NOKIA
PEOPLE & PLANET
REPORT 2013
Thank you for taking the time to read this report. This report covers the key ethical, socio-economic and environmental issues most relevant to Nokia’s business and stakeholders during the fiscal year 2013, including also the Devices & Services business substantially all of which was acquired by Microsoft on April 25, 2014.

Networks (formerly known as NSN), which became a wholly owned subsidiary of Nokia in August 2013, publishes its own detailed sustainability report and is excluded from this report unless otherwise indicated. We have, however, consolidated some key data from both companies (the Nokia Group) in data tables, which can be found in the ‘About Nokia’, ‘Our Economic Impact’ and ‘Key Data’ sections of this report.

For an explanation of how we identified the most relevant topics to include in this report, please see chapter on ‘Identifying key sustainability topics for Nokia’.

The Global Reporting Initiative index and compliance to the G4 guidelines are included at the end of this report, starting on page 123.

PricewaterhouseCoopers Oy (PwC) has provided assurance on selected sustainability information included in this report. Please see ‘Independent Assurance’, starting on page 118.

This report is only available in digital format, as we want to print less. We encourage you to only print the pages you need. This report was published in May 2014.

Integrated reporting and additional sources for sustainability information

Open and transparent reporting of our progress is a key part of our sustainability activities. We have been reporting on our environmental activities since 1999 and publishing corporate responsibility reports, including social and environmental topics, annually since 2002.

Today, issues of sustainability are inseparable from other corporate information. We integrate key sustainability data into our annual Form 20-F and Nokia in 2013 reports. The Form 20-F is filed with the United States Securities and Exchange Commission, and is available on our website. We also continuously report on sustainability issues on www.nokia.com/people&planet and include key achievements in the operating highlights section of our quarterly interim reports. In addition, the Carbon Disclosure Project (CDP) website provides detailed information on Nokia’s activities and performance related to climate change.

Nokia is committed to the principles of the United Nations Global Compact and has been a signatory and member since the Global Compact’s inception.

Your feedback

We welcome your views on our activities and our performance. If you’d like to share your opinions, please contact Nokia at press.services@nokia.com.
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Hello,

2013 was a remarkable year for Nokia. Through two major transactions, Nokia has transformed itself. In the first, we became full owner of our Networks business, known until recently as NSN. In the second, we divested the mobile devices business which emerged over three decades to become a household name. This transaction was completed in April 2014.

Going forward, Nokia will focus on the technologies of the future through three strong businesses: Networks, which offers network infrastructure software, hardware and services; HERE, which provides location intelligence; and Technologies, through which we pursue advanced technology development and licensing.

A lot is changing for Nokia. However, amid all that is new, some things are not changing. Most fundamentally, we will continue to strive to create value for people and our planet like we have been doing for a long time. This means being responsible in everything we do. It also means creating and shaping technologies that can make our lives better.

At Nokia, we know our technology can be part of the solution in many of global challenges. Our mobile technology has been used to provide access to learning materials in hard-to-reach areas. It has been used for collecting and sending real-time data to prevent diseases as well as mapping water points in water-scarce areas. And it has brought the Internet to hundreds of millions of people who have never had access to a desktop computer.

For a long time, we have talked about “connecting people” through mobile communications and what that has meant to people around the world. Well, with our deep experience in connecting people, we are ready for a new world of technology whose impact on our lives can be just as profound. Over the next 10 years billions of connected devices will converge into intelligent and programmable systems that will have the potential to improve lives in a vast number of areas: time and availability, transportation and resource consumption, learning and work, health and wellness, and many more.

With our three businesses and position as one of the world’s largest software companies, Nokia is well placed to meet our goal to be a leader in the technologies for a world where everybody and everything is connected.

So, there is much more to come from us in the future. As we go forward, you will see us behave as a responsible business guided by the same principles which we have
held dear for a long time: Valuing people in everything we do; Being green and clean, Unleashing the potential of technology for good; and Making change happen together.

Of course, actions are more important than words. Our actual performance has to reflect those principles. In the following pages, you can read about our achievements as well as what we believe were our biggest challenges during 2013.

All in all, I am pleased with the progress we made during the year in terms of our sustainability targets and the external recognition we have received for our performance. Among the highlights, we continued improving our performance on environmental measures throughout the value chain; we made progress on matters of occupational health and safety; we further improved the accessibility features of our devices; and, together with our partners, we helped improve access to education. In addition, upon announcing that the vast majority of our Devices & Services business would transfer to Microsoft, we went to lengths to engage with our employees regularly and extensively to ensure they had the information they needed, irrespective of their location or role in the company. I am pleased with the outcome here.

I’d like to end with mention of an important indicator in our annual internal survey: some 83% of our employees responded that they consider Nokia to be socially and environmentally responsible. For a company that has gone through a major transformation, I believe this is good going. This is the way we want to run our business in future as well.

Regards,

Risto Siilasmaa
Chairman of the Board of Directors
In 2013, we continued improving on our environmental performance throughout the value chain. Our social responsibility focused on improving the accessibility features of our devices and improving lives through mobile education. In addition, upon announcing that substantially all of our Devices & Services business transfers to Microsoft, we put a great emphasis on reaching our employees in a timely manner and providing them with a sufficient level of detail, regardless of their geographic location or role at Nokia.

Our efforts during the year were recognized for example in the Dow Jones Sustainability Index and Interbrand’s Best Global Green Brands list.
The below list provides a preview of some of the sustainability activities explained in more details in this report.

**ACHIEVEMENTS**

83% of Nokia employees consider Nokia to be socially and environmentally responsible, which was six percent higher compared to previous year. This was an important achievement for us as our employees are a vital stakeholder group, and we have a high regard for their feedback on how we run our business.

We continued strengthening our performance in matters of occupational health and safety (OHS). We continued to work on the quality of our global OHS injury and illness reporting. In 2013, the total incident frequency rate for our major manufacturing facilities was 0.1, down from 0.2 in 2012. In other words, for every 100 employees, contractors and service providers, there were 0.1 incidents of occupational injury or illness.

We were able to utilize 96% of the waste generated from our operations. We completed our waste utilization program on factory, office and R&D sites during the year. We were pleased with the achievements even though we still send some waste to landfills. As these quantities of waste are usually relatively small and they come from numerous office locations, it has been challenging to find recycling vendors or plants utilizing the energy embedded in waste in some countries in which we operate.

By the end of 2013, a majority of our office space was Green Building certified. We achieved our first LEED Platinum certification, the highest possible certification level, for our new site in Bangalore, India. In addition, our Salo campus was awarded a WWF Green Office certificate. By the end of the year, 61% of our office space was Green Building certified (either LEED, BREEAM or Green Office) and 52% of our office staff was based in the certified buildings.

We used more sustainable materials in our products and packaging. We used recycled plastics in the product cover for the first time in the Lumia 1520 black variant. We increased the use of recycled fibers in our packaging. At the end of the year, 78% (compared to 66%
in 2012) of our retail and transport packaging materials were made of recycled fibers, of which a large proportion were also certified. The increased use of recycled fibers and related material choices reduced the need for virgin fibers to 22% (34% in 2012), of which 40% was certified.

In addition, we reduced the page count of printed user guides by on average 40 pages for Lumia products and 7 pages for Asha products. This means we used 117,000 kg less paper, reduced transportation related CO₂ emissions and saved around EUR 16 million.

We implemented greener ways to transport our products
Since August 2013, we transported selected shipments from our Manaus factory to customers in Brazil on ships instead of planes. On the routes where we shifted from air to ocean transport, we achieved an estimated 80% reduction in CO₂ emissions. We also transferred transportation from air to road for internal shipping in Asia and to trains in India.

We published energy use and greenhouse gas emission generation of our suppliers
Energy use and greenhouse gas emissions were the two most significant aspects for reducing the environmental impact in our supply chain. Understanding that impact based on actual data rather than databases was the focus of our data collection and improvement programs in the recent years. In 2013 we reached a milestone that allowed us to establish a baseline for the emissions of the hardware, component and part suppliers in the second tier of our supply chain. This helps in efforts to drive significant emission reductions with suppliers of key components or high impact areas and eventually go further down in our supply chain.

We continued improving the accessibility features in our devices
We made the Lumia devices usable for the blind and people with severe sight impairment by launching the Mobile Accessibility screen reader for the Windows Phone operating system. For hard-of-hearing people, we gathered the largest hearing-aid manufacturers together to create a new, open, Bluetooth-based standard for a direct connectivity between phone and the hearing aid.

HERE Transit expanded to roughly 300 more cities
In December 2013, HERE Transit covered 800 cities (compared to around 500 in 2012). Ease of access to reliable location-based information on public transportation routing and timetables may have a big impact when deciding which mode of transport to use.

We continued connecting people in emerging markets to information and opportunity
Nokia Asha products include innovations that help people in emerging markets cope with the typical challenges of internet connectivity: cost and speed. The Asha product family became a truly inexpensive smartphone fleet. Nokia Asha 503 even includes 3G connec-
tivity, enabling fast data transfer. The Asha 500, 501 and 503 come in single- and dual-SIM variants. For many new owners, Asha products provided the first access to the internet.

We delivered education over mobile networks to hard-to-reach areas
Nokia Education Delivery is a software that enables delivery of quality education materials over mobile networks to the classroom, which is particularly useful in hard-to-reach areas. Combined with teacher training and community engagement, it has shown to improve academic results and increase retention among students, especially girls. In 2013, the service expanded and it was used in India, Vietnam, Kenya, Bangladesh, Indonesia, Tanzania, Haiti, South Africa, Nigeria, Colombia, the Philippines, Pakistan, Mexico, and on a pilot basis in Uganda.

The UNESCO-Nokia Policy Guidelines for Mobile Learning were launched
Drawing on almost two years of research, input from specialists in diverse fields, and contributions from over 20 UNESCO member states, the UNESCO-Nokia Policy Guidelines for Mobile Learning were published. The guidelines describe the unique benefits of mobile learning and articulate strategies to build enabling policy environments in which these benefits can take root and grow. The document is used at key education events around the world.

EXTERNAL RECOGNITION IN 2013

- **The Dow Jones Sustainability Index** ranked Nokia as the 2nd best company in the Communications Equipment Industry.
- Interbrand ranked Nokia 9th on its **Best Global Green Brand** list.
- Nokia's actions and transparency in regards to reducing carbon emissions and mitigating the risks of climate change were recognized in the **CDP Nordic 260 Climate Change Report 2013**.
- Nokia ranked second in the technology sector in the **FTSE ESG rating** in 2013. Nokia has been included in the **FTSE4Good Index** since 2001.
- Our long-term, goal-oriented collaboration with WWF for over a decade won the International Partnership Category in the **European CSR Award**.
- Nokia’s performance (the best A rating) and transparency (score: 97/100) in regards to reducing carbon emissions and mitigating the risks of climate change were recognized in the **CDP Nordic 260 Climate Change Report 2013**.
CHALLENGES

Finding the best way to help employees affected by changes in our business to build a new future

In 2013, Nokia reduced its global IT organization by approximately 300 employees. Nokia’s Mobile Phones business unit announced its plans to focus its product offering, with the aim of improving product competitiveness and delivering more innovation. The restructure led to a reduction of approximately 200 positions globally.

