possible number of people. For each topic, we first introduce the topic and then discuss our 2011 progress. Our contribution to enabling sustainable lifestyles is covered in chapter 3.2, 'How we enable sustainable lifestyle'.

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2.1.1 PROVIDING THE NEXT BILLION WITH ACCESS TO THE INTERNET AND INFORMATION

Digitalization and increased access to the Internet and ICT (information and communications technologies) have brought tremendous benefits for an ever-increasing number of people, worldwide. At the same time, however, people are divided by their access to technologies and information, and their ability to use it. Understanding and resolving issues that prevent equal access to ICT is by far the most important goal in building a truly global information society. With our new strategy, Nokia aims to provide the next billion with the best access to the Internet and information, with products that offer most compelling experiences. This means new opportunities for a vast number of people to create locally relevant apps and content. It also provides a unified platform for developers and operators to create an even more compelling offering.

NOKIA AIMS TO PROVIDE THE NEXT BILLION WITH THE BEST ACCESS TO THE INTERNET AND INFORMATION, WITH PRODUCTS THAT OFFER MOST COMPELLING EXPERIENCES

Three main kinds of barriers contribute to the digital divide: cost, physical disability and lack of skills and education. These issues are interlinked and often contribute to one another. Overcoming and finding innovative solutions requires broad collaboration between corporations, governments and civil society. Nokia participates in solving these challenges and creating shared value and opportunities in societies around the world.

Total cost of ownership

Regardless of where you live, the total cost of ownership of a mobile device includes not just the device price, but the cost and ease of connecting, too. We believe that mobile communication can be a force for social development. For example, education systems are usually based on delivering children to education, which tends to discriminate against people in rural areas, especially girls. With mobile technology, it is feasible to deliver education to children. However, cost remains a challenge. Regrettably, rather than reducing the cost of delivering information to promote education, health and other public services, we see countries increasing mobile-specific taxes.

These taxes, which are invariably passed on to citizens, exclude the people who would benefit most from communication technology. They lead to the introduction of environmentally-hazardous, counterfeit products, which deprive the government of revenue on devices in the first instance and ongoing revenue from services later on. For example the mobile-specific import duty in Kenya was removed in 2009. Since then, penetration has risen from 50% to 70%, industry jobs have increased by 67% and service tax revenue has risen by 33%. We continue to monitor and share information on these kinds of cases, while developing technology that highlights the direct link between mobile technology and social development.

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2.1.2 IMPROVING EDUCATION, HEALTH AND LIVELIHOODS WITH MOBILE TECHNOLOGY

Nokia focuses its corporate social investments on programs, which utilize mobile technology. We believe that investing in mobile technology can bring social benefits, which positively impact people's lives on a large scale at a low cost. We focus our social investments on education, health, livelihoods and environmental awareness.

WE BELIEVE THAT INVESTING IN MOBILE TECHNOLOGY CAN BRING SOCIAL BENEFITS, WHICH POSITIVELY IMPACT PEOPLE'S LIVES ON A LARGE SCALE AT A LOW COST. WE FOCUS OUR SOCIAL INVESTMENTS ON EDUCATION, HEALTH, LIVELIHOODS AND ENVIRONMENTAL AWARENESS.

On a program level, we are making many of our solutions in this area open source. This approach helps third party developers all over the world to utilize our technologies, tailor them and make money in their own ways. As a matter of scale and sustainability, it ensures local support and a local cost-base for organizations adopting the solutions. It also helps us to ensure that the solutions can survive a change in management or the end of Nokia's initial funding without compromising the quality of the software or service to clients.

EDUCATION FOR EVERYONE

We believe everyone should have the right to learn and develop themselves. Yet it is estimated that more than 750 million adults around the world are still illiterate. Literacy, quality of education and life-long learning should be the norm, not the exception. Mobile technology has the potential to provide access to quality learning, scale and services that can be used 24/7. Today, Nokia responds to educational needs, with solutions like Nokia Mobile Mathematics, Nokia Education Delivery and Nokia Flashcards.

Mobile phones can offer individualized learning for anyone, irrespective of their gender or which type of phone they use. Mobile technology can provide access to quality education materials and support to teachers, students and their families. Mobile communications allow the delivery of education to people, instead of requiring the delivery of people to education. In this sense, it can help to improve equality in educational achievement, because girls tend to be at a disadvantage when it comes to attendance. It can sharply reduce the cost of delivering quality content, as well as change the teaching environment, enabling the teachers' role to evolve into facilitators of peer-to-peer learning. Concepts such as Nokia Life (known as Nokia Life Tools in 2011), our expanding subscription-based service, also show the potential of affordable education delivery to people.

As a part of our commitment to education for all, we initiated a 5-year partnership with UNESCO in 2010. The partnership harnesses mobile communications to support individuals, organizations and governments as they strive to achieve the six goals of the global Education for All agreement. Nokia will contribute expertise relating to technology and policies in this area. Concrete initiatives include the development of policy guidelines that can enable mobile learning, projects to explore the role of mobile technology to support teachers and teacher training in Senegal, Pakistan, Mexico and Nigeria, and crowdsourcing ideas for how mobile phones can support the achievement of the Education for All goals.

MOBILE COMMUNICATIONS ALLOW THE DELIVERY OF EDUCATION TO PEOPLE, INSTEAD OF REQUIRING THE DELIVERY OF PEOPLE TO EDUCATION.

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2011 PROGRESS
EDUCATION FOR EVERYONE

Nokia Education Delivery

Nokia Education Delivery sends high-quality educational material to mobile phones over mobile networks. This can be used in a number of ways. It can support field personnel in cases where they use multimedia, it can be used for teacher training, and it can contribute to more visually stimulating content for public education. This is done by showing the content to a class on the phone or a TV.

Since its launch in 2003, Nokia Education Delivery has helped improve the quality of education in a number of places. During 2011, the Bridgeit program expanded to Kenya, Nigeria and India. Bridgeit incorporates Nokia Education Delivery as part of a broader program that includes teacher training, curriculum development and strong leadership from local education authorities.

The expansion in 2011 built on previously established projects in Chile, Colombia, Philippines and Tanzania, developed in partnership with the Pearson Foundation. The concept was also adopted by the International Reading Association in 2011 for projects in Indonesia and Bangladesh. These projects will aid teachers of early childhood literacy.

In the Philippines alone, the government has reached more than 900,000 students with this solution. In Tanzania, the attendance level in science and math classes has increased from between 55-70% to 80-90%.

Nokia Education was open sourced during 2011. This means that the concept can now be adopted by organizations looking for innovative ways to train, educate and inform their personnel.

Nokia Mobile Mathematics

This highly innovative solution combines official mathematics curricula with social networking. Nokia Mobile Mathematics offers pupils multifaceted learning experiences through theory, tutoring, peer-to-peer support, competitions, tests and self-assessment. Over 9,000 math exercises can be done with mobile phones. To date, 20,000 students, 700 teachers and 172 schools in South Africa have benefited from the scheme, compared with 30 schools and 4,000 students in 2010.

Analysis of shifts in academic results over one year from close to 2,000 learners showed that on average, the final Grade 10 maths marks of learners who used Nokia Mobile Mathematics regularly were 7% better than their peers' who did not.

2010 results showed that students used Nokia Mobile Mathematics over 80% outside of school hours. This resulted in a 14% better math grade for active users. What's more, 20% of students who used the service in 2010 continued to use it in 2011 despite moving on to upper grade.

LEARNERS WHO USED NOKIA MOBILE MATHEMATICS REGULARLY WERE 7% BETTER THAN THEIR PEERS' WHO DID NOT.

The project continues to work in close cooperation with content partner Maskew Miller Longman and operators MTN and CellC, who zero-rate the service, so that it is free for the pupils.

In autumn 2011, the South Africa Finland Knowledge Partnership (SAFIPA) rewarded Nokia Mobile Mathematics as the Best Social Impact project.

Nokia Mobile Mathematics was piloted in Finland in September 2010 – June 2011. The pilot results showed that the same concept can also benefit students within Finnish schools.

In 2011, we further developed the technology to make it scalable and replicable. We now plan to cascade the service to new countries and to develop the concept to include informal learning areas.

"Initially I was very scared of handling technology and now I have gained not only the skill of handling it, but I am also proud that I am able to use it in the classroom in a different manner, making both teaching and learning effective."

TEACHER
India

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BUILDING BUSINESSES AND CREATING BETTER LIVELIHOODS

Nokia helps people get better livelihoods in several ways from professional skills development to the creation of software to support local entrepreneurs. We also create software that can be adapted and sold to local customers by software developers. In doing so, we're subsidizing the investment required to help those small businesses to grow, while creating a platform for local technology innovation.

2011 PROGRESS
THE RAPID EXPANSION OF NOKIA DATA GATHERING

In July 2010, we launched Nokia Data Gathering under an open source license. Since then we've seen a rapid expansion of its use. The open source model allows us to affordably offer the software on a large scale, while providing clients flexibility and supporting the creation of livelihoods for systems integrators and developers. By replacing traditional data gathering methods, such as paper questionnaires, with mobile phones, the software suite has improved results while saving time and money. This open source software has been adopted by governmental, non-governmental and corporate clients, ensuring its continued success.

To date, over 200 organizations have either used or conducted trials of Nokia Data Gathering using our test server. There have been many public reference cases. These include the Department of Agriculture in the Philippines who have used it to improve food security, the UN FAO in Kenya which uses it to map water points for access to clean drinking water and irrigation, World Vision in Indonesia which uses it for child welfare sponsorship, Plan Kenya which uses it for birth registration, and Syngenta Foundation in Kenya, which uses it to improve agricultural productivity.

"I'm excited by the new tool and perceive Nokia Data Gathering as a positive program that can speed up the process of taking the child's data at field level (Child Management Standard) and shorten the admin work in ADP office."

WORLD VISION INDONESIA
Field Officer in Pontianak
West Kalimantan
Indonesia.

Updates for 2011

- More languages – As Nokia Data Gathering has increased in popularity, there have been many requests for localization. To achieve this on all the devices, we created a new component. This was developed to allow languages to be dynamically loaded over the air, based on user preferences. The Nokia Data Gathering client now comes with eight language options: English, Spanish, Portuguese, French, Russian, Swahili, Finnish and Polish. Additionally, Nokia Data Gathering enables people to create surveys using languages with different scripts, such as Arabic, Lao and Hindi.
- Better security – Much of the data collected, such as birth registration forms, is sensitive in nature. Consequently, Nokia Data Gathering security was further enhanced to ensure data is safe both when saved on mobile phones and while it's being sent to the server.
- Increased accessibility – We've also made Nokia Data Gathering more flexible. Now it's possible to change font sizes, background colors and user interface preferences based on user needs, such as working in bright sunlight.

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2011 PROGRESS
ENHANCING HEALTH AND WELLBEING

Examples of the progress in a variety of countries:

- In China, the British Council and Nokia Life launched an "English Class" campaign, in which users received English learning content during for two months.
- In India, we partnered with Arogya World and other partners to reach one million Indians with preventive Diabetes messages.
- In Indonesia, we worked with Mercy Corps to make maternal and child health information available to mothers in low income, urban families of Jakarta. We also introduced religious services in Indonesia.

ENHANCING HEALTH AND WELLBEING

In the last few decades the health of the world's population has improved dramatically. Nonetheless, according to the World Health Organization, infectious diseases still dominate in developing countries. Fortunately, mobile technology has the potential to keep people healthy and inspire them to go for healthier choices, manage disease outbreaks and expand the reach of health information and services.

We believe mobile technology has a critical role to play in preventing outbreaks of diseases and improving human health and wellbeing in general. We make our contribution by offering applications and services, and working with partners to conduct research.

ONE OF THE MANY USES OF NOKIA DATA GATHERING SOFTWARE IS HOW IT HELPS IMPROVE THE HEALTH OF THE POPULATION. THE SOLUTION HAS BEEN USED SUCCESSFULLY IN CONTRIBUTING TO A 93% CUT IN DENGUE FEVER CASES IN THE AMAZON. OUR NOKIA LIFE SERVICE ALSO PROMOTES HEALTH, INCLUDING PROVIDING PREGNANCY ADVICE, AS WELL AS INFORMATION ABOUT PARENTAL SKILLS AND CHILDCARE, FAMILY HEALTH AND FITNESS, AND DISEASES.

NOKIA LIFE – EMPOWERING PEOPLE TO MAKE INFORMED DECISIONS

Nokia Life (known as Nokia Life Tools in 2011) delivers information vital to the daily lives of millions. Working with 75 knowledge and content partnerships spanning universities, non-government organizations (NGO's), local government agencies and private sector enterprises, the content is personalized, hyper-localized and delivered in 17 languages supported by 18 operators for billing.

Nokia Life helps to bridge the digital divide in emerging markets, delivering reliable and comprehensive information to mobile phones by SMS. The service provides people in these countries with livelihoods and life improvement services, including education, healthcare, agriculture and entertainment services.

Between its commercial launch in mid-2009 and by the end of 2011, over 40 million people have experienced Nokia Life. The service is available in India, China, Indonesia and Nigeria. The tools include:

- Education services: Learn English, acquire general knowledge and access exam preparation and results, as well as information on higher education and career guidance.
- Healthcare services: Pregnancy advice, mother and childcare, family health and fitness, and disease information and actionable tips.
- Agriculture services: Market prices, e.g. for cocoa and fish, weather forecast information, agriculture tips and techniques, availability and market prices of seeds, fertilizers, and pesticides, and news and advice. The information is tailored to the farmer's location and selection of crops.
- Entertainment services: Football results, music, news alerts, horoscopes and jokes.

OVER 40 MILLION PEOPLE HAVE EXPERIENCED NOKIA LIFE.

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2.1.3 ACCESSIBILITY OF NOKIA PRODUCTS

Accessibility is about making Nokia products and services usable and accessible to the greatest possible number of people, including those with disabilities. All people, without discrimination, should be able to communicate. Worldwide there are about 600 million people with a recognized disability or need for improved accessibility. Nokia wants to give the possibility to connect to the Internet and information for all people, including those with accessibility needs regarding vision, hearing, speech, mobility or cognition. Many of the features and applications developed to better serve these specific groups are now also finding uses in the general population, especially amongst older generations.

Nokia has been working on improving the accessibility features of our devices for over a decade. In the past, we have brought several accessibility innovations to market, such as caller identification by a photo, video calls, and haptic feedback. We have even launched special products for those customers that use T-coil-equipped hearing aids: The Nokia Wireless Loopset LPS-5 enables those with hearing impairments to conveniently use a mobile device.

We believe accessibility is an integral part of the user experience design. In Series 40 and Symbian, we continued to offer a variety of options to help people enjoy mobile services in a way that best matches their diverse preferences. Our customers with accessibility needs have told us that they want choices regarding form factors. Therefore, we offer a wide variety of choices in terms of shape, style and input. These include full touch handsets, touch-and-type handsets, handsets with traditional keyboard, and handsets with QWERTY keyboard.

Technological progress, especially in smartphones, is making handsets ever more accessible. We can now offer dozens of device features or applications for people with disabilities. Screen magnification, voice dialing, text-to-speech processing and enhanced personalization options are featured in an increasing number of handset models. Nokia has been working on these features that enhance the accessibility of our devices for over a decade.

2011 PROGRESS
ACCESSIBILITY

A new key application for the visually impaired is the **Nokia Screen Reader** that lets the user hear the contents of the screen. Besides reading text messages and e-mails, the Nokia Screen Reader can, for example, read out the time, the date, the battery level, and volume control. Earlier there have been excellent third-party screen readers available for Nokia's Symbian smartphones and in October 2011, we announced Nokia Screen Reader for selected Nokia handsets. In this first wave, the Nokia Screen Reader became available for the Nokia C5-00, Nokia C5 5MP, and the Nokia 700 and 701 models. The Nokia C5 5MP, with its clear traditional keyboard, has become our most desired handset from an accessibility perspective. We also offer enhanced voice functions on some device models, allowing users to make and receive calls, read messages and send audio messages in eyes-free, hands-free mode.

In 2011, we continued to engage our stakeholders – representatives from disability organizations, regulators, developers and academia – into discussions on new solutions for accessibility. In particular, in October 2011 we organized a one-day invitational event, the **Nokia Accessibility Summit**, in connection with the Nokia World 2011 tradeshow in London. At the summit representatives from various disability organizations, such as the Royal National Institute of A and the Finnish Federation of the Visually Impaired from Finland were present. Furthermore, key operators and developers participated along with key accessibility owners from Nokia and our new strategic partner, Microsoft. As the outcome of the summit, a list of future priorities for improving accessibility for Nokia was identified. This list serves as the official customer expectations list for Nokia.

Launched at the Nokia World 2011, the **Accessibility Channel** is a new global service at the Nokia Store. In the first phase, it includes more than 50 handy applications, for people with accessibility needs regarding vision, hearing, speech, mobility or cognition. Some of the applications are free of charge, while for others there's a small cost involved. Currently, most apps are available only in English.

During 2011, we significantly improved the accessibility of our in-device user guides. The guides in the latest Symbian devices now include a text alternative for all graphics, to be read with a screen reader.

"The innovations in accessibility that Nokia has contributed to the marketplace have brought the convenience of mobile devices to many. Their commitment to accessibility and future priorities in this arena prove that Nokia is really in the business of connecting people… ALL people."

OLGA FAURE
Handicapzero

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2.1 ENABLING PEOPLE WITH MOBILE TECHNOLOGY

Future priorities for improving accessibility

- Offer the widest range of features and compatibilities for accessibility in smartphones.
- Bring screen reader technology also to feature phones.
- Provide an accessibility application programming interface (API) to all mobile platforms, open to 3rd party applications.
- Continue to provide superior access to mobile technology for the hard-of hearing.
- Ensure accessibility of Nokia's business and leisure applications, web content and user manuals.
- Ensure means for downloading software for blind users.
- Communicate progress in accessibility transparently and on a regular basis.
- Promote innovations for accessibility solutions in future devices.

The agenda for accessibility standardization at Nokia continues to be actively promoted in a number of ways. For example, a Nokia employee was nominated to be the director of the European Telecommunications Standards Institute ETSI in accessibility related matters. We also continue to develop some of our key innovations such as High Accuracy Indoor Positioning, which uses technology to bring accurate localization and navigation indoors. This helps people find their destination in complex environments such as in a shopping mall.

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OUR IMPACT ON PEOPLE

As a global company operating and delivering to customers around the world, our activities have impact on people and communities. In this chapter, we discuss our social responsibility, as regards to our employees, customers, partners and other stakeholders. Supplier related issues, having both social and environmental aspects, are discussed as a whole in the 'Nokia and suppliers' section, chapter 3.4.

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2.2.1 HUMAN RIGHTS

We believe that our core business – connecting people with mobile technology – contributes to the promotion of human rights by enabling and enhancing communication and facilitating economic development. Improved communications provide better opportunities for freedom of expression, and therefore promote civil and political rights as well as economic and social rights. At the same time, we have specific human rights responsibilities toward our employees, customers, the communities where we work, and within our supply chain.

Nokia has been at the forefront in applying UN Human Rights Special Representative John Ruggie's framework in its business practices. The framework consists of 3 pillars, protect-respect-remedy, and is widely welcomed by industry and governments.

Nokia is constantly conducting due diligence to fulfill its responsibility to respect human rights and assess any human rights risks that may be associated with its operations and products. Human rights challenges and opportunities are different at different stages of the Nokia value chain. For example, in R&D, these may include aspects of accessibility and privacy. In manufacturing, including our supply chain, the main human rights issues are labor rights, and health and safety. In sales and marketing, issues such as anti-corruption are the most likely human rights issues to be addressed.

One example of our due diligence activities in 2011 was the Social Impact Assessment conducted in Vietnam where we are going to build a new factory. A Social Risk Impact Assessment (SRIA) for Hanoi was conducted by an external risk consultancy and it consisted of both in-country and desktop research. The full SRIA report provides a summary of key findings regarding potential social risks that Nokia is likely to face. Based on the report, the program team created mitigation strategies to decrease the negative impact and to increase the positive impact of the factory.

2011 PROGRESS
HUMAN RIGHTS

The year 2011 represented an important milestone for us, as it was the year we had all of the elements of Ruggie's framework in place.

We also launched the Nokia Human Rights Approach, articulating our commitment to human rights. The document was developed in cooperation with our key stakeholders including NGOs, investors and operator customers and it draws on the analysis of the challenges identified in the due diligence process and our assessment of international best practices. The document is available on our website.

On top of defining our Human Rights policy we monitor key performance indicators, which demonstrate the effectiveness of John Ruggie's framework including, for example, monitoring the number of times people have contacted us via grievance channels.

CASE
BEIJING SPECIAL ECONOMIC ZONE PILOT

In the spirit of transparency, Nokia hosted a Human Rights Summit concerning the social impact of multinational companies. The focus was on labor conditions in Special Economic Zones (SEZ) and the payment of a fair and adequate living wage to workers. The event brought together various stakeholder groups, including non-governmental organizations (NGOs) and other businesses operating in similar environments to Nokia.

The outcome of the summit was an agreement to launch a multi-stakeholder initiative, which started during 2011 in the Beijing Development Area (BDA) in China. The pilot was kicked off in Beijing Industrial Park, with several companies, NGOs and authorities co-creating the actions for the multi-stakeholder project. As a result, altogether 10 companies including Nokia proposed that the BDA Labor and Social Insurance Bureau and the BDA union work on training in different areas. These included work safety, fire safety, food hygiene, personal behavior, legal rights, and personal development in, for example, computer skills and English. The target audience is people already working in companies in the area and people applying for jobs through our labor agencies. Nokia took the first rotating chairman role of the project in July 2011.

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2.2.2 NOKIA CODE OF CONDUCT

We are committed to actively fight against improper business practices, including corruption, and believe that as a global company we can play an important role in this area. We also believe that our efforts can provide us with a competitive advantage with customers who demand high ethical standards in their supply chain. For these reasons, we have a globally applicable Code of Conduct in place across Nokia.

The Code of Conduct is available in 34 languages and can be found on our website. Since 2009, we have conducted a program to train each employee on our Code of Conduct using an e-learning platform which is offered in 14 languages as well as live classroom training. By the end of 2011, 98% of eligible non-manufacturing-based employees completed their training, and in our manufacturing facilities 72% of eligible employees completed classroom training.

The training programs will continue during 2012. The training program has been designed to help employees identify and solve ethical dilemmas they may face in real-life situations, know who they should ask for support and where to report concerns. We also offer classroom training for employees who do not have access to computers. The training covers topics such as bribery and corruption, health and safety, labor conditions as well as how to report concerns about unethical conduct, corruption or any suspected violations of Nokia's Code of Conduct.

In 2011, we created the position of Chief Ethics and Compliance Officer. This individual plays a key role in the support and development of the Code, oversees corporate investigations as well as compliance with policies and laws, and aims to foster the highest ethical standards in all the countries where Nokia operates and does business. We have established several communications channels for employees and others to get help in understanding and applying the Code, or to report concerns of violations. This includes a "Contact the Board" channel for contacting the Board of Directors anonymously.

2011 PROGRESS
CODE OF CONDUCT

- Attendance percentage of Code of Conduct trainings are monitored and recorded annually. By the end of 2011, 98% of all Nokia indirect employees had taken the Code of Conduct training, mostly using the e-learning platform. In the factories, with mostly direct employees, the classroom training reached 72% completion by year end.
- An additional Vietnamese language version was added during 2011 to reflect our operations in Vietnam.
- On September 1st, 2011 Nokia established a new Ethics and Compliance Office and appointed a Chief Ethics and Compliance Officer. In order to bring the Ethics and Compliance closer to other activities within Nokia Legal, the areas of Privacy and Competition law are also included under the Ethics and Compliance function.

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2.2.3 EMPLOYEES

2011 employee snapshot

At the end of 2011, Nokia employed 56,364 people.

The below figures are from Nokia personnel management data system as at the end of 2011 and include 51,404 Nokia employees. It is not identical to the total year end employee number mainly due to the reason that certain Nokia employees were at year end 2011 in a separate personnel management system

- At December 31, 2011, Nokia had 25,428 employees working directly in production, including manufacturing, packaging and shipping
- At the end of 2011, 15.2% of senior management positions within Nokia were held by women, while 53.6% of senior management positions were held by people of non-Finnish nationality.
- In 2011, the rate of voluntary attrition – that is the percentage of the workforce leaving the company voluntarily – was 14.2%
- In 2011, we invested nearly 29 million Euros in training, an average of 980 Euros per employee working in areas other than production.
- 92% of Nokia employees have a permanent work contract and 8% have a fixed term contract with Nokia.
- Most of Nokia's employees work full time, with less than 1% working part time.

NOKIA WAY AND VALUES

We have a set of values developed by our employees around the world which reflects and supports our business and changing environment. The values act as a foundation for our evolving business culture and form the basis of how we operate. 'Achieving together' reflects how we reach out to others, encouraging them to work together with us and share risks, responsibilities and successes. 'Very human' reflects how we do business and work with each other. 'Engaging you' reflects how we engage our customers, our suppliers, and our own employees in what our company stands for. 'Passion for innovation' reflects our curiosity about the world around us and our desire to improve people's lives through innovation in technology. Additionally, Nokia's change in strategy has underlined the need for Nokia employees to adopt the mind-set of a challenger, which will be explained in more details later in this chapter, in 'New strategy and our employees'.

DIVERSITY AND INCLUSION

The best way to understand customer expectations around the world is to have a truly diverse workforce inclusive of people of different genders, cultural or ethnic backgrounds, skills and abilities, lifestyles, generations and perspectives.

Nokia is committed to promoting diversity and inclusion in the workplace and providing rewarding career development opportunities for all employees. We strive to create an inclusive workplace that welcomes men and women of different cultural or ethnic backgrounds, skills and abilities, lifestyles, generations and perspectives. This has helped us to build the diverse and robust community that Nokia is today.

Analyzing the headcount by gender shows that 59% of the workforce are men and 41% are women.

At the end of 2011, 15.2% of senior management positions within Nokia were held by women, and 53.6% of senior management positions were held by people of non-Finnish nationality. Both figures are slightly up compared to 2010.

Having a plan for actively managing equality and diversity has shown us that employees stay longer in the company, have greater company loyalty and maintain higher levels of satisfaction toward their work in general.

We are constantly developing the flexibility of our working conditions and policies, to enable an inclusive work environment. A key element is our focus on establishing "inclusive leadership" as part of Nokia's overall leadership umbrella. We have several initiatives including for example our Asia Talent Program; Women in Nokia, an active gay, lesbian, bisexual and transgender (LGBT) network and a variety of other initiatives to maximize the representation of key diversity groups.

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TRAINING AND DEVELOPMENT

Training and development, both personally and professionally, are important at Nokia. We provide a variety of mandatory and voluntary training opportunities for our employees to help them develop a broad range of skills for the workplace, as well as the competencies specific to their roles. We offer thousands of internal training options, as well as many external training opportunities. To match local needs, training may be tailored and may also be available in local languages. For factory workers we arrange on site/classroom trainings.

In 2011, we invested 29 million Euros in training, an average of 980 Euros per employee working in areas other than production. We encourage e-learning opportunities where possible, as these are more cost-effective and environmentally sound.

PERFORMANCE AND REWARDS

We use a global framework to set salary bands, which are applied to people regardless of gender, age or background. Levels of compensation are determined by local labor markets and take into account both individual contribution and company performance. In countries and sites where we have collective agreements in place, the salaries are set accordingly.

A large number of employees are nominated for our equity programs, which are based on rewarding performance and retaining employees. Our broad-based equity compensation programs include stock options and performance shares. Both are linked to the company's performance over a number of years.

Our various incentive programs include cash incentive/bonus plans, R&D incentives, sales incentives and short-term bonus plans. Employees in our production are entitled to a production incentive, which is a short-term plan designed to support results primarily in areas of production where the nature of the work and the measurement of results are mainly team-focused.

We communicate with employees about the effect of business results on their incentives after each quarterly announcement through articles and video messages on our internal news channel. We encourage managers to coach employees continually and to have at least one formal personal appraisal every year. Additionally, we communicate through quarterly letters, blogs, webcasts and face-to-face meetings and related information is available in our intranet for people to access any time.

More information about the reward framework, especially regarding our top management, is covered in our 2011 Form 20-F Report.

A trio of reward programs

Positive feedback is a powerful tool for reinforcing behaviors critical to our success. We believe that by focusing on positive recognition we can create an appreciative culture. By this we mean a culture where positive behaviors are recognized daily, not just at the end of a bonus cycle or during an annual review.

We have three global recognition programs: the Achievement Award for major achievements that go above and beyond an employee's typical responsibilities, Kudos to reward smaller achievements for a job well done and Peer to Peer, for demonstrating the new ways of working and behaviors we support.

Achievement Awards are given to individuals and/or teams to recognize outstanding contributions, significant achievements or exceptionally good performance. In 2011, Achievement Awards were used 6,757 times.

Kudos is a personal award, and it encourages line managers to instantly recognize employee achievements with a personal note and a small monetary bonus. In 2011, Kudos was used 11,843 times.

Peer to Peer is yet another recognition method, introduced in 2011, for demonstrating the new ways of working and behaviors we support. It is an instant recognition of a peer with a personalized email to the receiver. After six Peer to Peer awards, a small monetary Kudos award is earned.

EMPLOYEE COMPETITION TO RECOGNIZE INNOVATION

The Nokia Excellence Award is a yearly competition for our employees, which recognizes and rewards outstanding work, persistence and a pioneering attitude. A sustainability category has been included in the award for over ten years, with teams being recognized for their great work in, for example, sales package optimization for logistical savings, work with suppliers to reduce waste, and innovative recycling solutions.

2011 PROGRESS
PERFORMANCE AND REWARDS

To highlight the importance of good quality dialogue between the manager and employee, and to give greater rewards for individual contribution, we started to develop a new performance management and rewarding approach in 2011. This new approach was introduced to employees at the end of 2011 and it will be taken into use in 2012. Peer to Peer, yet another recognition method, was introduced in 2011.

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HEALTH, SAFETY AND WELL-BEING OF OUR EMPLOYEES

The health, safety and wellbeing of our employees are vital to our business. Wellbeing can make a difference in employee engagement and productivity, e.g. by reducing absenteeism, and thus saving costs. Our Occupational Health and Safety (OHS) Policy sets out our commitment to provide safe and healthy working conditions for all our employees, and to promote wellbeing at work. We work with our contractors, suppliers and customers to continuously monitor health and safety issues to meet our commitments. Health and safety is managed by the global OHS unit, which is part of our Human Resources department. The unit is responsible for developing our health and safety strategy and the annual action plans. The global OHS team coordinates and facilitates health and safety arrangements in individual countries, each of which have their own health and safety services. The team also develops procedures to ensure the compliance with the Occupational Health and Safety Administration System OHSAS. Our country level OHS teams also run a range of campaigns and training programs to raise awareness about locally meaningful health and safety issues.

As a global company, we have selected the Occupational Safety and Health Administration (OSHA) guidelines for accident and illness reporting. OSHA has issued specific guidelines and reporting instructions that we use for all global reporting. If we need to report locally, we refer to the appropriate local standards.

2011 PROGRESS
HEALTH, SAFETY AND WELLBEING

In 2011, we renewed our Global Occupational Health and Safety Injury and Illness Rate (IIR) Reporting Guidelines. One difference from previous guidance is that earlier we reported only those injuries and illnesses which caused absenteeism. Now we also report those cases that require some type of medical treatment or first-aid, but do not result in absenteeism. IIR is used as a management tool and is reviewed once a month by leadership teams.

In 2011, we changed the disclosure of incident frequency rate to include also non-lost time incidents in addition to lost time incidents. The change was made in order to continuously improve our Factory Safety and Health Programs.

Our global Total Incident Frequency Rate (TIFR) for all our major manufacturing facilities for 2011 with the renewed reporting was 0.5, meaning that for every 100 employees, 0.5 employees had an occupational injury or illness. There is not a global TIFR that is comparable, however, compared to the Bureau of Labor Statistics, similar industries in the United States reported an average TIFR of 1.6.

In 2011, we kicked off a project to create a culture supporting safe working practices at Nokia factories. The aim of the project has been to create a sustainable safety culture with strong focus on organizational learning and competence renewal. This will be achieved in a variety of ways. Firstly, by adopting a robust management system approach into OHS operations. Secondly, by defining and developing meaningful safety metrics together with relevant reporting systems. Thirdly, by improving the IIR, and building stronger OHS competences.

CASE
MOVING FROM A REACTIVE TO A PROACTIVE SAFETY CULTURE

In 2011, we started a project in our Chennai, India factory to create an organizational atmosphere where safety and health were considered a top priority. This meant creating a safety culture where everyone understood their role and the project aimed to change the culture from one that was reactive to one that is proactive. We first concentrated on improving workplace conditions with the help of comprehensive plant safety audits and machinery risk assessments. To ensure accountability, the factory level target was defined and embedded within the performance management system.

To change the attitudes of everyone, we made senior leadership teams at all levels accountable. This helped convince each and every individual to take ownership of health and safety at the workplace. Training was one of the key drivers during this program and we spent close to 15,000 employee hours on health and safety training in the workplace.

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ENCOURAGING VOLUNTEERING

Volunteering is an important part of employee engagement. What's more, it helps us achieve our sustainability goals as part of our mission is to make meaningful contributions to the communities in which we operate. Through volunteering we are able to learn new skills and gain new perspectives. Volunteering also helps to create a balance between our personal beliefs and professional lives.