We fully recognize the pain and difficulty we caused those employees affected by the reductions, and our responsibility to help them build a new future for themselves. We offered both financial support and comprehensive Bridge support program for employees affected by these changes. Bridge, founded in 2011, is our extensive support program for employees affected by Nokia’s restructuring plans.

Reaching our employees in a timely manner and providing them with sufficient detail during times of change

On September 3, 2013, Nokia and Microsoft announced a transaction whereby Microsoft would acquire substantially all of Nokia’s Devices & Services business and license Nokia’s patents and mapping services. We eventually completed the transaction on April 25, 2014, with some 25,000 people transferring to Microsoft.

Upon the announcement, we put great emphasis into reaching our employees in a timely manner and providing them with a sufficient level of detail, regardless of their geographic location or role at Nokia.

Meeting the energy reduction targets set for ourselves

While our total CO$_2$ emissions decreased, our per device and per person targets proved to be challenging for us and we did not meet the related targets. Our facilities consume a certain base load of energy from lighting, heating and air conditioning regardless of the number of devices produced or persons working in the buildings. Optimizing our facilities’ capacity to match with lower volumes and adjusting office space to accommodate less people are complex issues which require effort from several teams throughout our organization.

Creating a recycling culture where valuable materials are recovered for re-use

Over the years we have learnt that the challenge in general, when it comes to recycling mobile devices, lies in getting the phones back to offered recycling points. Old mobile phones are among the most valuable electronics for recyclers and material recovery which makes them a desirable resource by many actors for reuse, repair, refurbishment, second hand sales etc. To be able to create a recycling culture where these valuable materials are eventually recovered to be used in new products, it is very important to understand the drivers and options for recycling locally. In 2013, we worked hard to dive into these realities – aiming to better understand the actions on the ground and drivers that shape the flow of old
phones. We believe such work can greatly contribute to creating future collection and recycling networks.

Understanding and driving change in supply chain
One of the great challenges in sustainable supply chain management is finding the best ways to effect change on a larger scale. Supply chains in our industry are complex and long but there is a growing demand for making sense of that complexity, tracking eg. the origin of different raw materials and driving change for more sustainable practices when needed. Examples where we were tackling this challenge much further upstream in our supply chain beyond our direct supplier relationships relate to our continued due diligence to avoid conflict minerals entering our chain, helping international efforts to establish traceability mechanisms for metals and supporting legitimate minerals trade from central Africa. We hope to see such efforts gain more ground in the future and inspire more collaboration across stakeholder groups to drive even greater change.
NET POSITIVE IMPACT ON PEOPLE & PLANET IN 2013

Our positive impact

- We paid 386 MEUR direct income taxes
- 38% of the electricity used in our facilities was renewable
- We used more sustainable materials in our products and packaging
- We expanded HERE transit to 300 more cities
- Asha product range was updated with Nokia Asha 500, 501 and 502. These products provided the first access to the internet for many
- We improved the accessibility features in our devices
- We worked to improve supplier performance and ensure compliance of social conditions since 2011, more than 1,000 new businesses were established with Bridge support
- We delivered quality education over mobile networks to hard-to-reach areas
- We provided employment for around 90,000 people

Our negative impact

- WE COLLECTED 388 TONS OF USED MOBILE PHONES, BATTERIES AND ACCESSORIES
- Around 195,000 tons of CO2 from our facilities
- 4% of waste from our operations ended up in landfill
- 96% of waste from our operations was reused
- Education from our networks ended up in landfill
- E-Waste despite our efforts to encourage recycling
- Environmental impact in our supply chain
- Reduction of around 500 positions globally

Globally, the reduction of around 500 positions was achieved.
ABOUT NOKIA
In 2013, Nokia was a leader in mobile communications, enabling mobility through its different businesses.

Nokia at-a-glance in 2013 (Nokia Group level)

- Head office in Finland
- 8 production facilities around the world, each working to become as sustainable as possible.
- Major research and development as well as software development in China, Finland, Germany and the United States
- Sales in over 160 countries
- Our 10 largest markets by turnover in 2013 were: China, India, Japan, United States, Brazil, Germany, Russia, United Kingdom, Indonesia, and Finland.
- Total number of employees at year-end: 86,462 (Nokia Group)

Nokia was a key participant in the mobile devices market through its Devices & Services business. Our Devices & Services business created innovative mobile products for people around the world. Together with Microsoft, Nokia was building a global ecosystem that offered people a distinct alternative to iOS and Android. With Windows Phone and the broader Windows platform Nokia offered unique and compelling experiences that make Nokia Lumia smartphones stand out. Through the home-grown software platforms, Series 30 and Series 40, Nokia...

### Our Structure at December 31, 2013

- Devices & Services
- HERE
- Nokia Solutions and Networks (NSN)

### Economic Figures 2013 (Millions of Euros, except EPS data)

<table>
<thead>
<tr>
<th>Economic Figures</th>
<th>2013</th>
<th>2012</th>
</tr>
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<tbody>
<tr>
<td>Net Sales (Group)</td>
<td>23,444</td>
<td>30,552</td>
</tr>
<tr>
<td>Net Sales: Nokia Siemens Network</td>
<td>11,282</td>
<td>13,779</td>
</tr>
<tr>
<td>Net Sales: Location &amp; Commerce</td>
<td>914</td>
<td>1,103</td>
</tr>
<tr>
<td>Net Sales: Advanced Technologies</td>
<td>529</td>
<td>534</td>
</tr>
<tr>
<td>Net Sales: Discontinued operations</td>
<td>10,735</td>
<td>15,152</td>
</tr>
<tr>
<td>Operating Profit *</td>
<td>-71</td>
<td>-2,303</td>
</tr>
<tr>
<td>Earnings Per Share, Diluted *</td>
<td>-0.17</td>
<td>-0.84</td>
</tr>
</tbody>
</table>

* Operating Profit and Earnings Per Share, Diluted for 2012 and 2013 are Nokia Group figures. Below the division between Continuing and Discontinued Operations:

<table>
<thead>
<tr>
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<th>CONTINUING OPERATIONS 2013</th>
<th>DISCONTINUED OPERATIONS 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Profit</td>
<td>519</td>
<td>-590</td>
</tr>
<tr>
<td>Earnings Per Share, Diluted</td>
<td>0.05</td>
<td>-0.22</td>
</tr>
</tbody>
</table>

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 on Form 20-F of Nokia’s annual report.
was leveraging its innovation and strength in growth and developed markets around the world, connecting even more people to their first Internet and application experience and providing consumers with powerful and very affordable mobile products.

In September 2013, Nokia announced an agreement with Microsoft whereby it would sell substantially all of its Devices & Services business to Microsoft. The transaction was completed on April 25, 2014.

**Nokia Reinvented**

Today, Nokia is a leader in the fields of network infrastructure, location-based technologies and advanced technologies. Headquartered in Espoo, Finland, and with operations around the world, Nokia invests in the technologies of the future.

We have three strong businesses: Networks, our network infrastructure business; HERE, our location intelligence business; and Technologies, which is focused on technology development and intellectual property rights activities.

**Networks** (formerly known as NSN) is the world’s specialist in mobile broadband. From the first ever call on GSM, to the first call on LTE, we operate at the forefront of each generation of mobile technology. Our global experts invent the new capabilities our customers need in their networks. We provide the world’s most efficient mobile networks, the intelligence to maximize the value of those networks, and the services to make it all work seamlessly.

**HERE** is a global leader in the mapping and location intelligence business. Rooted in almost three decades of experience in cartography, our vision is simple: offer the world’s best maps and location experiences across multiple screens and operating systems. We want to help people navigate their lives with ease and confidence every day and everywhere. We believe that giving people a better and deeper sense of location will be essential to live a modern urbanized life.

**Technologies** develops and licenses cutting-edge innovations that are powering the next revolution in computing and mobility: the “programmable world” where intelligent connections bring millions of everyday objects online and create exciting new possibilities. Through Technologies, Nokia will invest in the further development of its industry-leading innovation portfolio. This will include expanding our successful IP licensing program, helping other companies and organizations benefit from our breakthrough innovations, and exploring new technologies for use in potential future products and services.

Through these businesses, we have a global presence, employing around 55,000 people. We are also a major investor in R&D, with investment through the three businesses amounting to more than EUR 2.5 billion in 2013.
As a global company, Nokia has a significant economic impact on our stakeholders, both directly and indirectly. Our direct economic impact on various stakeholder groups is summarized in the following table. Since the beginning of the fourth quarter 2013, the Devices & Services business has been reported as Discontinued Operations.

### ECONOMIC IMPACT DATA TABLE (NOKIA GROUP)

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</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td>Net sales, EUR million</td>
<td>12,709</td>
<td>10,735</td>
<td>23,444</td>
<td>30,552</td>
<td>39,059</td>
<td>42,446</td>
<td>40,984</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suppliers</td>
<td>Total purchases of goods and services, EUR million</td>
<td>7,248</td>
<td>NA</td>
<td>NA</td>
<td>21,125</td>
<td>27,572</td>
<td>30,500</td>
<td>29,100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholders</td>
<td>Dividends paid, EUR million</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>21,125</td>
<td>27,572</td>
<td>30,500</td>
<td>29,100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td>Wages and benefits, EUR million 1)</td>
<td>3,432</td>
<td>1,159</td>
<td>4,591</td>
<td>6,080</td>
<td>6,284</td>
<td>5,808</td>
<td>5,658</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creditors</td>
<td>Net financial expenses, EUR million</td>
<td>280</td>
<td>-10</td>
<td>270</td>
<td>340</td>
<td>102</td>
<td>285</td>
<td>265</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public sector</td>
<td>Paid direct income taxes, EUR million</td>
<td>NA</td>
<td>NA</td>
<td>386</td>
<td>478</td>
<td>718</td>
<td>905</td>
<td>915</td>
<td></td>
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</tr>
</tbody>
</table>

1) Include termination benefits and exclude social security expenses.

In addition to our direct impact, Nokia contributes to economic development indirectly in various ways. For example, in 2013 we contributed through our products, which are used by over one billion people, 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 of how Nokia products helped people to improve their livelihoods are described throughout this report.

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

Overall, mobile technology facilitates 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 10 more mobile phones are added per 100 inhabitants. The impact of increased internet access almost doubles that. The technology industry also has a major global role to play 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 interim reports, in our Form 20-F, and Nokia’s Annual Accounts, which are available on our website.

Our corporate tax payments
One of the topics in global corporate responsibility discussions in 2013 was around the issue of corporate tax payments overall and from the point of view of the countries where companies operate.

Nokia’s direct income tax payments between 2009 and 2013 are listed in the table on the previous page. In addition to the direct income tax, Nokia also contributes to society in the form of pension contributions, social security contributions, payroll taxes, value-added taxes, sales taxes, customs duties, excise taxes, environmental taxes, and similar duties and fees.

As a good corporate citizen, Nokia pays the amount of tax legally due and observes all applicable rules and regulations in each country where it operates. As for the allocation of Nokia Group’s taxable income, i.e. revenue and expenses, across the jurisdictions we operate in, it should be noted that this has been done consistently throughout the years according to the centralized business model Nokia has operated in its mobile device business since the early 1990s. The Finnish parent company, Nokia Corporation, is responsible for all key business risks and for funding related global R&D work, marketing and brand development. This in turn means that intangible assets and know-how resulting from these activities are owned by our Finnish parent company.

This also means that our foreign subsidiaries operate mainly at limited risk, and are remunerated by our Finnish parent company for their manufacturing, and contract R&D and marketing activities on an arm’s length basis. Because of this centralized business model, our Finnish parent company earns a proportionally higher portion of the global profit when overall profitability is good. Correspondingly, when overall profitability is lower, a proportionally smaller portion of the profit is recognized in Finland. The profitability of our overseas operations varies proportionally less, but is naturally not immune, for example, to changes in volumes, cost structure or the nature of local Nokia activities.
IDENTIFYING KEY SUSTAINABILITY TOPICS
5.1 **GLOBAL FACTORS IMPACTING OUR SUSTAINABILITY APPROACH**

In 2013, we identified the following broad global sustainability factors as some of the most significant concerning Nokia, and where Nokia and mobile technology can play a role as part of a solution.

- **Economic development, education and livelihoods:** Better information connects people to better lives through new ways of learning, having access to real-time data and sharing and contributing via social networking. By delivering affordable mobile technology, Nokia can bring access to the internet and information to people who currently don’t have it.

- **Human rights, ethics and democratization:** Connecting people with mobile technology contributes to the promotion of human rights by enabling and enhancing communication.

- **Health and safety:** Mobile technology can be further developed to support solving global challenges, for example, to mitigate deep-seated problems such as infectious diseases and a lack of maternity support. One example is mobile data collection, which continues to offer benefits across several sectors of society and set of organizations.

- **Population growth and urbanization:** An increasing number of people are moving to urban environments, including mega cities and towns where the population is growing rapidly. Making those chaotic environments smart, efficient and sustainable is one of the key challenges today. Mobile technology can have a role as part of the solution here by making using public transportation easier choice for the commuter, and making driving more sustainable.

- **Climate change, energy and resource efficiency:** Climate change is impacting areas that are important to human life. Global demand for material resources will increase as these resources become less available. This means that we need to manage our resources more effectively, find new ways of substituting materials, recycle and recover resources. In addition, with our reach, we can encourage people using our products and services make more sustainable choices in their daily lives.
5.2 IDENTIFYING KEY SUSTAINABILITY TOPICS FOR NOKIA

A combination of factors have gone into the identifying the key issues we monitor, as well as the selection of topics we present in this report. Using the factors listed below, we’ve analyzed the shared value to people, the planet and our company. This analysis forms a basis for our sustainability strategy and related target setting.

- Our long history and experience of working on sustainability issues.
- Issues of public debate, and media and analyst interest.
- Regular engagement with stakeholders and partners, to understand the issues that are most important to them. The chapter ‘Making change happen together’ provides more details on how we engage with our stakeholders and take their views into account in our sustainability work.
- Global macro trends and sustainability challenges, including the UN Millennium Development Goals, and identifying how Nokia can help drive positive change.
- Risk and opportunity assessments with regards to sustainability, and on our business as a whole.
- Participation in the Global eSustainability Initiative (GeSI) ‘materiality analysis’, an initiative that defines areas where the ICT sector can make the greatest contribution. GeSI’s analysis uses a combination of stakeholder and company interviews, desk research, and workshops.
- The Global Reporting Initiative (GRI) guidelines, which help identify the topics most relevant to Nokia and our industry. In 2013, we started applying the new G4 guidelines with increased focus on materiality. See the ‘GRI Index’ at the end of this report.

The results of the analysis are presented in the following table, which summarizes the key topics of our sustainability work.

Key topics and their impact on sustainable development, stakeholder interest and Nokia’s business

The topics closest to the top right corner of the diagram are the most material ones to our stakeholders and our business, in terms of sustainable development. However, all of the topics in this diagram are important in our sustainability work.
OUR SUSTAINABILITY STRATEGY: CONNECTING TO EMPOWER
“WE SEE A WORLD WHERE TECHNOLOGY EMPOWERS EVERYONE TO IMPROVE THEIR LIVES AND PROTECT OUR PLANET”

VALUING PEOPLE IN EVERYTHING WE DO
We’re committed to making Nokia products with industry leading, ethical and responsible business practices, building on our long history of respect for people in our own operations as well as in our supply chain.

BEING GREEN AND CLEAN
We are committed to leading our industry on improving the environmental performance of mobile devices – from raw materials to end of life.

UNLEASHING THE POTENTIAL OF TECHNOLOGY FOR GOOD
We are committed to creating innovative mobile solutions that help people live better lives and lower their environmental impact.

MAKING CHANGE HAPPEN TOGETHER
We are committed to working together with our customers, partners, suppliers as well as policy makers to make even greater difference.

The strategy described in this report includes the sustainability topics relevant for Nokia, including also the Devices & Services business substantially all of which was acquired by Microsoft in April 2014.
6.1 OVERVIEW

The key areas in our sustainability strategy are: Valuing people in everything we do; Being green and clean, Unleashing the potential of technology for good; Making change happen together.

Valuing people in everything we do
We go to great lengths to implement sustainable and ethical working practices in our operations and we expect the same from our suppliers. In addition, we enhance the health, safety and wellbeing of our workforce. In 2013, our strategy concentrated on making Nokia phones with industry-leading, ethical and responsible business practices. By this we mean:

- Respecting human rights
- Applying the highest standards for good corporate governance
- Ensuring industry-leading labor conditions
- Fulfilling our economic responsibilities
- Protecting people’s privacy
- Ensuring product safety

Being green and clean
Our environmental work focuses on minimizing potential negative impact, and is based on global principles and standards that we integrate in our business activities. In 2013, we concentrated on improving our offices, factories, logistical operations and use of technologies in ways that save energy and reduce emissions. We were committed to leading our industry in improving the environmental performance of mobile devices – from raw materials to end of life. We did this by:

- Driving emission reductions and water awareness in our supply chain
- Introducing new, more sustainable materials
- Improving the energy efficiency of our devices
- Making ecologically sound choices at our offices and factories
- Making a difference with small packaging that uses certified materials
- Working on ways to create greener logistics
- Inspiring Nokia users to use their devices for more sustainable living
- Creating a recycling culture for no longer needed devices

Unleashing the potential of technology for good
The power of mobility plays a key role in making people’s lives better, particularly in developing countries. Our technologies can help develop education and livelihoods. Additionally, mobile technology, if used in a smart way, can help people to lower their environmental impact. That’s why we are committed to creating innovative solutions that help people live better lives and lower their environmental impact. In 2013, our focus was on:

- Connecting the next billion to information and opportunity
- Improving lives with innovative mobile solutions
- Unleashing the power of mobile in education
- Offering features and apps for those with disabilities
- Helping Nokia users and communities lower their environmental impact
Making change happen together

We believe that by working together with other organizations, we can make an even greater difference in the ongoing struggle to achieve a more sustainable, socially responsible world. That’s why we’re continuously:

- Working together with the whole industry to drive improvements
- Collaborating with policy makers
- Supporting operators’ sustainability agendas
- Working with NGOs to build a better tomorrow
- Engaging with developers, universities and research institutions
- Driving improvements with suppliers

Accordingly to our strategy we work throughout our value chain

Area where the impact of the value chain on sustainable development is...

- high:
- medium:
- low:

The areas where we have the highest possibilities to influence = dark blue
6.2 **KEY TARGETS AND PROGRESS IN 2013**

The targets we had set for specific areas in our sustainability strategy are listed below.

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<tr>
<th>STRATEGY AREA</th>
<th>TARGET</th>
<th>PROGRESS</th>
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<tr>
<td><strong>VALUING PEOPLE IN EVERYTHING WE DO</strong></td>
<td>Providing safe and healthy working conditions for all our employees and strengthening our performance in matters of occupational health and safety (OHS).</td>
<td>We continued to work on the quality of our global OHS injury and illness reporting in 2013. The total incident frequency rate for all of our major manufacturing facilities was 0.1, down from 0.2 in 2012. In other words, for every 100 employees, contractors and service providers, there were 0.1 incidents of occupational injury or illness.</td>
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We work to improve supplier performance and ensure compliance of social conditions through health, safety and labor metrics. In 2012, the average reportable occupational illness and injury incidence rate (IIR) was 0.3 for the supplier sites supporting Nokia's business, meaning that for every 100 employees there were 0.3 reportable occupational injuries or illnesses during the calendar year (0.5 in 2011).

The average employee attrition rate at supplier sites supporting Nokia business was 19% in 2012 (18% in 2011). 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 3.0 on a scale from 1 to 4 in 2012 (3.1 in 2011), which indicates that approximately 60% of all employees at supplier sites are covered by an annual employee satisfaction survey.

(2013 data will be ready later in 2014.)