Nokia Helping Hands is our global volunteer program, which helps those in need in a variety of ways. It also acts as an umbrella organization for locally relevant volunteering activities. What's more, it's owned and operated by our employees. Thousands of our employees contribute their time and effort to worthy causes in their communities. For us, it is important to encourage and support employees who want to contribute. In recognition of this, our employees can take two working days per year as a Nokia Helping Hands day to go out into the community and contribute to a good cause.

LABOR CONDITIONS

Global employment guidelines

Each of our sites must comply with our global employment guidelines. Our global employment guidelines determine how we handle employment issues at each site. They cover:

- Compensation
- Working time and location
- Employee wellbeing
- Equal opportunities
- Confidentiality and privacy issues
- Guidance on external assignments
- Conflicts of interest
- Efficient communications
- Freedom of association, including collective bargaining rights

Ensuring the highest standard for labor conditions

It is extremely important to Nokia that labor conditions at all our production sites meet recognized international standards. We assess our performance as well as our suppliers' performance regularly. The Nokia Labor Conditions Standard is based on the International Labor Organization and UN Human Rights conventions and has been benchmarked against other international labor laws and standards. This standard provides a framework to monitor and assess labor conditions in a consistent manner, and addresses the following issues:

- Discrimination
- Forced labor
- Child labor
- Freedom of association
- Occupational safety
- Occupational health
- Disciplinary practices
- Working hours
- Compensation
- Management systems

The content of this standard is provided to all factory workers during induction, and information is also provided through factory-specific campaigns. E-learning is provided for employees in other areas.

Assessing labor conditions at our factories

We carry out in-depth assessments of labor conditions at all of our major production facilities every second year. During the intervening period, we also carry out reassessments to ensure any necessary corrective actions have been made, and we conduct some internal audits based on risk analysis. Assessments are based on the Nokia Labor Condition Standard.

We began tracking people incidents in our factories in 2010. Incidents such as legal strikes, other labor unrest, work-related fatalities or occupational injuries, serious security incidents, cases of corruption, discrimination or breaches of Nokia's Code of Conduct are reported on a global level and analyzed for further improvements. Our focus since the last assessment round in 2010 has been on workplace safety, discussed earlier in this chapter.

As part of the human rights approach, discussed in chapter 2.2.1, we follow up and take action on operations identified as having risks related to freedom of association, child labor, forced and compulsory labor, and business units at risk from corruption. We monitor actions and the number of incidents of discrimination and corruption through our internal grievance mechanisms and assessment processes. When making operational changes, we always follow local legislation. In cases of multi-country changes, we always follow the local legislation and required processes to inform and consult with our employees.

ALMOST ALL OF OUR MANUFACTURING FACILITIES HAVE COLLECTIVE AGREEMENTS IN PLACE WITH ONE OR MORE LABOR UNIONS. 78.2% OF NOKIA'S PRODUCTION EMPLOYEES ARE COVERED BY COLLECTIVE BARGAINING AGREEMENTS.

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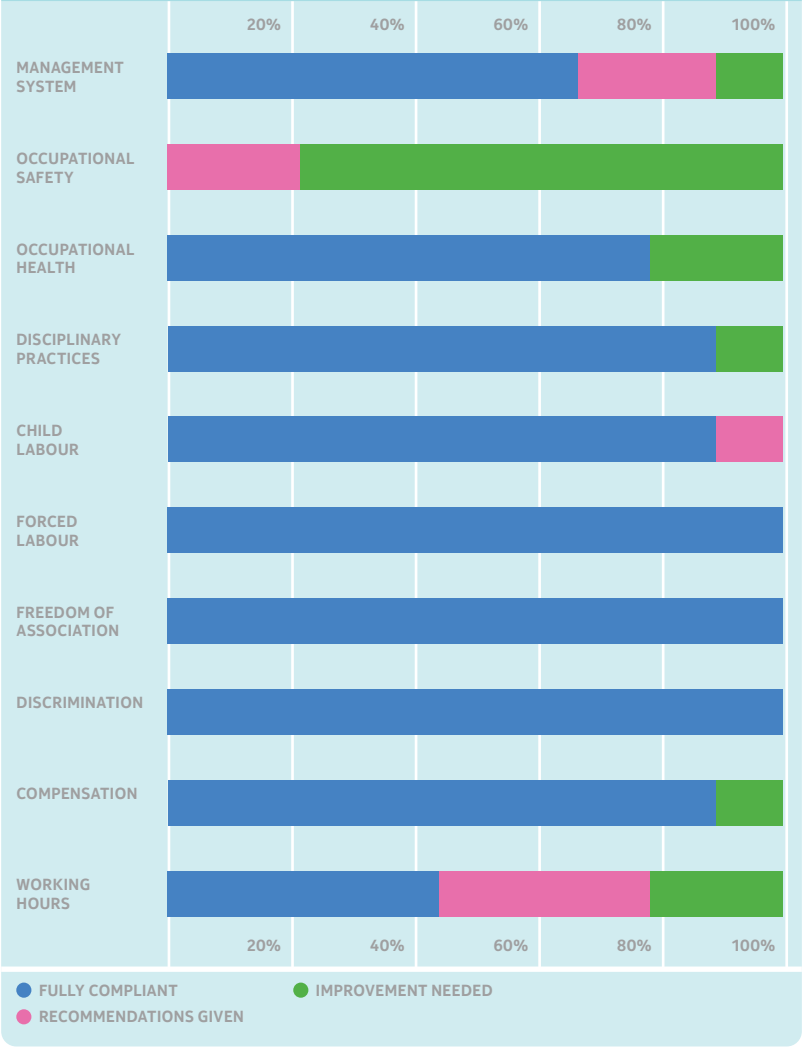
LABOR CONDITIONS IN 9 NOKIA-OWNED FACTORIES



In 2010, working conditions in Nokia factories were assessed by Intertek (see the chart). Although the overall results were very good, audits identified some areas of improvement for example within occupational health and safety and working hours. During 2011, we updated our labor conditions standard, which include specific guidelines for these areas, with more specific requirements related to occupational health and safety and monitoring. Additionally, we kicked off a separate project to create a culture supporting safe working practices at Nokia factories.

Direct external labor

The percentage of external temporary labor in our factories fluctuates throughout the year. These workers help us meet demand in peak production periods and provide cover when our permanent employees are absent. Our global policy on direct external labor in factories determines how our sites manage external staff. External temporary labor is hired through agencies for a maximum time period, normally 12 months. When selecting agencies, we ensure they have complied with all applicable labor practices. These labor agencies are also in the scope of our social audits.

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NEW STRATEGY AND OUR EMPLOYEES

Our success depends on our employees. We consider them a vital stakeholder group and value their feedback on how we run our business. Already in 2010, we reported how we expected critical challenges to our business and the way we work, and started a fundamental transformation. In 2011, we concentrated on addressing these challenges.

Changing culture and behaviors

Nokia's change in strategy, announced in February 2011, underlined the need for Nokia employees to adopt the mindset of a challenger. The new 'challenger' philosophy places a heavy emphasis on results, speed and accountability and requires all Nokia employees to change, to adopt new attitudes and new ways to satisfy our customers. To accelerate our speed of execution we are also developing new ways of working, with a particular focus on driving faster decision-making, reducing complexity, and improving our responsiveness to customer needs and market trends.

Strong leadership is vital in times of change. Leaders must stay connected with employees and provide updates on progress. Our new leadership principles were used to enhance our ways of working and demonstrate our values. A successful Nokia leader is able to demonstrate empathy, show accountability, have a sense of urgency, and engage in continuous quality dialogue with employees. According to our yearly employee survey 'Listening to you', these behaviors were seen as follows:

- 83% of employees felt they are 'being treated with respect and dignity' – a strong score, improved from 73% in previous year
- 67% felt that in their work environment, 'it is easy to speak up about any issue without concern', a similarly strong score and above benchmark
- 65% of employees feel they have inspiring managers

We use employee feedback to drive change and support our transformation. The Listening to You survey is one tool to ask, act on, and monitor progress on how we are doing with our new strategy, new ways of working, and employee engagement. Listening to You traditionally has a high response rate and in 2011 82% (89% in 2010) of our employees in more than 50 countries participated. We measure and monitor inspired people, leaders as role models, and how visible the culture change is for them. Employees are also invited to comment on the one thing they would suggest to improve Nokia.

- 61% thought that we have inspired people
- 67% felt our leaders act as role models
- 64% felt the culture change is visible

These numbers are collected from non-production staff responses.

According to the employee satisfaction survey results, our employees say that there is still too much bureaucracy, complexity and slowness. Therefore, correcting how we behave individually and collectively as a company is a prerequisite for future success.

On top of the yearly Listening to You survey, we follow our change progress by conducting a similar type of employee survey, Pulse, once every quarter. Additionally, we believe it's very important to encourage open discussion and debate within our business. Employees can ask questions and comment on our business at any time through the company intranet or internal social network and receive a prompt and openly published response. Our internal news is also open for our employees to comment on.

During times of change stress levels inevitably go up. To help combat this, we used the wellbeing index tool – a questionnaire for teams to measure their stress and wellbeing and ensure their ability to work effectively. During the last quarter of 2011, the index was used by 1,700 respondents. The index is used by occupational health services for team interventions and periodic health checks related to age.

New strategy and operational structure: reductions in our global headcount

To deliver on our new strategy meant that we had to make some painful decisions, including consolidation of site operations. In February we announced that the new strategy and operational structure are expected to have significant impact to Nokia operations and personnel, and which unfortunately meant reductions in the global headcount.

In April 2011 the change became more concrete when we announced that we plan to reduce our global workforce by about 4,000 employees by the end of 2012, with the majority of reductions in Denmark, Finland and the UK. The announcement included plans to form a strategic collaboration with Accenture that would result in the transfer of Nokia's Symbian software activities. As a result of the transaction, approximately 2,300 employees were transferred to Accenture by the end of 2011.

In September we announced we would close our manufacturing facility in Cluj, Romania by the end of the year. The closure of the factory combined with adjustments to supply chain operations was estimated to impact approximately 2,200 employees. At the same time we announced changes in the Location and Commerce business, which were estimated to impact approximately 1,300 employees. These anticipated personnel reductions were an addition to the measures announced in April and were expected to take effect by the end of 2012.

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How we helped our people find new jobs

Acknowledging the pain and difficulties caused to our employees and our social responsibility, we established an extensive support program, Bridge, to provide a wide range of new employment opportunities, financial support and grace period for those who were at risk losing their jobs. The program was created to support our employees' finding employment within or outside the company.

The program offered a wide range of re-employment possibilities:

- A new job within the company – We want to retain as much talent as possible, by providing career counselling and helping employees identify new job opportunities within Nokia.
- A new job outside the company – We offer career counselling to help identify job opportunities. Furthermore, we worked with our extensive network to create a dedicated job portal, linking employees directly with local companies and their resourcing needs. All employees could remain with the company throughout 2011, while employees affected in 2012 will be given a two-month grace period. In addition, employees who are losing their jobs at Nokia are entitled to severance packages in accordance with local practices.
- Entrepreneurship – We offer training, funding, and help to identify business opportunities and partnerships for those interested in starting a new business, which could fuel new growth for impacted communities.
- Career renewal – We work with local partners to create new opportunities through co-funded research programs, scholarships, and supported employment in local not-for-profit organizations and other growth companies.

Bridge has also been adapted to give it a local perspective. We've established Bridge centers in Finland (capital city area, Salo, Tampere and Oulu), Copenhagen in Denmark, the UK, the USA, Bangalore in India, Cluj in Romania, Germany, Hungary and Singapore. The Bridge program in the USA supports the employees both in the North America and in the Latin America.

In addition to these Bridge centers we have a virtual Bridge concept, "Bridge Globe", to support Nokia employees who are located in countries where Nokia doesn't have a local Bridge team.

By the end of 2011, more than 4,200 employees had participated in the Bridge program. Those employees who lost their jobs during 2011 could stay with Nokia until the end of the year 2011, due to the voluntary grace period offered. The grace period is a voluntary extra time that Nokia offers for those employees that are losing their jobs so that they have time to adjust and focus on finding a new employment. Because of the grace period, only few people left Nokia in 2011, and those who did typically had a job when they left.

"The basic idea was rather simple. We recognized that Nokia's transformation was going to be a tough call for individuals working for Nokia, for local communities where we were operating, and for the company itself as well. If we are not handling this well, the company itself is going to suffer and our brand will suffer. That's why we decided that we had to do this in a different way, in a way which creates opportunities as much as possible, and we can mitigate all of the risks related with this transformation. And that whole thinking was based on shared value. The idea that we do things in a way that everyone is able to win."

ESKO AHO
Executive Vice President
Corporate Relations Responsibility
Nokia

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2.2.4 CUSTOMER ENGAGEMENT

CUSTOMER SATISFACTION

Delivering customer satisfaction is not only about meeting needs, but also about creating value for our operator customers and end users by increasing the sustainability of our devices throughout the product life cycle. We continuously research the views of both groups to understand where we are succeeding and how we can do better.

TRADE CUSTOMERS

Each year an independent market research company helps us to research trade customers' views on Nokia through our Listening to Trade Customer (LTC) survey. A sample of executive and operational contacts from companies that make up about 80% of Nokia revenues are invited to take part. Feedback from the survey is used to drive action planning at the local and global levels. At a local level, Nokia account managers discuss the survey findings with their customers and take relevant actions. The consolidated feedback is used to understand where systematic improvements are needed. Customer participants receive a response letter from Nokia's CEO highlighting the survey's overall findings and the key improvement actions taken.

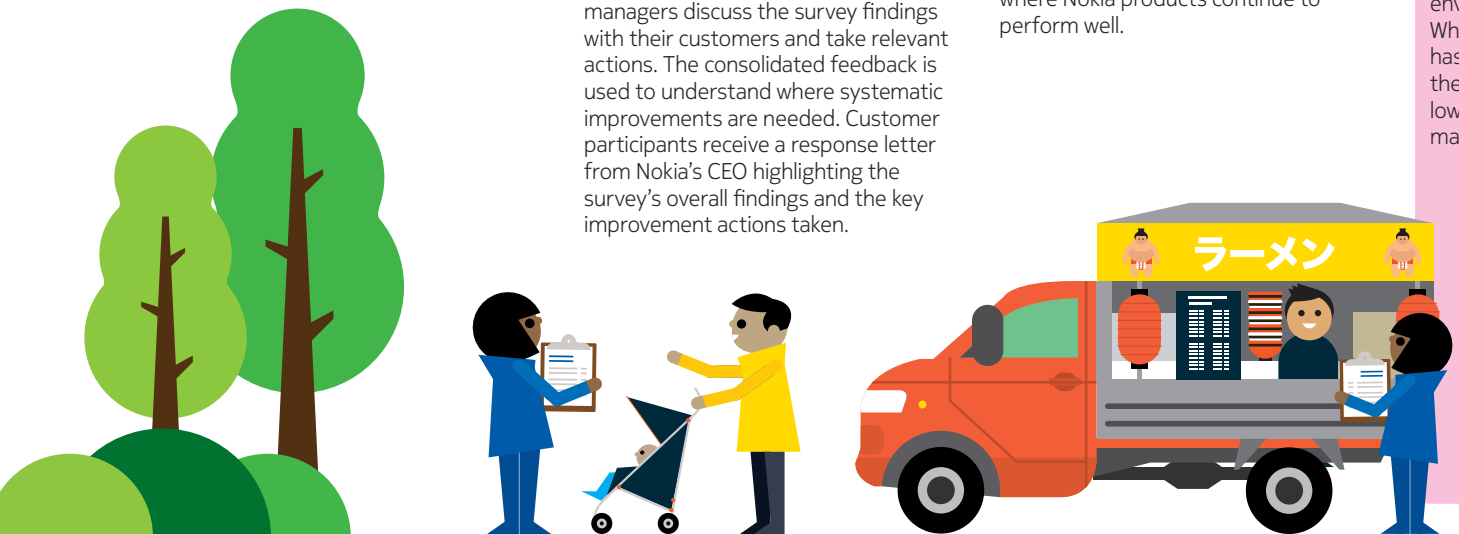
To support our trade customers' sustainability agenda we focus on providing the greenest portfolio of mobile devices. We also work together to develop initiatives, such as joint take-back and recycling campaigns in which we can support and engage end users to live more sustainably. Sustainability provides a wide array of opportunities for collaborations, which differentiates Nokia from our competitors. Nokia continues to receive inquiries and assessment requests about social and environmental performance from our customers and we respond to those requests through our normal customer account management interface. We also participate in the joint industry initiative E-TASC (Electronics- Tools for Accountable Supply Chains) which is a sustainability solution crafted for companies to effectively implement a common approach for assessing and managing supply chain risk. It also aims to drive performance improvement related to labor practices, health and safety, ethics and environmental activity. In addition, we continue to supply data to operator-specific product sustainability rankings, where Nokia products continue to perform well.

CASE
GLOBAL SURVEY TO MEASURE ATTITUDES AND BEHAVIORS

This year, we conducted a global survey to provide insights about attitudes and behaviors around sustainability and environmentally friendly practices. It also provided interesting comparisons with the study on recycling attitudes conducted in 2007. According to the report, environmental awareness appears well established around the globe. Claimed concern for green issues is particularly strong in developing countries, while developed markets are more routine in their green behavior rather than conscious of their eco-credentials. Nokia has strong environmental brand equity, especially amongst Nokia owners, suggesting potential for further initiatives. Energy efficiency is the most appealing environmentally friendly attribute in a mobile phone, followed by being fully recyclable and being made with environmentally friendly materials. While claimed mobile phone recycling has risen from 3% to 9% since 2007, the actual figures are still relatively low. Keeping a back-up remains the main reason not to recycle.

2011 PROGRESS
TRADE CUSTOMERS

In 2011, more than 805 key customer representatives from 265 customer accounts in 83 countries around the world participated in our Listening to Trade Customer survey. Overall, trade customer satisfaction with Nokia decreased in 2010, while satisfaction with some of our key competitors increased. According to the survey, the main drivers of the shift were reduced satisfaction with high-end product offerings and with consumer marketing. Overall relationship satisfaction improved from last year, and in fact reached an all-time high. Trade customers' perceptions of environmental performance in 2010 showed that Nokia continued to be the most highly regarded with almost half of respondents classifying Nokia's environmental performance as Very Good or Excellent. In addition, awareness of Nokia's environmental performance increased significantly whereas awareness of competitors' environmental performance tended to decline.



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CUSTOMER PRIVACY

Personal privacy are not just words for us. We believe that people have the right to know what happens to the information they generate and how to control its use, and we are committed to fulfill the privacy expectations of our customers.

Protecting customer privacy has always been important to Nokia. It is even more important as we develop new services and bring more people online through the Internet and mobile technologies. These services enable consumers to use and share their personal information in new contexts. Nokia is a key player in today's connected mobile online world, committed to bring the next billion people online. We recognize our responsibility to address privacy in an effective and sustainable manner in all of our activities, and are committed to a high and ethical privacy standard.

2011 PROGRESS
PRIVACY INITIATIVES

In 2011, we launched the Privacy Challenge as part of our crowd-sourcing Ideas Project to gather ideas from the public about how we design privacy into our devices.

We also launched an improved way for consumers to manage their marketing consent with Nokia. With the launch of Symbian Anna software, we simplified consumer's marketing consent into one "yes" or "no" approval that is stored with their Nokia account. This was a major improvement for consumers with a Nokia account, giving them a simple way to control whether Nokia contacted them or not.

In 2011, Nokia contributed to research on Near Field Communications (NFC) capabilities, which investigated privacy and security risks. This resulted in Privacy by Design guidelines on how the privacy principles can be manifested in mobile technology to protect privacy, empower consumers, and build trust in the mobile ecosystem. "Nokia has been committed to the development of NFC technology standards and products for many years. Privacy by Design is a key element of Nokia's privacy strategy and its commitment in our product creation process, said Mikko Niva of Nokia Global Privacy Council.

Respect for privacy and protection of user generated content is part of our commitment to high standards of integrity and ethical conduct in all our operations. Our target is that consumers trust Nokia to fulfill their privacy expectations. This should happen through Nokia being open and transparent, and allowing consumers to be in control of their personal information and the content they create. Therefore, we do not disclose personal data without consent or a legal obligation to do so. We have in place both proactive and reactive processes to ensure that our policies are effective, and aim to constantly improve privacy related matters, both internally as a company and by the choices we offer in our products and services. In addition, we are actively engaged in privacy matters at the industry level, and participate in regulatory discussions with key stakeholders.

Our approach to Privacy by Design means that privacy is engineered and taken into account in all product considerations. Consumers can find more about our privacy principles on our website, www.nokia.com/privacy

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PRODUCT SAFETY

Product safety is a top priority for Nokia. All Nokia products operate below the relevant international exposure guidelines and limits set by public health authorities and international expert bodies, such as the International Commission on Non-Ionizing Protection (ICNIRP) and the US Federal Communications Commission (FCC).

We are committed to transparency and responding to our customers' questions about mobile phone safety. Our website at www.nokia.com/emf contains information and links to other sources. For example, since October 2001, Nokia has voluntarily made Specific Absorption Rate (SAR) information available, helping our consumers to make informed choices. SAR information is included in our product user guides and can also be found at www.nokia.com/sar.

We support the World Health Organization (WHO) in its efforts to coordinate global regulations on electromagnetic fields. These are based on the widely recognized guidelines issued by the International Commission on Non-Ionizing Radiation Protection.

Understanding more about health effects

From time to time, there are reports in the media of individual research studies, which suggest that there may be adverse effects related to mobile phone use. Since 1995, expert panels and government agencies around the world have performed more than 110 reviews of the scientific evidence regarding health effects from Radio Frequency (RF) exposure.

For example, the WHO notes that "A large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use."
This position was confirmed after the International Agency for Research on Cancer, a WHO specialist agency, classified the electromagnetic fields produced by mobile phones as possibly carcinogenic to humans in 2011. WHO has identified areas for further research and is to conduct a health risk assessment of Electric and Magnetic Fields (EMF) in 2012.

Nokia has funded research on mobile telephony and health, principally through the Mobile Manufacturers Forum (MMF), an international association of telecommunications equipment manufacturers with an interest in mobile and wireless communications. These programs and projects, listed on the MMF website at www.mmfai.org, are jointly funded with governmental organizations and other industry forums. Importantly, neither the MMF nor its individual member companies have any editorial influence on the publication of the research results. Nokia continues to be a member of the MMF.

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2.2.5 STAKEHOLDER ENGAGEMENT

Most of our stakeholder dialogue takes place as part of normal business practice. From a sustainability impact point of view, our most important stakeholders are our employees, suppliers and customers. We also cherish and rely upon good relationships with our shareholders, governments and other policy makers, universities, NGOs and the wider community.

Our main channels for dialogue with stakeholders are both internal and public, small and large group engagement, campaigns, as well as specific and attitudinal surveys and feedback. We cover specific stakeholder activities that occurred in 2011 in relevant parts of this report. The regulatory and industry partners as well as NGOs are discussed in this chapter. For employees, please see chapter 2.2.3, for customers, chapter 2.2.4, for suppliers, chapter 3.4. Stakeholders are also discussed in relation to defining our key sustainability topics in chapter 1.3.

Listening to stakeholders and translating their expectations into business value is an important Nokia process. Our approach is to be transparent and stakeholder-focused and apply trusting and collaborative business approaches in order to drive progress for us as a business. What's more, we are an active and engaged participant in many industry and sector organizations, not only those specifically concerned with sustainability. This helps us to be better informed on issues and trends and to share our learning with others for the greater good of all. In playing a positive role we regularly contribute to working groups and committees of the organizations listed below. We also participate in a number of public policy development initiatives across the world in areas that are close to our business, including telecommunications, trade, technology, industry, education and environment.

We constantly strive to activate new channels concerning the ways in which we meet our existing expectations, while at the same time we continue to identify emerging trends. This window into the future is an important part of our ongoing success as it allows us to understand where systematic improvements can be made.

The key stakeholder concerns in 2011 were related to company restructuring and its impact on employees, as well as economic performance and the sourcing of raw materials.

CASE
STAKEHOLDER SURVEY

To further improve our understanding of our stakeholders' expectations and to better align our sustainability efforts and reporting with their priorities, we conducted an online stakeholder survey. A couple of hundred external stakeholders were invited to participate. They represented NGOs, operators, consumers, investors, analysts, media, developers, retailers and governmental authorities, reflecting the whole business scope of Nokia's operations. The survey confirmed the importance of the topics covered in our 2010 report and that most people were very satisfied with the information provided. According to the results, the most important topics for our stakeholders are our sustainability approach, our practice of design for the environment including life cycle assessment and our substance and materials management.

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COLLABORATION WITH BUSINESS, SECTORIAL, AND SUSTAINABILITY ORGANIZATIONS

ORGANIZATION	SPECIFIC INTEREST AREA	NOKIA'S ENGAGEMENT
Business organizations		
DIGITAL ENERGY AND SUSTAINABILITY SOLUTIONS CAMPAIGN (DESSC)	Promoting the use of ICT to address climate change and energy security	Member
EUROPEAN DIGITAL MEDIA ASSOCIATION (EDIMA)	Policy advocacy in Europe	Nokia representative is Chairman of the Board
EUROPEAN ROUNDTABLE OF INDUSTRIALISTS	General advocacy for European industries (48 largest European companies)	Member
INTERNATIONAL CHAMBER OF COMMERCE (ICC)	Business sector	Member
ROSETTANET	Supply chain trading network	Member
CONFEDERATION OF FINNISH INDUSTRIES	Environmental Committee, Working Group on Sustainable Business: Sustainability and business	Member of Environmental Committee, Working Group on Sustainable Business
FEDERATION OF FINNISH TECHNOLOGY INDUSTRIES	Environmental Committee: Sustainability and business	Member of Environmental Committee
Sectoral organizations		
CTIA – THE WIRELESS ASSOCIATION	Wireless industry trade body	Member
DIGITAL EUROPE	Policy advocacy in Europe	Member and Chair
GLOBAL E-SUSTAINABILITY INITIATIVE (GESI)	Sustainability in ICT sector	Member and board member
INFORMATION TECHNOLOGY INDUSTRY COUNCIL (ITI)	Policy advocacy in US ICT	Member
SOLVING THE E-WASTE PROBLEM (STEP)	Waste issues	Member
TRUST IN DIGITAL LIFE CONSORTIUM	Setting a vision for trustworthy products	Founding Member
Sustainability organizations		
UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO)	Sustainable development	Signatory and member of Education for All initiative
UNITED NATIONS GLOBAL COMPACT	Business sustainability guidelines	Member of Global Compact Network, One of the founding members of Global Compact Nordic Network, Signatory and member of Caring for Climate initiative, Member of Supply Chain Advisory Group
WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT (WBSCD)	Sustainability and business	Widespread cooperation, Nokia Chairman is chair
PROSUITE	Prospective Sustainability Assessment of Technologies	Member of working group
WORLD50	Sustainability and business	Sustainability 50

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COLLABORATION WITH POLICY MAKERS

In addition to the activities related to policy issues such as e-waste, energy and climate, and substance management, Nokia is also, for example, participating in EU Commission pilot projects. These aim to assess the applicability of the standards and methodologies for telecommunications products and services. As this is a key requirement for better policy making, Nokia has been actively contributing to the development of these standards and methodologies.

Our Education Policy team communicates with governments and educational institutions to help them shape and modernize education systems and syllabi. Its aim is to ensure they better reflect the needs of global competition and the ICT revolution. The team also communicates with our business units to identify their long-term competence needs.

CASE
METHODOLOGIES FOR MEASURING THE ENVIRONMENTAL IMPACT OF ICT

Nokia participates in many research projects with the theme of sustainable production and consumption. For example, in a project run by the European Commission Directorate General of the Environment, we have been testing methodology guidelines developed by Joint Research Center (JRC) for the calculation of the environmental impact of products and organizations. This methodology goes beyond calculating only the greenhouse gas impacts of a product, but the whole spectrum of environmental impacts that products may have.

During 2011, we contributed by testing how the guidelines are suited for assessing the environmental impact from cradle to grave of a smartphone. The twelve different impact categories included such topics as climate change, ozone depletion, human toxicity and resource depletion. While it seems the methodology is not suitable for comparing different products, it may be useful for helping to identify where we need improvements in the methodology or the data that can then be used to prepare better information for users.

Because we are committed to improving our performance, we have also been participating in the development of standardized methodologies for greenhouse gas calculations in the ICT sector. We are currently piloting the suitability of these methodologies together with other leading companies. While this may sound very technical and process oriented, the ultimate goal is to reduce the environmental burden of ICT. When completed, we hope that these tools can be used as the basis for improved impact assessments and policy making.

You can read more of how we work to develop environmental legislation in the chapter 3.1.5 in 'Working with waste regulators'.

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COLLABORATION WITH UNIVERSITIES

Nokia's collaboration with academic institutions can be broadly split into two types of activities: Nokia Research Center (NRC) University collaborations and Nokia Donations Program.

The NRC focuses on engaging the world's leading academic institutions in driving global intellectual vision and insight and building global test beds to learn from broader audiences, thereby multiplying Nokia's own efforts. In 2011, we had 13 strategic partners, including Aalto University of Helsinki, University of Tampere and Tampere University of Technology in Finland, University of Cambridge in the United Kingdom, EPFL Lausanne and ETH Zurich in Switzerland, Tsinghua University and Beijing University of Posts and Telecommunications in China, Massachusetts Institute of Technology, University of California Berkeley, University of Southern California and Stanford University in the United States.

The Nokia Donation Program granted donations to universities in 2011 in Africa, the Americas, the Asia-Pacific region and Europe. We have supported a wide range of projects in a variety of subjects, everything from developing M-Health competences in Russia to 3D scene creation, navigation and sharing in Canada.

CASE

MLABS – PUBLIC PRIVATE PARTNERSHIP PROGRAM WITH FINNISH GOVERNMENT AND INFODEV (WORLD BANK)

Nokia, together with infoDev, continues to implement the 'Creating Sustainable Businesses in the Knowledge Economy' (CSBKE) program, funded by the Finnish Ministry of Foreign Affairs, in five target countries: Kenya, South Africa, Vietnam, Armenia and Pakistan. The CSBKE program aims to strengthen the productive capacity of small and medium enterprises (SMEs) in the agribusiness and ICT sectors in developing countries.

As part of the program, the first two mLabs were inaugurated during 2011 in Kenya and South Africa and three further ones will be opened during the first half of 2012 in Pakistan, Vietnam and Armenia. The mLabs focus on supporting innovators and emerging entrepreneurs who develop applications and content with positive socio-economic impact and which expand the reach of mobile innovations to low-income consumers. The objective is to accelerate the closing of the digital divide, and to ensure that citizens around the world have ubiquitous access to high-quality content and services.

Nokia collaborates with the mLab on the ground by providing in-kind contributions in the form of technical assistance, training material, devices and online tools for the testing laboratories, and mentoring of mobile entrepreneurs. Nokia is also committed to organizing developer events and competitions in collaboration with the mLabs, as well as to purchase services from the incubated entrepreneurs in the form of locally relevant applications, localized content and potential research projects.

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PARTNERING WITH NON-GOVERNMENTAL ORGANIZATIONS

By working together with other organizations, Nokia can make a difference in the ongoing struggle to achieve a more sustainable, equitable world. Our main objective when cooperating with NGOs is to invest in projects that are sustainable and preventive rather than reactive. We believe in projects that bring together expertise from all sectors – private, public and civil – to help empower communities and individuals to help drive their own development.

The level of co-operation varies from local one-off projects – see for example 'Improving education, health and livelihoods with mobile technology' and 'Protecting biodiversity' – to holding joint events – see 'Human rights' and 'Ethical sourcing of raw materials'. In addition, Nokia has the following four global NGO partnerships in place.

NOKIA LOOKS BEYOND TRADITIONAL NGO COOPERATION, AND SEEKS PROJECTS THAT BRING VALUE TO COMMUNITIES AND IMPROVES THE ENVIRONMENT WITH MOBILE TECHNOLOGY.

The International Union for Conservation of Nature (IUCN)

IUCN helps find and develop workable solutions to the world's most pressing environmental and development challenges. In early 2011, Nokia signed an agreement with IUCN, pledging to support their nature conservation work and help them raise awareness on the importance of biodiversity – a key emerging issue in environmental protection. What's more, we were the first company to join the SOS (Save Our Species) initiative, which aims to build a major global species conservation fund by 2015. We also support IUCN's conservation project in the Indian Himalayas, helping communities in the region learn how water management can be used to build climate resilience.

Oxfam

In 2011, we started global partnership with Oxfam GB. Oxfam is an international confederation of 15 organizations working together to find lasting solutions to poverty and injustice. The aim of our collaboration with them is to help poor people's voices be heard within their communities, countries, and globally. We're also trying to enhance poor people's decision-making ability by developing tools that address their immediate needs. Our partnership with Oxfam has inspired a range of projects. For example, in April 2011, Nokia and Oxfam used OpenIDEO to explore how mobile technologies, combined with online community, can be used to improve maternal health, especially in pregnancy and childbirth.

United Nations Educational, Scientific and Cultural Organization (UNESCO)

In October 2010, Nokia initiated a 5-year partnership with UNESCO. The partnership harnesses mobile communications to support individuals, organizations and governments as they strive to achieve the six goals of the global Education for All agreement. The partnership has been structured to meet the target date for these goals by 2015. Nokia will contribute expertise relating to technology and policies in this area.