We expect suppliers to provide a safe working environment, exercise good labor practices, use environmentally-sound manufacturing processes, and to reduce the environmental impact of their operations. We use a variety of assessments to monitor supplier performance. We increased the number of assessments from previous year. By the end of 2013, 371 supplier facilities had been risk self-assessed in relation to labor, ethics, health and safety, and environmental practices at their factories (345 in 2012). This accounts for around 90% of the estimated business value of our hardware, components and parts for 2013. (Estimated business value is based on the estimated volume for the year). We also conducted 42 Nokia Supplier requirements assessments and 13 Environmental and Ethical in-depth assessments (23 and 10 respectively in 2012).
**KEY TARGETS AND PROGRESS IN 2013**

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<th>STRATEGY AREA</th>
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<tr>
<td>BEING GREEN AND CLEAN</td>
<td>We aim to reduce greenhouse gas emissions at our offices, R&amp;D sites and manufacturing facilities by a minimum of 30% by 2020 (2006 baseline)</td>
<td>By the end of 2013, we exceeded the target by reaching 40% reduction. While this is partly due to the result of lower production volumes and reduced headcount, we have also worked hard to improve space and energy-efficiency at our facilities.</td>
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<td>In addition to studying opportunities to increase our onsite renewable energy production, we plan to continue to maintain the purchase of renewable energy via the grid and renewable energy certificates at least at the current level of 35-40%</td>
<td>In 2013, we generated 2,200 MWh of renewable electricity onsite and bought 126,000 MWh of renewable electricity certificates, bringing our total renewable electricity share to 38% (41% in 2012).</td>
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<td>We aim to reduce CO₂ emissions per person working in Nokia offices and at R&amp;D sites by 20% by the end of 2013 (2006 baseline)</td>
<td>Our CO₂ per person efficiency metric has proved extremely challenging for a transforming company like us. Despite various initiatives described in this report, our CO₂ emissions from offices and R&amp;D premises, measured as CO₂ per person, were 22% higher in 2013 than in our 2006 base year.</td>
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<td>Reduce our per production unit energy consumption at our factories by 10% by the end of 2013, and by 15% by 2015 (second half of 2010 – first half of 2011 baseline).</td>
<td>Despite our daily energy management and completed investments, we were not able to reduce energy usage to align with our production volumes nor meet our 10 percent energy per product reduction target in 2013. Instead, we had a per unit increase of 38%, compared with our 2010-2011 base year.</td>
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<td>Reduce waste from our factories by 9% by the end of 2013 and 15% by the end of 2015 (second half of 2010 – first half of 2011 baseline).</td>
<td>We generated 11% less factory waste per unit in 2013 which means we exceeded this target. We slightly redefined this target during the year by excluding reused waste amounts from the calculations as we actually want to encourage reuse of waste instead of decreasing it.</td>
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<td>By 2020, we will use only 100% certified renewable or recycled materials for our packaging. By 2015, our total packaging material should, on average, consist of 70% recycled fibers.</td>
<td>We increased the use of recycled fibers in our packaging. At the end of the year, 78% (compared to 66% in 2012) of our retail and transport packaging materials were made of recycled fibers, of which a large proportion were also certified. The increased use of recycled fibers and related material choices reduced the need for virgin fibers to 22% (34% in 2012), of which 40% was certified.</td>
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<td>BEING GREEN AND CLEAN (CONT.)</td>
<td>Reduce logistics-related CO₂ emissions per product sold by 5% by the end of 2013 and 15% by the end of 2015 (2012 baseline).</td>
<td>By the end of 2013 we reached and clearly exceeded our 5% target. The reduction was measured at 17% from 2012. This is mainly due to the change in our manufacturing and component manufacturing set-up, i.e. our production is closer to component suppliers and in addition to some packaging efficiency efforts.</td>
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<td>Continue our efforts to reach the average no-load consumption of 0.07W in our chargers (2006 baseline).</td>
<td>Since 2004 we have reduced the no-load power consumption of our chargers by over 83% and in our best-in-class chargers by over 90%. In 2013 we reached 0.061W, a reduction of 37% from 2012.</td>
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<td>Maintain annual air travel-related CO₂ emissions significantly below 2008 levels by limiting unnecessary travel and providing alternatives such as videoconferencing.</td>
<td>Nokia’s air travel amount increased by 8% from 2012. We estimated that the primary reason for the increase in air travel in 2013 was Microsoft’s acquisition of Nokia’s Devices &amp; Services business, preceded and followed by preparatory activities. In comparison to our 2008 baseline level, total air travel amount has reduced by 68%.</td>
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<td>Drive significant emission reductions with suppliers of key component or high impact areas.</td>
<td>Since 2010, almost all of our suppliers of flex printed circuits have been able to reduce their CO₂ emissions by a minimum of 30% (20% in 2012). For the printed wired board production the positive reduction trend started first in 2011. Since then, all our printed wired board suppliers have reduced their CO₂ emissions between 4% and 21% depending on the supplier.</td>
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<td>UNLEASHING THE POTENTIAL OF TECHNOLOGY FOR GOOD</td>
<td>Making Nokia products usable for all, including people with disabilities.</td>
<td>Mobile Accessibility screen reader, which makes Lumia devices usable by blind people and those with severe visual impairment, was launched with the latest update of the Windows Phone operating system. Launch of several classical feature phones with traditional physical keyboards were welcomed in particular by our older customers. Nokia Create contest for developers was organized to innovate applications that would take advantage of our industry-leading cameras for the benefit of partially sighted people. We gathered all the large hearing-aid manufacturers together in order to create a new open Bluetooth-based standard for direct phone-hearing aid connectivity.</td>
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<td></td>
<td>Expand Nokia Life</td>
<td>Nokia Life, our subscription based mobile information services suite, surpassed the 100 million global user milestone and expanded to Kenya, one of Africa’s largest economies. Nokia Life+ English Teacher was launched, to assist primary school English teachers in Nigeria by providing free professional development support through their mobile phones.</td>
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<td>At the end of 2013 we had to make some difficult decisions regarding Nokia Life and Life+. The partner ecosystem around the service was evolving rapidly from SMS to an application-centric approach as smart phones came down in price and with data subscriptions becoming increasingly available for affordable phones. With the changing environment, we made a strategic decision to discontinue the Nokia Life and Life+ services apart from India where we signed a term sheet with HCL for a Nokia Life managed service agreement.</td>
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Nokia’s sustainability governance and management practices are in place to ensure that social and environmental matters are 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.

**SUSTAINABILITY ORGANIZATION GOVERNANCE AT NOKIA**

- **THE PRESIDENT & CEO & NOKIA GROUP LEADERSHIP TEAM**
  - Highest level of decision making, strategic direction and supervision.

- **NOKIA OPERATIONS LEADERSHIP TEAM**
  - Operative leadership and implementation of Nokia’s sustainability activities.

- **SUSTAINABILITY LEADERSHIP TEAM**
  - Sustainability is part of everyone’s job at Nokia. It’s in everything we do.

- **SUSTAINABILITY UNIT**

**SUSTAINABILITY IS PART OF EVERYTHING WE DO**
The highest decision-making levels at Nokia are the Board of Directors and ultimately the General Meeting of Shareholders (GM). The Board provides the supervision of Nokia’s sustainability performance, and annually reviews sustainability and related topics at their meetings. In recent years, questions related to sustainability have also been discussed at the GM.

The President and CEO, and the Nokia Group Leadership team review sustainability issues twice a year and agree on strategy, priorities, resourcing, organization, key targets and measures for Nokia’s main sustainability initiatives.

In 2013, Executive Vice President, Operations, Juha Putkiranta was responsible for the sustainability portfolio within the Nokia Leadership Team. He was also the head of the Nokia Operations Leadership Team, which regularly reviewed sustainability-related issues, made decisions and, when needed, escalated matters to the Nokia Leadership Team or to other Nokia business units.

**Operative leadership and implementation of Nokia’s sustainability activities**

In 2013, the Nokia Sustainability Leadership Team, led by Markus Terho, developed the company’s sustainability framework. This framework outlined our policies, strategic targets and priorities. This team acted as the operative leadership team of Nokia’s sustainability unit, which in turn drove sustainability initiatives within the business. Our sustainability unit was responsible for building and implementing processes to achieve our environmental and social targets.

At Nokia, sustainability is part of everything we do. Our policies and management systems related to issues of sustainability include:

- Nokia Global HR Policies
- Nokia Occupational Health and Safety Policy
- Nokia Volunteering Policy
- Nokia Privacy Policy
- Nokia Human Rights approach
- Nokia Code of Conduct
- Nokia Labor Conditions Requirements
- Nokia’s Environmental Policy
- Nokia Natural Resources Policy
- Nokia Natural Resources Policy and Conflict Minerals
- Nokia Supplier Code of Conduct
- Nokia Supplier Requirements
- Environmental Management Systems
- Risk and opportunity management process

More information on Nokia’s corporate governance practices is available in Nokia’s Form 20-F 2013 and on our website.
Risk and opportunity management
Nokia has a common, systematic approach to risk and opportunity 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 and opportunities 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 the 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 that prevent Nokia from reaching 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 primarily monitor social, political, human rights and environmental risks. We follow the precautionary principle, especially in areas involving environmental risks.

The most important risk factors as well as the principal factors and trends affecting our operations are discussed in our 2013 annual report in Form 20-F.

These include also sustainability related risks such as:

- Risks related to privacy, product safety, health and security as well as the environment.
- Risk of non-compliance with regulations or our supplier and customer requirements.
- Violation of Code of Conduct.
- Reduced employee motivation, difficulties to recruit, and loss of key personnel.
- Labor unrest and strikes.
- Purchasing boycotts, public harm to our reputation and Nokia brand due to actual or alleged reasons.

We systematically analyze sustainability related opportunities. Our innovations hold the potential for changing the way we live, from improving livelihoods and embracing more sustainable lifestyles to helping lower our environmental impact.
VALUING PEOPLE IN EVERYTHING WE DO
We strive to be an industry leader when it comes to sustainable and ethical working practices. Let’s take a closer look at our responsibility to human rights, privacy, ethics in our business operations and how we look after our employees in times of change.
7.1 RESPECTING HUMAN RIGHTS

Our business 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, our customers, the communities where we work, and within our supply chain. Protect. Respect. Remedy.

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 three pillars: protect-respect-remedy. We’ve had all of the elements of Ruggie’s framework in place since 2011.

Nokia constantly conducts due diligence to fulfill its responsibility to respect human rights and assess any human rights risks that may be associated with our 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.

Nokia’s approach to human rights

The Nokia Human Rights Approach articulates our commitment to human rights. It was developed in 2011 in cooperation with our key stakeholders including NGOs, investors and operator customers. It draws on the analysis of the challenges identified in the due diligence process and our assessment of international best practices.

On top of defining our human rights policy, we monitor key performance indicators, including the number of times people have contacted us via grievance channels.

7.2 PROTECTING PEOPLE’S PRIVACY

We believe that people have a right to know what happens to their personal data, and we are committed to fulfilling the privacy expectations of our customers.

Respecting customer privacy has always been important to Nokia, and its importance grows as people are using and sharing their personal information in new contexts.

To address privacy questions in a growingly complex business environment, Nokia had a comprehensive privacy program in 2013. Our program was based on a well-recognized accountability model, with one Nokia wide accountable executive and federated implementation across Nokia’s units and functions.
The essential elements of our privacy program were:

- Executive oversight
- Policies and their implementation
- Staffing and delegation
- Training and awareness program
- Ongoing risk assessment and mitigation
- Provision of remedies and procedures for responding to inquiries, complaints and privacy breaches
- Monitoring and auditing compliance and internal enforcement

Nokia’s units had privacy owners and privacy officers tasked with implementing the program within their respective unit’s operations. This included implementing privacy early on in our products and services. The privacy program also interlocked with security and data teams at Nokia.

The Nokia Privacy Leadership Team, chaired by the senior privacy executive, consisted of privacy owners, privacy legal and representatives of industry and regulatory relations. This team defined the objectives for privacy work across Nokia and tracks its progress.

Focus on improving the maturity of our privacy program

We placed special emphasis in 2013 on improving the maturity of our privacy program which we established in 2012. We updated our privacy principles, privacy management policies, consumer privacy policy as well as our internal privacy requirements that guide the implementation of our products and services. We continued to improve our privacy compliance processes and developed privacy engineering related concepts and processes.

We conducted privacy engineering and assurance activities on our various business activities and took steps to address concerns in areas where findings were made. In addition, we incorporated our IT service providers into our privacy program, for example through privacy training as well as compliance monitoring of their services.

Privacy considerations for technology standardization

Nokia recognizes the importance of technology standardization in creating a sustainable technology infrastructure for an information society. Accordingly, we continued to drive inclusion of privacy considerations to technology standardization through a model that supports transformation of privacy principles into actual privacy considerations in technology standardization. According to this model, technology standards would have a privacy considerations section to assess the impact of the standard on privacy. We have successfully introduced this model to a number of technology standardization bodies such as ISO, W3C and OASIS, and have taken an initial lead in others.

Stakeholder Engagement

Throughout 2013, Nokia continued strong engagement with external stakeholders on issues of privacy. We were in discussions in Europe, Asia-Pacific, Latin America and the US on proposed data protection regulation and laws as well as on other current topics. Our privacy team offered security and privacy training to application developers through AppCampus, a joint project of Aalto University, Microsoft and Nokia for Windows Phone developers.
As a global company, we recognize our responsibility to fight actively against improper business practices, including corruption. We also see this as an important competitive advantage, with customers demanding high ethical standards in their supply chain.

At Nokia, we focus our efforts on providing our employees and suppliers with tools to help them deal with the ethical issues they face in their day-to-day work.

Updated and expanded Code of Conduct
The Nokia Code of Conduct sets our approach to ethical and sustainable business practices and is based on the highest ethical standards. It outlines our commitment to respect and promote human rights and fair workplace practices, equal opportunities, environmentally sustainable business, and our zero-tolerance policy on bribery and corruption. In 2013, the code was available in 34 languages. All Nokia employees must understand and comply with it. We apply the Code of Conduct globally in our own operations and require the same standards from our suppliers. You can read more about the Nokia Supplier Code of Conduct on page 105.

Our Code of Conduct was first introduced in 1997 and revised in 2009. In 2013, we further revised it, using the renewed Nokia values as a basis and expanding the topics we cover, introducing examples, frequently asked questions and checklists that help our employees apply the code to their everyday work lives. The revised Code of Conduct will be published during 2014.

Ethics and compliance required training program
Since 2009, we have held Code of Conduct training for all employees using e-learning (in 14 languages) as well as classroom training. 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 suspected violations of Nokia’s Code of Conduct. By the end of 2013, 94% of eligible non-manufacturing employees and 93% of eligible employees in our manufacturing facilities had completed the training. For the first time, from early 2013 our HERE employees were included in this training as well as the Privacy and Competition Law training.

In 2013 the Ethics and Compliance Office developed a comprehensive training program designed to support a culture of compliance based on the highest standards of ethical behavior and to safeguard Nokia against global compliance risks. The trainings help employees identify and resolve issues related to the Nokia Code of Conduct and how to get help or report concerns. New or refreshed e-learning modules were introduced, including one for all Nokia employees on General Privacy and other modules for specific groups of employees, depending on their job roles covering the areas of Competition Law, Anticorruption and Trade Compliance.
Making the right choices easy

We have established several communications channels for employees and others to get help in understanding and applying our Code of Conduct, or to report concerns of violations. In 2013, this included a “Contact the Board” channel where employees and others can raise concerns regarding fraud or misconduct under our code. We also established a new Nokia business ethics helpline during 2013 designed for reporting on concerns involving financial affairs, auditing or accounting practices, corruption, fraud or other serious misconduct. The helpline provides a dedicated telephone line that is available 24/7 in 53 countries, and an encrypted internet site www.nokiaethics.alertline.com.

We continued publishing “Right Choices”, an ethics and compliance newsletter featuring actual cases involving misconduct. It also includes regular features on areas such as corruption, security, competition law, trade compliance and privacy. The readership was strong across the company, and sparked employee discussion about ethics on our internal social media sites.

Again, we included two questions in our annual global employee survey to target employee perceptions of ethics at Nokia. The questions ask whether “Nokia shows a commitment to ethical business decisions and conduct” and whether “it is easy to speak up about any issue”. We are pleased with our results and believe we can continue to improve them.

We conducted the first company-wide “Perceptions of Integrity” survey to understand how employees feel about Nokia’s commitment to ethical conduct and to enable us to better focus our efforts and resources where they are needed most.

A group of 6,000 randomly selected employees were asked to participate. The survey had 20 questions.

Monitoring compliance

Our Internal Audit and Internal Controls teams are key partners of the ethics and compliance program at Nokia. We work with Internal Audit on financial investigations and with Internal Controls to continuously improve our business procedures. In addition, our Internal Audit teams regularly review the corruption risks of our business units during routine audits.
In 2013, Nokia had eight factories worldwide for assembling mobile devices.

Since 2006, Nokia Labor Conditions Requirements have outlined our commitment to responsible work practices at our own factories, and have been used as a framework to monitor labor conditions in a consistent manner. Compliance with local law is naturally the foundation for all our activities. On top of this, our requirements are based on global practices that often go above and beyond scope of the local legislation.

**Nokia Labor Conditions Requirements**

Nokia Labor Conditions Requirements follow the Nokia Code of Conduct and are based on international standards such as UN human rights declarations, International Labor Organization (ILO) conventions, international ethical standards and international labor laws. They have also been benchmarked against SA8000 and EICC and are revised regularly to meet new global requirements or progression of social accountability. The latest revision was in 2012.

The content of the document is provided to all factory workers during induction or through campaigns. E-learning is available in English for non-production employees.

### Assessing labor conditions at our factories

Every second year our factories go through in-depth assessments where labor conditions are monitored and compliance verified. These assessments are always conducted by a professional external assessment company. The last assessment round took place in 2012 and the outcome indicated that labor, health and safety are properly managed at all factories. For non-conformity found during the assessments, root causes were analyzed and the findings have since been resolved or were proceeding well during 2013.

The factories also go through internal assessments. These assessments are conducted by trained internal assessors, usually from our factories. Cross-assessing the labor practices, sharing experiences and coaching encourage an open dialog between the factories and foster continuous improvement. Non-conformities found during the third party assessments are also followed up on. The internal assessments cover either all factories or selected ones based on risk analysis considering issues such as location, factory size, latest assessment findings or changes in factory management.

In 2013, our internal assessment scope constituted...
of the factories in Hanoi, Chennai and Dongguan. As the Hanoi factory started operations in 2013, a pre-assessment was done in May prior to start of mass production. In December, when the factory was up and running, it was assessed again to ensure well-established policies and practices and the efficiency of the management system.

As part of our human rights approach, discussed on page 34, 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.

Maplecroft, a global risk analytics, research and forecasting company has evaluated the risk levels related to freedom of association, child labor, forced and compulsory labor and divided them into extreme, high, medium and low. The risks have been evaluated on a general country level, which does not e.g. consider industrial or regional differences.

**Child labor avoidance**

Child labor is strictly prohibited in our operations and we have zero tolerance for it. It is a risk in many of the countries where we had factories in 2013. To mitigate, prevent and control this risk we have taken several actions over the years.

First of all, at our factories, age of the candidates is
always verified prior to recruitment. In countries where identification forgery is a risk, or where proper identity papers do not exist, robust procedures for otherwise confirming the age and identity of applicants has been established. This risk exists to some level in India and China, for instance.

All factories operating in countries at high or extreme risk for child labor shall also have a child remediation plan. This plan describes the actions we will take in case a child is found working in the factory premises. We have not had to use this plan in any of the factories.

Furthermore, to ensure a healthy development and growth of young workers – from 15 to 18 years old or how specified by local legislation – they are not allowed to do hazardous, unsafe or unhealthy work, and daily working time for them is 8 hours. When apprentices and trainees work at the factory they do that as part of their course of education by an institute of education or as part of their training program by the factory. These programs are approved by a government authority or arranged together with a training institution. Each factory has clear guidelines and documentation of these programs.

Elimination of all forms of forced or compulsory labor

Forced labor is generally rooted in poverty, discrimination and persistent local practices and can take a number of
forms in our industry: employers hold identity papers creating a situation where workers cannot leave, indebtedness of workers as a result of the high recruitment fees or wage deductions for board and lodgings where no adequate policies and monitoring systems exist. We acknowledge the types of challenges and risks that we are likely to face in relation to this topic and work actively to mitigate them.

We strictly prohibit the use of forced, bonded or imprisoned labor. All workers have written work contracts, in a language that they understand. Workers can leave the workplace premises after completing their work shift. In the countries where dormitories are offered, workers are not forced to stay in them.

Nokia is not engaged in nor support the use of forced labor or human trafficking. Job applicants are not required to pay recruitment fees to Nokia. Management does not hold any identity papers, salary, benefits or any other property of the workers. The same requirements apply to our external labor providers and recruitment agencies.

Respecting the right of factory workers to join labor unions
Our workers have the right to express their opinions. They are free to form and join trade unions of their
choice and to bargain collectively to raise concerns to the attention of the management. Freedom of association is a fundamental right for workers, but is at risk in some countries.

We support our workers to join or form labor unions. In countries where this is restricted or difficult to establish, we encourage employees for parallel means or alternative worker association arrangements. Therefore, a labor union or a worker representation mechanism is in place at all our factories. In China we have also been actively involved in the Sustainable Trade Initiative (IDH), a two year program in the electronics industry to improve the dialogue between factory management and workers. The program aims to bring factory workers better opportunities for career development, improved working conditions, greater employee satisfaction and improved communication.

Ensuring health, safety and wellbeing of our employees

Our Occupational Health and Safety Policy sets out our commitment to provide safe and healthy working conditions for all our employees and promote wellbeing at work. We work with our contractors, suppliers and customers to continuously monitor health and safety issues and meet our commitments.

Building a culture where employees and partners know that their health and safety are a priority

In the recent years, we placed a strong emphasis and resources in the Occupational Health & Safety (OHS) into the following areas:

- strengthening leadership engagement
- building a robust management system
- introducing a process to capture leading and lagging metrics
- reducing occupational injuries and illnesses and
- increasing OHS competencies

In 2013, we continued building on these focus areas, ensuring that our programs are centered on quality and continuous improvement. Our goal was to ensure that our culture of safety is built on a strong foundation where employees and partners know that their health and safety are a priority for Nokia.

Strengthening the foundations of occupational health and safety

We believe that the core of a strong Occupational Health and Safety (OHS) program is to build continuous improvement into the OHS culture and programs. To ensure that this aspect was in place in our programs, we focused on the validation and quality of our current performance and reporting capabilities through transparency and best practice sharing in 2013.

To strengthen the Nokia OHS foundation, we included our leading and lagging metrics into our internal and external auditing process to promote the alignment and quality of our performance. We believe this transparency and validation places an emphasis on a true commitment to health and safety in Nokia.