World Wide Fund For Nature (WWF)

Nokia and WWF have had a Global Partnership Agreement in place since 2003. By working with WWF we aim to further strengthen our environmental performance, support WWF's conservation work and develop mutually beneficial activities which will promote sustainable development. We want to raise environmental awareness and WWF can help us create downloadable content to encourage people make sustainable choices in their everyday lives.

Since 2003, we have not only supported WWF's extensive conservation work, including projects such as the Living Himalayas Network Initiative, but also develop mutually beneficial activities to help promote sustainable development. For example, WWF has helped us create downloadable content to encourage people to make sustainable choices in their everyday lives. WWF also helps us further strengthen our environmental performance, for instance reducing our environmental impact in different areas. Furthermore, WWF share their expertise with Nokia personnel and, for example, helps us organize device take-back campaigns in different markets.

FINANCIAL SUPPORT TO CRISIS AREAS

In 2011, we provided financial or in-kind support to several crisis-afflicted areas, including Japan, Australia, New Zealand, Thailand and the Horn of Africa.

ENCOURAGING VOLUNTEERING

Nokia Helping Hands is our global volunteer program, which helps those in need in a variety of ways. It also acts as an umbrella organization for locally relevant volunteering activities. What's more, it's owned and operated by our employees. Thousands of our employees contribute their time and effort to worthy causes in their communities. For us, it is important to encourage and support employees who want to contribute. In recognition of this, our employees can take two working days per year as a Nokia Helping Hands day to go out into the community and contribute to a good cause.

AWARDS RECEIVED FOR NOKIA'S SUSTAINABILITY WORK

During 2011, Nokia received several awards for its sustainability work, including the Justmeans Social Innovation Award for most strategic use of philanthropic Funds for Nokia Data Gathering; SAFIPA (South Africa – Finland partnership on ICT) award for Best Socio-economic Impact for Nokia Mobile Mathematics. We also received the Mobile News Environmental Enterprise award for company initiative that shows the best case of ethical business, innovation and community values. This was given for the environmentally friendly measures we took in production and packaging.

IUCN WWF UNESCO Oxfam Be Humankind

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2.2.6 OUR ECONOMIC IMPACT

As a global company, the Nokia Group has a significant economic impact, both directly and indirectly.

DIRECT ECONOMIC IMPACT

Our direct economic impact to different stakeholder groups is summarized in the following table.

COMPONENT	COMMENT	2011	2010	2009	2008	2007
CUSTOMERS	Net sales, EUR million	38,659	42,446	40,984	50,710	51,058
SUPPLIERS	Total purchases of goods and services, EUR million	27,572	30,500	29,100	34,600	36,400
SHAREHOLDERS	Dividends paid, EUR million	1,536	1,519	1,546	2,048	1,760
EMPLOYEES	Wages and benefits, EUR million	7,534	6,995	6,747	6,914	5,938
CREDITORS	Net financial expenses, EUR million	102	285	265	2	(239)[1]
PUBLIC SECTOR	Gross taxes, EUR million	752	798	736	1,514	2,209

INDIRECT ECONOMIC IMPACT

In addition to our direct impact, Nokia contributes to economic development indirectly in various ways. For example, we contribute through our products, used by over one billion customers, by making information gathering and sharing easy, effective and accessible, and enhancing the ability to make real time decisions. This is useful for creating new business opportunities, expanding market reach and making better tools and skills available to more people across the world. Various examples how Nokia products help people to improve their livelihoods are described throughout this report.

Our indirect economic impact also includes things like creating business opportunities and jobs along our supply chain, competence development to our employees, and impact on communities.

Overall, mobile technology enables positive change on a scale greater than ever before, and at a time when we need rapid change the most. The links are astonishing. Research shows that GDP increases by 0.6% in emerging markets when ten more mobile phones are added per 100 inhabitants. The impact of increased Internet access almost doubles that.[2] The technology industry has also a major global role in technology transfer and human capital development.

More Nokia and Nokia Group data is available in the Key Data section of this report. Details on our financial performance are published in quarterly results releases, in our Form 20-F, and Nokia's Annual Accounts, which are available at our website.

[1] Net financial income.

[2] Vodafone policy paper: The Impact of Telecoms on Economic Growth in Developing Countries.

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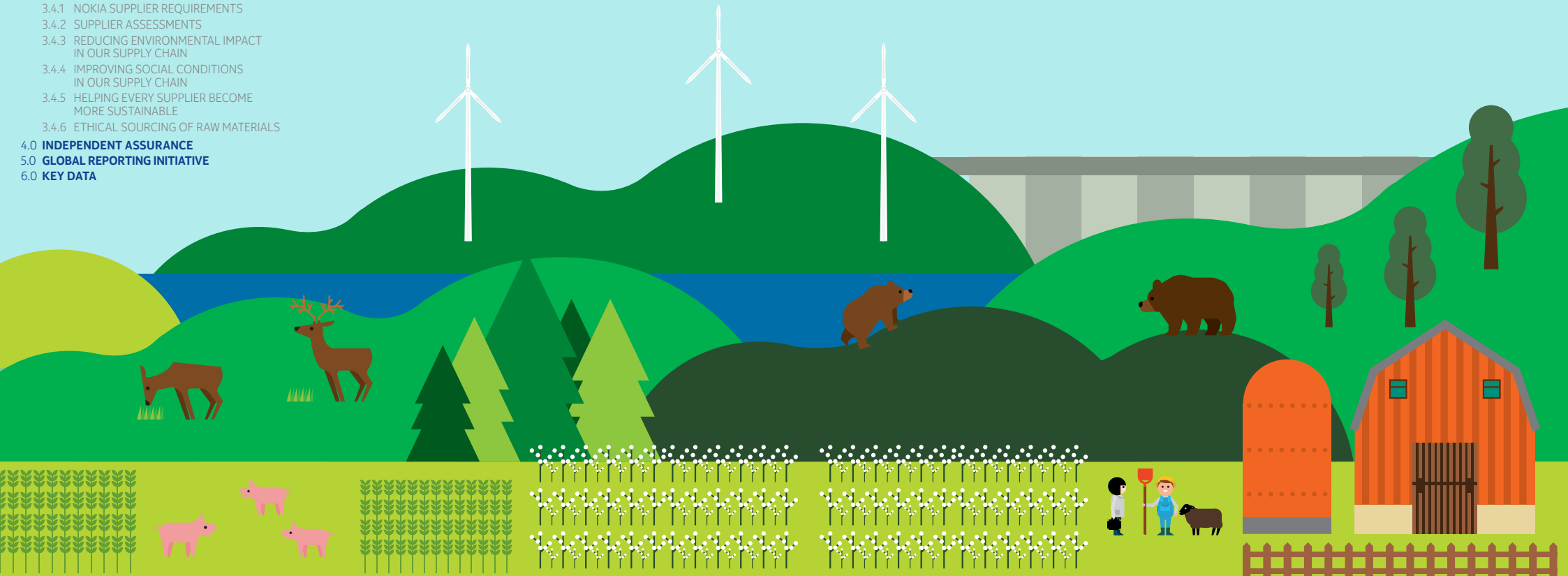
Nokia aims to be a leading company in environmental performance. We continue to find new ways of reducing our own impact by reducing emissions and managing waste across our factories, facilities and offices. In addition to these minimizing efforts, we drive positive change by maximizing the enabling effect our technology can have and developing new partnerships both inside and outside our industry.

In the following chapters, we cover our impact on the environment and our environmental strategy. First, we introduce our sustainable devices, and the positive, enabling effect of our products can have on the planet. We also report upon our impact on the environment, as well as our targets and progress regarding climate strategy and energy efficiency.



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At Nokia, we think every device should be made with the environment in mind, so we continuously improve the environmental credentials of all our products. Our eco hero devices have the widest range of environmental features as well as new innovations, which are gradually implemented across our product portfolio. Today, we are proud to say we have the environmentally leading product range in the industry and have been recognized by several organizations for our environmental accomplishments.

WE ARE PROUD TO SAY WE HAVE THE ENVIRONMENTALLY LEADING PRODUCT RANGE IN THE INDUSTRY

During product creation, we focus on energy efficiency, avoiding substances of concern and using renewable materials, smart packaging and creating environmental services, which encourage people to adopt more sustainable lifestyles. Effective end-of-life practices close the life cycle loop, putting energy and valuable materials back into circulation. Our environmental services and applications, together with our environmentally friendly and energy efficient devices and accessories, can inspire and enable people to live more sustainably. Various studies imply that for certain people, environmental aspects are important and thus they would be willing to pay more for green features on their mobile device.

New eco hero devices

- The Nokia 700 is our greenest smartphone and the industry leader in the use of bio-materials, recycled plastics and recycled metals. The ecologically themed game, Climate Mission 3D, comes preinstalled in the device. The Nokia 701 is a smartphone that also contains an increased amount of recycled metals.
- The Nokia Asha 200 and Nokia Asha 201 are QWERTY messengers, introducing eco innovation to the lower price point devices as well.
- The Nokia E6, another eco hero device with QWERTY keymat, targeted at business users
- Services to support sustainable lifestyles
- Climate Mission 3D game combines the fun of gaming with a way of discovering how to reduce your own ecological footprint and learn about climate change.
- The Green Channel gathers all the applications for more sustainable lifestyle into one place within the Nokia Store.
- Nokia Maps and Nokia Drive help you to consider the environment while moving around.
- Nokia Public Transport application offers public transportation route planning, raising awareness of environmentally sound public transportation as a journey option and making it easier to use

3.1.1 DESIGN FOR THE ENVIRONMENT PROCESS

We take a proactive approach when considering how our activities might impact the environment. Our product creation is guided by life cycle thinking to minimize the environmental impacts across the life cycle of a product. Life cycle assessments help us identify and focus our activities where we can best contribute to environmental improvements. During the last decade, the greenhouse gas footprint of our phones has been reduced by up to 50%, while introducing new features and capabilities that allow our devices to be used in various new ways.

In our product creation, all our new products have a dedicated Design for Environment specialist who supports product development project. They verify the implementation of the legal environmental requirements and our voluntary substance and materials requirements, promote the implementation of most sustainable alternatives for material choices and energy efficiency, and provide sustainability reporting like Eco Profiles.

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54%
OF TOTAL GREENHOUSE GAS EMISSIONS
RAW MATERIALS AND COMPONENT MANUFACTURE

4%
OF TOTAL GREENHOUSE GAS EMISSIONS
OWN OPERATIONS

16%
OF TOTAL GREENHOUSE GAS EMISSIONS
TRANSPORTATION

25%
OF TOTAL GREENHOUSE GAS EMISSIONS
USE OF PHASE PRODUCTS

1%
OF TOTAL GREENHOUSE GAS EMISSIONS
RECYCLE, REUSE AND RECOVERY OF MATERIALS

3.1.2 PRODUCT LIFE CYCLE ASSESSMENT (LCA)

At Nokia, we use an externally audited life cycle assessment methodology to calculate the environmental impact of our products and processes. LCAs help us identify and focus on the areas where we can make the biggest reductions. Our calculations include the entire mobile device life cycle, from raw material acquisition to the end of the product's life. We also assess energy efficiency, sustainable use of materials and small packaging. The LCA methodology of Nokia's Eco Profile for products was audited during the spring of 2010. Nokia has a long experience in conducting life cycle assessments and is continuously participating in research projects and development of standardized methodologies. See case 'Methodologies for measuring the environmental impact of ICT' in chapter 2.2.5 in 'Collaboration with policy makers'.

The life cycle assessment of a typical Nokia mobile device was first published in 2009. This assessment measured the greenhouse gas emissions across the entire life cycle of the device (pictured above). The amount of energy consumed during the entire life cycle is around 210 mega joules (MJs) and the total greenhouse gas emissions are 12kg of CO_2e. This is equal to driving 71km in a typical family car. The biggest climate change impact throughout the life cycle comes from raw materials and component manufacturing, which make up 54% of total greenhouse gas emissions. Our mobile device production facilities account for 4% of total greenhouse gas emissions, transportation 16%, device usage 25%, and recycling 1%. The results of a life cycle assessment (LCA) always depend on the calculation method, scoping and assumptions used and they reflect our understanding at the time of publishing.

The biggest impact throughout the life cycle comes from raw materials and component manufacturing, which make up 54% of total emissions.

On our website, we provide Eco Profiles for all our new products containing information on their environmental impact. These profiles also contain basic information on products' material use, energy efficiency, packaging, disassembly and recycling. For older products, Nokia has provided Eco Declarations since 2001.

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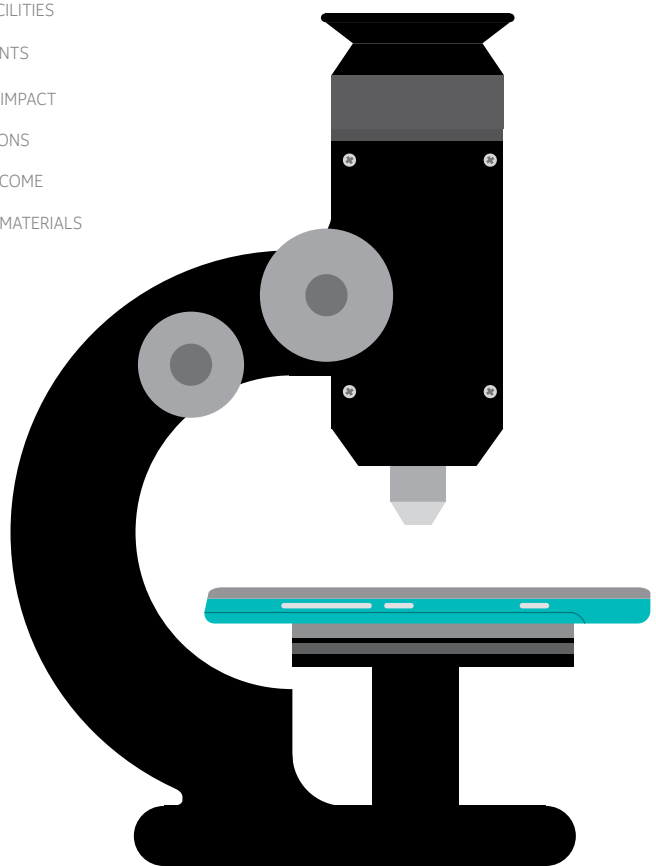
3.1.3 SUBSTANCE AND MATERIALS MANAGEMENT

We're an industry leader in substance and materials management and the first mobile phone manufacturer to have a full material declaration of mobile devices. Our main objective is to know all the substances in our products, not just those that raise concerns. This means we can respond swiftly if new concerns arise about the substances we use.



Meeting health and environmental regulatory requirements is a basic requirement. Nokia follows the precautionary principle. Where we have reasonable grounds for concern over the possibility of severe or irreversible damage to health or the environment, we believe that lack of full scientific certainty should not be an obstacle to triggering actions to gather and assess additional data. This may lead us to take voluntarily steps, e.g. to substitute substances of concern with safer alternatives, where feasible alternatives are available.

We use legal compliance not as a mere baseline but as a starting point from which to grow. Our focus is on continuously reducing substances of concern, and exploring and introducing new, environmentally friendly materials, discussed in this chapter in 'Use of eco materials'. Take-back and recycling is also a major part of our solution to the issue of limited resources.

We operate in a world of limited resources and escalating pressure on the natural environment. Some of the substances and materials, which go into mobile technologies, raise questions about human rights, because they can be sourced from conflict areas. Meeting these challenges requires careful management across our supply chain and throughout the product life cycle. Our minerals management is discussed in chapter 3.4.6, 'Ethical sourcing of raw materials'.

NOKIA SUBSTANCE LIST (NSL)

Nokia publishes, on an annual basis, the Nokia Substance List (NSL) in which both legislative and voluntary material restrictions are shown. Substance and material phase-outs that are implemented in collaboration with our sourcing organization are initiated regarding the voluntary and legislative restrictions defined in NSL.

EU ROHS AND EU REACH COMPLIANCE

All our mobile devices and accessories, worldwide, are fully compliant with the EU Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (EU RoHS). Additionally, our products do not contain substances included in the Candidate List of Substances of Very High Concern, by the EU Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (EU REACH), which the EU REACH regulation requires to be reported.

VOLUNTARY PHASE OUTS

Since 2006, we have also voluntarily phased out PVC from all mobile devices and enhancements. Since 2009, all our new products must be free of BFR (brominated flame retardants) and RFR (restricted flame retardants), as defined in the NSL. We have also voluntarily banned the use of beryllium oxide since 2004 in all new products. The restriction for use of all other beryllium compounds has been in force since 2010 for all new products as defined in NSL. The first technology area in which we have completely phased out beryllium and its compounds is connector technology. Alongside the new products, the connector technology phase-out has also been applied to older products still in production. Nokia is actively searching for alternative materials to replace beryllium also in other technology areas where technically suitable materials have not been available so far.

Use of phthalates in our products has been restricted since 2005. The ban includes eight different phthalates of which seven are restricted based on EU regulation.

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NOKIA'S VOLUNTARY PHASEOUTS OF SUBSTANCES OF CONCERN

MATERIAL OR SUBSTANCE GROUP	2001	2004	2005	2006	2007	2008	2009	2010	2011
RESTRICTION OF HAZARDOUS SUBSTANCES (ROHS) DIRECTIVE	EU RoHS directive requirements introduced to NSL		1st EU RoHS compliant product, April 2005	All products RoHS compliant globally; EU RoHS directive came into force on 1 July 2006					RoHS recast introduced to NSL
RESTRICTED FLAME RETARDANTS (RFR) AND OTHER BROMINE AND CHLORINE COMPOUNDS		Sb2O3, BFR, CFR restricted for certain product categories						All products free of bromine, chlorine and Sb2O3 as defined in NSL	
BERYLLIUM COMPOUNDS		Beryllium oxide restricted					Beryllium compounds restricted on new Nokia products excl. gear products	All new products free of beryllium compounds as defined in NSL	
POLYVINYL CHLORIDE (PVC)		PVC restricted for certain product categories		All products free of PVC					
PHTHALATES			Phthalates restricted						
PERFLUOROOCTANE SULFONATES (PFOSS)					PFOSs restricted				
ORGANIC TIN COMPOUNDS							Triorganic tin compounds (TBT, TBTO and TPT) restricted	Organic tin compounds restrictions to include diorganic DBT, DOT and triorganic tin compounds	
PERFLUOROOCTANOIC ACID (PFOA)									PFOAs restricted

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3.1 AN ENVIRONMENTALLY LEADING PRODUCT RANGE

USE OF ECO MATERIALS

During the last few years, we have been active in introducing new, more sustainable materials like bio plastics, bio paints and recycled metals into our devices. During 2011, we continued on this path, introducing the use of recycled plastics first in Nokia 700. This materials innovation helps us to reduce our dependency on fossil raw materials and the need for virgin metals, use less energy in raw material acquisition, and introduce more sustainable industry practices.

3.1.4 PACKAGING

Our focus, in the past, on creating smaller packages has resulted in a real chain reaction of benefits. We got smaller, lighter and more efficient chargers. We also made smaller and shorter user guides with fewer language variants per package, less content in the box, tighter wrapping of cabled accessories and fewer and lighter packaging parts. This optimization has been going on for years and there isn't much more that can be done to reduce the use of materials in packaging. The current mission of the Packaging Design team is therefore to retain the levels we have achieved over the years, now with a much more targeted focus on using sustainable materials. We estimate that in 2011, smaller packaging has helped us to reduce packaging and transportation costs by tens of millions of Euros.

In 2011 we saw our first Forest Stewardship Council (FSC) certified packages with the Nokia N9 and the Nokia Lumia 800 packages. This is just the beginning of what we expect to see in the coming years. Our vision is that we will use only 100% certified renewable or recycled materials for our packages. We are making great strides towards that vision.

All our packages are 100% recyclable and each part is individually marked with ISO standard recycle markings in order to harmonize the experience for our customers. We do this on a global level, hoping that other companies will follow our lead. To enable clean recycling, we choose not to combine plastic and paper materials into single components.

Nokia's packaging portfolio is closely tied to its product portfolio. Our feature phones are shipped in truly optimized packaging, both in terms of choice of material and the minimized size. On the other hand, our smart devices represent a totally different price range demanding more premium packaging. Despite that, we have succeeded in reducing the average size of a smart device package and the material usage substantially. In addition, we use much less fresh forest fibres (virgin fibres) and much more post-consumer recycled material than in previous years.

Packaging materials used during 2011

Retail packages

- Paper: 23,032 tonnes; on average 60% recycled
- Plastic: 683 tonnes; up to 90% recycled

Transport packages

- Paper: 9,948 tonnes; on average 78% recycled

Retail and transport packages combined

- Paper: 32,980 tonnes; on average 66% recycled
- Plastic: 683 tonnes; up to 90% recycled

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3.1.5 TAKE-BACK AND RECYCLING

Nokia aims to connect “the next billion” people to the Internet and information through our mobile devices. This is a critical opportunity for Nokia, but an increase in the amount of products sold is also a key concern as electronic waste from old devices continues to increase. We take this responsibility seriously, and therefore operate the world’s largest mobile phone and accessory recycling system, with more than 6,000 take-back points in almost 100 countries at the end of 2011.

6,000 TAKE-BACK POINTS IN ALMOST 100 COUNTRIES AT THE END OF 2011.

Although Nokia adheres to strict management of materials and substances (see chapter 3.1.3) mobile phones can contain potentially hazardous materials if improperly disposed of at their end-of-life. Improper disposal of mobile phones includes dumping to landfill, or hazardous recycling methods such as open air burning or so-called “backyard recycling”. Proper recycling, however, is safe for people and the planet.

Our recycling programs target the removal of unusable products from domestic waste. The benefit is two-fold as recycling lessens the environmental burden of end-of-life mobile devices, and also harvests valuable materials that can be used for new products.

We build our recycling programs by identifying safe and reliable recyclers, developing the infrastructure for reverse logistics, offering a variety of our own take-back options, and partnering with others to increase our capacity to take back old mobile devices that might otherwise be headed for landfill. Of course, Nokia branded collection isn’t the only channel for people to recycle their devices. We have seen people returning products through EU collective schemes, through refurbishment and second-hand sales, through tele-operators and through other common collection schemes.

We work to make sure consumers are aware of the channels open to them for take-back and recycling and support all safe and effective methods of mobile phone recycling.

We measure our success on take-back and recycling in three ways: the number of countries covered, the number of people reached with our recycling message in dedicated campaigns, and the weight of mobile devices, and accessories, recycled.

RAISING AWARENESS AND CREATING A RECYCLING CULTURE

Our aim continues to be to help create a recycling culture in every country we operate in. We want to achieve this not just by raising awareness with our own customers, but by equipping all consumers with the know-how and the ability to, recycle their phones. We know from experience that developing a solid foundation, which supports a wider set of recycling behaviors, will result in more mobile phone recycling. That is, when recycling is part of people’s daily routine, recycling old mobile phones also becomes routine and we conducted a survey during 2011 which provided additional insight into consumer recycling attitudes and behaviors (see case ‘Global survey to measure attitudes and behaviors’ in chapter 2.2.4). We’re continuously studying the most effective ways for consumers to recycle their phones. Our focus is on learning how we can motivate people to act in more sustainable ways, so that we can put those practices to into use, globally.

WORKING WITH WASTE REGULATORS

Since 2005, under the Waste Electrical and Electronic Equipment (WEEE) directive, EU member states have been required to set up collection systems for waste from household electrical and electronic equipment. The various schemes managing this collection and recycling are operated and financed by the equipment producers, while municipal collections, specified waste management sites and shops selling equipment are the main collection sites. An ongoing challenge for reaching even higher collection targets is ‘leakage’, meaning waste equipment that isn’t monitored by existing national collection channels. Leakage occurs because much of household electronic waste still has value at the time of disposal and is sold for second-hand use (often abroad) or for recovery of its components after collection. In addition, consumer awareness and the scale of public campaigns about recycling vary widely across the EU, and the current EU target of collecting four kilos of electronic waste per inhabitant per year is resulting in very different success rates being achieved between countries.

Steady progress has been made to establish and develop the existing national collection networks in every country and these networks collect and treat all electronic waste from households, and are a big step forward to making e-waste recycling the rule, not the exception. Nokia has actively participated in the recast of the WEEE initiative in the EU. In addition, we have participated in the development of legislation concerning e-waste in countries around the world, including in India, China, Kenya, Mexico and Thailand during 2011 just to name a few.

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WORKING WITH PARTNERS

We use different types of incentives to introduce recycling and make it desirable, including partnering with NGOs, making donations and giveaways, and offering access to events. Expanding our NGO partnerships and working together to increase recycling rates has been a key activity during 2011, as recycling in general is either a new and unfamiliar concept in many parts of the world, or the infrastructure is not readily available for consumers. Our successful campaigns in India, the Middle East and across Africa are proving great examples. By rolling out phone recycling programs in these countries, we've opened doors to other forms of recycling for communities that are new to the idea. In these cases, Nokia has played a key role by going beyond managing the impact of our own products. Our activities have helped to create local recycling culture.

"Nokia has been a founding member of the "Solving the E-waste Problem (StEP) Initiative" since 2007. Through this Nokia pro-actively contributes to StEP science based but nevertheless applied work to optimize the life cycle of electrical and electronic equipment by (i) Improving supply chains, (ii) Closing material loops and (iii) Reducing contamination, increase utilization of resources and promote re-use of equipment, exercising concern about disparities such as the digital divide between the industrializing and (post-)industrialized countries, and increase public, scientific and business knowledge and capacity/capability to properly treat e-waste."

RUEDINGER KUEHR
Executive Secretary of the
Solving the E-Waste Problem (StEP)
Initiative of the United Nations

2011 PROGRESS
TAKE-BACK AND RECYCLING

During 2011, Nokia ran recycling campaigns in 26 countries. We had cooperation with tele-operators or retailers in 13 countries and with universities and schools in 10 countries. We offered mail recycling programs in five countries, and participated in national recycling programs in 30 countries. Most importantly, we were able to increase our permanent take-back service for obsolete devices to more than 6,000 collection points in close to 100 countries. During the year we collected 661 tonnes of used mobile phones, batteries and accessories through our own campaigns and Care recycling channels. That is an increase of almost 60% compared to the previous year. A combination of increased awareness, better infrastructure, and convenience for the consumer is leading to gradual increases in collection volumes.

We take part in collective recycling schemes with other equipment manufacturers in Europe, Canada and Australia. We also engage in local recycling awareness with retailers, operators, other manufacturers and authorities around the world. Our take-back and recycling programs continue to expand into new markets, assuring that mobile devices end up in environmentally safe recycling processes.

3.1 AN ENVIRONMENTALLY LEADING PRODUCT RANGE

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CASE
TAKE-BACK AND RECYCLING HIGHLIGHTS FROM AROUND THE WORLD

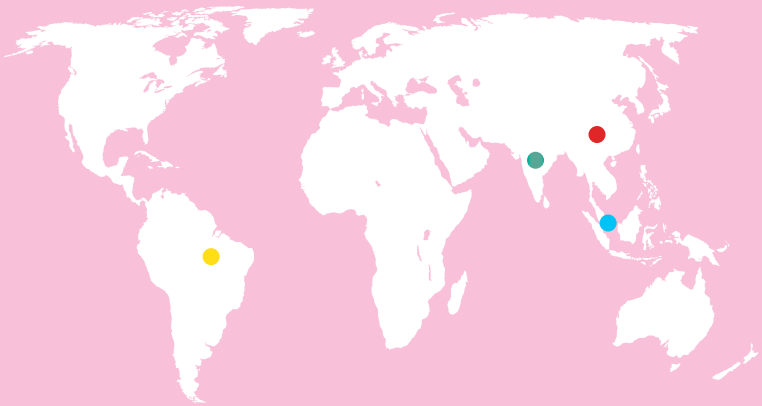
India

In India we have taken an ecosystem approach and partnered with organizations such as NGOs, schools, colleges, government bodies and corporations, which have a wide variety of competences and societal reach. We continue to build our recycling network by improving and expanding the infrastructure and logistics for collection, training retail personnel, collaborating with a responsible recycling vendor, and engaging consumers.

During 2011, we managed to collect almost 1.2 million phones and accessories (weighing over 60 tonnes) for responsible recycling. In addition, we planted approximately 36,000 trees during 2011 in cooperation with Humana People to People India (HPPI), World Alliance for Youth Empowerment, Rotary Midtown Bangalore and GrowTrees.com as part of an incentive campaign for recycling old mobile phones and accessories.

We also started working with schools and colleges in July 2010 and are in the process of partnering with over 3,000 schools and have already engaged over 100,000 students and over 2,000 school teachers with our partners Toxicslink and iDream to educate about the importance of recycling.

Nokia's corporate engagement program expanded to reach over 400 offices in several cities. In addition, as low awareness and lack of information is a key barrier in developing an effective system for e-waste management, Nokia along with our partner Humana People to People ran a program to raise awareness amongst small mobile phone retailers and repair shops in India about recycling of e-waste and to initiate on-site collection of old devices. Since the start of this program in June 2011, 11,000 phones and accessories have been collected. Nokia also started a viral campaign in December 2011 to create mass awareness to help people understand the concept of recycling, see a video.



China

In China we continued the Green Box program, in effect by Nokia and its partners since 2005, to invite product chain partners, employees and consumers alike to join in the e-waste recycling effort. During 2011, we expanded the Green Box program with the "Phones to Trees" campaign. For every phone or accessory that a participant returned, a certificate was awarded for with a tree to be planted in partnership with the China Green Foundation, resulting in 50,000 samplings planted. For the "Recycle a phone, Spread the love" campaign Nokia partnered with the Beijing Post to collect old phones at any of the 44 Beijing post office locations.

The idea was to offer people a recycling drop off point at a convenient and regularly visited location, the post office, so that there was no need for a separate trip to recycle. In return for each device recycled, education materials were sent to in need primary school students.

To date, the Green Box program has collected over 170 tonnes of electronics waste for proper treatment.

Brazil

In 2011, we expanded our recycling program in partnership with Pão de Açúcar Group, the largest retailer in the country, and increased the number of recycling points in Brazil and brought recycling a step closer to the daily lives of our customers. We also ran the "Troca do Bem" (Goodwill exchange) program with Pinto Frio, a major online retailer. By purchasing any Nokia device with the "Troca do Ben" label, the consumer received a national post envelope to return his or her old device for recycling in return for discounts and donations from Nokia and Ponto Frio to al local NGO.

Southeast Asia

During 2011, we expanded our partnership programs in Southeast Asia by organizing innovative new ways to engage youth and raise awareness about the importance of recycling. We organized recycling campaigns in eight countries with stakeholders, including retailers, universities and schools, operators, business partners and NGO partners.

"Recyclimpics", piloted in Malaysia during 2011, has been a fun way to recycle your phone. Old phones became projectiles in a series of games– Javelin, Basketball, and Lawn bowling – complete with scoreboards, prizes and the like. In addition to winning prizes in the Recyclimpics games, every participant was given a 'Planting Certificate' of a tree being named after them in the Nokia NEWTrees Program with WWF Indonesia. The tree can also be viewed in Nokia Maps with co-ordinates given in the 'Planting Certificate'. See a video about Recyclimpics.

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CASE
TAKE-BACK AND RECYCLING HIGHLIGHTS FROM AROUND THE WORLD

Egypt

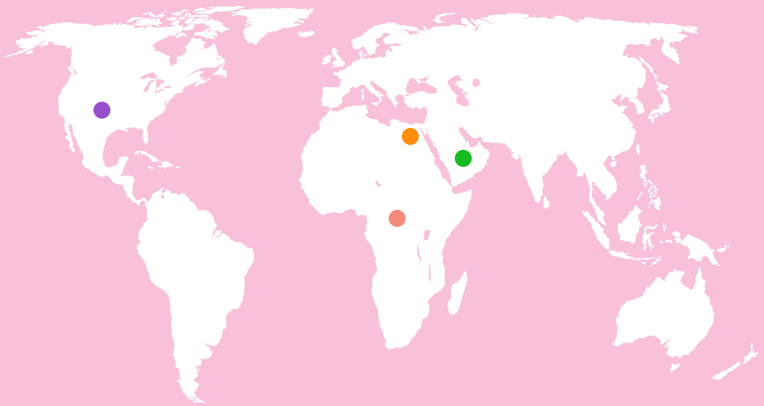
During 2011, Nokia initiated the first campaign in Egypt to highlight the importance of recycling mobile phones in collaboration with the Resala Foundation – an organization with over 100,000 volunteers involved in education and support for local communities across the countries – to link Nokia's solution for recycling mobile devices to Resala's education project.

Middle East

In Dubai, Nokia exhibited its innovative environmental initiatives at the EPIC Sustainable Living Expo in the world's largest shopping mall. The event was the first of its kind in the Middle East, and Nokia played a visible role in the event by exhibiting the latest eco hero devices, engaging visitors to charge their mobile phone with a Nokia bike charger, inviting them to recycle their obsolete devices and even to race the bikes to win a brand new phone.

In Pakistan, a campaign promoted by national celebrities, three media companies and Nokia Care has helped raise awareness about recycling, in particular e-waste recycling. For this campaign, Nokia partnered with FMCG, the second largest operator in the country.

In the United Arab Emirates, Oman and Qatar, Nokia and Emirates Wildlife Society (EWS-WWF) joined forces to spearhead a month-long campaign to raise awareness about the importance of e-waste recycling and the region's Marine Turtle Conservation Project. Those who donated their old mobile phones for recycling received adoption certificates for the Hawksbill turtles endangered in Gulf waters.