To build a strong culture of health and safety, we focused on implementing a monthly sharing of best
practices and lessons learned within the OHS organization. Each month we reviewed the incidents reported at Nokia factories with the goal of improving our culture by sharing knowledge and best practices.

Including all cases that require medical treatment in Injury and Illness Reporting
Our global OHS Injury and Illness Reporting includes all factory internal Nokia employees, external contractors and service providers. In 2013, the Total Incident Frequency Rate for all of our major manufacturing facilities was 0.1 (0.2 in 2012). In other words, for every 100 employees, contractors and service providers, there were 0.1 incidents of occupational injury or illness. We have selected the Occupational Safety and Health Administration (OSHA) guidelines for accident and illness reporting.

Promoting wellbeing at work
The general wellbeing of employees makes a big difference to their engagement and productivity at work. We provided educational opportunities for Nokia employees to engage and empower our teams on how to make meaningful changes.

Our 2013 accomplishments and challenges
In 2012, we introduced our safety performance indicators to HR and Factory Leaders. In 2013, our leadership commitment and engagement continued to build. The HR and Factory Leadership Teams built in the review of safety performance indicators into the monthly Leadership Team meeting. This continued to increase the visibility and engagement of our safety performance and internal interest in OHS-related topics.

Another 2013 success was the overall improvement in the quality of our safety performance indicators. This was accomplished by incorporating processes to validate factory reporting and make it transparent.

Overall, 2013 was a success in strengthening our culture of safety in the workplace, but we also learned some important lessons which are helping us to further develop a culture of workplace safety. One example is the importance of really engaging our stakeholders in health and safety topics. To ensure the continued momentum and maturity of the OHS programs is a team effort and continuing to build the commitment in our foundation requires the engagement and support of all Nokia teams and partners.

The health, safety and wellbeing of our employees are vital to our business. Wellbeing can make a difference in employee engagement and productivity, for example by reducing absenteeism, which in turn saves costs.
A healthy, motivated workforce is vital to Nokia’s success. Our responsibilities include attracting a skilled and committed workforce and conducting our business in a way that satisfies our customers, consumers and investors and employees.

**OUR VALUES**

At Nokia, we have together defined four core values that guide us in our everyday work. They act as a foundation for our evolving business culture and form the basis for how we operate as a company. These values are:

**Make it great for the customer.**

Everyone in Nokia has a role to play in making it great for our customers. This involves listening and understanding before making the decisions that will provide a great customer experience. It’s about taking accountability, and holding others accountable, for keeping commitments and getting things done on time.

**Challenge and innovate.**

Challenging the status quo is a prerequisite for change and innovation. Innovation is the lifeblood of our future success and the cornerstone of our product making. This is about not accepting “what is”, but being curious and striving for “what could be”.

**Achieve together.**

Results matter, and we achieve more when we work together. This is about everyone at Nokia taking responsibility for achieving and collaborating across organizational or geographic boundaries to win. It’s about having a diverse and inclusive environment that promotes individual expression.

**Act with empathy and integrity.**

Empathy and integrity are our guides for dealing with our customers and each other. It’s about us being honest, transparent and doing the right thing. We inspire trust by speaking frankly and having the courage to call things out on what matters.

Our values have evolved over time to reflect the changing environment

- Achieving together
- Very human
- Engaging you
- Passion for innovation

The new values were discussed and communicated through various forums and channels in order to make the values an integral part of our daily work. Today, peer to peer recognition, our performance evaluation and the way we interact with our stakeholders all reflect how we live our new values.
AT THE END OF 2013

Nokia employed **38,028** people (D&S and HERE).

**59%** of Nokia’s workforce were men and **41%** were women (These figures include D&S only).

**18,743** employees were working directly in production, including manufacturing, packaging and shipping.

**86%** of Nokia employees had permanent work contracts, and **14%** had fixed term contracts with Nokia (D&S).

Most of Nokia’s employees worked full time, with less than **1%** working part time (D&S).

In 2013, the rate of voluntary attrition (the percentage of the workforce leaving the company voluntarily) was **8.9%** (D&S).

DURING 2013

- The number of permanent positions recruited was **1,843** (D&S).
- **46%** of employees who went on parental leave returned to work and **87%** of these employees continued to be part of Nokia (D&S).

OUR COMMITMENT TO DIVERSITY

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.

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. We also recognize that this diverse workforce is the best way to understand customer expectations around the world.
We’re also constantly developing the flexibility of our working conditions and policies, to foster an inclusive work environment.

At the end of 2013, Nokia received a 100% rating in the Human Rights Campaign’s Corporate Equality Index 2013, which is the main benchmarking tool in the United States for corporate policies and practices related to gay, lesbian, bisexual and transgender employees.

**Providing equal opportunities**

We put a great emphasis on fair employment practices at all our sites. In addition to ensuring health, safety and wellbeing of our employees, we support career growth and recognize positive behavior.

**Training and development**

In 2013, we had thousands of internal training courses, as well as many options for external training. To match local needs, training may be tailored and may also be available in local languages. For factory workers we arranged onsite training sessions.

We invested almost EUR 15 million (2012: over EUR 23 M) in training, an average of EUR 1,100 (2012: EUR 1,100) per employee working in areas other than production. We encouraged e-learning opportunities where possible, as these are more cost-effective and environmentally-responsible (the figures include Devices & Services business only).

**Recognizing outstanding performance**

Our performance management and rewards approach highlights the importance of good quality dialogue between our managers and our employees, and giving greater rewards for individual contribution. All our employees undergo a formal performance and career development discussions annually.

**Equity programs**

The Nokia Equity Program 2013 was designed to support participants’ focus and alignment with the com-
pany’s strategy and targets. Nokia’s use of the performance-based plan in conjunction with the restricted share plan as the main long-term incentive vehicles is planned to effectively contribute to the long-term value creation and sustainability of the company and to align the interests of the employees with those of the shareholders.

The Nokia Equity Program 2013 included the following equity instruments: new Employee Share Purchase Plan for Nokia employees in selected jurisdictions, Performance Shares, Restricted Shares, and Stock Options.

Approximately 38,500 employees in 27 countries were offered the possibility to participate in the Employee Share Purchase Plan for the plan cycle in 2013 and 9,177 of them enrolled. Additionally a total of 3,500 employees participated in the Nokia Performance Share Plan, Restricted Share Plan and Stock Option Plan Incentive programs in 2013.

Incentive programs
In 2013, our incentive programs included:

- A plan for our corporate and R&D roles, which focused on both individual and company performance
- A sales incentive plan, which focused on sales achievements against targets, and
- A production incentive plan, which was a quarterly plan designed to support results primarily in areas of production where the nature of the work and the measurement of results were 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 hold quarterly performance discussions. Additionally, we communicate through regular manager newsletters, blogs, webcasts and face-to-face meetings, and related information is available on our intranet for people to access at any time.

More information about the reward framework, including our top management, is covered in our Form 20-F Report for 2013 filed with the United States Securities and Exchange Commission (SEC).

A trio of reward programs
Positive feedback is a powerful tool for reinforcing behaviors critical to our success.

By focusing on positive recognition, we can create a culture of appreciation, a culture where positive behaviors are recognized daily, not just at the end of an incentive cycle or during the annual performance review.

In 2013, we had three global recognition programs: the Achievement Award, Kudos, and Peer-to-Peer. Achievement Awards are given to individuals and/or teams to recognize outstanding contributions. In 2013,
Achievement Awards were used 1,304 times (2012: 1,185). This was 10% higher compared to 2012.

Kudos is a personal award used by line managers to instantly recognize employee achievements with a personal note and a small monetary bonus. In 2013, Kudos was used 6,755 times (2012: 7,924). This was 15% lower compared to 2012.

Peer-to-Peer is a recognition method introduced in 2011 for demonstrating the new ways of working and behaviors we support. It is an instant recognition of one peer to another with a personalized email to the receiver. Once an employee receives six Peer-to-Peer awards, he or she receives a small monetary Kudos award. In 2013, 17,333 Peer-to-Peer awards were given. This Peer-to-Peer recognition was converted to 847 Kudos awards (2012: 1,441). This was 41% lower than in 2012.

**Global approach to setting salaries**

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, salaries are set according to those agreements.

**ENCOURAGING VOLUNTEERING**

Volunteering is an important part of employee engagement. It helps us make meaningful contributions to the communities in which we operate. Through volunteering, our employees can learn new skills and gain new perspectives, and communities can benefit from the professionalism of Nokia employees. Volunteering can also contribute to a better balance between personal convictions and professional lives.

Our volunteering program, Nokia Helping Hands, has been running for over a decade.

Within the program, every Nokia employee can use two working days per year for volunteering for the good of the community.

In September 2013, we refreshed the program by adding reporting capability and encouraging our employees to use their professional expertise for voluntary work. We also wanted to increase internal awareness about the possibility of doing voluntary work within working hours and made our internal website interactive to allow discussions and experience sharing.

Since the launch of this new approach, our employees have, for example, given mobile marketing training and translation help to non-governmental organizations (NGO) and taught English and mathematics to refugees. They have also organized fund raising events in various countries. Altogether 1,638 volunteering hours were reported in 2013.
In 2010, Nokia reported expecting critical challenges to its business and the way of working. Nokia started a fundamental transformation, which continued through 2013.

In 2013, as part of the transformation, Nokia reduced its global IT organization by approximately 300 employees.

Nokia’s Mobile Phones business unit announced its plans to focus its product offering, with the aim of improving product competitiveness and delivering more innovation. The restructure led to a reduction of approximately 200 positions globally.

The affected employees were offered both financial support and a comprehensive Bridge support program. Nokia engaged with employee representatives regarding the plans in accordance with country-specific legal requirements.

**Bridge program for employees affected by Nokia’s restructuring plans**

We fully recognize the pain and difficulty we’ve caused those of our employees affected by the reductions, and our responsibility to help them build a new future for themselves. In 2011, we established Bridge, an extensive support program for employees affected by Nokia’s restructuring plans. The priorities of the Bridge program are, in order of importance:

1. To assist impacted individuals
2. To provide support to the local economies where Nokia plays a significant role
3. To support Nokia’s new strategy and ecosystem.

The Bridge program offers a wide variety of possibilities to help:

- **A new job within nokia**: We want to retain as much talent as possible. We provide career counseling, and help employees identify new job opportunities at Nokia.
- **A new job outside the company**: We offer career coaching, resume writing and job search support. Furthermore, we work with our extensive network to link employees directly with local companies looking for new employees.
- **Entrepreneurship**: We offer training in collaboration with local incubators, as well as funding and other help for those interested in starting a new business, which could also fuel new growth for impacted communities. We have arranged coaching in business planning and establishing startups. We give grants of up to EUR 25,000 to new entrepreneurs. The final grant size is based on an evaluation of a business plan, investment need, growth opportunities and local cost levels.
- **Training**: We fund training that helps affected employees in finding a new job quickly. In Finland, we have planned and implemented training programs jointly with local employment offices. The Finnish government offers significant funding for training programs, which is normal practice in Finland.