Africa

The Eco-school program, started in 2011 in cooperation with WWF in South Africa, raises awareness for teachers and educators about the importance of e-waste recycling. In Nigeria, Nokia works in partnership with Youth for Technology Foundation (YTF). The purpose of the project, called "TakeItBack" is to increase education and awareness for take-back and recycling mobile phones in Nigeria, and to increase the amount of collected mobile phones by YTF and Nokia in Nigeria.

An in-depth survey was conducted in Nigeria, Kenya and South Africa to gauge consumers' awareness of and concern for environmental issues, as well as attitudes towards recycling. The results show that, while Africans show high concern for the environment, awareness of recycling is still quite low. Responses also showed Nokia showing strong brand equity in the environmental space.

North America

During 2011, Nokia participated in America Recycles Day and Earth Day in the U.S. to engage consumers, environmental stakeholders and industry partners about the importance of E-Waste recycling. Recycling events spanned the U.S. and included several showings of the Nokia-sponsored film Wild Ocean, which highlights the importance of conserving Earth's ecosystems.

CASE
I #RECYCLING TWITTER CAMPAIGN

The challenge

To find a way to get people interested in phone recycling.

The idea

Luckily, people love their old Nokia phones, and still love talking about them. This was our chance to talk about recycling in a whole new way. Five historic Nokia phone personalities were brought to life online and struck up conversations with Nokia fans on Twitter. Each phone encouraged recycling... as long as it wasn't them. The phones were recycled in order of Twitter popularity. All activity linked back to Nokia's recycling network, explaining the ins and outs of where and how to recycle. We used Nokia blogs and Facebook to fuel Nokia nostalgia and get people recycling.

The outcome

We reached over 170,000 people in 44 countries via social media channels. Local markets loved the campaign enough to make a Chinese version. This quirky and fun approach was an effective way to generate excitement around phone recycling.

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ENABLING SUSTAINABLE LIFESTYLE

Traditionally, environmental activities have focused on minimizing the environmental impact in operations. Today, we are looking at how using Nokia devices can have a net positive impact by offering our customers products and services that promote sustainable lifestyle and enable people to reduce their environmental footprint. In this section, we talk about Nokia's contribution to enabling sustainable lifestyles by:

- Developing solutions that enable mobile phones to replace several other products (convergence)
- Developing services that reduce the need for unnecessary travel and commuting (such as navigation, virtual meetings and remote work)
- Developing other applications for sustainable lifestyle and services that replace physical products
- Helping to save energy with energy efficient solutions and by utilizing renewable energy

For each topic, we have a case study to illustrate how Nokia products and services can help people to reduce their CO_2 emissions. The enabling effect of mobile technology is also discussed in chapter 2.1, 'Enabling people with mobile technology'.

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3.2.1 MERGING SEVERAL PRODUCTS INTO ONE

Our devices are equipped with multiple functionalities, for instance many include a digital camera, music player, navigation, web browser and several other features – all in one product. Merging several products into one, also known as convergence, helps consumers reduce their own environmental footprint and avoid buying, using and charging several separate devices, when one device can be used for many different purposes.

CASE
EXAMPLES ON HOW TO REDUCE CO_2 EMISSIONS WITH NOKIA DEVICES[1]

Converged devices

If only 10% of the over 1 billion people using Nokia devices would use their mobile device instead of buying a separate music player, camera, video camera, PC, fixed-line telephone and a car navigator, we would avoid around 73 million tonnes of CO_2 emissions during a year.

That's equal to the emissions of flying 15 million people around the world once.

Have it all in one device

A study from 2011[2] shows that many people have already replaced their separate devices with a smartphone:

- 17% have replaced their car navigator
- 12% have replaced their music player
- 7% have replaced their camera
- 6% have replaced their video camera
- 3% have replaced their game console

This means that the 1,454 people who participated in the study have saved over 43,000 kg of CO_2e.

3.2.2 REDUCED TRAVEL AND COMMUTING

We provide innovative solutions that enable people to cut the impact of their daily activities and choices. Mobile devices can be used for attending meetings and working remotely, reducing the need for carbon-intensive business travel and commuting.

CASE
EXAMPLES ON HOW TO REDUCE CO_2 EMISSIONS WITH NOKIA DEVICES[1]

Use your mobile to avoid unnecessary business travel

If only 1% of the over 1 billion people using Nokia devices would use their mobile device for attending a meeting instead of travelling there by plane even once a year, we would avoid around 8.8 million tonnes of CO_2 emissions.

This roughly equals to the average fossil fuel-based emissions of 2 million people in one year.

Use mobile devices to work remotely

Let's assume that just 10% of people using Nokia devices would use their mobile device to work remotely once a week instead of driving to work.

This could reduce global CO_2 emissions by some 62 million tonnes a year.

This is more than the annual fossil fuel based emissions of countries like Portugal, Colombia or Nigeria.

[1] These case studies illustrate how Nokia products and services can help people to reduce their CO_2 emissions. For assurance, please see the third party assurance statement by PwC.

[2] A Study by teleporter DNA and Nokia: Finns and smartphones, Feb 2011.

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3.2.3 APPS FOR SUSTAINABLE LIFESTYLE

To enable sustainable lifestyle, we design apps that raise awareness about environmental issues, help reduce carbon footprint and help protect the planet in an engaging and informative way. Nokia Maps, Nokia Public Transport and Nokia Drive help consider saving the environment while moving around. The Nokia Public Transport application offers public transportation route planning in hundreds of cities all over the world. This app aims to raise awareness of environmentally sound public transportation as a journey option, and makes using public transportation easier, wherever users go. In addition, with the Nokia Public Transport service, you no longer need to carry around travel cards, timetables or city maps—it's all on your device, wherever you are.

Launched in 2011, the Nokia Public Transport is expanding in 2012, being pushed to many Nokia smartphones via bundling and software update. If you need to drive, Nokia Drive and the use of navigation and Nokia Maps help you to find the quickest, shortest route, allowing you to save time and fuel. Studies show that with regular use, using car navigation people drive less and increase fuel efficiency by 12%.[2]

We offer smart applications and digital services that show consumers how to reduce their environmental footprint. From Nokia's Climate Mission 3D game and other applications in Nokia Store's Green Channel to our People and Planet website, we help raise awareness about sustainable lifestyles, health and well-being and social responsibility

The Green Channel is a collection of eco applications in the Nokia Store. Today, Green Channel contains around 50 applications from around the world, created with developers and partners and powered by Nokia.

Nokia's People and Planet website has information about applications and services related to the environment, health and wellbeing, education, social responsibility and accessibility.

CASE
EXAMPLES ON HOW TO REDUCE CO_2 EMISSIONS WITH NOKIA DEVICES[1]

Car navigation – use navigation on your mobile

Several studies show that using car navigation services can result in 5% to 15% fuel savings. NAVTEQ Navigation Benefits Study (2009) shows that with regular use people actually drive shorter distances and spend less time on driving:

- Fuel efficiency increased by 12% and saved about 375 liters of fuel that equals close to one tonne of CO_2 emissions per year.
- People also drove nearly 2,500 km less, which would save 1.19 million tires in Germany alone.

If 10% of the over 1 billion people using Nokia devices would save 5% of their driving-related CO_2 emissions with the help of car navigation we could avoid over 22 million tonnes of CO_2 emissions per year. This equals the annual CO_2 emissions of around 6.5 million cars.

What's more, you don't need a separate navigation device, just a Nokia smartphone that has Nokia Maps Navigation for free.

[1] These case studies illustrate how Nokia products and services can help people to reduce their CO_2 emissions. For assurance, please see the third party assurance statement by PwC.

[2] Source: Real-World CO_2 Impacts of Traffic Congestion study, 2008

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3.2.4 HELPING TO SAVE ENERGY WITH ENERGY EFFICIENT SOLUTIONS

We are also continuously improving the energy-saving features throughout our product portfolio, including energy efficient chargers, to enable our customers to save energy. With over a billion people using Nokia phones around the world, small steps like these make a really big difference. Already in 2007, Nokia was the first mobile manufacturer to put alerts into mobile devices to remind people to unplug their chargers once they are fully charged. We've also introduced features to reduce the energy use of our devices. All our devices come with power saving standby settings, and Symbian devices feature a Power Save mode. Browsing the Internet and making video calls is more energy efficient with a mobile device, compared with a laptop or desktop computer.

CASE
EXAMPLES ON HOW TO REDUCE CO_2 EMISSIONS WITH NOKIA DEVICES[1]

Browse the Internet using your mobile device

With the same amount of energy used for one Facebook status update with a desktop computer, you can post over 100 updates with your mobile.

If 10% of the over 1 billion people using Nokia devices used their mobile instead of their desktop computer for Internet surfing half an hour a day, we could avoid over 1.9 million tonnes of CO_2 emissions per year.

This equals the annual greenhouse gas emissions of around 574,000 cars.

Use mobile device for video calls

With the same amount of energy used for a ten minutes webcam talk with a desktop computer and large LCD screen, you can have a mobile video call for over 18 hours.

And with a mobile, you can have your video call wherever you want.

CASE
HELPING CONSUMER REDUCE THEIR CO_2 EMISSIONS

One of the key ways Nokia can make a positive impact through our core technologies is by helping consumers to reduce their own carbon footprints. Assume, for example, that just 10% of the people using Nokia devices would do the following with Nokia devices and services for one year:

- Use their mobile device for attending a meeting once instead of travelling to the meeting by plane
- Use their mobile device to work remotely once a week instead of driving to work
- Use their mobile device instead of buying a separate music player, camera, video camera, PC, fixed line telephone and a car navigator

The combined impact of these actions could reduce global CO_2 emissions by over 220 million tonnes. That represents nearly the same amount as the annual fossil fuel-based CO_2 emissions of the countries of Sweden, Chile, and Vietnam combined.

[1] These case studies illustrate how Nokia products and services can help people to reduce their CO_2 emissions. For assurance, please see the third party assurance statement by PwC.

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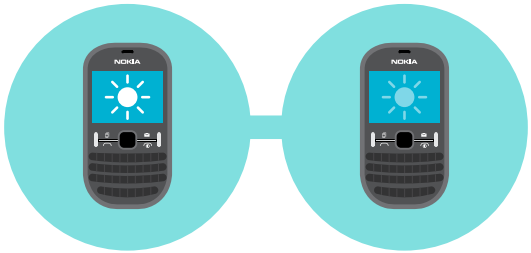
HOW TO REDUCE THE ENERGY YOUR HANDSET USES

Some simple tips to reduce the energy your handset uses

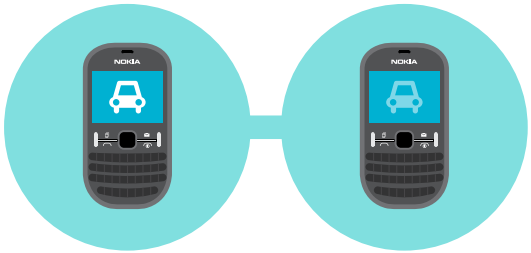
SAVES UP TO 15%

REDUCE BACKLIGHT BRIGHTNESS



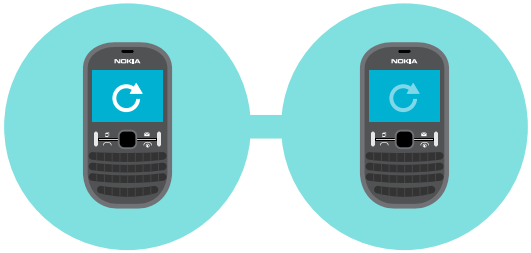
SAVES UP TO 30%

SWITCH OFF UNUSED APPS



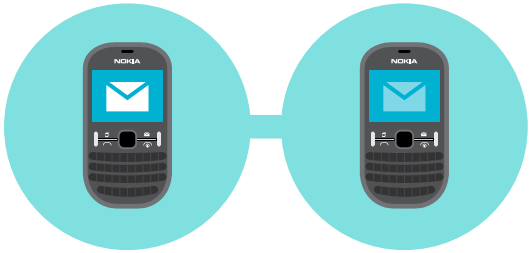
SAVES UP TO 30%

REDUCE BROWSER UPDATE INTERVAL



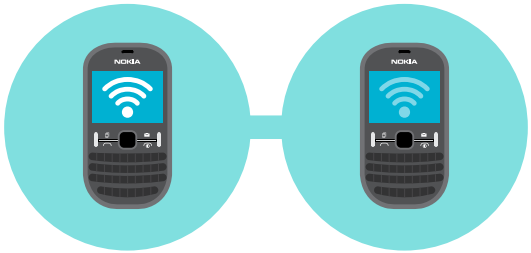
SAVES UP TO 15%

REDUCE EMAIL UPDATE INTERVAL



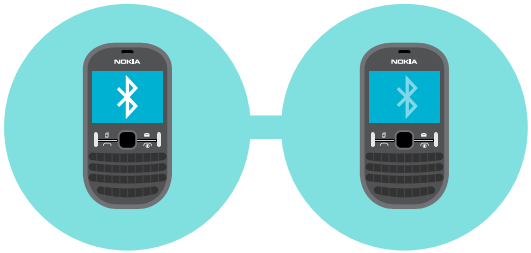
SAVES UP TO 10%

TURN OFF WI-FI WHEN IT'S NOT USED



SAVES UP TO 10%

TURN OFF BLUETOOTH WHEN IT'S NOT USED



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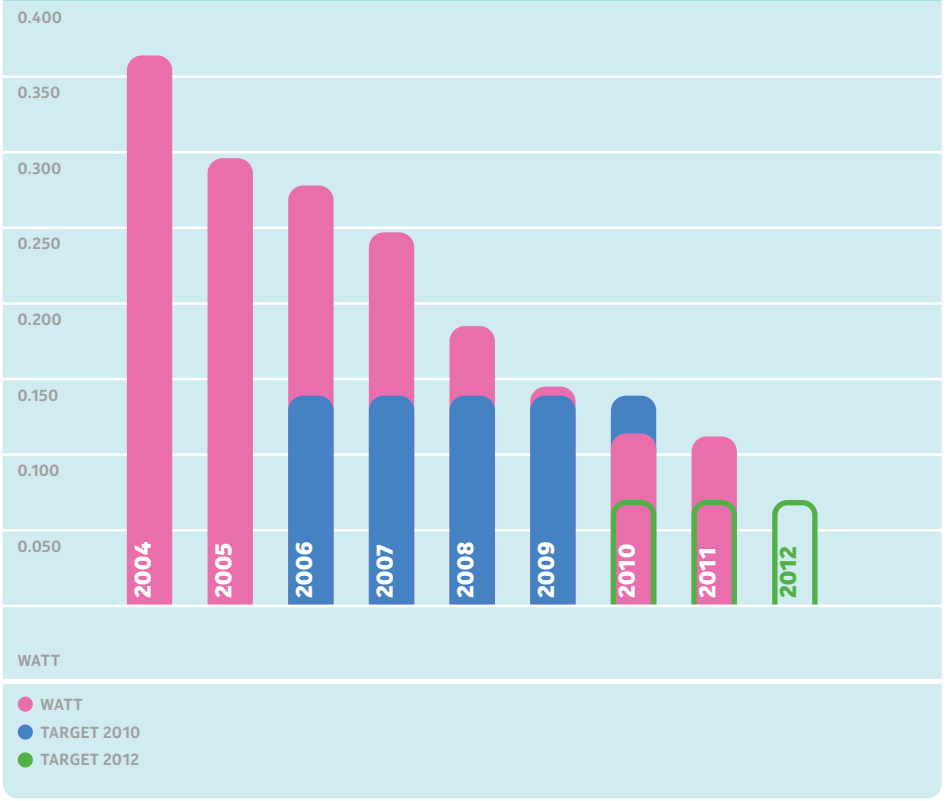
ENERGY EFFICIENT CHARGERS

At the end of 2008, Nokia, together with other manufacturers, created and began using a Mobile Device Charger Energy Rating. The rating is based on the charger's no-load energy consumption. This is the amount of energy a charger will continue to consume if you forget to unplug it from the outlet after the phone is fully charged. The rating is displayed on a unique label, which is featured in the product Eco Profiles and on the packaging of our accessory products.

Over the last decade, we have reduced the no-load consumption of our chargers by over 80%, and in our best-in-class chargers by over 95%. During 2011, we have introduced two new energy efficient chargers, the AC-11 and AC-16, replacing our older, less energy efficient chargers. Today, all new Nokia devices are being shipped with four star or five star chargers.

The charger no-load power consumption values are calculated as volume weighted average charger no-load power consumption for phone products per year. In 2011, we experienced big changes in the market and this caused us to make changes in our product portfolio, too. Due to this the decreasing trend of our average charger, no-load consumption was flattened out. Changes in the charger portfolio will help us to reduce the charger no-load power consumption and are heading for the new target of 75% reduction by end of 2012 from the 2006 baseline.

ON TRACK TOWARDS OUR END OF 2012 TARGET OF 75% REDUCTION FROM BASE YEAR 2006
The volume weighted average no-load power consumption of nokia's charger



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3.2.5 INNOVATING IN THE USE OF RENEWABLE ENERGY

As part of our continuous search for energy efficiency and sustainable alternatives, we initiated the Nokia Solar Charging Project at the start of the summer of 2011. The project's goal was to answer fundamental questions about how we can charge mobile phones just using the renewable energy of solar power, and to find solutions that help people who live in parts of the world where you can't just plug in and load up on electricity.

The public journey of our project started with the launch of the Nokia Solar Charging blog in June 2011 at www.nokia.com/solarcharging. The blog's mission was to share online and real-time the adventures and experiences of our test team, while reporting on the success of solar energy harvesting. We also wanted our readers to join us on our journey and to educate them by publishing a number of articles explaining the technology. The blog also published test reports and news from our test team.

The project test team consisted of group of people living and traveling in a diverse range of locations. We explored how solar charging works in different scenarios, from sailing across the Baltic Sea to camping in a Swedish forest. What's more, we gained an insight into how solar charging works in different parts of the globe. From above the Arctic Circle, where the sun doesn't set for three months, to Kenya, where access to electricity can be a daily challenge.

Our testers used a specially created mobile phones prototype, nicknamed Lokki. The small solar charging panels developed for this project were integrated into Nokia C1-02 devices, with a data logger for reporting the harvested solar energy. The key findings of the pilot project include the following.

- A basic phone, with the solar panel integrated in the back cover, succeeded in harvesting enough energy to keep the phone on standby mode and even provide some talk time, when carefully positioned to capture the available sunlight
- In order to support mobility and ensure carefree communications capability on a daily basis, be it sun or rain, even a basic phone would benefit from a larger solar charging surface than what's available on the back cover.
- Smartphones are typically loaded with applications and hardware that drain the battery in a day or two. Thus, to power a smartphone a solar panel would need to be much larger than the space available on a smartphone back panel.

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OUR ENVIRONMENTAL IMPACT

In this section, we report upon our impact on the environment, starting with our climate strategy. Next, we go through our environmental management systems, moving on to our factories, our offices, our data centers, use of green energy, logistics, business travel, employee commuting and car fleet, reducing waste and water, and finally protecting biodiversity. For each, we first introduce the topic and then discuss our 2011 progress.

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3.3.1 CLIMATE STRATEGY

We created our first climate strategy in 2006 and revised it in 2010. In 2011, we began updating the strategy, and our climate strategy with new, longer term targets, which will be finalized during 2012. The strategy addresses the energy consumption and greenhouse gas emissions of our products and operations, and sets energy and greenhouse gas emission reduction targets for our most important activities in areas that contribute to our direct and indirect greenhouse gas emissions.

Nokia is not an energy intensive company. Most of the greenhouse gas emissions related to our products come from component manufacturing by our suppliers or from the actual use of the products while in their owners' hands. Regardless, we aim to show leadership by reducing our own energy consumption and greenhouse gas emissions, raising consumer awareness on measures they can take to reduce their own footprints and driving best practices in our value chain and industry.

Our current focus areas in greenhouse gas emissions reduction are:

- Products
- Manufacturing, facilities and way of working
- Logistics and supply chain
- Helping our customers to reduce their own greenhouse gas emissions

OUR CLIMATE TARGETS

Devices and accessories

Our aspirational target is to reduce the greenhouse gas emissions caused during the whole device life cycle by over 60% by the year 2020 compared to the level in 2000[1]. To reach this, we have set ourselves targets for specific areas of the device life cycle:

Product use

- Reduce the average charger's no-load power consumption by 75% by the end of 2012 (2006 baseline)
- Continue to study new technologies which will use renewable energy, such as solar panels and kinetic energy
- Develop solutions that enhance the energy efficiency in our products

Manufacturing and our facilities

- Reduce greenhouse gas emissions in our offices, R&D sites and manufacturing facilities by a minimum of 30% by 2020 (2006 baseline, assuming no major business volume or headcount changes)
- Reduce energy used in production by 10% per unit produced by the end of 2012 (2010 baseline)[2]
- Reduce greenhouse gas emissions per person working in Nokia offices and R&D by a minimum of 15% by the end of 2012 (2006 baseline)[3]
- Continue the development of our Green Data Center strategy, which is already implemented in Finland, delivering targeted cooling, environmentally friendly backup power and power-efficient server racks

[1] Our overall target is based on our life cycle Assessment (LCA) methodology and actual data (when available). We take into account all the life cycle phases through this methodology: raw materials and components, inbound and outbound logistics, Nokia operations (manufacturing and facilities, business travel and commuting), use phase (the impact of charging and "no-load" time, or when a charger is plugged into the mains without a device attached) and end of life phase which focuses on recycling the device. There is currently no standard for LCAs, databases or data accuracy, nor for devices or their functionalities, but standards are likely to develop over the next decade. This makes the direct year on year device comparison challenging when measuring our progress. We will aim to use comparable techniques and compare devices with similar functionalities to address this challenge.

[2] We had to significantly change our calculation for energy used in production per unit produced during 2011 due to major changes in production, and thus had to change the base year from 2008 (as in previous targets) to 2010 (to be exact 2H 2010 – 1H 2011) in order to keep the target meaningful.

[3] Our original ambitious target was 23% reduction of greenhouse gas emissions per person working in Nokia offices and R&D for 2012, but this had to be revised due to the new Nokia strategy, which significantly changed the number of sites and employees during 2012. This prevents us from implementing all the original plans and unfortunately results in some temporary inefficiencies. The longer term targets however remain unchanged.

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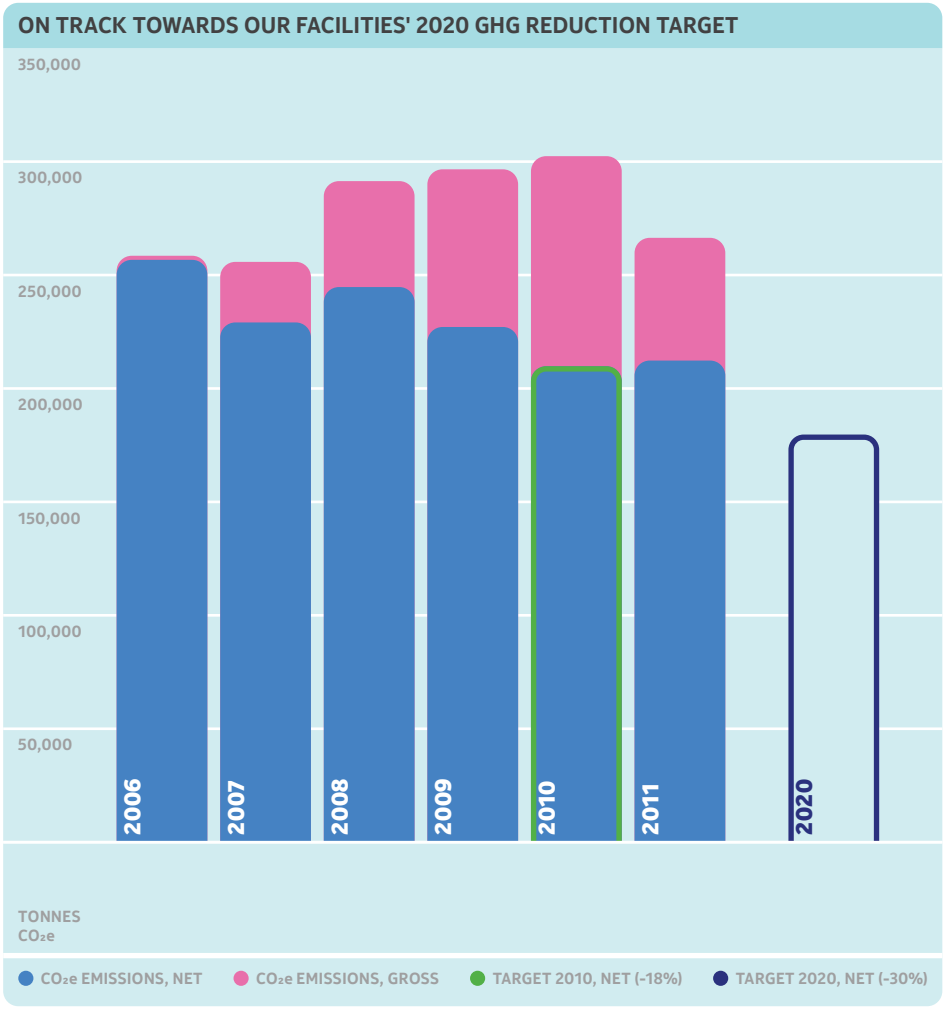
FACILITY CO_2e EMISSIONS AND TARGETS



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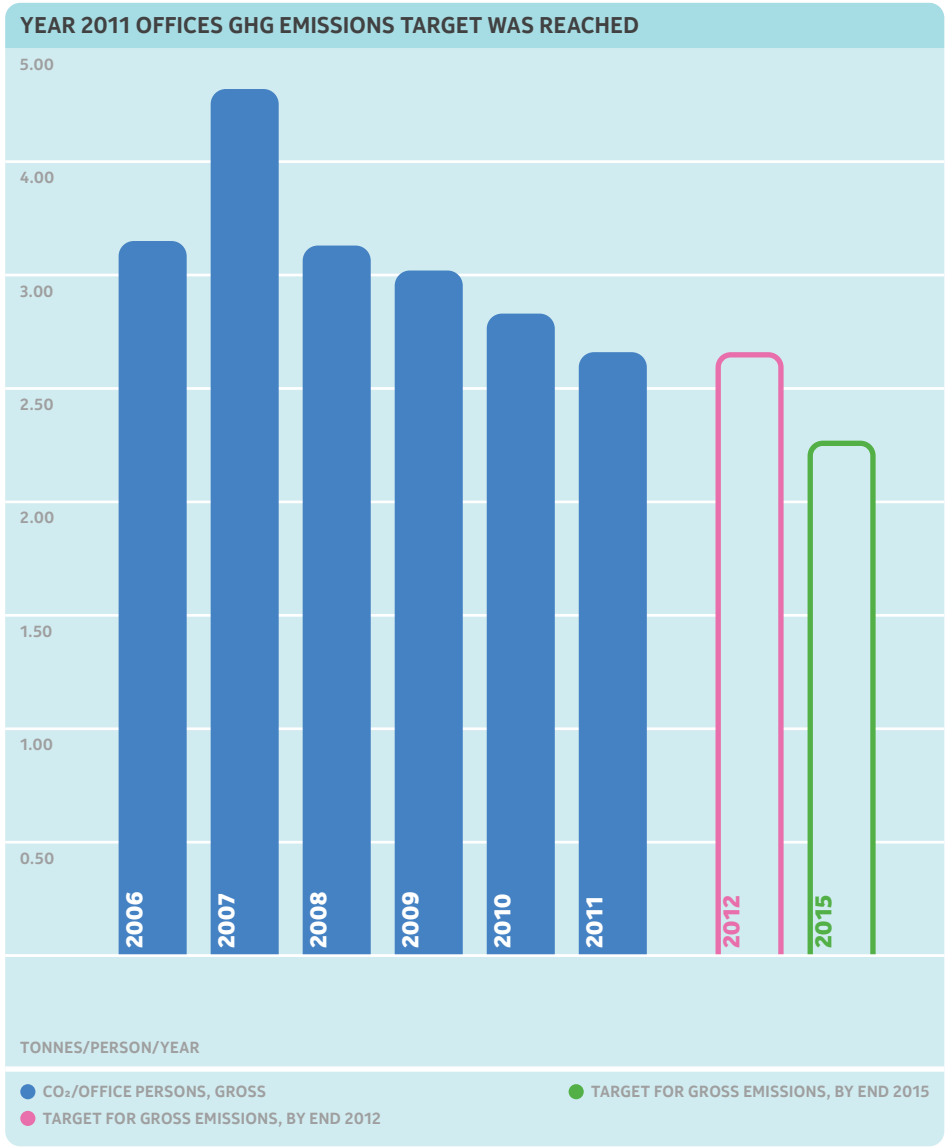
OFFICE AND R&D CO_2 EMISSIONS PER PERSON



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Logistics

- Reduce greenhouse gas emissions per sales package produced by 20% by the end of 2012 (2008 baseline)

Supply chain

- Aim that all our key suppliers set energy efficiency and greenhouse gas emission reduction targets by the end of 2012

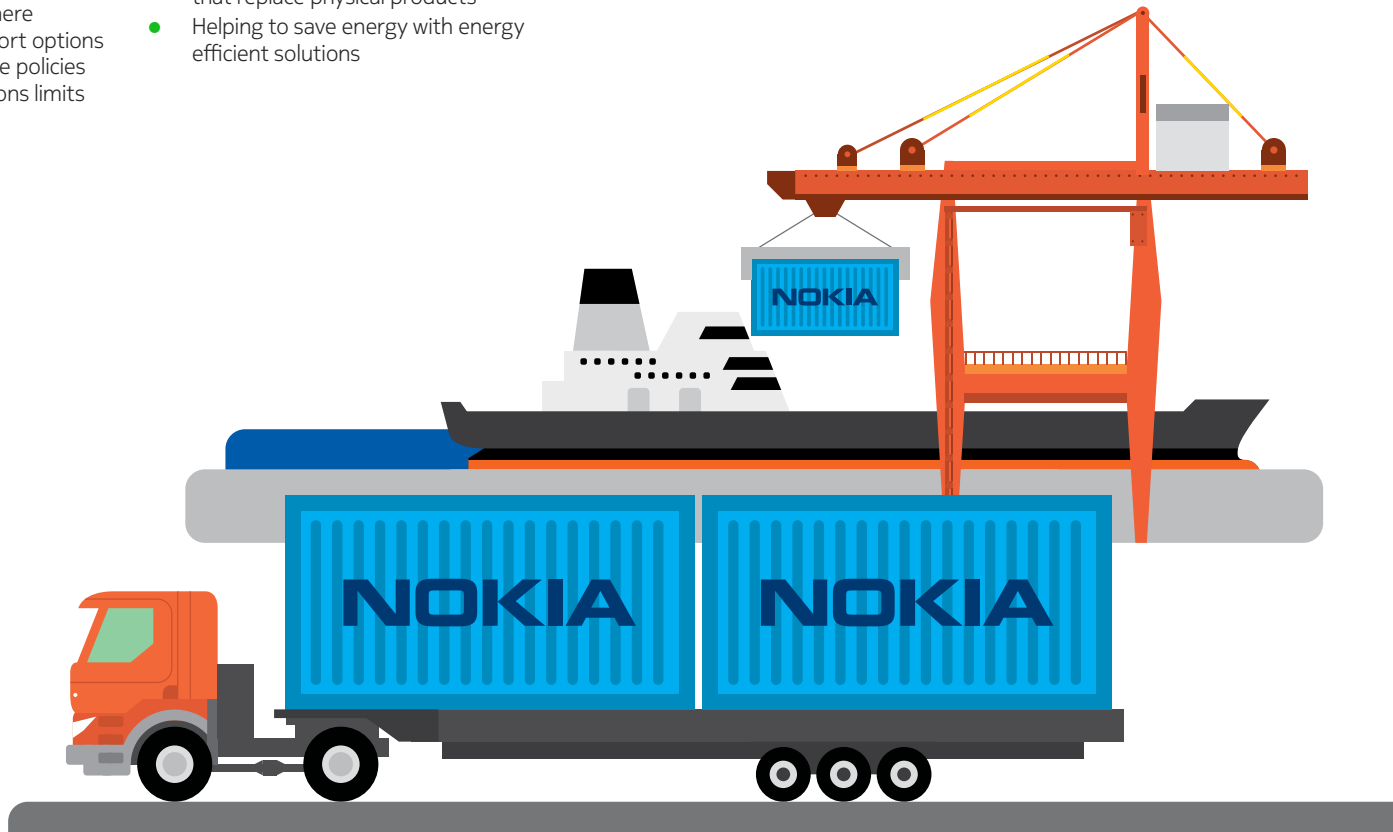
Travel and commuting

- Maintain annual air travel-related greenhouse gas emissions, both total and per employee, clearly below 2008 levels by the end of 2012
- Renew the Nokia remote working framework and increase the number of countries where employee public transport options are offered and car lease policies are tied to lower emissions limits

Helping customers reduce their own greenhouse gas emissions

We aim to enable people who use Nokia phones to reduce their greenhouse gas emissions several times more than caused during the life cycle of their devices. The main activity areas, discussed in chapter 3.2, 'Enabling sustainable lifestyle', are:

- Developing solutions that enable mobile phones to replace several other products (convergence)
- Developing services that reduce the need for unnecessary travel and commuting (such as navigation, virtual meetings and remote work)
- Developing other applications for sustainable lifestyle and services that replace physical products
- Helping to save energy with energy efficient solutions



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3.3.2 ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS)

Our EMS is an integral part of our common global management structure. The international ISO14001 standard has been the foundation for our certified EMS for more than 15 years and it covers all of our manufacturing facilities.