In addition, within the program, employees losing their jobs at Nokia are entitled to severance packages which are typically higher than local minimum practice.
How we’re helping the affected communities
A second priority of the Bridge program is to support communities where Nokia has played a major role. We’ve made major efforts to attract new companies to cities where Nokia has downsized or closed its operations. New businesses, which former Nokia employees may have set up, also contribute to the economies of these communities. The Nokia factory in Cluj was sold to DeLonghi and a major part of the Salo factory was sold to Orion. DeLonghi has started electronics production in Cluj while Orion has opened a logistics and packaging center in Salo. In Ulm, car electronics companies established new sites and recruited a significant share of available talent from Nokia.

Bridge program adapted to meet local needs
The framework of the Bridge program is consistent around the world, but it’s implemented at a local level and adapted to suit local needs and culture. We’ve established Bridge centers in Finland (the Helsinki region, Salo, Tampere and Oulu), the UK, Copenhagen in Denmark, several sites in the US, Bangalore in India, the Cluj factory and R&D sites in Romania, Ratingen, Ulm and Berlin in Germany, Kőmárom in Hungary, Reynosa in Mexico, Masan in South Korea, Vancouver in Canada, Beijing in China, and Singapore.

In addition to these Bridge centers, we’ve set up Bridge Globe, a virtual Bridge center, to support Nokia employees located in countries where Nokia doesn’t have a local Bridge team.

By the end of 2013, 18,000 employees had participated in the Bridge program. At the end of their employment we check on the status of the employees leaving Nokia. Support may continue even after they have left. Of all employees leaving Nokia, 57% had responded that they knew their next step after leaving Nokia, even before their employment with Nokia had formally ended.

This breaks down as follows:
- 6% had found a new job at Nokia
- 36% had found a new job outside of Nokia
- 8% became entrepreneurs
- 4% selected full-time education
- 3% intentionally selected their own path, for example, family leave, sabbatical or charity work.

We conduct the survey when we have our last contact with the employee. In many countries this is a significant time before the formal end to their employment with Nokia. In some countries it is at the beginning of the notice period.

The figures vary greatly between countries. For instance, larger job markets, such as India or the UK, are able to absorb job seekers faster than smaller countries. The global average percentage is also a worst case scenario, as it is assumed that if employees do not respond to the survey, they have not found a new job after leaving Nokia.

Globally more than 1,000 new businesses were established with Bridge support. In Finland more than 400 new businesses were established. Many companies are set up by a team. That’s why the total number of new entrepreneurs is higher than number of new companies. The new businesses are in different industries.
- ICT start-ups: Consumer business & B2B 42%
- Other 38%
- Professional services and consulting 21%
On September 3, 2013, Nokia and Microsoft announced a transaction whereby Microsoft would acquire substantially all of Nokia’s Devices & Services business and license Nokia’s patents and mapping services. We eventually completed the transaction on April 25, 2014, with some 25,000 people transferring to Microsoft.

**Having continuous dialogue with our employees**

Our employees are a vital stakeholder group, and we have a high regard for their feedback on how we run our business. We believe in having a continuous dialogue with our employees and actively utilizing all of the internal channels at our disposal to communicate with them. This became all the more important as our organization was facing a change. We saw that listening to our employees and discussing matters openly with them was crucial when it came to dealing with the change and bringing the transition to a successful conclusion.

Upon announcing that the substantially all of our Devices & Services business would transfer to Microsoft, we put a great emphasis on reaching our employees in a timely manner and providing them with a sufficient level of detail, regardless of their geographic location or role at Nokia.

In addition to an email and/or intranet based cascade of nearly 200 documents explaining the situation to our employees, there was, for instance a live webcast with a Q&A session, featuring management representatives of Nokia and Microsoft. The webcast was broadcasted from Nokia headquarters in Finland to approximately 15 sites worldwide and, to cater for the needs of the different time zones, the webcast was made available as a recording shortly after the main event. Additionally, during the day our management representatives at around 10 sites hosted webcast viewing sessions with an opportunity for employees to ask questions.

More than 40 regional, local, business unit or function specific follow-up information sharing sessions were hosted by Nokia management shortly after the announcement, giving employees a chance to discuss the change with their leaders and to get answers to the most burning questions. During a 10-day period following the announcement on September 3, 2013, Nokia’s management – partly together with Microsoft representatives – visited around 20 Nokia sites and offices to meet with our employees to ensure that they understand what the change might mean for them and highlight the need to focus on current business targets and priorities.

**Times of change call for strong leadership**

Especially in times of change and uncertainty, leaders must stay connected with their employees. While conveying information effectively is an important aspect of being a leader, leadership also means listening, decreasing ambiguity, inspiring our people and building belief in the future – regardless of whether one was due to transfer to Microsoft or continue with Nokia.

For this reason, our managers were encouraged to have open and transparent discussions with their teams, and were also trained on how to deal with change and how to support their teams during the period of change.
For two years, Nokia has been developing a site leaders’ network with nominated senior leaders responsible for employee engagement at sites. The site leaders and their leadership teams have arranged employee and manager discussions to help people in going through their personal change curve.

Our everyday communication activities were complemented by regular updates from the top management to all employees, explaining aspects of the change and the progress made. A dedicated resource mailbox was established upon the announcement for employees to send in their questions about the change. Answers were published weekly on the company intranet.

Collecting feedback from our employees to monitor progress

“Listening to You”, Nokia’s annual employee engagement survey, is one of the tools we use to gather feedback, act on, and monitor our progress on how we are doing with our strategy, ways of working, and employee engagement. In 2013, the survey was opened soon after the Nokia and Microsoft transaction was announced.

Listening to You traditionally has a high response rate. In 2013, 84% (75% in 2012) of our production and non-production employees in more than 50 countries participated.

Despite the challenging times, according to ‘Listening to You’

- 87% (85% in 2012) of employees felt they are ‘being treated with respect and dignity’
- 76% (71% in 2012) felt that, in their work environment, ‘it is easy to speak up about any issue without concern’
- 71% (69% in 2012) of employees felt their ‘immediate manager inspires the best in people’
- 81% (76% in 2012) felt Nokia shows a commitment to ethical business decisions and conduct.

The numbers relate to responses collected from non-production staff in the Devices & Services and HERE businesses.

To complement the annual Listening to You survey, we track our change progress by conducting a similar quarterly employee survey called Pulse. It has questions around the same topics as the full Listening to You survey, but is shorter.

“Nokia is socially and environmentally responsible.” In 2013, 83% of our employees thought that it is, which was six percent higher compared to previous year.
BEING GREEN AND CLEAN
Our environmental work focuses on minimizing the potential negative impact of our activities. In 2013, we improved our offices, factories, logistical operations and technology use to cut energy use, waste and emissions. We drove emission reductions and water awareness in our supply chain, introduced more sustainable materials in our devices and smaller packaging made of certified materials, improved the energy efficiency of logistics, and continued creating a recycling culture to ensure our products are disposed responsibly when they are no longer needed.

This chapter covers sustainability matters mostly related to the Devices & Services business substantially all of which was acquired by Microsoft in April 2014. After the completion of the sale, we are no longer managing the business described in the sections 8.7–8.12.
8.1 ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

Nokia Environmental Policy is the guiding principle in the environmental management of our operations. The policy was first approved in 1994 and last amended in 2013. Our Environmental Management System (EMS) is an integral part of our overall global management system structure. Our goal is to improve our environmental performance focusing on energy-efficiency, waste management, water management and air emissions.

EMS in our offices
The environmental management of our offices serves two main purposes: minimizing the environmental impact of our energy and resource use, and maximizing employee environmental awareness. The work is managed through our global Environmental Management System (EMS) for offices, which is based on the ISO 14001 standard. The EMS is externally verified in Nokia’s former headquarters in Finland, internally verified in all other larger offices globally.

EMS at factories
In 2013, Nokia had eight factories worldwide for assembling mobile devices, in Kómárom, Hungary; Reynosa, Mexico; Manaus, Brazil; Chennai, India; Masan, South Korea; Beijing and Dongguan, China and our new factory in Hanoi, Vietnam.

All our factories are committed to reducing the environmental negative impact of their operations and for continuous improvement in environmental management. The international ISO14001 standard has been the foundation of our certified EMS for more than 15 years. Factories are included under the Nokia single ISO14001:2004 certificate, Hanoi, Vietnam was to be included in 2014.

To improve the environmental performance of our operations we set global and local targets at our factories. Improvements to our processes are verified through internal assessments and external audits. Deviations are followed up on, corrected and monitored until they are resolved.

**KEY TARGETS:**
1. Energy consumption reduction per produced device
2. Waste amount reduction per produced device
3. Water risk mitigation and

We set monthly reporting requirements and follow the development against our targets quarterly.

Auditing our EMS
As part of the continuous improvement cycle, we run internal assessment in our factories annually. In addition, our certification partner TÜV SÜD conducted four audits in 2013: Kómárom, Hungary; Chennai, India; Beijing, China and the Nokia head office in Espoo, Finland. All these external audits were conducted without any major findings.

EMS requirements for suppliers
Besides our own factories, we require our contract manufacturers and suppliers to apply an EMS that aligns with the requirements of ISO 14001 standard. Since 2011, 91% of our direct hardware suppliers’ sites which serve Nokia were certified to the ISO 14001 standard. Nokia’s direct hardware suppliers have maintained a high level of certification since 2008.
Although Nokia is not part of an energy-intensive industry, our operations do have an environmental impact through energy consumption and the resulting emissions. We continuously work to reduce and control our environmental footprint. Our approach involves a combination of standards, local energy-efficiency initiatives and new ways of thinking about how we can use space effectively.

**ENERGY EFFICIENCY AND EMISSIONS**

In 2013, we occupied more than 350 facilities around the world, including eight production sites. About 25% of these buildings accounted for 95% of our facilities’ total environmental impact, so these sites were where we focused on improving our performance.

In 2013, we enlarged our environmental data collection scope to cover premises larger than 1,000 square meters, whereas the previous threshold was 3,000 square meters. The consumption of smaller locations was estimated based on Nokia average consumption per area or person, for example heating per area and water per person.

The energy we used at our facilities resulted in 8,200 tons of gross direct and 187,100 tons of gross indirect greenhouse gas (CO\textsubscript{2}e) emissions. Direct energy involves use of gas and oil while indirect energy involves use of electricity, district heating and district cooling.

Our purchase of certified green energy reduced indirect emissions by 41,700 tons.

Our net emissions were 145,400 tons.