Its goal is to improve our environmental performance, focusing on energy consumption, waste management, water management and air emissions. We require a certified EMS according to ISO 14001 from our contract manufacturers, and a certified EMS from all our direct suppliers.

Our EMS consists of:

- Nokia's Environmental Policy and Code of Conduct
- Clearly identified environmental issues and evaluations of their significance
- Objectives and programs for achieving global and local environmental targets
- Compliance mechanisms for meeting legal and other regulatory requirements
- Audits, assessments, management reviews and other mechanisms for continuous improvement
- Operational management (data and processes) for key indicators such as energy, waste and water use

The EMS is integrated with the quality management system, and we use the overall management processes to address both issues in our production. We have set global guidance and reporting to follow up these agreed activities.

MEASURING TO IMPROVE OUR ENVIRONMENTAL PERFORMANCE

The goal of the Nokia EMS is to improve our environmental performance, focusing on:

- Energy consumption (increase the energy efficiency of our production processes as well as of site infrastructure)
- Waste management (avoid generating waste, increase waste utilization)
- Water management
- Air emissions (reduce emissions of Volatile Organic Compounds)
- Ozone-depleting substances

AUDITING THE EMS

To ensure we continuously improve and maintain our EMS, we run ISO 14001 audits through external auditing organizations, such as Det Norske Veritas. Research and Development (R&D) is audited against ISO 9001, and factories are audited against the ISO 9001:2008 and ISO 14001:2004. About 50% of our factories are audited each year.

The following factories were audited during 2011: Salo, Beijing, Dongguan, Chennai and Vertu. The global demand-supply network management process is audited every year. Nokia Corporation ISO 14001 certificate was renewed October 24th 2011 for the next three-year period.

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SETTING TARGETS IN OUR FACTORIES

We are working to reduce our environmental impact by setting global and local targets in our factories. We verify improvements to our processes through internal assessments and external verifications. Any deviations are followed up, corrected and monitored until they are resolved.

Our main environmental focus areas in factories are:

- Increasing the energy efficiency of our production processes and factory premises
- Reducing CO_2 emissions
- Increasing waste utilization, targeting zero landfill
- Improving material management, meaning less waste
- Decreasing water usage, monitoring proper waste water treatment, and optimizing the use of production and optimizing the use of production and maintenance chemicals with respect to emissions, such as VOCs (volatile organic compounds)

Our global factory targets are to:

- Reduce energy consumption per manufactured unit by 5% annually between 2008 and 2012, compared to a 2010 base year[1]
- Reduce waste sent to landfill from our factories by half annually between 2008 and 2012, compared to a 2008 base year. This will lead us close to 100% waste utilization.

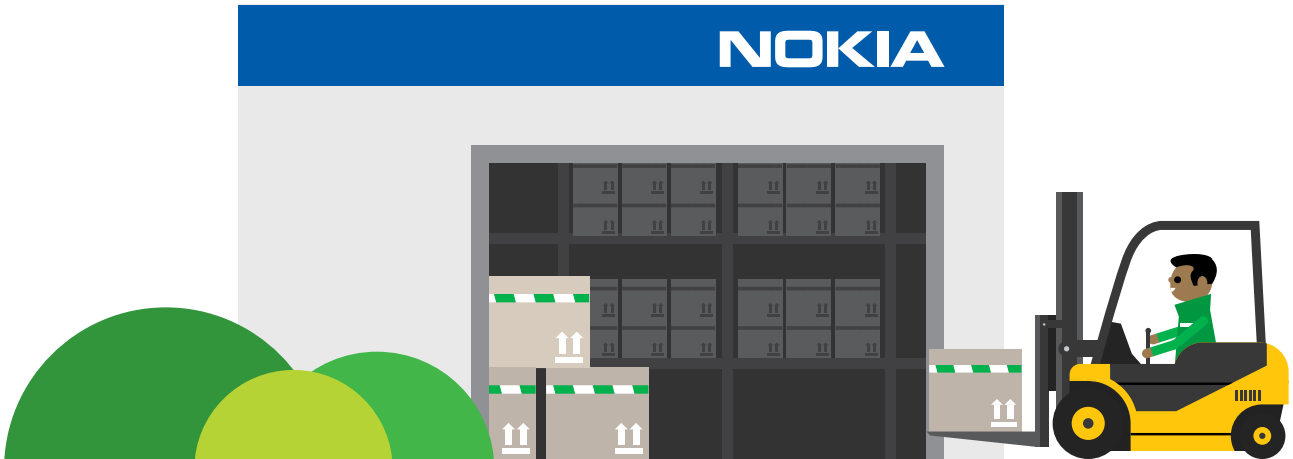
Please see information on our performance against these targets in chapter 3.3.3 in 'Energy efficiency and emissions' and 'Reducing waste'.

SUPPLIER REQUIREMENTS EMS

In regards to environmental impact, Nokia requires its suppliers to have an EMS in place. In 2011, 91% of our direct hardware suppliers' sites serving Nokia were certified to ISO14001. Nokia's direct hardware suppliers have maintained a high level of certification since 2008. Read more about our progress on 'Nokia Supplier requirements' in chapter 3.4.1.

CONTINUING TO MANAGE OUR OFFICE SITES

We have combined all Nokia's large office sites under one internally verified environmental management system, which follows the rules of ISO 14001. In offices we concentrate on workplace solutions and building infrastructure. In 2011, the system covered more than 75% of our total office and R&D area.



[1]We had to significantly change our calculation for energy used in production per unit produced during 2011 due to major changes in production, and thus had to change the base year from 2008 (as in previous targets) to 2010 (to be exact 2H 2010 – 1H 2011) in order to keep the target meaningful.

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3.3.3 GREEN OPERATIONS AND FACILITIES

ENERGY EFFICIENCY AND EMISSIONS

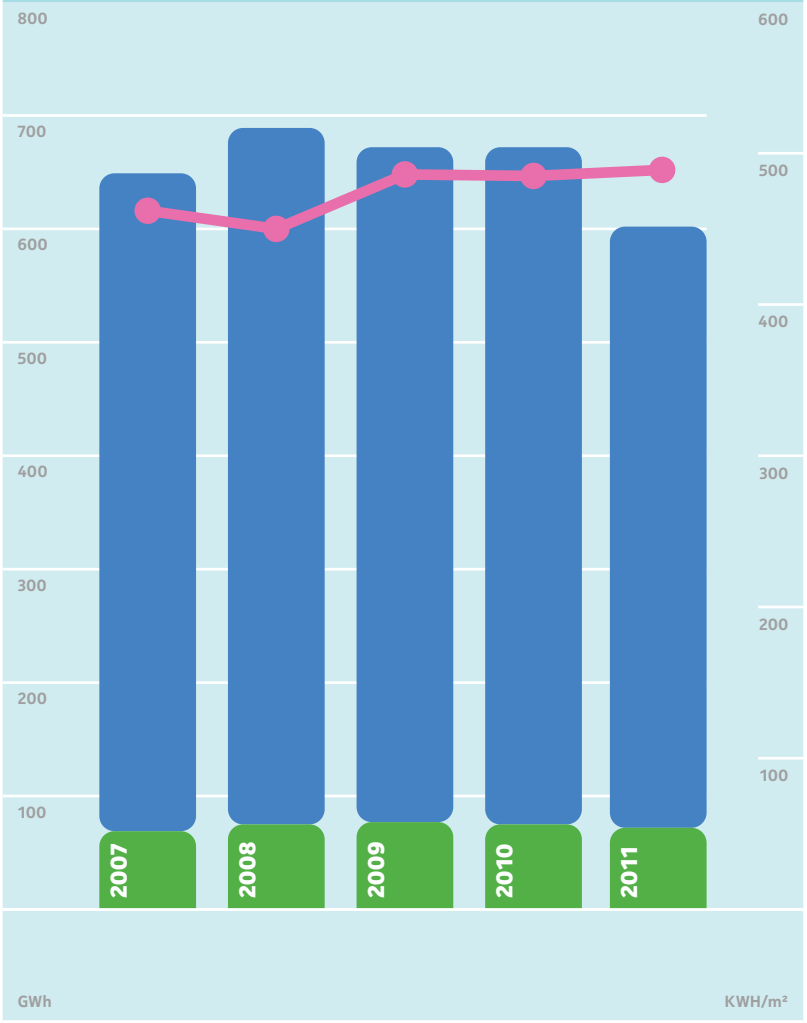
Although Nokia is not part of an energy-intensive industry, our operations do have an environmental impact through energy consumption and the resulting emissions. As we aim to connect the next billion, we need to decouple the growth of our business from the many ways we consume energy in our operations.

In 2011, we occupied more than 550 facilities around the world, including 10 production sites and 43 Nokia and Vertu retail stores. As about 20% of these buildings result in 90% of the total environmental impact, these sites are where we focus on improving our performance.

Our approach to greener buildings involves a combination of standards, local energy efficiency initiatives and new ways of thinking about how we can use space effectively.

ENERGY CONSUMPTION IN FACILITIES

TOTAL FACILITIES ENERGY CONSUMPTION DECREASED BY 10%



In 2011, total energy consumption in Nokia facilities decreased by 10% compared with 2010. We consumed 72 GWh of direct and 530 GWh of indirect energy. Energy consumption per m² increased slightly.

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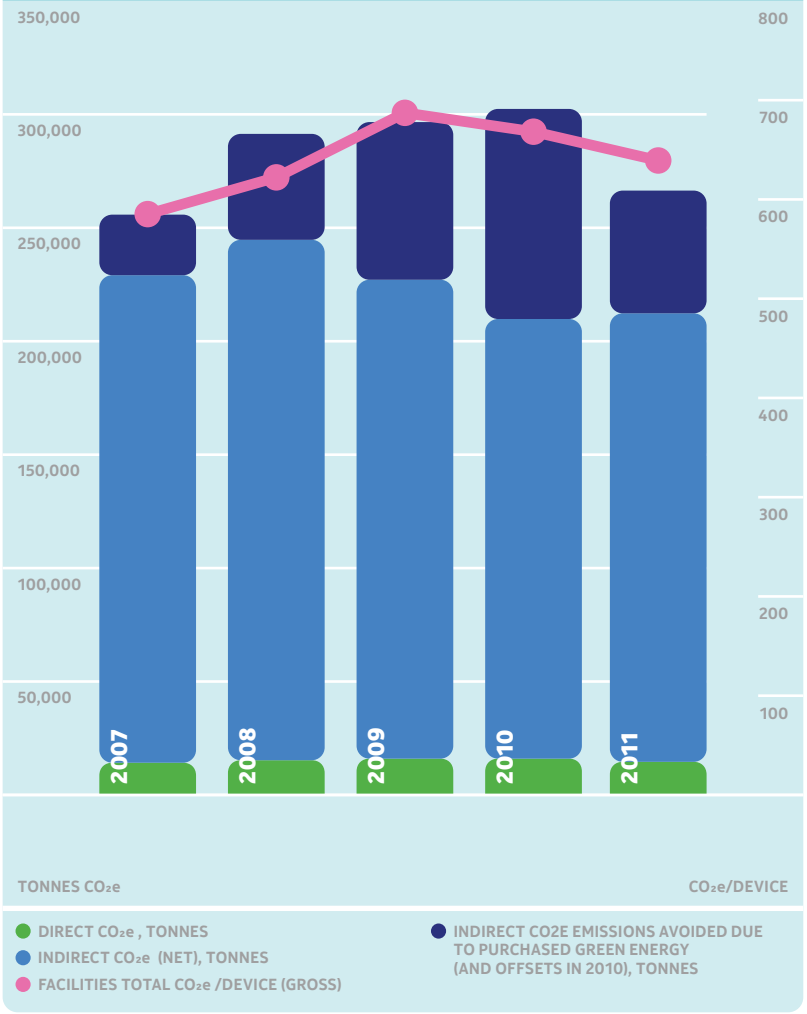
FACILITIES GREENHOUSE GAS EMISSIONS

In 2011, energy used in Nokia facilities caused 13,200 tonnes of direct and 251,800 tonnes of indirect greenhouse gas (CO_2e) gross emissions. Direct energy means our use of gas and oil while indirect energy refers to our use of electricity, district heating and district cooling. Our purchase of certified green energy reduced the (above mentioned) indirect emissions by 54,100 tonnes, meaning that Nokia's net emissions were 210,900.

Nokia's CO_2 calculation methodology for our own operations was validated in 2008 and since then the annual results have been verified by a third party.

FACILITIES' TOTAL AND PER DEVICE GROSS GREEN HOUSE GAS EMISSIONS DECREASED



2011 PROGRESS
FACILITIES ENERGY CONSUMPTION AND EMISSIONS

In 2011, our new facility energy savings were around 15,000 MWh, which has helped us to save, to our estimate, around 1.5 million Euros. This brings our 2007-2011 cumulative savings to more than 65,000 MWh.

In 2011, Nokia facilities' CO_2 emissions decreased by 17 % compared with the base year 2006 level. This reduction was achieved through the energy efficiency measures in our buildings and renewable energy purchases, and due to lower production volumes and headcount reduction e.g. from the new collaboration model with Accenture.

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OUR FACTORIES

We have set energy reduction targets for our factories since 2008 and take a holistic approach to optimize not only energy consumption, but also maintenance costs and risks.

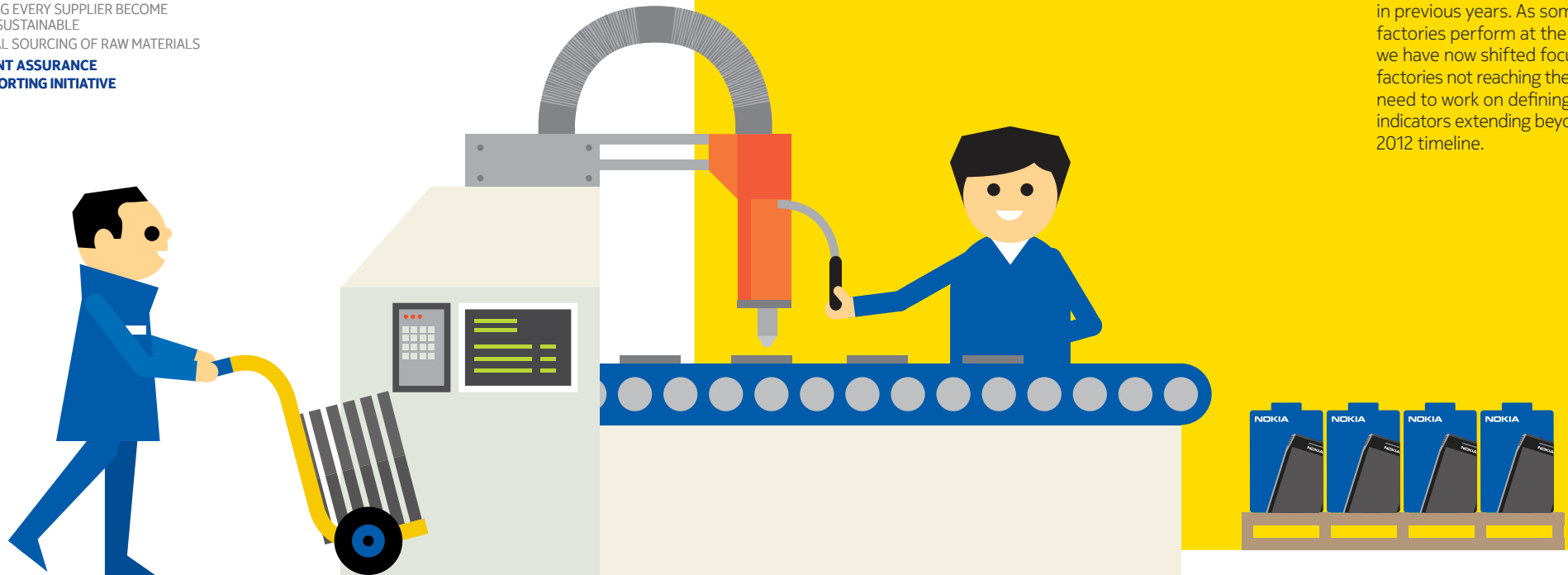
2011 PROGRESS
OUR FACTORIES

Last year, the total energy consumption of Nokia factories was reduced by 30,600 MWh, which is 10% lower than in 2010. In addition to total energy consumption, we track energy consumption in relation to production volumes and completed energy efficiency investments, in order to better assess the impact of our actions.

In 2011, we continued our Manufacturing Improvement Project, which started in 2007-2008 with energy audits of our factories and has since covered eight factories in all regions: APAC-China, Europe and the Americas. By making energy efficient investments, such as energy-saving lighting in Salo and humidifiers in Dongguan, and by optimizing building management systems to take advantage of favorable weather conditions, these factories saved around 11,800 MWh of energy, reducing CO_2 emissions by 4,900 tonnes.

To ensure we continue our energy saving performance in the years to come, and to identify additional energy management possibilities, we implemented a new computer managed maintenance system (CMMS) tool and are piloting schemes on detailed energy metering in 2012. Once these tools are fully implemented, we expect to see higher energy savings levels once more.

Despite these energy saving measures, we did not meet our target of reducing factory energy 5% per unit in 2011, but had instead a 3% increase. While production volumes were decreasing, the factory buildings' share of the consumption remained almost unchanged and therefore we were not able to repeat our progress as seen in previous years. As some of Nokia's factories perform at the target level, we have now shifted focus to those factories not reaching the target. We also need to work on defining intelligent indicators extending beyond the current 2012 timeline.



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OUR OFFICES

Since 2007, we have implemented a global property strategy, which includes Leadership in Energy and Environmental Design (LEED) certification. LEED is an internationally recognized green building certification system which provides third-party verification that a building or community was designed and built using strategies aimed at improving performance.

Since then, we have included LEED Gold certification in the specification of our key real estate projects for both new constructions and major renovations. This helps us to avoid emissions by having energy-efficient solutions in place from the beginning of the project. For smaller leased sites our options are more limited, but we aim to apply green lease contracts and select buildings, which perform better than average. Also, by implementing the mobile office concept, we can also utilize office space more effectively, such that the per capita energy usage is lowered.

Some examples of how we progressed in 2011 include installing a capacitor bank at our Irving, Texas office, which recycles the surplus energy generated by the older large motors of, e.g. the air-conditioning equipment. We also continued replacing fluorescent lamps with LED-lights in our Beijing site. In Finland, we optimized free cooling and heat recovery systems in several locations and continued our project to modify lighting controls on sites, which were not yet covered during 2010. The fuel cell installation for our Sunnyvale R&D site is covered later in this chapter in section 'Green energy'.

In the UK, Nokia is a participant in the Carbon Reduction Commitment (CRC) which is the first national mandatory carbon reporting scheme in the world, aimed at improving energy efficiency and cutting carbon emissions within large organizations. The scheme requires Nokia to report its UK based carbon emissions on an annual basis and purchase allowances for the carbon we produce.

2011 PROGRESS
OUR OFFICES

We reduced CO_2 emissions from offices and R&D premises by 15% in CO_2 /person, compared to 2006.

We continued work on our 3-year emissions reduction roadmaps for our office and R&D premises. Our intent was to find effective combinations of actions for our different sites, concentrating on the greenhouse gas emissions arising from energy consumption. On our existing owned sites or those having long lease contracts, we will continue our energy efficiency investments and search for on-site renewable energy options.

We achieved a LEED Gold certification for our office refurbishments projects in San Diego, USA and Bangalore, India. Altogether 11% of our total space was LEED Gold certified by the end of 2011.

Office hardware

We take the energy efficiency of IT hardware equipment into account during procurement. All laptops, desktop computers, workstations and monitors purchased by Nokia must have Energy Star or Electronic Product Environmental Assessment Tool (EPEAT) Gold or Silver rating.

We are working to adopt energy efficient LED monitors as a standard. LED monitors have zero consumption in standby mode, which would lead to significant electricity savings during the hours that employees are not in office. In 2011 we have introduced a number of LED monitors, which use less power.

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OUR DATA CENTERS

As we deliver more applications and services to our consumers around the world, we are increasing our Internet presence and thus need to expand our data center infrastructure. We recognize that this expansion represents an increasing share of our total energy consumption across Nokia, and we are focused on being as efficient as possible. It will be an ongoing challenge to balance our business performance with the resulting carbon impact.

Nokia will continue to make strategic data center investments to support new business and markets as responsibly as we can. We believe that the concept of Sustainable IT can be a real business goal and we use this principle to drive our data center portfolio forward while actively managing our greenhouse gas emissions. We also strive to bring all of the data center stakeholders together to root out energy waste in the facilities, the technical infrastructure and the applications.

Our approach to reducing the carbon impact of our global datacenter operations focuses on active consumption measurement. We challenge our third-party facility suppliers to be best in class for energy consumption and management, and optimize the design of our own facilities to demonstrate leadership in energy efficiency.

GREEN ENERGY

In addition to studying possibilities to increase our onsite renewable energy production, our intention is to maintain our purchase of renewable energy via grid and renewable energy certificates. We aim to buy approximately 35-40% of our energy this way. However, the slow development of renewable energy markets in some of the countries where we operate continues to be a challenge for us.

2011 PROGRESS
OUR DATA CENTERS

In 2011, we refurbished the main data center for our corporate IT in Salo, Finland to deliver a power usage effectiveness (PUE) of 1.2, which is industry leading. At the same time we eliminated battery-powered backup systems as an important step to reduce the use of hazardous materials in the operation of this data center. We also make use of the “free cooling” in Finland, available during more than 60% of the year due to the northern location.

We will continue to work on optimizing our IT infrastructure to deliver reduced energy consumption, while maintaining our service levels. By the end of 2011, more than 50% of our servers are virtualized, thus considerably increasing our infrastructure efficiency. Continuing on this path, increased usage of virtualization technology and more real-time capacity management allows us to deliver more resources to our business while simultaneously decreasing the physical and carbon footprint of our IT.

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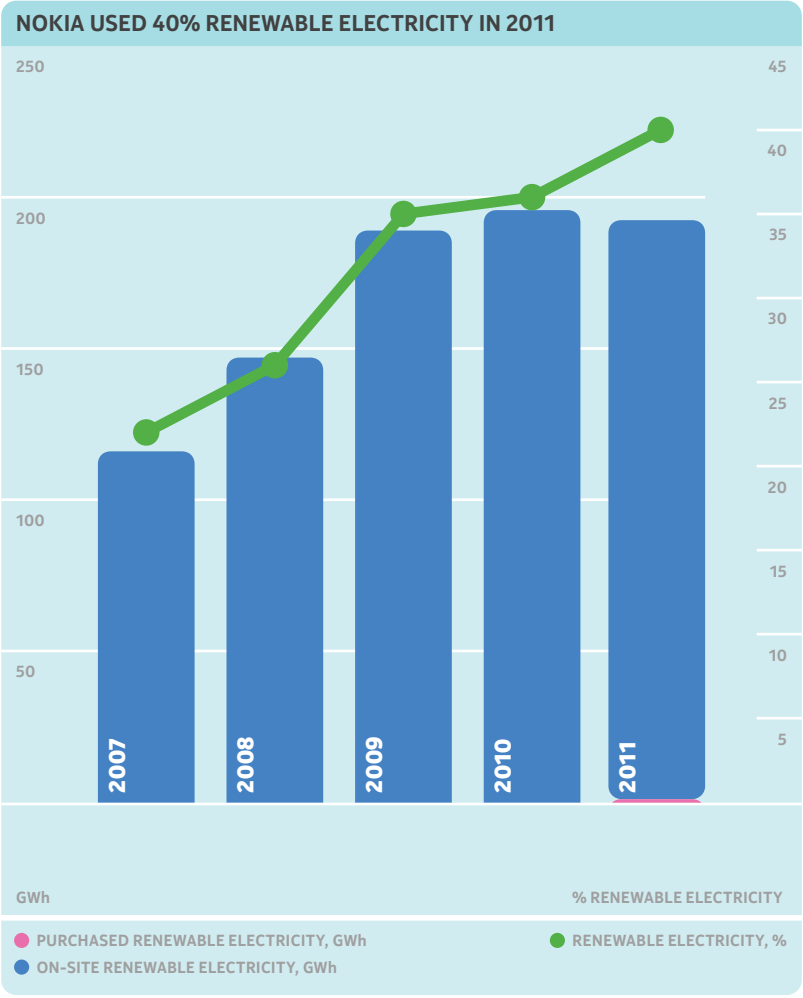
RENEWABLE ELECTRICITY



Nokia has purchased renewable electricity via certificates and from grid since 2006 and now our first onsite installations for the generation of renewable energy are in place. Altogether in 2011, our share of renewable electricity was 193 GWh, which is equal to 40% and which reduced our CO_2 emissions by 54,500 tonnes.

2011 PROGRESS
ON-SITE GREEN ENERGY

The fuel cells at Nokia's Sunnyvale office in Silicon Valley, California are a state-of-the-art onsite energy solution. Currently we use 75-80% biogas, more specifically, landfill gas. Total CO_2 emissions from the site have dropped by 87%. This is a monthly reduction of around 80 tonnes of CO_2, which represents 6% of Nokia's gross emissions from all office and R&D sites in the Americas region. Annually, the saving is equivalent to taking 280 cars off the road.

Our factory in the Chennai Business Park started to use biogas in July 2011. Bio waste and food waste from companies in the park is collected and used for biogas generation. This is used to heat water in the main kitchen and replaces around 5% of fossil-based LPG (liquefied petroleum gas). This investment was made initially as a solution for treating bio waste, as it generates only limited amount of energy, however it also supports our goal to introduce renewable energy production to the site.

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GREEN ELECTRICITY PURCHASING

In 2011, we bought renewable electricity certificates for 100% of our consumption in the United States (Green-e wind), Canada (EcoLogo certified biomass), Finland and Denmark (RES-E Guarantee of Origin hydro power). We did the same for our Paris office in France and Komarom factory in Hungary (RECS) and for the big offices and R&D sites in Germany, using hydropower. What's more, we covered a quarter of our consumption in Sydney, Australia with GreenPower. We focus on deploying these purchases in Nokia operating countries where using renewable energy can make the biggest impact on carbon savings. This impact depends on how carbon-intensive the local power generation industry is and, to a large extent, where green energy is available. It should be noted that our Location and Commerce unit (previous NAVTEQ) premises have not yet been included in our green energy purchasing strategy.

GREEN LOGISTICS

We define logistics to include transport from component manufacturers to Nokia sites (inbound), transportation of finished products from the Nokia manufacturing sites to the customers (outbound), and care logistics for repair, reuse and recycling. Logistics is estimated at 16% of the total energy consumption of one of our mobile devices during its life cycle. As logistics operations are conducted by third-party operators, the greenhouse gas emissions from logistics belong to Greenhouse Gas scope 3, i.e. indirect impact for Nokia.

Our approach to green logistics has two parts: measuring and minimizing. Data is collected from our logistics providers and is a challenge due to the lack of standardization for measuring greenhouse gas emissions in the logistics industry. The interconnected, extensive reach of the logistics network also complicates efforts by individual service providers to measure their own emissions.

2011 PROGRESS
GREEN LOGISTICS

During 2011, we have focused on improving logistics data quality. Much work has been done with our logistics service providers to refine our data collection process and internally integrate emissions into existing logistics processes. This will fully align with the anticipated greenhouse gas protocol for Scope 3 emissions. Logistic service providers provide us with CO_2 figures per shipment on a monthly basis and this has required system development not only at Nokia's end but also for service providers. The CO_2 figures are now embedded into existing logistics processes and reporting, which is a significant step towards more reliable data and full traceability of figures. For this kind of extensive network, data quality is a challenge and we are still working on it.

We are also working on ways to streamline logistics and reduce our impact through packaging efficiency, in-transport packaging efficiency, alternative transportation modes and engagement with our operator customers. We aim to use ocean transport instead of air whenever possible, taking into account the need to protect quality and ensure availability. We achieved an estimated 80% reduction in CO_2 emissions when shifting transportation from air to ocean. The share of ocean transportation out of total component transportation was about 16% (in volumes) in 2011.

We have also continued implementing a global program into all Nokia factories to increase the awareness of, and track, the transportation packaging efficiency for each factory in a consistent way, globally. Simply put, it reduced the size of the palletized packaging, measured the improvement and then showed how much less the freight cost was per delivery. This was then summarized per factory per month as an operational target. The program is still being fine-tuned for reporting purposes, but we have already seen benefits of this initiative are a major reduction in packaging materials costs, cargo space needed on planes and trucks and subsequently a major reduction in Nokia's global CO_2 footprint and emissions. Data on Nokia logistics related CO_2 emissions can be found in the Nokia Key Data table at the end of this Report.

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BUSINESS TRAVEL, EMPLOYEE COMMUTING AND CAR FLEET

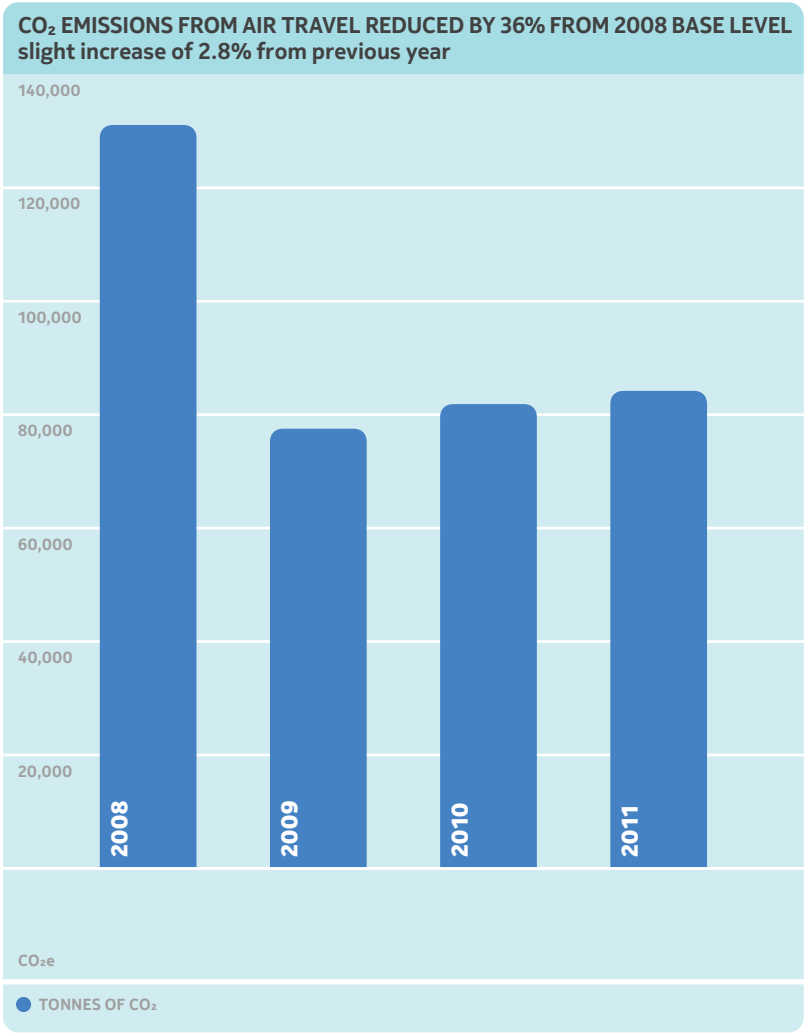
Business air travel

Since 2008, Nokia has taken a stricter approach to business travelling. Travel reduction efforts have included a new travel policy, travel awareness campaigns, improved availability of videoconferencing facilities globally, and direct travel consultancy to Nokia business units on better ways of working, with the aim of reducing both costs and emissions. In 2011, Nokia continued direct travel consultancy to Nokia business units and further tightened its travel policy. A new rail policy was also attached to the global travel policy, encouraging the use of trains and shuttle services.

As a result, Nokia's annual carbon emissions from air travel have been reduced by 36% from 2008 base level. CO_2 emissions from air travel were 84,192 tonnes in 2011, which is 2.8% more than in 2010. The increase in travel resulted from negotiations related to organizational changes and our partnership with Microsoft. The emissions figure covers 99% of Nokia's air travel and has been calculated with a conservative interpretation of greenhouse gas Protocol emission factors.

Nokia also continued a voluntary carbon offset scheme for business flights. After a trip, the traveler can pay to offset the associated CO_2 emissions and Nokia will reimburse the cost. The payments will help to fund projects around the world that focus on renewable energy and energy efficiency. Nokia prefers organizations, which are able to provide Gold Standard certified offsets.

CO_2 EMISSIONS FROM AIR TRAVEL REDUCED BY 36% FROM 2008 BASE LEVEL



Nokia's and NAVTEQ's air travel reporting has been consolidated in 2011, and 2008-2010 emissions have been updated based on historical travel data.

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Location and Commerce car fleet

To ensure the accuracy of its map database, Nokia's Location and Commerce business (L&C) has about 1,100 geographic analysts strategically located around the world. L&C's car fleet is used by these geographic analysts who actually drive the roads, collecting, verifying and updating information in our map database.

Nokia's CO_2 emissions from map building driving activities were 3,989 tonnes in 2011, a decrease of 2.6% compared to 2010. Emissions were essentially flat because the increase in driving required to build and maintain digital maps in Asia and the Americas was offset by less driving in EMEA. Calculation of the emissions from cars is based on the distance driven and vehicle-specific conversion factors. Where exact car models were not available, an average of vehicle fleet emissions has been used.

Since the onset of tracking activities in 2002, Nokia Location and Commerce has taken the step of using fuel efficient vehicles like hybrid vehicles in North America as well as directly offsetting its driving related carbon emissions by contributing to the conservation of rainforest and biodiversity in Madagascar and reforestation in China's Yunnan province, carried out by Conservation International.

Commuting

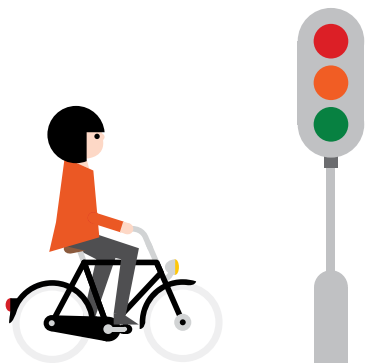
Nokia promotes remote working and arranges shuttle services for employees, which reduces emissions from commuting. In Finland, Nokia has a car leasing policy which promotes cars with lower CO_2 emissions and the average CO_2 emissions of cars leased during 2011 was 140 g/km. Additionally, to support public transportation, Nokia directly reimburses employees for a portion of their public transportation costs. In 2011, almost 1,000 employees in Finland were using the benefit.

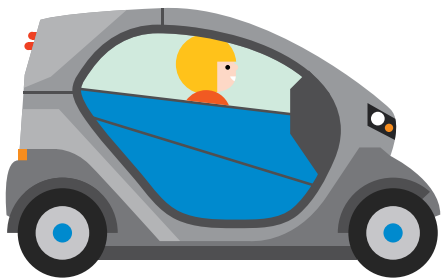
Data on Nokia employee commuting related CO_2 emissions can be found from Nokia Key Data table at the end of this Report.

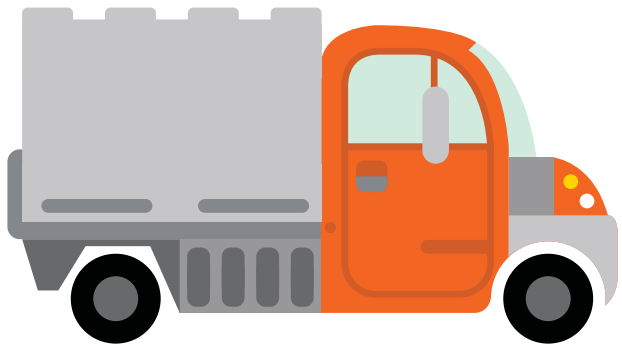
REDUCING WASTE

Non-hazardous packaging waste from our factories makes up the biggest percentage of our total waste. We monitor with detailed reporting the amounts of both hazardous and non-hazardous waste from our factories. Our goal is to reduce all waste to a minimum and find alternative ways to reuse it, especially waste destined for landfills. This goal extends to waste produced in Nokia workplaces, including offices, factories and R&D facilities.

We have set a target of halving the landfill waste from our factories each year, starting from 2008. This will lead us close to 100% waste utilization by the end of 2012. Most of the waste sent to landfill is from our support functions, such as staff cafeterias, in countries where there is no infrastructure for bio-waste handling or energy recovery for mixed municipal waste.







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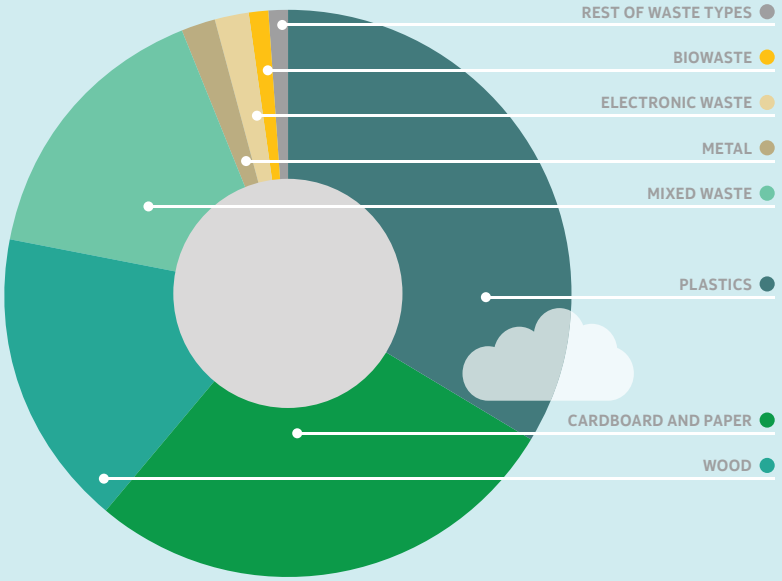
FACTORY WASTE SPLIT

MOST FACTORY WASTE IS WOOD BASED AND PLASTICS BASED COMPONENT PACKAGING MATERIAL



Our factories segregate waste into over 20 categories. Three-quarters of factory waste comes from cardboard, plastics and wood from packaging. The majority of the remaining 25% comes from mixed waste, paper, bio-waste and electronic waste. Less than 1% of the total mass is hazardous waste, which includes solvent waste and cleaning rags contaminated with chemicals, batteries and maintenance-related waste, like oil and fluorescent lamps.

Future challenges to reducing waste are finding the needed utilization routes for the various waste fractions, and possible investment costs in cases where local infrastructure does not support our goal.

2011 PROGRESS
REDUCING WASTE

In our office and R&D sites we have a project to reduce waste going to landfills and we managed to decrease the amount by around 200 tonnes, approximately 33%, between 2010 and 2011. Each region has created a waste reduction roadmap and we have good examples on waste management. For example, we are focusing on the reduction of food waste from our canteens together with our catering service providers. Even if the amounts of wasted food per lunch customer are relatively low, it is worth raising awareness, globally, about this extremely important issue.

We have also managed to increase the waste utilization in our factories year by year. Currently, we're slightly behind our target of halving landfill waste each year. However seven out of ten factories have met, or are within 1% of meeting this target and now our focus is on reducing waste in factories not achieving their targets. Globally, when looking at our 10 factories we have reached a 97% utilization rate in 2011, meaning that only 3% of the factory waste is landfilled or incinerated without energy recovery. Utilization includes reuse, recycling and incineration with energy recovery, in this order of priority.

In 2011, our total waste was reduced by 23% in comparison to 2010. We also managed to continue our trend of sending less waste to landfill. In total, we produced 45,900 tonnes of waste and out of this, 91% was reused or recycled, energy was recovered from 5%, and only 4% went to landfill or to be incinerated without energy being recovered. If we remove the reused waste from the equation, such as packages reused several times between us and suppliers, and the recyclable material for which we were paid a positive price our total waste drops to approximately 8,700 tonnes.[1] Although our production volumes were lower this year, we made progress in waste reduction as the metric of waste per mobile device decrease by 17%.

[1] As defined in the Dow Jones Sustainability Index.

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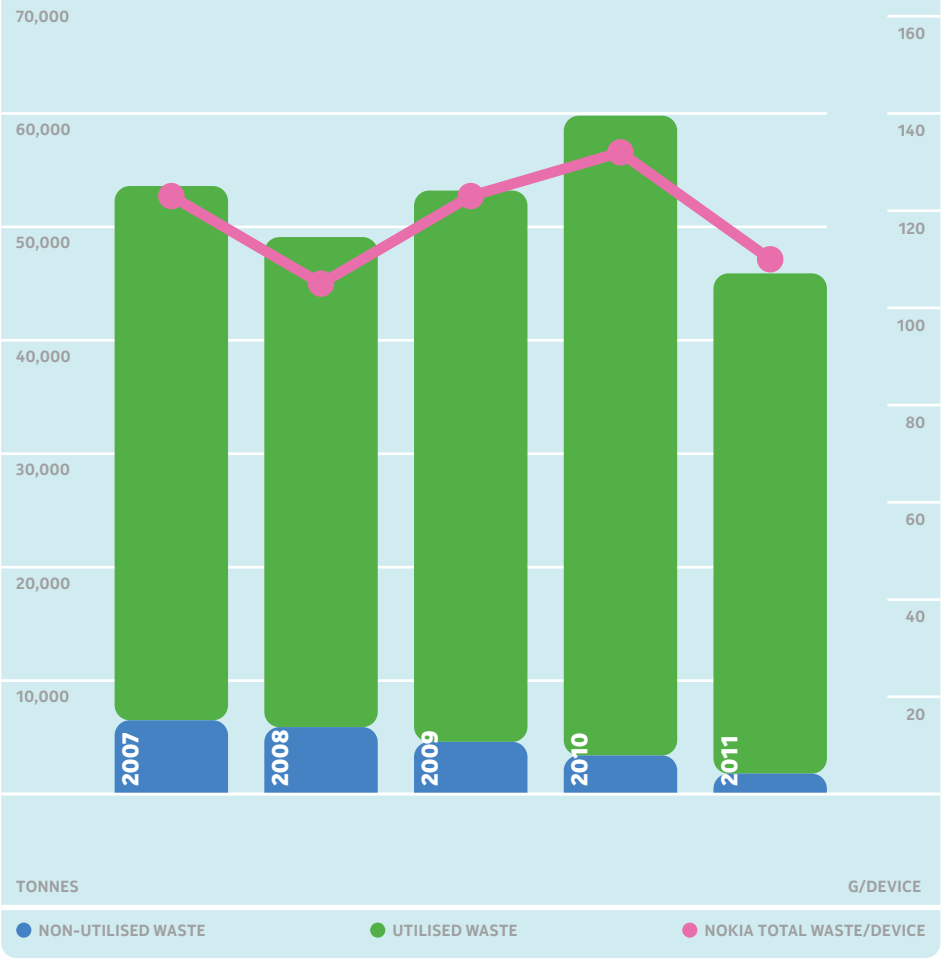
WASTE UTILIZATION

TOTAL AND PER DEVICE WASTE AMOUNTS DECREASED



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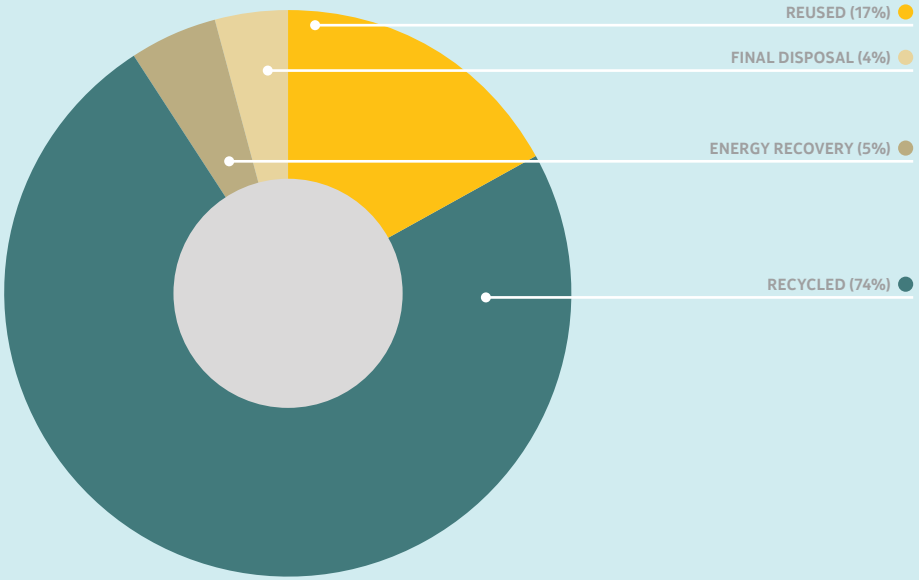
96% OF WASTE WAS UTILIZED
4% STILL TO BE REDIRECTED FROM LANDFILLS



CASE
FACTORY HIGHLIGHTS

In Chennai Business Park, from the summer of 2011 onwards, bio waste and food waste from companies was collected and used for biogas generation. This benefits both waste and CO_2 emission management.

As most of our factory waste is incoming packaging material, we piloted a project in Salo factory to reduce this waste. We focused on the component packaging, such as pallets, cartons and plastic wrapping, and together with suppliers sought ways to minimize the packaging, yet not risk the quality of the components.

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VOLATILE ORGANIC COMPOUNDS AND OZONE-DEPLETING SUBSTANCES

Volatile organic compounds (VOCs)

During our assembly process, some Volatile Organic Compounds (VOCs) are released. VOC emissions arise from the use of solvents in the soldering and cleaning processes. In 2011, our emissions were 38 tonnes, which mean 42% reduction compared to 2010.

42% REDUCTION COMPARED TO 2010

Ozone-depleting substances (ODS)

Ozone depleting substances are not used in our products or production. Nokia facilities only use HCFC and HFC types of refrigerants in cooling and air conditioning systems. These systems are sealed and care is taken to prevent leaks during operations and maintenance, but some trace amounts do evaporate from all the systems and the amount of annual emissions vary due to changing refill needs. HFC refrigerants are not dangerous for the ozone layer, but they are greenhouse gases. Legislation around refrigerants is followed and as with other companies, we would like to see market development of refrigerants friendly for both the ozone layer and climate.

WATER USAGE

Water is critical and valuable resource, and its availability to future generations has to be assured. Even though Nokia's operations are not considered as water intensive, water has strategic importance in our supply chain and it is a necessity for communities around us. Therefore, we have taken action to ensure Nokia's operations cause a minimal amount of additional burden for the environment, and also support various water conservation projects especially in water scarce areas. We also collaborate with our suppliers to increase awareness, set water reduction targets and support best practices in water management.

In Nokia's own operations, most of our water usage occurs for sanitary and catering purposes, and to a smaller extent in gardening and facilities management, such as cooling towers. Our production manufacturing processes use relatively small amounts of water, less than 1000 liters of water per year in each factory, typically in equipment such as stencil washers or reflow ovens that require small amounts of water in self-contained tanks.

In 2011, Nokia withdrew 1,309,000 m^3 water for use in our facilities, out of which 95% was withdrawn from municipal, and 5% from ground water sources. Of this, 10% was recycled. 92% of waste water went for municipal off-site water treatment and the rest was treated on-site.

We work with expert organizations on how to best utilize mobile technology in issues such as water efficiency, raising awareness and improved water management. We have for instance helped FAO to use Nokia Data Gathering to tag water points.

Nokia also participates in the WBCSD's Water group through which we follow relevant water related initiatives. Nokia also supports China Water Platform via WWF International.

2011 PROGRESS
WATER USAGE

As most of our water use relates to people, not to processes or building area, our key performance indicator is water use per person. Our target was to continue the decreasing trend we had from 2008-2010. With the result of 14 m^3/ person / year, we were 12% below the 2008 value but were not able to reduce the use compared with 2010. People in this indicator include both Nokia employees and other people working within Nokia premises, like service providers' personnel. One reason for the increase was an exceptionally hot summer in North America, which increased our water use in cooling and grounds maintenance. We are working in 2012 to further improve our data measurement techniques.

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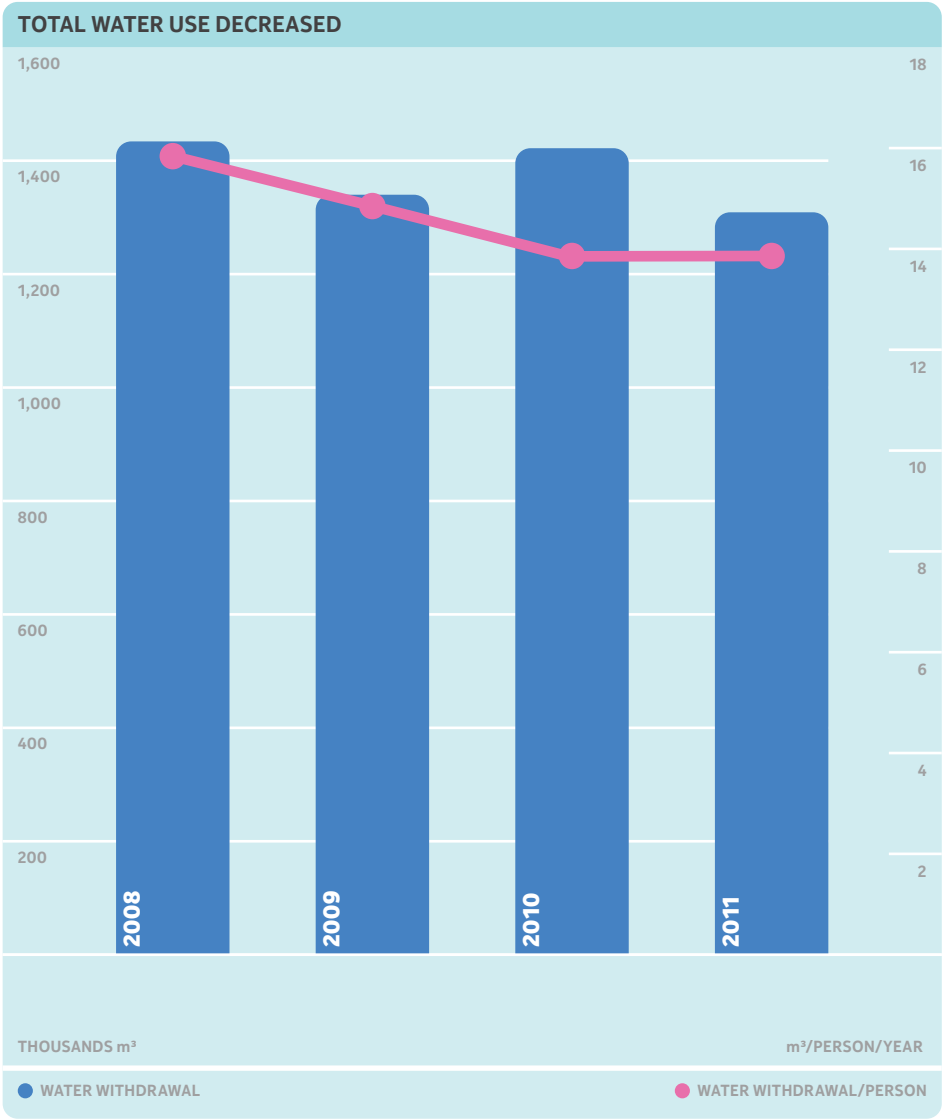
WATER WITHDRAWAL

In 2011, Nokia withdrew 1,309,000 m³ water for use in our facilities. Our target was to continue the decreasing water per person trend we had from 2008-2010. With the result of 14 m³/ person / year we were 12% below the 2008 value but were not able to reduce the use compared with 2010.

In 2011, we completed the creation of a water strategy and internal guidelines for facilities in water scarce areas, focusing on water efficient solutions in all stages of the building life cycle. We also prepared a water workshop for our Beijing factory and office and for the other Xingwang business park companies, as Beijing is located in the high-risk Hai He water basin. The outcome was increased overall awareness, sharing of best practices and the initiation of a local water action plan.



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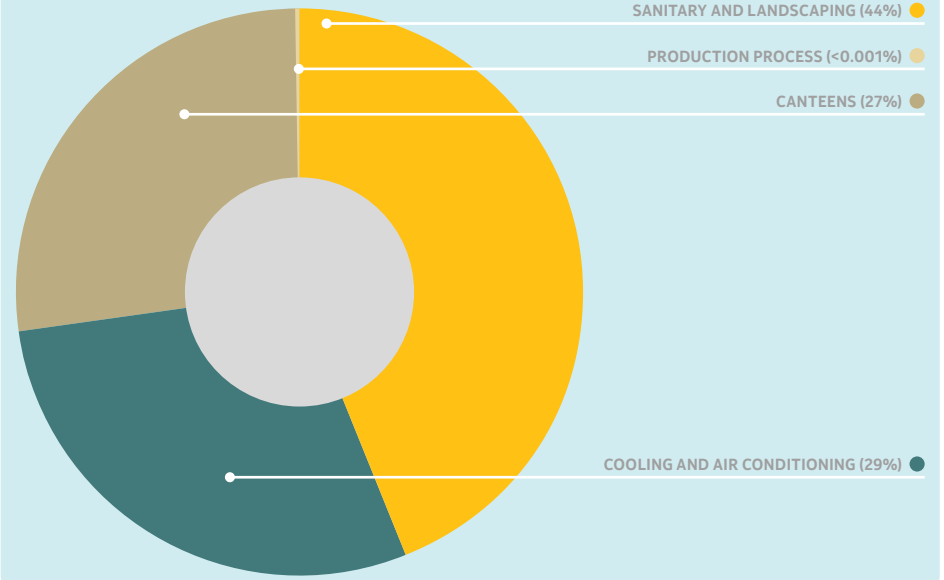
BEIJING FACTORY WATER USE

Our Beijing factory's water use split is quite typical for Nokia: in general most of water usage occurs for sanitary and catering purposes, and to a smaller extent in gardening and facilities management, such as cooling towers. Production manufacturing processes use less than 1,000 liters of water per year in each factory, which is much less than a percentage in Beijing and hence not visible in the graph.

Our Dongguan factory provides an example of a water efficiency scheme, completed in 2011. In this case, the flush time for toilets was adjusted from 15 seconds to 10 seconds, decreasing the water use from 10 liters to 6 liters per flush, and saving 4,012 cubic meters of water per year.

PRODUCTION PROCESSES USE HARDLY ANY WATER



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PROTECTING BIODIVERSITY

Protecting our ecosystem is crucial for life on Earth, while scarcity of natural resources poses risk to business. Safeguarding biodiversity then provides an opportunity to both create new value and contributes to sustainable development. Nokia believes that halting biodiversity loss requires a multi-stakeholder effort, and we want to ensure we do our part.

Our main impact upon biodiversity takes place in our supply chain. During raw material extraction and component manufacturing, for example, some activities can cause hydrological changes and pollution if not handled properly. We aim to reduce our environmental impact in all product life cycle phases through different activities described in other parts of this report. In 2011, we have worked for instance to identify the water and forest related impacts in our value chain, and to prepare action plans for reducing them.

Our factory in Manaus, Brazil is near a non-protected, albeit highly bio-diverse area. We follow local requirements closely and take voluntary action to avoid any negative impact. Our leased R&D site in Vancouver, British Columbia is located in an area protected by the Federal provincial government under a “land, wetlands, and animals” – program.

Nokia cooperates with NGOs on biodiversity issues, and supports different nature conservation programs. These include water management projects in Nepal, India, China and Kenya, tiger protection in India as well as Baltic Sea and Saimaa seal protection in Finland. We were also the first company to support the Save Our Species (SOS) initiative, covered in chapter 2.2.5 in ‘Partnering with non-governmental organizations’.

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NOKIA AND SUPPLIERS

Our supply chain is long with thousands of direct and indirect suppliers. This gives us a great responsibility and we're committed to ensuring that the highest standards of environmental and social responsibility are exercised. Some suppliers are more advanced than others in managing their operations sustainably, which means our approach needs to meet different needs and build capacity over time. It's a challenge that requires continuous improvements and cannot be achieved alone.

To achieve our commitment, we promote environmental, ethical and social principles across the supply chain. For us, sustainable practices are not separate add-on features, but they are embedded in everything we do, including supplier selection and relationship development. We believe that open communication, good relationships and transparency are among the key success factors, and therefore work closely with not only our suppliers, but also industry peers and other stakeholders. In the coming years, we will take an even more active role to ensure progress towards sustainability.

Snapshot of our supply chain

- Our supply chain consists of around a hundred direct suppliers for hardware, components and parts, and hundreds of software suppliers. We also work with thousands of indirect suppliers providing services and equipment needed for our operations.
- Our global supply chain begins with raw material extraction and processing, ending in the manufacturing of components and final product assembly.
- There are typically four to eight supplier layers between Nokia and any mining activities. Our supply chain is spread around the world as it needs to deliver to our own production sites as well as to our offices worldwide.
- As we operate our own global manufacturing network, most manufacturing is done in-house complying with our strict social and environmental requirements. This also means that our first tier supplier line starts only after production.

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3.4.1 NOKIA SUPPLIER REQUIREMENTS

Our comprehensive set of Nokia Supplier Requirements provides clear guidance on what we expect from our suppliers. These requirements include environmental and social expectations, which are based on international standards such as ISO 14001, SA 8000, OHSAS18001, as well as PCMM, ILO and UN conventions.

The Nokia Supplier Requirements are part of the contractual agreement, which our suppliers must follow regardless of location or size. Our aim is to ensure that our suppliers provide safe working conditions, exercise good labor practices, use environmentally friendly manufacturing processes, and that they aim to reduce the environmental impact of their own operations.

WE UPDATED THE REQUIREMENTS AND PUT SOME MORE EMPHASIS ON THE ENVIRONMENT, LABOR CONDITIONS, OCCUPATIONAL HEALTH AND SAFETY, AND ETHICS. WE ALSO INCLUDED NEW REQUIREMENTS, SUCH AS OUR CONFLICT MINERAL POLICY AND CONFLICT MINERAL DUE DILIGENCE

As part of our continuous improvement of the supplier management system, Nokia Supplier Requirements are updated on a regular basis. In 2011, we updated the requirements and put some more emphasis on the environment, labor conditions, occupational health and safety, and ethics. We also included new requirements, such as our conflict mineral policy and conflict mineral due diligence, which suppliers must comply with as of January 2012. When training our hardware suppliers on these new requirements, they were also asked to make a Nokia Supplier Requirements compliance declaration by the end of 2011, to ensure they can meet the new requirements. In case any gaps are found, these suppliers will need to describe and put in place concrete corrective action plans that Nokia will follow up on.

We believe that remaining engaged with suppliers and providing support is the best way to help them improve their long-term performance. To drive sustainable change, we combine different approaches including face-to-face meetings, development programs, training, performance metrics and targets, as well as supplier-focused events.

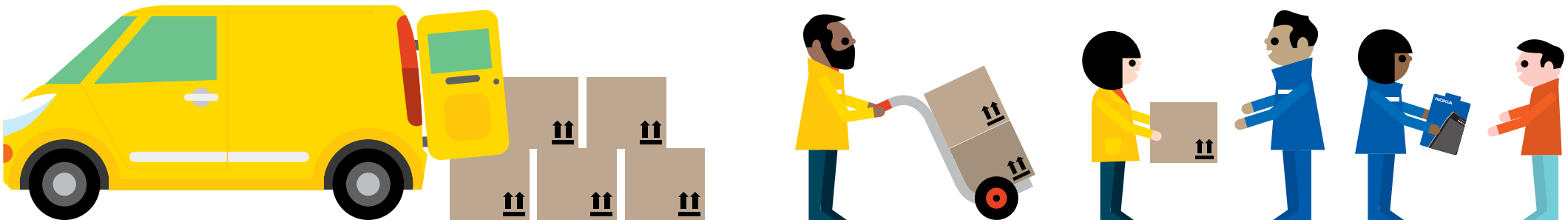
2011 PROGRESS
SUPPLIER REQUIREMENTS

Nokia's new supplier requirements, which put some more emphasis on the environment, labor conditions, occupational health and safety, were approved and will apply as of 2012.

We added conflict mineral policy and conflict mineral due diligence to our supplier requirements, which our suppliers must comply with as of January 2012.

CASE
WORKING WITH IPE FOR A GREENER SUPPLY CHAIN

The Institute of Public and Environmental Affairs (IPE) is a Chinese non-profit organization promoting a global green supply chain. It does this by expanding environmental information disclosure to allow communities to fully understand the hazards and risks in the surrounding environment. In 2011, we started utilizing their publicly available database to find out about possible environmental violations of our suppliers. Whenever there's feedback about any of our suppliers within the IPE database, we'll follow through with our suppliers. They will also be required to contact IPE to make sure the case will be updated accordingly in the database. For a new supplier qualification, we'll have a pre-check in the IPE database to see whether there is any record of issues.



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3.4.2 SUPPLIER ASSESSMENTS

Supplier self-assessments

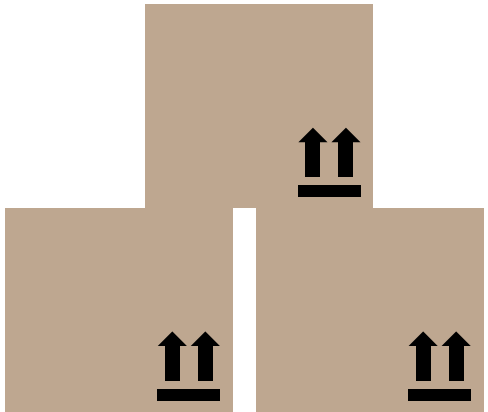
At Nokia, we have used a risk assessment tool for our own factories called E-TASC for some years now and we've also asked strategically important suppliers to assess their factories. However, in 2011 we expanded this practice to include all direct hardware suppliers' factories. E-TASC is a web-based risk tool, which helps companies throughout the supply chain manage and analyze social and environmental responsibility data. It was developed as a joint effort of the Global e-Sustainability Initiative (GeSi) and is used across our industry.

During 2011, altogether 292 hardware supplier facilities were risk self-assessed in relation to labor, ethics, health and safety and environmental topics (26 in 2010). The average results showed the following risks for four different areas assessed in E-TASC. A lower percentage score indicates a higher risk that the supplier is falling short of expectations and standards.

- Environment – low risk (89%)
- Labor –low risk (89%)
- Health and Safety –low risk (92%)
- Ethics –low risk (86%)

We have also put a process in place on how to handle high or medium risk areas identified by the tool and how to drive improvements. During 2012, we aim to get suppliers to complete the missing assessments and to start reviewing the results and drive improvements.

DURING 2011, ALTOGETHER 292 HARDWARE SUPPLIER FACILITIES WERE RISK SELF-ASSESSED IN RELATION TO LABOR, ETHICS, HEALTH AND SAFETY AND ENVIRONMENTAL TOPICS (26 IN 2010).



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Our on-site assessments to supplier sites

To monitor supplier performance against our requirements and to promote sustainability improvements, we conduct supplier self-assessments and on-site assessments. The aim of our regular on-site system assessments is to monitor compliance with the Nokia Supplier Requirements. These involve a review of the supplier's complete processes and management system against the Nokia Supplier Requirements. All new suppliers must undergo a system assessment, together with suppliers who have undergone significant organizational changes and suppliers considered at highest risk of non-compliance or with the greatest need of development. Key suppliers are generally assessed every two years.

The second type of on-site assessment is called an in-depth assessment. This provides an opportunity for more insight into how a supplier is managing and performing against the ethics, environment, labor and health and safety requirements defined in the Nokia Supplier Requirements. Suppliers undergo in-depth assessments for a variety of reasons, including identified risk, non-conformance or strategic importance.

One of the most common findings in our on-site assessments has been related to the way our suppliers manage the overtime hours of their employees. We have discovered that finding a real solution often requires long-term development. We support our suppliers in striving towards such lasting improvements by helping them analyze the adequacy of their corrective actions, offering benchmarking with our internal human resources practices and consultancy with our in-house subject matter experts as necessary. It is an approach that requires a strong commitment on both sides, but we believe it is the best way to create lasting change for the better.

Typical challenges that arise in our supplier assessments

- Disciplinary practices
- Freedom of association (where it is legally restricted)
- Health and safety requirements
- Overtime hours
- Pay structure
- Sub-supplier monitoring system
- Waste management

PROGRESS 2011
SUPPLIER ASSESSMENTS

In 2011, we conducted 35 Nokia Supplier Requirements assessments and 8 Environmental and Ethical in-depth assessments. In areas where risks were identified, suppliers have been requested to take corrective actions and we'll follow up on their improvements. To increase the visibility and in-depth understanding on environmental and social performance, we plan to increase the number of assessments.

Altogether 292 hardware supplier facilities were risk self-assessed in relation to labor, ethics, health and safety and environmental topics (26 in 2010).

CASE
CHEMICALS MANAGEMENT PILOT PROJECT IN CHINA

In line with Nokia's approach to drive continuous improvement in the sourcing sustainability issues and to raise standards in our supply chain during 2011, we designed an Occupational Health and Safety pilot project focusing on chemicals management in our supply base based in China. The project will involve conducting a series of 3rd party audits focusing on Health and Safety and environmental issues in detail. We have selected a number of supplier sites to undergo initial assessments followed by development actions to close any detected gaps. This builds on our own internal assessment practices and complements them by offering an independent expert view to chemicals management issues. We will also get the opportunity to mitigate potential risks early.

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3.4.3 REDUCING ENVIRONMENTAL IMPACT IN OUR SUPPLY CHAIN

Over 50% of the energy consumption and greenhouse gas emissions a Nokia product generates during its life cycle occur in the supply chain before the components reach our factories. Therefore, it is important for us to work closely with our suppliers to reduce this environmental impact.

We encourage all of our suppliers to measure, monitor and set reduction targets. Nokia follows up on whether the suppliers have reduction targets in place and have been able to meet the targets. All of our strategically important suppliers, or suppliers which have the highest environmental impact, are required to report to us about their impact. The main focus areas, largely the same as with our own factories, are: energy consumption, greenhouse gas emissions, waste generation, and water use and recycling.

In 2011, 66% of our hardware suppliers that account for the highest environmental impact or are strategically important to us, had company-level reduction targets for energy, greenhouse gas emissions, water and waste in place and monitored. The figure has slightly decreased since last reporting period and in coming years we will thus put even more efforts on getting suppliers to commit to reduce their environmental impact.

Nokia's water action plan for the supply chain

During 2011, Nokia prepared a water strategy for the entire company. In regards to the supply chain, we identified components and parts that require more water usage during production as well as areas and locations that are water scarce. Based on these findings we will take the following actions in the years to come.

- Raising awareness on water scarcity in the Nokia supply chain by arranging workshops and training.
- Improving the water efficiency in the Nokia supply chain by closer co-operation with suppliers operating in water scarce areas.

During the next few years, we will encourage our suppliers operating in water scarce areas to have the required practices, policies etc. in place to manage water scarcity. Additionally, we'd like all relevant Nokia suppliers to have water reduction targets in place, monitor water use and recycle water.

Reporting on greenhouse gas emissions

To quantify our upstream indirect emissions taking place in Nokia's supply chain, we have been using life cycle assessment calculations for many years. This has helped us to identify hot spots and drive improvements throughout the product life cycle. Since 2007, our direct suppliers have been asked to measure and set reduction targets on their greenhouse gas emissions. The scope of suppliers reporting on their emissions has expanded during the years. We have been using training sessions to improve the data quality and accuracy.

2011 PROGRESS
REDUCING THE ENVIRONMENTAL IMPACT

In 2011, 91% of our direct hardware suppliers' sites serving Nokia were certified to ISO14001. Nokia's direct hardware suppliers have maintained a high level of certification since 2008.

Nokia prepared a water strategy for the entire company. In regards to the supply chain we identified components and parts that require more water usage during production as well as areas and locations that are water scarce.

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3.4.4 IMPROVING SOCIAL CONDITIONS IN OUR SUPPLY CHAIN

As well as focusing on the environmental impact, we also work to improve the ethical, labor and health and safety conditions of our supply chain through performance metrics and target setting. These metrics help us to follow up on how our suppliers are managing, while providing them support to improve further.

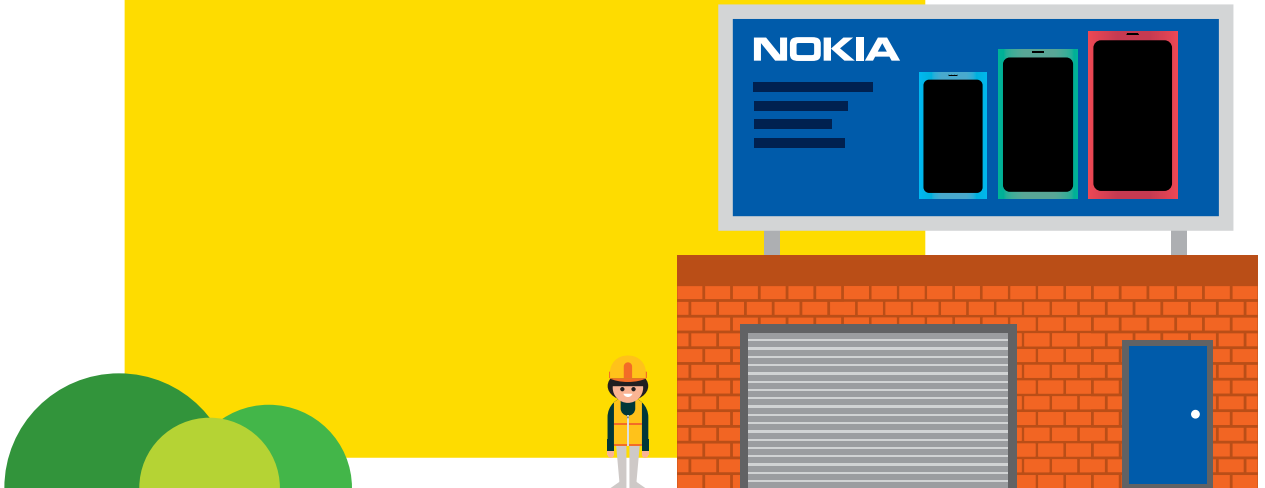
A year ago, in 2010, Nokia introduced four new metrics related to health, safety and labor issues. With these metrics, we want to get a deeper understanding of the labor conditions of our suppliers. These metrics concern occupational injuries and illnesses, employee attrition and overall employee satisfaction surveys. We started with a pilot scheme in 2010 and during 2011 all of our strategically important suppliers were asked to report these metrics.

2011 PROGRESS
SOCIAL CONDITIONS

- 98% (92.9% in 2010) of our direct hardware suppliers had a code of conduct policy in place that met our requirements. A Code of Conduct policy covers key sustainability topics including corruption, general business routines, health and safety, human rights, working conditions, social rights and environmental standards and is a part of the Nokia Supplier Requirements. Suppliers not meeting our expectations have been requested to take corrective actions.
- 97% of our strategically important hardware suppliers report on our new health and safety metrics introduced in the 2011. The number of remaining hardware suppliers that voluntarily reported was 52%

In 2011, the average results of our new health, safety and labor metrics were the following:

- The rate of occupational illnesses and injuries was 0.34, meaning that for every 100 employees, there were 0.34 incidence of occupational injury or illness.
- Employee attrition at supplier sites was 21%. Employee attrition represents staff turnover; employees that leave the organization divided by the total number of employees.
- The average response regarding employee satisfaction survey practices at our supplier sites was 2.80 on a scale from 1 to 4, which indicates that at supplier sites, in general, nearly or over 60% of total employees are covered by an annual employee satisfaction survey.



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3.3 **OUR ENVIRONMENTAL IMPACT**
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- 3.4.6 ETHICAL SOURCING OF RAW MATERIALS

4.0 **INDEPENDENT ASSURANCE**
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3.4.5 HELPING EVERY SUPPLIER BECOME MORE SUSTAINABLE

To build trust and stronger relations with our suppliers, we decided to move beyond only auditing and focus also on supplier capacity building initiatives. We have delivered a number of supplier training info-sessions on environmental requirements such as the Nokia Substance List and Material Data Collection. The aim of this training is to provide suppliers with a clear understanding and guidance on Nokia requirements. It will also enable their internal environmental organization to promote learning within their own supply eco-system. As active members of EICC/GeSI Learning and Capability Building Work Group, we promoted the Worker Management Communication training course among our suppliers. The objective of the course was to support our suppliers in implementing effective worker-management communication systems and in raising worker awareness of their rights and responsibilities.

3.4.6 ETHICAL SOURCING OF RAW MATERIALS

We take continuous action to ensure that our products are manufactured from ethically sourced materials. During 2011 we focused on the further development of an industry-wide approach. Our aim was to ensure that our supply chain was fully accountable and easier to trace. Traceability is an issue that concerns the entire electronics industry, and any other industry using metals and minerals derived from conflict areas. This is why we think it's very important to participate in industry initiatives aimed at improving overall traceability, even though we don't mine or even buy metals directly.

There are typically four to eight supplier layers between Nokia and any mining activities. In all these layers active work on increasing transparency, to improve the overall traceability of metals and minerals, is required. We aim to understand the commitments of each tier of the supply chain through dialogue both at an industry level and with stakeholders. We believe that an effective and sustainable solution requires that all companies, using metals, follow the same rules and apply the same practices.

CASE
DRIVING SUSTAINABILITY PERFORMANCE ACROSS ICT SECTOR

We also work to promote good conduct and to develop and deploy a consistent set of tools and processes to measure, monitor and improve sustainability performance across the ICT sector. As part of our membership of the Global e-Sustainability Initiative (GeSI) Supply Chain Working Group (SCWG), we actively participate in the Learning and Capability Building, Validated Audit Program and Extractives working groups' collaboration with Electronic Industry Citizenship Coalition (EICC).

Many of the supply chain challenges we face, such as the traceability of metals, are similar across the electronics industry. Collaborating with other companies and industry groups to help develop solutions is essential. We have been a full member of GeSI since 2007 and a member of the GeSI SCWG since 2004. We are very pleased to be part of the industry that has taken a proactive approach to the matter and worked out a validation process that will provide a third-party assurance that smelters do not source minerals from conflict areas.

3.4 NOKIA AND SUPPLIERS

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2011 PROGRESS
ETHICAL SOURCING OF RAW MATERIALS

As of June 2011, we have included requirements regarding conflict minerals policy and due diligence into Nokia Supplier Requirements.

Also in June 2011, we signed up to participate in the pilot implementation of OECD (Organization for Economic Cooperation and Development) Due Diligence Guidelines for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. The aim of the pilot scheme is to apply the guidance, share experiences and discern best practices with companies from other sectors and large conglomerates.

A key factor in the guidelines is a progressive approach to conducting due diligence and seeking to avoid boycotting of mining in countries like the Democratic Republic of Congo, where there is also legitimate mining activities, employing thousands. By incorporating the flexibility to allow trade to continue, the guidelines promote responsible sourcing.

The guidelines resulted from a multi-stakeholder consultation process, where Nokia was an active participant. They outline a five-step risk-based process for companies to develop responsible supply chain management for tin, tantalum and tungsten.

OECD Guidelines

1. Establish strong company management systems
2. Identify and assess risk in the supply chain
3. Design and implement a strategy to respond to identified risks
4. Carry out an independent third-party audit of the supply chain
5. Report on supply chain due diligence

The OECD guidance was the first inter-governmental agreement on how to undertake supply chain due diligence – and clarify how all the parties involved, from mines and mineral processors to the manufacturers, can identify and manage risks throughout the supply chain. The pilot scheme will run until June 2012.

In addition to OECD pilot scheme, Nokia also supports the smelter audit validation processes by Electronic Industry Citizenship Coalition (EICC) and Global e-Sustainability Initiative (GeSI) for tin, tantalum, tungsten and gold, as well as the recently introduced Minerals Reporting Template tool, a standardized template for assessing due diligence. The tool was developed to facilitate disclosure and communication of information regarding smelters that provide material to a company's supply chain.

In late 2011, Nokia joined the Public-Private Alliance for Responsible Minerals Trade (PPA). This is a joint initiative between governments, companies, and civil society to support supply chain solutions to conflict minerals challenges in the Democratic Republic of Congo (DRC) and the Great Lakes Region (GLR) of Central Africa. While we want to ensure that our products are free of conflict minerals, we wish to avoid an embargo on Central Africa and support legitimate trade.

In December 2011, in order to provide further clarification on our stance regarding the illegal trade in natural resources, we published a public policy to complement our strict supplier requirements and other guidelines. We require the parties in our supply chain to agree to follow the same principles. In the policy we publicly state that we prohibit human rights abuses associated with the extraction, transport or trade of minerals. We also prohibit any direct or indirect support to non-state armed groups or security forces that illegally control or tax mine sites, transport routes, trade points, or any upstream actors in the supply chain. And finally, we have no tolerance with respect to corruption, money laundering or bribery.

More information about our progress in traceability of minerals can be found on our website.

THE ENOUGH PROJECT HAS RANKED NOKIA AMONG THE TOP 5 ELECTRONICS COMPANIES FOR PROGRESS ON CONFLICT MINERALS.

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INDEPENDENT ASSURANCE

Selected key corporate responsibility indicators in this report have been assured by an independent third party, PricewaterhouseCoopers Oy (Nokia's statutory auditor). their assurance report can be found below:

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TO THE MANAGEMENT OF NOKIA CORPORATION

We have been engaged by the Management of Nokia Corporation (hereinafter also "Nokia") to perform a limited assurance engagement on selected Nokia Corporation's sustainability information for the reporting period of 1 January 2011 to 31 December 2011 included in Nokia Corporation's Sustainability Report 2011, as disclosed on Nokia's website (hereinafter the "Selected sustainability information").

Furthermore, the assurance engagement has covered the nature and extent of Nokia Corporation's adherence to the AA1000 AccountAbility Principles as presented in the AA1000 AccountAbility Principles Standard 2008 (inclusivity, materiality and responsiveness).

SELECTED SUSTAINABILITY INFORMATION IN THE ASSURANCE SCOPE

The Selected sustainability information consists of performance indicators in the areas of Environment, HR and Supply Chain as listed below. "Nokia" means Nokia Group excluding Nokia Siemens Networks, and unless otherwise stated, Nokia includes NAVTEQ. Beginning 1 October 2011, NAVTEQ has been part of Nokia's Location and Commerce business.

ENVIRONMENT (THE BOUNDARY HAS BEEN INDICATED IN PARENTHESIS)

- Facility related direct and indirect energy consumption and related greenhouse gas emissions (Nokia and Nokia Group) and comparison of year 2011 GHG emissions to base year 2006 emissions (Nokia). CO_2 emissions in base year 2006 have originally been assured by Ecofys Germany GmbH, and for that part PricewaterhouseCoopers Oy has relied on their assurance work.
- Energy used in production per unit produced in 2011 compared to year 2010 (Nokia) and greenhouse gas emissions per person working in Nokia offices and R&D in 2011 compared to year 2006 (Nokia excluding NAVTEQ).
- Water usage in facilities (withdrawal amount and source, recycling, discharge destination) (Nokia and Nokia Group) and water withdrawal per person in 2008 and 2011 (Nokia).
- Green electrical energy portion of total electricity consumption (Nokia and Nokia Group).
- VOC (Volatile Organic Compound) emissions from factories (Nokia).
- Waste amounts, treatment and recycling refunds (Nokia).
- ROHS and REACH compliance of products (Nokia).
- Charger no-load power consumption (average sold p.a.) (Nokia).
- Air travel emissions (Nokia).
- GHG reduction impact of Nokia Devices and Services (cases) (Nokia).

HR (THE BOUNDARY IS "NOKIA EXCLUDING NAVTEQ", UNLESS OTHERWISE STATED BELOW IN PARENTHESIS)

- Employees in production.
- Total training cost and Training cost/employee.
- Total incident frequency rate (TIFR) in production.
- Women in senior management.
- Non-Finnish nationalities in senior management.
- Total workforce by employment type, employment contract and gender.
- Rate of employee turnover (Voluntary attrition).
- Number of monetary employee recognition given (number of Achievement Awards and Kudos given).
- Percentage of production employees covered by collective bargaining agreements.
- LtY (Listening to You) results on strategic goals for Nokia's transformation (Nokia).

SUPPLY CHAIN (THE BOUNDARY IS NOKIA, AND THE INDICATORS COVER NOKIA'S DIRECT HARDWARE SUPPLY CHAIN)

- Percentage of direct hardware suppliers having certified ISO14001 system in place for sites serving Nokia 2011, 2010 and 2009.
- Percentage of suppliers having reduction targets for energy, GHG, water, and waste in place and monitored.
- Risk assessment E-TASC:
  - Number of direct suppliers that have completed a risk self-assessment in 2011.
  - Average supplier risk assessment score for Environment, Labour, Health and safety, Ethics.
- NSR (Nokia Supplier Requirements) and E&E (Environmental and Ethical) in-depth assessments:
  - Number of NSR assessments and E&E in-depth assessments during 2011.
- Supplier Code of Conduct implementation percentage in 2011, 2010 and 2009.
- Percentage of priority suppliers reporting on Nokia's new health, safety and labour metrics.
  - Average results.

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MANAGEMENT'S RESPONSIBILITY

The Management of Nokia is responsible for preparing the Selected sustainability information in accordance with the reporting criteria as set out in Nokia's documented standards, GHG Protocol, and ISO 14001 certifications for suppliers' ISO 14001 system (hereinafter the "Reporting criteria"). Also, adherence to AA1000 AccountAbility Principles Standard 2008 and the three principles of inclusivity, materiality and responsiveness is the responsibility of the Management.

PRACTITIONER'S RESPONSIBILITY

Our responsibility is to express a conclusion on the Selected sustainability information based on our work performed. Our assurance report has been made in accordance with the terms of our engagement. We do not accept, or assume responsibility to anyone else, except to Nokia for our work, for this report, or for the conclusions that we have reached.

Within Nokia Group, Nokia Siemens Networks sustainability information for 2011 has been assured by another service provider. For those performance indicators in our assurance scope, which include Nokia Siemens Networks data, we have relied on the other service provider's assurance work, and hence we have not performed any assurance work separately on Nokia Siemens Networks data.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information". This Standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain limited assurance whether any matters come to our attention that cause us to believe that the Selected sustainability information has not been prepared, in all material respects, in accordance with the Reporting criteria.

In addition, we have conducted our work in accordance with the AA1000 Assurance Standard 2008. For conducting a Type 2 assurance engagement as agreed with Nokia, the AA1000 Assurance Standard 2008 requires planning and performing of the assurance engagement to obtain limited assurance on whether any matters come to our attention that cause us to believe that Nokia does not adhere, in all material respects, to the AA1000 Accountability Principles and that the Selected sustainability information is not reliable, in all material respects, based on the Reporting criteria.

In a limited assurance engagement the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. An assurance engagement involves performing procedures to obtain evidence about the amounts and other disclosures in the Selected sustainability information. The procedures selected depend on the practitioner's judgement, including an assessment of the risks of material misstatement of the Selected sustainability information. Our work consisted of, amongst others, the following procedures:

- Interviewing relevant management of Nokia.
- Interviewing relevant employees from various organisational levels of Nokia with regards to stakeholder expectations, meeting of those expectations, as well as stakeholder engagement.
- Assessing stakeholder engagement and responsiveness based on Nokia's documentation and internal communication.
- Performing a media analysis on Nokia.
- Assessing how Nokia employees apply Nokia's reporting guidelines and procedures.
- Visiting Nokia's Head Office as well as two other sites in Germany and South Korea.
- Interviewing employees responsible for collection and reporting of the Selected sustainability information at Nokia, as well as at the sites where our visits took place.
- Inspecting relevant documents and systems for gathering, analysing and aggregating the Selected sustainability information as well as performing tests on a sample basis.
- Assessing the data consolidation process of the Selected sustainability information at Nokia.

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CONCLUSION

Based on our limited assurance engagement, nothing has come to our attention that causes us to believe that Nokia Corporation does not adhere, in all material respects, to the AA1000 Accountability Principles.

Furthermore nothing has come to our attention that causes us to believe that Nokia Corporation's Selected sustainability information has not been prepared, in all material respects, in accordance with the Reporting criteria, or that the Selected sustainability information is not reliable, in all material respects, based on the reporting criteria.

Our assurance report should be read in conjunction with the inherent limitations of accuracy and completeness for sustainability information. This independent assurance report should not be used for interpreting Nokia Corporation's performance in relation to its principles of sustainability.

OBSERVATIONS AND RECOMMENDATIONS

Based on our limited assurance engagement, we provide the following observations and recommendations in relation to Nokia Corporation's adherence to the AA1000 AccountAbility Principles. These observations and recommendations do not affect the conclusions presented earlier.

- Regarding Inclusivity: Nokia Corporation has a strong commitment to stakeholder engagement. The company has an ongoing and extensive stakeholder engagement process in place to ensure a continuous identification of relevant stakeholders as well as their concerns and expectations. We recommend that Nokia Corporation especially utilises its wide-ranging stakeholder engagement to confirm or refute the company's assumptions regarding the materiality of key sustainability issues.
- Regarding Materiality: Nokia Corporation has processes in place to discuss, evaluate and determine the materiality of sustainability topics. These processes are aligned with the processes for organisational decision making and strategy development. We recommend that Nokia Corporation continues to update its materiality analysis regularly, and also takes proactively into account emerging sustainability trends.
- Regarding Responsiveness: Nokia Corporation is committed to being responsive to its stakeholders, which is evident from the ongoing, wide-ranging and thematically balanced communication on sustainability issues via various communication channels. We recommend that Nokia Corporation ensures that its responsiveness across the organisation continues to be sufficient taking into account the rapidly changing markets.

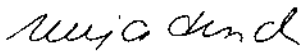
PRACTITIONER'S INDEPENDENCE AND QUALIFICATIONS

PricewaterhouseCoopers' own Global Independence Policy is applicable to PricewaterhouseCoopers Oy, its partners and professional staff, including all members of the assurance engagement team.

Our multi-disciplinary team of corporate responsibility and assurance specialists possesses the requisite skills and experience within financial and non-financial assurance, corporate responsibility strategy and management, social and environmental issues as well as industry knowledge to undertake this assurance engagement.

Helsinki, X Month 2012

PricewaterhouseCoopers Oy
Authorised Public Accountants



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GLOBAL REPORTING INITIATIVE

In compiling the 2011 sustainability report, Nokia used the Global Reporting Initiative's (GRI) G3 Sustainability Reporting Guidelines (version 3.0). We have disclosed all core indicators as well as additional indicators relevant to Nokia.

A third-party GRI Application Level check conducted by PricewaterhouseCoopers Oy has confirmed Nokia's self-declaration that this report meets the requirements for GRI Application Level A+.

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STANDARD DISCLOSURES PART I: PROFILE DISCLOSURES

PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
1. Strategy and Analysis					
1.1	Statement from the most senior decision-maker of the organization.	Fully	1.1 Greetings from Nokia's CEO		
1.2	Description of key impacts, risks, and opportunities.	Fully	1.3.1 Identifying key sustainability topics; 1.4 Key achievements and challenges in 2011; 3.3.1 Climate strategy (Our climate targets); 1.5.3 Risk and opportunity management; 2.2.4 Customer engagement (Customer privacy); 2.2.5 Stakeholder engagement (Partnering with non-governmental organizations)	3D. Risk Factors (p. 13 -); Corporate Responsibility: Nokia (p. 72-)	
2. Organizational Profile					
2.1	Name of the organization.	Fully	First page	Title page	
2.2	Primary brands, products, and/or services.	Fully	1.2 Nokia in 2011	4B. Business overview (p. 50-)	
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	Fully	1.2 Nokia in 2011	4. Information on the company / Organizational Structure and Reportable Segments (p. 49-50) 4C. Organizational structure (p. 85-86)	
2.4	Location of organization's headquarters.	Fully	1.2 Nokia in 2011	Title page	
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	Fully	1.2 Nokia in 2011	4D. Property, Plants and Equipment (p. 85-86)	
2.6	Nature of ownership and legal form.	Fully		Introduction and use of certain terms (p. 4); 7A. Major shareholders (p. 184)	
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	Fully	1.2 Nokia in 2011	5A. Operating results (p. 87-), Net sales p. 115	
2.8	Scale of the reporting organization.	Fully	1.2 Nokia in 2011; 2.2.6 Our Economic impact	3A. Selected Financial Data (p. 9); Results of operations (p. 114-); 5A. Operating Results (p. 118); 6D. Employees (p. 173)	
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	Fully		5A. Operating results (p. 87-); 8B. Significant changes (p. 190)	

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STANDARD DISCLOSURES PART I: PROFILE DISCLOSURES

PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
2.10	Awards received in the reporting period.	Fully	2.2.5 Stakeholder engagement (Awards received for Nokia's sustainability work)		
3. Report Parameters					
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	Fully	About the report		
3.2	Date of most recent previous report (if any).	Fully	About the report		
3.3	Reporting cycle (annual, biennial, etc.)	Fully	About the report (Integrated reporting and additional sources for sustainability information)		
3.4	Contact point for questions regarding the report or its contents.	Fully	About the report		
3.5	Process for defining report content.	Fully	2.2.5 Stakeholder engagement; 1.3.1 Identifying key sustainability topics		
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	Fully	About the report (Reporting scope)		
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	Fully	About the report		
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	Fully	About the report (Reporting scope; Integrated reporting and additional sources for sustainability information)		
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	Fully	6. Key Data		This is reported in connection with each indicator as relevant.

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STANDARD DISCLOSURES PART I: PROFILE DISCLOSURES

PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g.,mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	Fully	6. Key Data	5A. Operating Results (p. 87)	This is reported in connection with each indicator as relevant.
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	Fully	6. Key Data	5A. Operating results (p. 87-); 8B. Significant changes (p. 190)	
3.12	Table identifying the location of the Standard Disclosures in the report.	Fully	5. Global Reporting Initiative (GRI); This index		
3.13	Policy and current practice with regard to seeking external assurance for the report.	Fully	4. Independent assurance		
4. Governance, Commitments, and Engagement					
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	Fully		6A. Directors and Senior Management (p. 142-); 6C. Board Practices (p. 168-)	
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Fully		6C. Board Practices (p. 170)	
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	Fully		6C. Board Practices (p. 170)	

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STANDARD DISCLOSURES PART I: PROFILE DISCLOSURES

PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Fully			All shareholders have the right to submit agenda items or proposals to the agenda of our Annual General Meeting (AGM) provided that the item or proposal belongs to the scope of the general meeting of the shareholders, and the request is made to the Board in writing well in advance to be included in the notice of the meeting. The Finnish Corporate Governance Code recommends attendance by the Board Chairman and a sufficient number of directors to allow the shareholders to exercise their right to present questions to the Board and management. All the directors attended Nokia's Annual General Meeting held on May 3, 2011.
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	Fully		6B. Compensation (p. 152-)	Nokia has group level sustainability targets and also each business unit has their more specific targets.
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	Fully		6C. Board practices (p. 168-)	
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	Fully		6A. Directors and senior management (p. 142-)	
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	Fully	2.2.2 Nokia Code of Conduct; 2.2.3 Employees (Nokia Way and values; Labor conditions)	4B. Business overview (Corporate responsibility) (p. 72-)	

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PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	Fully	1.5.1 Sustainability governance and management	Corporate Responsibility: Nokia (p. 72-)	
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	Fully		6C. Board Practices (p. 169)	
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	Fully	1.5.3 Risk and opportunity management		
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	Fully	2.2.5 Stakeholder Engagement		
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: Has positions in governance bodies; Participates in projects or committees; Provides substantive funding beyond routine membership dues; or Views membership as strategic.	Fully	2.2.5 Stakeholder engagement		
4.14	List of stakeholder groups engaged by the organization.	Fully	2.2.5 Stakeholder engagement		
4.15	Basis for identification and selection of stakeholders with whom to engage.	Fully	2.2.5 Stakeholder engagement		
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Fully	1.3.1 Identifying key sustainability topics; 2.2.5 Stakeholder engagement; 2.2.3 Employees (New strategy and our employees)		
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	Fully	2.2.5 Stakeholder engagement		

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STANDARD DISCLOSURES PART II: DISCLOSURES ON MANAGEMENT APPROACH (DMAS)

PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Disclosure on Management Approach EC					
ASPECTS		Fully	1.4 Key achievements and challenges in 2011; 1.5.1 Sustainability governance and management; 1.5.2 Sustainability targets, management systems and policies; 1.5.3 Risk and opportunity management; 2.1 Enabling people with mobile technology; 2.2.5 Stakeholder engagement; 2.2.6 Our economic impact; 3.3.1 Climate strategy; 3.4.1 Nokia Supplier Requirements	Corporate Responsibility: Nokia (p. 72-)	Management approach disclosed in conjunction with information on each aspect
Disclosure on Management Approach EN					
ASPECTS		Fully	1.4 Key achievements and challenges in 2011; 1.5.1 Sustainability governance and management; 1.5.2 Sustainability targets, management systems and policies; 3.1 An environmentally leading product range; 3.3.1 Climate strategy	Corporate Responsibility: Nokia (p. 72-)	Management approach disclosed in conjunction with information on each aspect
Disclosure on Management Approach LA					
ASPECTS		Fully	2.2.3 Employees; Diversity and inclusion; Labor conditions; Health, safety and well-being of our employees; Training and development; Performance and rewards; New strategy and our employees	Corporate Responsibility: Nokia (p. 72-)	Management approach disclosed in conjunction with information on each aspect
Disclosure on Management Approach HR					
ASPECTS		Fully	1.5.2 Sustainability targets, management systems and policies; 2.2.1 Human rights; 2.2.2 Nokia Code of Conduct; 2.2.3 Employees (Labor conditions); 3.4.2 Supplier assessments; 3.4.4 Improving social conditions in our supply chain	Corporate Responsibility: Nokia (p. 72-)	Management approach disclosed in conjunction with information on each aspect

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STANDARD DISCLOSURES PART II: DISCLOSURES ON MANAGEMENT APPROACH (DMAS)

PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Disclosure on Management Approach SO					
ASPECTS		Fully	1.4 Key achievements and challenges in 2011; 1.5.2 Sustainability targets, management systems and policies; 2.1 Enabling people with mobile technology; 2.2.2 Nokia Code of Conduct; 2.2.3 Employees (Labor conditions, New strategy and our employees); 2.2.5 Stakeholder Engagement	Corporate Responsibility: Nokia (p. 72-)	Management approach disclosed in conjunction with information on each aspect
Disclosure on Management Approach PR					
ASPECTS	Customer health and safety	Fully	2.2.4 Customer engagement (Product safety); 3.1.3 Substance and materials management	Corporate Responsibility: Nokia (p. 72-)	Management approach disclosed in conjunction with information on each aspect

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ECONOMIC

PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Economic performance					
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	Partially	2.2.5 Stakeholder engagement; 2.2.6 Our economic impact (Direct economic impact)	F-2	Data disclosed for other parts, not for Community Investments. Amounts are not material in relation to Nokia's overall business volumes. Our social investment projects are explained in chapters 2.1.1 Providing the next billion with access to the Internet and information and 2.1.2 Improving education, health and livelihoods with mobile technology.
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	Partially	3.3.1 Climate strategy; 1.5.3 Risk and opportunity management		Not expected to cause material financial implications in the near term.
EC3	Coverage of the organization's defined benefit plan obligations.	Partially		P. 160, F-13, F-30-33	As we have disclosed the financials of defined benefit schemes and country headcount we did not consider the actual participation numbers to be material but these can be supplied upon request.
EC4	Significant financial assistance received from government.	Fully			Nokia has received some funding from governmental organizations such as research and development financing from Tekes, the Finnish Funding Agency for Technology and Innovation. During 2011, Nokia received around 10 million EUR which was mainly used for co-operation projects with universities and Finnish business partners.

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ECONOMIC

PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Market presence					
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	Partially	3.4.1 Nokia Supplier Requirements		Proportion of spending on locally-based suppliers not disclosed. As Nokia is a global company and to ensure material availability, we mainly use global suppliers. Many of these suppliers often operate near our locations of operations.
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	Partially	2.2.3 Employees (Diversity and inclusion)		Our policy is to employ local people wherever we work. Proportion of local senior management not reported. Data not available.
Indirect economic impacts					
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	Fully	2.1 Enabling people with mobile technology		During the reporting period Nokia itself has not invested in public infrastructure investments those meant by GRI, but has participated in to the public good activities through donations and through partners.
EC9 (ADD)	Understanding and describing significant indirect economic impacts, including the extent of impacts.	Fully	2.1 Enabling people with mobile technology		

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ENVIRONMENTAL

PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Materials					
EN1	Materials used by weight or volume.	Partially	3.1.3 Substance and materials management; 3.1.4 Packaging		Packaging materials disclosed. Nokia collects full material declaration of all parts and components used in manufacturing and thus we are able to provide full material declaration for our mobile devices. Due to very detailed level of information of materials we publish used materials in "material pie" level for consumers. http://www.nokia.com/global/about-nokia/people-and-planet/sustainable-devices/eco/eco-profiles/ This substance list is the requirement specification of materials used in parts and components delivered to Nokia by suppliers: http://www.nokia.com/global/about-nokia/people-and-planet/strategy/management/substance-management/. Part of the material information is Nokia suppliers trade secret and thus total materials used is not reported in GRI terms.
EN2	Percentage of materials used that are recycled input materials.	Partially	3.1.4 Packaging		Nokia does not calculate percentage of materials used in products that are recycled input materials as these are not material to our operations, only the amount used in packaging materials is calculated.

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ENVIRONMENTAL

PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Energy					
EN3	Direct energy consumption by primary energy source.	Fully	3.3.3 Green operations and facilities (Energy efficiency and emissions); 6. Key data		
EN4	Indirect energy consumption by primary source.	Fully	3.3.3 Green operations and facilities (Energy efficiency and emissions); 6. Key data		
EN5 (ADD)	Energy saved due to conservation and efficiency improvements.	Partially	3.3.3 Green operations and facilities (Energy efficiency and emissions)		
EN6 (ADD)	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	Partially	3.3.3 Green operations and facilities (Energy efficiency and emissions)		
EN7 (ADD)	Initiatives to reduce indirect energy consumption and reductions achieved.	Partially	3.3.3 Green operations and facilities (Energy efficiency and emissions)		
Water					
EN8	Total water withdrawal by source.	Fully	3.3.3 Green operations and facilities (Water usage); 6. Key data		
EN10 (ADD)	Percentage and total volume of water recycled and reused.	Fully	3.3.3 Green operations and facilities (Water usage); 6. Key data		
Biodiversity					
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	Fully	3.3.3 Green operations and facilities (Protecting biodiversity)		Size of land is altogether around 100.000 m².
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	Fully	1.3.2 Our key sustainability topics table (Green supply chain and logistics); 3.1.2 Product life cycle assessment (LCA); 3.3.3 Green operations and facilities (Protecting biodiversity)		

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ENVIRONMENTAL

PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Emissions, effluents and waste					
EN16	Total direct and indirect greenhouse gas emissions by weight.	Fully	3.3.3 Green operations and facilities (Energy efficiency and emissions); 6. Key data		216.300 tonnes (CO_2e) net emissions.
EN17	Other relevant indirect greenhouse gas emissions by weight.	Fully	3.3.3 Green operations and facilities (Energy efficiency and emissions); 6. Key data		
EN18 (ADD)	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Fully	3.3.3 Green operations and facilities (Energy efficiency and emissions); 6. Key data		
EN19	Emissions of ozone-depleting substances by weight.	Fully	6. Key data		
EN20	NOx, SOx, and other significant air emissions by type and weight.	Fully	6. Key data		
EN21	Total water discharge by quality and destination.	Fully	6. Key data		
EN22	Total weight of waste by type and disposal method.	Fully	6. Key data; 3.3.3 Green operations and facilities (Reducing waste)		
EN23	Total number and volume of significant spills.	Fully			There were no significant spills from Nokia facilities in 2011
Products and services					
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	Fully	2.1 Enabling people with mobile technology; 3.3.1 Climate strategy (Our climate targets)		
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	Partially	3.1.4 Packaging		Recycling volumes described. Other required data in GRI format not available.

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ENVIRONMENTAL

PROFILE DISCLOSURE	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Compliance					
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	Fully			There were no significant fines or non-monetary sanctions for noncompliance with laws and regulations during 2011.
Transport					
EN29 (ADD)	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	Fully	3.3.3 Green operations and facilities (Green logistics; Business travel, employee commuting and car fleet); 6. Key data		

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SOCIAL: LABOR PRACTICES AND DECENT WORK

PERFORMANCE INDICATOR	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Employment					
LA1	Total workforce by employment type, employment contract, and region broken down by gender.	Fully	2.2.3 Employees (Diversity and inclusion)	6D. Employees (p. 173)	
LA2	Total number and rate of employee turnover by age group, gender, and region.	Partially	2.2.3 Employees		Voluntary attrition rate of permanent employees disclosed. Nokia does not follow employee turnover by age group, gender or region and due that the data for this disclosure is not reported.
Labor/management relations					
LA4	Percentage of employees covered by collective bargaining agreements.	Partially	2.2.3 Employees (Labor conditions)		Nokia recognizes the right of employees to join unions and enter collective bargaining agreements. However, practicalities vary according to country laws and practices. Percentage not available.
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	Fully	2.2.3 Employees (Labor conditions)		Nokia always follows the local legislation.
Occupational health and safety					
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	Partially	2.2.3 Employees (Health, safety and well-being of our employees)		The metrics are not available from the whole 2011 due to structural changes in the organization. 1H figure of aggregate people incidents was 10. In 2012 we will introduce new incident log and aim to have not only aggregate figure but specific number. Aggregate people incidents contain all people incidents like strikes, occupational hazards, discrimination etc. The categorization/ reporting does not go in reporting each type of people on indicents separately but is covered by aggregate figure because many times one incident can represent many categories same time (discrimination leads to strike etc.).
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	Fully	2.2.3 Employees (Health, safety and well-being of our employees)		

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SOCIAL: LABOR PRACTICES AND DECENT WORK

PERFORMANCE INDICATOR	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Training and education					
LA10	Average hours of training per year per employee by employee category.	Partially	2.2.3 Employees (Training and development); 6. Key data		Nokia does not track training hours, only the cost of training.
LA11 (ADD)	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	Fully	2.2.3 Employees (Training and development; New strategy and our employees)		
LA12 (ADD)	Percentage of employees receiving regular performance and career development reviews.	Partially	2.2.3 Employees (Performance and rewards)		
Diversity and equal opportunity					
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	Partially	2.2.3 Employees (Diversity and inclusion); 6. Key data	4B. Business Overview (p. 75); 6A. Directors and Senior Management (p. 142 – 151)	Nokia does not track breakdown of employees by minority group memberships. Data for employees by age group not available for 2011, but will be reported in future. Number of women (2) / men (9) in board, and total number (11) of board members. Number of women (4) / men (10) in leadership team, and total number (14) of leadership team members.
Equal remuneration for women and men					
LA14	Ratio of basic salary of men to women by employee category.	Partially	2.2.3 Employees (Performance and rewards)		Gender demographics vary greatly both between the many countries where we operate and employee categories. For our indirect (non-production staff) we use a global framework to set salary bands which are applied to people regardless of gender/age, etc. We also regularly benchmark with other companies in the industry to ensure we are paying competitively. For our production staff, we have agreements which specify the salary for each role and experience level. These are applied consistently irrespective of gender.

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SOCIAL: HUMAN RIGHTS

PERFORMANCE INDICATOR	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Investment and procurement practices					
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	Partially	2.2.3 Employees (Labor conditions)		Nokia conducts human rights/social impact assessment for all major new investments e.g. new factories.
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	Partially	3.4.2 Supplier assessments; 3.4.4 Improving social conditions in our supply chain		All new suppliers must undergo a system assessment, together with suppliers who have undergone significant organizational changes and suppliers considered at highest risk of non-compliance or with the greatest need of development. Key suppliers are generally assessed every two years.
HR3 (ADD)	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	Partially	2.2.2 Nokia Code of Conduct		Nokia does not track training hours.
Non-discrimination					
HR4	Total number of incidents of discrimination and actions taken.	Partially	2.2.3 Employees (Labor conditions)		The metrics are not available from the whole 2011 due to structural changes in the organization. 1H figure of aggregate people incidents was 10. In 2012 we will introduce new incident log and aim to have not only aggregate figure but specific number. Data for disclosing more detailed this is not available.

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SOCIAL: HUMAN RIGHTS

PERFORMANCE INDICATOR	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Freedom of association and collective bargaining					
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	Partially	2.2.1 Human rights; 2.2.3 Employees (Labor conditions)		The risks have been regocnized but they are not significant in our operations. Mitigation activities for these risks are implemented.
Child labor					
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	Partially	2.2.1 Human rights; 2.2.3 Employees (Labor conditions)		The risks have been recognized but they are not significant in our operations. Mitigation activities for these risks are implemented.
Forced and compulsory labor					
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	Partially	2.2.1 Human rights; 2.2.3 Employees (Labor conditions)		The risks have been recognized but they are not significant in our operations. Mitigation activities for these risks are implemented.

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SOCIAL: SOCIETY

PERFORMANCE INDICATOR	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Local communities					
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	Fully	2.1 Enabling people with mobile technology; 2.2.3 Employees (New strategy and our employees)		
Corruption					
SO2	Percentage and total number of business units analyzed for risks related to corruption.	Partially	2.2.2 Nokia Code of Conduct		We audit our business units on a periodic and risk adjusted basis to examine risks related to corruption as well as general financial integrity. The number of units we audit in any given year vary due, but in general we cover all own factories i.e. our 1st tier supply every second year.
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	Fully	2.2.2 Nokia Code of Conduct		
SO4	Actions taken in response to incidents of corruption.	Partially	2.2.3. Employees (Labor conditions)		Nokia has no governmental investigations or litigation involving corruption. However, from time to time we find that our internal standards have not be followed. In those situations we take corrective action, including disciplinary action, as appropriate.

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SOCIAL: SOCIETY

PERFORMANCE INDICATOR	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Public policy					
SO5	Public policy positions and participation in public policy development and lobbying.	Fully	2.2.5 Stakeholder Engagement		We are in active dialogue with different kinds of stakeholder groups presented in report (in chapter 2.2.5 Stakeholder engagement) through which we often operate.
SO6 (ADD)	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	Fully			Nokia does not contribute to political parties or politicians.
Anti-competitive behavior					
SO7 (ADD)	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	Fully			There were no legal actions against Nokia for anti-competitive behavior, anti-trust or monopoly practices in 2011.
Compliance					
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	Fully			There were no significant fines or non-monetary sanctions for noncompliance with laws and regulations during 2011.

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SOCIAL: PRODUCT RESPONSIBILITY

PERFORMANCE INDICATOR	DESCRIPTION	REPORTED 2011	2011: SUSTAINABILITY REPORT	2011: 20-F	ADDITIONAL INFORMATION
Customer health and safety					
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	Fully	2.2.4 Customer engagement (Product safety); 3.1.3 Substance and materials management		Health and safety are essential part of our products and services life cycle management, from manufacturing to end of life. http://www.nokia.com/global/about-nokia/people-and-planet/emf-health/emf-and-health/; http://www.nokia.com/global/about-nokia/people-and-planet/strategy/management/substance-management/; http://www.nokia.com/global/about-nokia/people-and-planet/strategy/ems/ems-and-policy/
Product and service labelling					
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	Fully	2.2.4 Customer engagement (Product safety)		Applicable to all Nokia products.
PR5 (ADD)	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	Fully	2.2.4 Customer engagement (Customer satisfaction)		
Marketing communication					
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	Fully	3.1.3 Substance and materials management		Nokia wants to ensure that it complies with the laws and regulations set by each market's individual regulatory bodies. Typically, our requirements meet or go beyond the strictest stipulations set by any regulations in the world and are rooted in our global standards and requirements. E.g. RoHS and REACH compliance.
Compliance					
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	Fully			There were no significant fines or non-monetary sanctions for noncompliance with laws and regulations during 2011.

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NOKIA KEY DATA

These figures cover Nokia sustainability data and exclude Nokia Siemens Network (NSN) a company approximately 50% owned by Nokia, which publishes its own sustainability report and figures. In addition to separate data tables of Nokia and NSN we have consolidated some key figures in a Nokia group key figure table which can be found after the notes part of this table. See footnotes for more information about the reporting scope and boundaries.

This report covers last 5 years – if interested in longer term historical development please see Nokia's older reports.

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ENVIRONMENTAL KEY DATA	2011	2010	2009	2008	2007
GREENHOUSE GAS EMISSIONS (TONNES)[1,2]					
GHG Scope 1 (direct facility and car fleet)	**18,600**	**20,100**	**19,100**	**17,400**	**15,900**
Direct CO_2 emissions from facilities total	13,200	14,200	14,400	13,600	13,100
Hydro-Fluoro-Carbon (HFC)	1,400	1,800	1,600	1,700	1,100
CH_4	26	28	29	27	26
N_2O	11	11	12	11	10
CO_2 emissions from car fleet[3]	**4,000**	**4,100**	**3,100**	**2,100**	**1,700**
GHG Scope 2 (Purchased electricity and heat), net amount[4]	**197,700**	**193,800**	**211,100**	**229,400**	**214,900**
Indirect CO_2 from facilities, gross amount	251,800	286,400	280,600	276,000	241,600
CO_2 avoided due to purchased renewable energy (tonnes)	-54,100	-60,100	-69,500	-46,700	-26,700
CO_2 avoided due to Gold Standard offsets (tonnes)	0	-32,500	0	0	0
GHG Scope 3 (see below)					
CO_2 emissions from air travel (tonnes)[5]	**84,200**	**81,865**	**77,524**	**131,080**	**n/a**
CO_2 emissions from employee commuting (tonnes)[6]	**72,100**	**74,600**			
CO_2e emissions from the use of devices (tonnes)[7]	**1,200,000**	**1,470,000**			
CO_2e emissions from supply chain (tonnes)[7]	**1,870,000**	**6,880,000**			
CO_2 emissions from logistics (tonnes)[8]	**500,200**				
CO_2 Key Performance Indicators					
Logistics: CO_2 /sales package, kg[8]	1.68	3.50	3.06	2.23	
Offices: CO_2/office headcount, net, (tonnes)[9]	1.51	1.66	1.39	1.93	3.06
Offices: CO_2/office headcount, gross, (tonnes)[10]	2.68	2.83	3.02	3.13	3.82
Factories: CO_2/device, net, (grams)[11]	342	276	377	358	345

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ENVIRONMENTAL KEY DATA	2011	2010	2009	2008	2007
OTHER AIR EMISSIONS					
Volatile Organic Compounds (VOC) Emissions to air total (tonnes)[12]	38	66	65	47	43
Emissions of Ozone Depleting Substances (ODS), as ODP (tonnes)[13]	0.16	0.16	0.17	0.04	0.09
ENERGY CONSUMPTION (1 GWh = 3 600 GJ)					
Nokia facilities[14]					
Electricity, total (GWh)	485	538	537	560	527
District heating, total (GWh)	43	57	56	50	51
District cooling, total (GWh)	2	2	2	2	2
Fossil gas, total (GWh)	66	68	72	66	66
Biogas, total (GWh)	2	0	0	0	0
Oil, total (GWh)	4	7	5	6	3
Energy, total (GWh)	**602**	**672**	**672**	**684**	**649**
Direct energy, total (GWh)	72	75	77	72	69
Indirect energy, total (GWh)	530	597	595	612	580
Renewable energy (GWh)[15]	193	196	189	147	116
Renewable electricity share of total electricity[15]	40%	36%	35%	26%	22%
Energy, total kWh/m²	**489**	**485**	**486**	**450**	**462**
Nokia device chargers' no-load power consumption (average sold per annum in W)	**0.112**	**0.114**	**0.145**	**0.185**	**0.250**

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ENVIRONMENTAL KEY DATA	2011	2010	2009	2008	2007
WATER (NOKIA FACILITIES)					
Water withdrawal total (thousands m³)	**1,309**	**1,422**	**1,340**	**1,434**	**1,282**
Water withdrawal by source (%)[16]					
Municipal water supply	95%	95%	94%	94%	94%
Ground water	5%	5%	6%	6%	6%
Discharges to Water, Total (tonnes)[17]					
BOD5	549	619	548	526	369
TSS	724	817	723	695	487
N	88	99	88	84	59
P	22	25	22	21	15
Water discharge destination (%)[18]					
Municipal treatment facility, %	92%	87%	86%	87%	89%
Piped to surface water after treatment, %	3%	4%	5%	4%	4%
Used for irrigation after treatment, %	5%	9%	9%	9%	7%
Recycled/reused water (thousands m³)[19]	**133**	**178**	**141**	**130**	**90**
Recyling/reuse % of total withdrawal	**10%**	**12%**	**11%**	**9%**	**7%**
WASTE FROM NOKIA FACILITIES[20] (TONNES)					
Total	**45,900**	**59,800**	**53,200**	**49,100**	**53,600**
Reuse	7,500	10,300	8,000	2,000	2,100
Recycle	34,100	43,900	38,700	39,000	43,400
Energy recovery	2,500	2,200	1,900	2,200	1,600
Incineration without energy recovery	100	200	200	400	200
Landfill	1,700	3,200	4,400	5,500	6,300
Utilisation rate %[21]	**96%**	**94%**	**91%**	**88%**	**88%**
Non-hazardous waste[22]	**45,700**	**59,400**	**52,900**	**48,800**	**53,300**
Hazardous waste	**240**	**420**	**300**	**270**	**340**
E-waste collected outside own facilities (tonnes)[23]	**661**	**415**	**373**	**316**	

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EMPLOYEES AND ETHICS[24]	2011	2010	2009	2008	2007
Average number of employees	56,714	58,642	56,462	57,443	49,887
Employees in production	25,428	29,234	22,935	25,576	28,096
Total employee training cost for non production staff, EUR million	29	28	25	55	70
Average cost of training per employee, EUR	980	850	748	1,721	
Injury/illness rate within production, TIFR[25]	0.53	0.32	0.49	0.6	0.73
Women in senior management, %[26]	15.2	14.5	13.8	13.7	14.3
Non-Finnish nationalities in senior management, %[26]	53.6	53.2	50.7	47.4	44.1
Voluntary attrition, %	14.2	12	12.8	9.3	8.5
Countries with community involvement programs	33	42	40	57	45
Employee Code of Conduct awareness, %	98	98	85	86	98
Languages of the Code of Conduct	34	34	34	34	32

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SUPPLY CHAIN	2011	2010	2009	2008	2007
Number of assessments[27]	43	37	63	70	90
Supplier ISO14001 certification, %[28]	91	92	92	91	
Supplier satisfaction survey, %	n/a	80	79	78	
Supplier's Code of Conduct implementation %[29]	98	93	92		
Supplier's environmental performance %[30]	66	72	93	82	

ECONOMIC[31]	2011	2010	2009	2008	2007
NOTE: MORE FINANCIAL FIGURES CAN BE FOUND IN NOKIA GROUP LEVEL DATA TABLE					
Net sales, EUR million	24,618	29,785	28,410	35,401	37,665
Operating profit, EUR million[32]	-773	2,756	2,836	5,267	9,293
Research and development, EUR million	3,399	3,707	3,638	3,468	2,890

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NOTES

Following scope has been used for facility related data (energy, emissions from facilities, other air emissions, waste and water) in the above table: NAVTEQ figures have been included for years 2006-2011. Although NAVTEQ has been part of Nokia Group only from mid 2008 onwards, NAVTEQ data has been included also for 2007 and 2006 according to WRI/WBCSD Greenhouse Gas Protocol requirements to recalculate acquisition's effect until base year, which is 2006 in case of Nokia. NAVTEQ increased Nokia consumption values with around 5%. Nokia's former Networks business group and functions supporting Networks have been excluded from year 2006 and 2007 figures. Data covers 100 % of square meters managed by Nokia in 2006-2011; data collection coverage has been 90-93% of all square meters, including all production sites and other sites greater than 3000 sqm. Data from smaller than 3000 sqm sites has been estimated based on Nokia averages. Due above explained scope definitions year 2006-2011 data in the above table are comparable between each other but in some cases differ from figures published in previous reports.

1

Our approach to measuring greenhouse gas emissions follows the Greenhouse Gas (GHG) Protocol (www.ghgprotocol.org) developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). The GHG Protocol defines three scopes of CO_2 emissions:

- Scope 1 – direct emissions, from sources owned or controlled by the company
- Scope 2 – indirect emissions, from the consumption of purchased electricity, heat, and/or steam
- Scope 3 – indirect emissions, as a consequence of the activities of the company, but from sources not owned or controlled by the company.

Organisational boundaries

We use the "operational control" approach (instead of equity share approach), which means we include entities based on whether we can introduce and implement operating policies rather than on the basis of financial control or economic interest. As Nokia Siemens Networks' (NSN) operations are separate, detailed data management and reporting are done separately. Thus, NSN energy consumption and emissions are not included in this Nokia Key Data table but are reported separately by NSN and are also consolidated in Nokia Group's summary tables which can be found after the notes part of this table. NSN Sustainability Report

Our GHG measurements have been assured by third party since 2003 and assurance will continue on an annual basis. Read our assurance statement.

Direct CO_2e emissions from Nokia facilities include emissions from gas and oil usage in Nokia facilities and HFC emissions. Emissions are calculated by using the values embedded in WRI/WBCSD GHG Protocol Initiative calculation tool: "Calculation Tool for Direct Emissions from Stationary Combustion, version 4.0", by using Higher heating values. The effect of greenhouse gases CH_4 and N_2O produced during burning process have been included in CO_2e emissions (CH4 and N2O effect being 0.3% of direct CO_2 emissions). HFCs are refrigerants and emissions are minor fugitive emissions from facilities' cooling systems. Nokia uses also some HCFCs as refrigerants, but they are not included in the inventory because the are not covered by the Kyoto Protocol. These refrigerants are anyhow included in the published Ozone Depleting Potential -figure. Out of Kyoto protocol greenhouse gases Perfluorocarbons (PFCs) and Sulphur hexafluoride (SF6) are not applicable for Nokia.

Indirect CO_2-emissions (Scope 2 emissions) include emissions from purchased electricity and district heating and cooling. Emissions are calculated by principles of a WRI/WBCSD GHG Protocol Initiative calculation tool: "Indirect CO_2 Emissions from the Consumption of Purchased Electricity, Heat, and/ or Steam", which takes values from IEA. Despite delay on IEA country statistics, data from previous years has not been updated with new factors. The year 2006 emissions are calculated with tool worksheet version 1.2 and 2007 and 2008 with version 2.0 and 2009 with version "GHG emissions from purchased energy, version 21". Year 2010 emission factors are IEA country statistics from year 2007 (published in October 2009) and 2011 factors from year 2008. For USA latest EPA eGrid factors are used, e.g. 2007 statistics for 2011 calculations. As an exception to get more specific district heating emission factor for Finland, which uses around 90% of Nokia total district heating, Finland year 2008 emission factor is based on energy production data from year 2007 (Statistics Finland, Environment and Energy), calculation method being "benefit sharing" (in stead of alternative "energy method") and the year 2007 factor is based on Finnish Environmental Institute publication. As no update for "benefit sharing" value was available for 2009 calculation and for simplicity, Finland figure was calculated since 2009 with the GHG-tool value for purchased energy. As CO_2 typically represents over 99 percent of the GHG emissions in electricity and heat production, indirect emission factors in GHG-tool are for CO_2 only, not for CO_2e.

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2

Total net CO_2 emissions in Nokia facilities by regions

	2011 (TONNES)	2010 (TONNES)	2009 (TONNES)	2008 (TONNES)	2007 (TONNES)
TOTAL	210,900	208,000	225,500	243,000	228,000
AMERICAS	19,000	34,200	14,200	26,400	57,500
ASIA-PACIFIC	157,700	127,500	157,400	151,900	121,500
EUROPE AND AFRICA	34,200	46,300	53,900	64,700	49,000

3

The figure represents CO_2 emissions from digital mapping operations by Nokia's Location and Commerce division. Calculation of the emissions from cars is based on the distance driven and vehicle-specific conversion factors. Where exact car models were not available, an average of vehicle fleet emissions has been used.

4

Net and gross indirect CO_2 emissions: Gross emissions are emissions from purchased electricity and heat calculated with IEA (Internal Energy Agency) country emission factors. Net emissions are gross emissions reduced with CO_2 avoided due to purchase of renewable energy (certificates) and carbon offsets. Onsite renewable energy reduces also gross emissions.

5

Nokia's and NAVTEQ's air travel reporting has been consolidated in 2011, and 2008-2010 emissions have been updated based on historical travel data. The emissions figure covers over 99% of Nokia's air travel. The figure includes travel by externals in cases where travel cost is covered by Nokia and bookings made through Nokia's designated travel agencies. Emissions have been calculated with a conservative interpretation of GHG Protocol 2006 emission factors.

6

In 2010 Nokia conducted an employee commuting survey in order to calculate the corresponding CO_2 emissions. The following information was required: country, how many days one works at the office/home, commuting distance, time and means of transport. 3455 employees participated in the survey from 58 different countries. The emissions were then extrapolated to correspond with all Nokia employees for years 2010 and 2011.

7

ISO 14040 and ISO 14044 standards have been used as a framework in Life Cycle Assessments (LCAs) that are the basis of the greenhouse gas emissions figures. These calculations take into account the raw materials acquisition, component manufacturing, Nokia's own factory processes, inbound and outbound logistics, usage (3 years) and recycling of the mobile devices. The results of an LCA always depend on the calculation method, scoping, assumptions and Life Cycle Inventory (LCI) data used. The changes in calculation methodology and LCI database and to smaller extent reduction in volumes cause the reduction in CO_2e emissions from supply chain. GHG emissions from the use of devices reflect the annual product volumes and portfolio. Impact from Nokia Gear & Vertu is excluded from both supply chain and use of devices GHG figures.

8

This covers component and customer shipments. The year 2010 and 2011 has been a transition period when we have moved onto a second development phase of CO_2 calculation and data gathering from logistics service providers system wise, which means that the basis for our calculations has changed from previous years. We still have challenges with the quality of data but the estimated CO_2 per sales package in year 2011 is about 1.68 kg CO_2.

9

Net CO_2 emissions (i.e. green energy and offsets taken into account) from Nokia office and R&D buildings (excluding NAVTEQ) in metric tonnes, per Nokia employees and externals working in Nokia Offices and R&D.

10

Gross CO_2 emissions from Nokia office and R&D buildings (excluding NAVTEQ) in metric tonnes, per Nokia employees and externals working in Nokia Offices and R&D.

11

Net CO_2 emissions (i.e. green energy and offsets taken into account) from Nokia factory sites (including emissions from all energy use in the sites) in grams, per Nokia device volume as published in Nokia annual report.

12

Volatile organic compounds (VOC's) are released during the soldering process and when using solvents in the cleaning process. Until 2009 consumption has increased due to more accurate reporting and changes in the production process. At Nokia, we monitor and control the use of solvents with the aim to reduce the consumption. In general, the consumption is on a low level and no environmental VOC permits or declarations are required by authorities.

13

Nokia uses no Ozone Depleting Substances (ODS) in its products or production. The reported ODS figures are due to minor leakage of ODS contained in cooling systems in facilities. Annual emissions vary due to changing annual maintenance needs. ODP (Ozone Depleting Potential) = emission in kg of CFC-11 equivalent.

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Energy consumption in Nokia facilities by regions. Direct energy means fuel (gas and oil) used on site and indirect energy purchased electricity and heat, in case of Nokia district heating and district cooling.

(1 GWh = 3,600 GJ)	2011 GWh	2010 GWh	2009 GWh	2008 GWh	2007 GWh
Electricity, total	**485**	**538**	**537**	**560**	**527**
Americas	91	114	110	118	119
Asia-Pacific	197	202	196	196	154
Europe and Africa	197	222	231	246	254
District heating, total	**43**	**57**	**56**	**50**	**51**
Americas	0	0	0	0	0
Asia-Pacific	0	1	0	0	0
Europe and Africa	43	56	56	50	51
District cooling, total	**2**	**2**	**2**	**2**	**2**
Americas	0	0	0	0	0
Asia-Pacific	0	0	0	0	0
Europe and Africa	2	2	2	2	2
Fossil gas, total	**66**	**68**	**72**	**66**	**66**
Americas	14	13	13	11	16
Asia-Pacific	22	27	26	23	19
Europe and Africa	30	28	33	32	31
Oil, total	**4**	**7**	**5**	**6**	**3**
Americas	1	2	2	3	1.5
Asia-Pacific	3	5	3	3	1.5
Europe and Africa	0	0	0	0	0
Energy, total	**602**	**672**	**672**	**684**	**649**
Americas	108	129	125	132	137
Asia-Pacific	222	235	225	222	175
Europe and Africa	272	308	322	330	337

15

Over years, major part of the renewable ("green") electricity has been from the purchase of RES-E Guarantee of Origin certificates in Nordic countries and Green-e wind certificates in USA. In addition smaller amount of other certificates (RECS, GreenContract, Greenpower, EcoLogo) have been purchased in Europe, Australia and Americas. Green certificates have been bought also in United Kingdom in 2006-2008: the amounts are included as renewable energy in the table, but due to new UK governmental guidance in 2008, no CO_2 reduction has been calculated to result from the purchase in 2008.

16

Water withdrawal is reported according to Global Reporting Initiative (GRI) definitions.

17

Discharges to water are coming from sanitary waste water and are calculated based on the headcount. BOD5 (Biological Oxygen Demand for 5 days) measures the amount of oxygen required or consumed for the microbiological decomposition (oxidation) of organic material in water. TSS means Total Suspended Solids, N stands for Nitrogen and P for Phosphorus. In 2011 report headcount definition changed to include for this calculation also external persons working in Nokia premises and all years were recalculated. Also, more detailed information on water discharge destinations caused recalculation for past years destination percentages.

18

More detailed information on water discharge destinations caused recalculation for past years destination percentages.

19

Recycled/reused water amount includes water recycled both for sanitary purposes (water recycled many times) and for irrigation.

20

Accuracy of waste data is not as high as with energy and water, as waste vendors often report amounts based on number of waste bins emptied and average weight for waste type, instead of weighing each container. In factories and biggest offices most of the reporting is based on actual weighed amounts.

21

Utilised waste includes waste that has been either reused, recycled or energy of it has been utilised. Remaining waste has been either sent to landfill or incinerated without energy recovery. Composting of biowaste is recorded under recycling.

22

The definitions for what is reported under hazardous and non-hazardous waste have been done on global level to keep simplicity in corporate reporting. E.g. all discarded batteries are reported globally under hazardous waste, although several battery types are not defined hazardous in many countries. On the other hand all electronical waste is reported under non-hazardous , although different sub-categories of it are defined hazardous in different countries. The actual waste treatment is always done according to local legal requirements.

23

E-waste figure includes electronics waste collected by Nokia outside of own offices, R&D and production, for example as part of phone and accessories take-back campaigns.

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These figures do not include employees in Nokia Location and Commerce who were previously employed by NAVTEQ.

25

TIFR = Total Incident Frequency Rate which includes also non-lost time incidents in addition to lost time incidents. Previous to 2011 Nokia reported IIR = injuries and illnesses rate, without non loss time incidents.

26

The calculation rule was changed for the 2009 report from an average for the year to be year end figure. This was done to enable a direct comparison with NSN data.

27

2008 figure is including Nokia direct sourcing supplier system assessments and in-depth assessments. 2009 onwards figures are including Nokia direct and indirect sourcing system assessments including in-depth assessments.

28

Supplier ISO14001 certification %; Hardware supplier environmental management system ISO14001 certification status at Supplier sites serving Nokia.

29

Supplier's Code of Conduct implementation %: One expectation for suppliers is that they have a company-level Code of Conduct in place. Codes of conduct set out requirements in several areas, such as corruption, general business routines, health and safety, human rights, working conditions, social rights and environmental standards. The indicator measures percentage of suppliers that have such a Code of Conduct policy in place that meets Nokia's requirements concerning it.

30

Supplier's environmental performance %: Suppliers' environmental performance and target setting status, concentrating on four key areas: energy consumption, carbon dioxide (equivalent) emissions, water consumption and waste generation.

31

As of April 1, 2011, our Devices and Services business has two operating and reportable segments – Smart Devices, which focuses on smartphones, and Mobile Phones, which focuses on mass market mobile devices – as well as Devices and Services Other. Prior period results for each quarter and the full year 2010 and Q1 2011 have been regrouped (on an unaudited basis) for comparability purposes according to the new reporting format that became effective on April 1, 2011. Devices and Services prior period results for each quarter and the full year 2010 and Q1, Q2 and Q3 2011 have also been recasted (on an unaudited basis) for comparability purposes according to the new reporting format that became effective on October 1, 2011.

32

The decrease in operating profit is a consequence of the year-on-year decline in Devices and Services net sales in 2011 resulted from lower volumes and ASPs in both Smart Devices and Mobile Phones, partially offset by higher IPR royalty income.

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KEY SUSTAINABILITY DATA – NOKIA GROUP

This data table consolidates some key Sustainability performance related figures of Nokia and Nokia Siemens Networks (NSN – a company approximately 50% owned by Nokia). More detailed company specific data can be found from Nokia data table (above) and from NSN own CR Report. This report covers last 5 years – if interested in longer term historical development please see Nokia's older reports.

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ECONOMIC KEY DATA[1]	2011	2010	2009	2008	2007
Net sales, EUR million	38,659	42,446	40,984	50,710	51,058
Operating profit, EUR million[2]	-1,073	2,070	1,197	4,966	7,985
Earnings/share diluted, EUR	-0.31	0.50	0.24	1.05	1.83
Market capitalization at year-end, EUR million	13,987	28,709	33,078	41,046	101,995
Research & development, EUR million	5,612	5,863	5,909	5,968	5,636
Gross taxes, EUR million	752	798	736	1,514	2,209
Interests paid, EUR million	283	235	256	155	59
Divdents paid, EUR million	1,536	1,519	1,546	2,048	1,760
Total purchases of goods and services, EUR million	27,572	30,500	29,100	34,600	36,400
Liquid assets at year-end, EUR million	10,902	12,275	8,873	6,820	11,753
Total liabilities at year-end, EUR million	22,289	22,892	20 989	23,072	20,261
Retained earnings at year-end, EUR million	7,836	10,500	10,132	11,692	13,870

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ENVIRONMENTAL KEY DATA	2011	2010	2009	2008	2007
Energy consumption, GWh	1,143	1,190	1,223	1,285	1,223
Direct CO_2e from facilities energy, tonnes	17,000	20,400	20,100	23,000	18,500
Indirect CO_2e from facilities energy consumption, tonnes, net[3]	404,300	363,500	413,500	434,500	418,900
Indirect CO_2e from facilities energy consumption, tonnes, gross	518,700	523,000	520,800	496,700	457,900
CO_2 avoided due to renewable energy, tonnes	-114,400	-127,000	-107,300	-62,200	-39,000
CO_2 avoided due to Gold Standard offsets, tonnes	0	-32,500	0	0	0
Water use, thousand m^3	2019	2,197	2,167	2,293	2,091
Total waste, tonnes	58,500	69,100	58,930	55,200	60,810
Total waste utilisation, %	94%	93%	91%	88%	88%
Emissions of ODS, kg of CFC-11 equivalent[4]	200	187	186	42	108
Data reported from Facility area, 1000 m^2 [5]	2,445	2,489	2,641	2,743	2,996

EMPLOYEES	2011	2010	2009	2008	2007
Total number of employees at year-end	130,050	132,427	123,553	125,829	112,262
Wages & benefits, EUR million[6]	7,534	6,995	6,747	6,914	5,938
Pension expenses net, EUR million	445	431	427	478	420

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NOTES

1

Figures are consolidated Nokia group data that include Nokia Siemens Networks and NAVTEQ. The years are not directly compatible largely because of following reasons:

- Year 2007 Nokia Siemens Networks data was consolidated in Nokia group data for 9 months. Our consolidated financial data for the periods prior to April 1, 2007 included our former Networks business group only.
- Year 2008 Nokia Siemens Networks data was consolidated in Nokia Group data for 12 months and NAVTEQ for less than 6 months
- Year 2009 and 2010 Nokia Siemens Networks and NAVTEQ data were both consolidated in Nokia Group data for 12 months
- In April 2011, Nokia Siemens Networks acquired the majority of the wireless network assets of Motorola Solutions. From April 30, 2011, certain of Motorola Solutions' products and services and approximately 6,900 employees were transferred to Nokia Siemens Networks.

2

Location & Commerce operating loss in 2011 includes a goodwill impairment loss of EUR 1 090 million. Nokia Siemens Networks operating loss in 2009 includes a goodwill impairment loss of EUR 908 million.

3

Net and gross indirect CO_2 emissions: Gross emissions are emissions from purchased electricity and heat calculated with IEA (Internal Energy Agency) country emission factors. Net emissions are gross emissions reduced with CO_2 avoided due to purchase of renewable energy (certificates) and carbon offsets.

4

Nokia uses no ODS (Ozone Depleting Substances) in its products or production. The reported ODS figures are due to ODS contained cooling systems in facilities. ODP (Ozone Depleting Potential) = emission in kg of CFC-11 equivalent.

5

For NSN share of Group data, environmental data only covers buildings that are larger than 3,000 m^2, and these sites represent around 80% of NSN's overall real estate portfolio. In 2007-2009 waste data is covering only 71-83% of over 3000 m^2 buildings.

6

The figures consist of Personnel expenses as per income statement. During the previous years the payroll figure consisted of Wages and salaries figure.