Compared to 2012, CO\textsubscript{2} emissions from our facilities decreased by 16%, and compared with 2006, the base year level, emissions decreased by 40%. This was an important milestone, as we exceeded our 30% carbon emission reduction target, set for 2020. While it may be argued that this achievement was the result of lower production volumes and reduced headcount, we also worked hard to improve space and energy-efficiency at our facilities. In addition, we purchased a significant share...
of our electricity from renewable sources. In 2012, we calculated that one third of our annual emission reduction resulted from our active efficiency projects and the rest from reduced business.

For 2013, we estimate that 40% of the emissions reduction from 2012 levels was achieved through our new facility energy savings, which were around 25,500 MWh. We estimate that these investments and optimizations in technical systems helped us save around EUR 1.5 million.

 Added together, between 2007 and 2013 we implemented different energy saving activities leading to around 100,000 MWh savings.

Our methodology for calculating CO₂ emissions from our operations was validated in 2008, and since then the annual results have been verified by a third party.

**ENERGY CONSUMPTION AT OUR FACTORIES**

In 2013, we used 13% less energy in our factories than in 2012. In addition to our total energy consumption, we also tracked energy consumption in relation to our production volumes and completed energy-efficiency investments, in order to better assess the impact of our actions.

We implemented an energy management system following the ISO 50001 standard in our largest factories in China and India. This systematical approach include setting of an energy policy, establishing an energy management team and setting key energy performance indicators. Examples of implemented action are lighting system upgrade in Dongguan, compressed air pressure reduction in Beijing and chiller efficiency improvement in Chennai.
In 2013, our biggest challenge was to optimize the energy usage needed for our factory buildings, as the production processes themselves consumed only around a third of our factories’ total electricity usage.

Air conditioning accounted for our largest energy consumption activity, followed by production line consumption, lighting and generating compressed air.

Despite our daily energy management and completed investments, we were not able to reduce energy usage to align with our decreased production volumes. Because of this, we did not meet our 10% energy per unit reduction target in 2013. Instead, we had a per unit increase of 37% compared with our 2010-2011 base year.

ENERGY-EFFICIENCY IN OUR OFFICES

In 2013, we continued work on our three-year emissions reduction roadmaps for our larger office and R&D premises. As an example, we replaced more fluorescent lighting with LED lighting at our Beijing site and had 70% LED lighting in our largest office and R&D site in APAC. As our environmental management system scope enlarged to include smaller offices, environmental managers made systematic energy assessments throughout the sites. Several small, typically no-cost, optimization actions were implemented. These included turning off air conditioning during weekends in non-laboratory areas of a R&D center in the United Kingdom and allowing internal air temperature to follow external temperature with looser specifications than before, without compromising occupational health requirements in various offices in the Americas. In Finland, the lifecycle costing model was developed further and piloted when getting bids to renew elevators in an office in Espoo.

Despite these initiatives, our CO₂ emissions from offices and R&D premises, measured as CO₂ per person, were 22% higher in 2013 than in our 2006 base year. This result shows that we were not yet able to regain normal efficiencies after the major structural changes of 2012.

Headcount reductions led to an increase in the number of vacant workspaces, which still consumed nearly the same levels of energy. As excessive space is also a cost issue, it was a shared target of our real estate and environmental departments to get this metric back to our target level. We renegotiated leases, sold and subleased unused space to streamline our real estate portfolio. We trust that this hard work will turn the CO₂ per person trend to the right direction.
Using energy-efficient office hardware

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

Energy consumption of our data centers

As examples of our 2013 actions in data centers servicing our own R&D, offices and factories, we increased virtualization by using cloud services provided by our IT service providers. We also reduced the amount of small server rooms and consolidated servers to selected owned and serviced data centers, where best practice energy management, like free cooling and heat recovery, were implemented.

GREEN ENERGY USE

In 2013, we generated 2,200 MWh of renewable electricity onsite, and bought 126,000 MWh of renewable electricity certificates, leading our total renewable electricity share to be 38%. We have fuel cells in California and we bought renewable electricity certificates for 100% of our consumption in the United States (Green-e hydro), Canada (Clean Source wind), Finland (RES-E Guarantee of Origin biomass) and Germany (hydro via RECS and BusinessStrom Green), as well as at our Kőmárom factory in Hungary (hydro via RECS). Furthermore, we purchased renewable electricity certificates to cover part of our electricity consumption in our offices in France and Netherlands.
In addition to renewable electricity, we heated water with solar power in our Hanoi factory in Vietnam and new Beijing office in China and turned biowaste into biogas at the Chennai business park in India.

GREENING OUR OFFICES
Our office sustainability is enhanced through Green Building certification schemes. We aim to provide sustainable, healthy, inspirational workplace for all our employees – a work environment that encourages sustainable behavior both in the office and at home. By year end 2013, 61% of our office space was Green Building certified (either LEED, BREEAM or Green Office) and 52% of our office staff was based in the certified buildings.

Since 2007, we have included LEED (Leadership in Energy and Environmental Design) Gold level certification in the specifications of our key real estate projects for both new constructions and major renovations, aiming to have energy-efficient solutions in use at all of our premises and in the design of all building projects. In 2013, we were proud to achieve our first LEED Platinum certification, which is the highest possible certification level. This specifically environmentally-sound and energy efficient site was our new office in Bangalore, India.

We continued our commitment to WWF Green Office certification scheme, which emphasizes employee education and awareness. Our office in Salo, Finland, received the Green Office certification in December 2013, as a result of work by an onsite Green Office team comprising members from several business units. Employees outside the team were also asked to participate and suggest sustainability actions for their own workplace. The Salo certification was kicked off with campaigns for waste, water, and social awareness.

Our office in Berlin was the second to boast a community garden on its roof, while the first, Nokia’s headquarters, continued with a successful second season. The community gardens are great examples of producing wide-ranging sustainability benefits: they help increase environmental awareness, promote health and wellbeing, and create innovative and inspiring workplaces.
Nokia’s headquarters also introduced priority parking for employees who share their rides with colleagues and friends. Furthermore, a material efficient retrofit was done using only recycled office furniture, and focusing on the importance of both natural and artificial lighting in the workplace. The renewed premises allow innovative and efficient use of space and support new, sustainable ways of working.

**CO₂ FROM AIR TRAVEL**

Since 2008, Nokia has taken a stricter approach to business travel. Travel reduction efforts have included updates in 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 comparison to our 2008 base level, total air travel amount has reduced by 68%, but compared to 2012, Nokia’s air travel increased by 8% in 2013. Nokia employees* travelled a total of 346 million kilometers in 2013, leading to 33,397 tons of CO₂ emissions. We estimate that the primary reason for the increase in air travel in 2013 was Microsoft’s acquisition of Nokia’s Devices & Services business, preceded and followed by preparation activities. In 2013, Nokia continued to allow voluntary carbon offsets for business flights.

**8.3 SAYING NO TO WASTE**

We keep detailed reports of hazardous and non-hazardous waste volumes. We aim to reduce all waste to a minimum and find alternative ways to reuse it. This goal extends to waste produced at all Nokia workplaces, including offices, factories and R&D facilities.

Our target was to reduce our total waste amount by 9% by 2013, compared to the 2010-2011 baseline. We defined the target further in early 2013 and concentrated in factories, as more than 85% of our total waste was generated there. We also excluded reused waste amounts from the calculations as we actually wanted to encourage reuse instead of decrease it. We exceeded our target while we generated 11% less factory waste per unit in 2013, compared to the baseline.

In absolute terms we were doing also well, as in 2013 we reduced our total waste from all sites, including also offices and R&D, by 28% from 2012, resulting in 22,600 tons of waste in total. Our waste reduction program

*) Nokia’s travel figure includes travel by externals in cases where travel cost is covered by Nokia and bookings are made through Nokia’s designated travel agencies.
concentrated on studying further possibilities to reuse component packages between Nokia and nearby suppliers. Production volumes and headcount reductions influenced the result as well.

We had also a “towards zero landfill” target and with 96% utilization rate (i.e. waste was reused, recycled or energy was recovered) we were doing well. At our factories we achieved 97% utilization rate. At our offices and R&D sites, finding a good selection of recycling vendors and setting internal waste sorting was more challenging, but we managed to increase the utilization percentage from 79% to 83% during our three year office waste program. For example, at our Oulu and Espoo offices in Finland, normally nothing goes to a landfill, because the approximately third of waste that cannot be recycled goes to energy recovery. We still cannot fully utilize the mixed waste coming from renovations and moves, but sorting of this material is also moving in the right direction. We also worked with our catering providers to reduce food waste.
Even though Nokia’s operations are not water intensive, we have taken action to ensure our operations cause minimal burden to the environment.

At our own sites, most of our water usage occurs from sanitary and catering activities, and to a lesser extent in gardening and facilities management, such as cooling towers. Mobile device manufacturing production processes used less than 1,000 liters of water annually at each factory, typically in equipment such as stencil washers or reflow ovens that required small amounts of water in self-contained tanks.

In 2013, Nokia withdrew 1,096,000 m³ water for use at our facilities, of which 93% was withdrawn from municipal, and 7% from ground water sources. We recycled 12% of water we use, thereby reducing the withdrawal of clean water. Ninety percent of waste water went for municipal off-site water treatment while the rest was treated onsite.

As most of our water use relates to people, not to processes or building areas, our key performance indicator is water use per person. Our target was to get back to the good level achieved in 2010-2011. With the result of 21 m³/person/year, the use was anyhow increased and we set targets for all our factories and follow water use more tightly also in offices. People in this indicator include both Nokia employees and other people working at Nokia premises, such as service provider personnel.

**Focusing our actions on sites in water-risk areas**

In 2013, we continued to implement actions identified in our 2011-2014 water roadmap. We worked with our suppliers to increase awareness, set water reduction targets and support best practices in water management.

We held a water conservation information workshop at our Reynosa, Mexico, factory in December together with nearby suppliers. This was a continuation of our 2012 events in China and India. We have now initiated water cooperation in all our factories located in water-scarce basins. Since the workshop in Beijing, environmental specialists from Nokia’s factory, office and Nokia’s suppliers have received further training on water footprinting and our Beijing factory has completed a waste water plant improvement. In Chennai, India, Nokia and our suppliers

**PRODUCTION PROCESSES USE HARDLY ANY WATER**

The graph describes the water use split of Nokia Reynosa factory. There was no water used in production process at all. Some other factories use at maximum thousand liters of process water a year, resulting in less than 0.1% share.
located in the SEZ business park continued to share best water practices and track water use per person monthly. As an example, in 2013 two of the suppliers followed Nokia’s earlier action and started to reuse condensate water as fire-fighting water.

In addition to factories in water-risk areas, our other factories learned best practices from each other and all included a water action plan in their environmental management systems.

**Supporting water conservation initiatives**

We worked with expert organizations to identify the best ways to use mobile technology in issues such as water efficiency, awareness raising, and improved water management. For instance, we helped the United Nations Food and Agriculture Organization (FAO) use Nokia Data Gathering to tag water points and we supported various water habitat conservation projects as part of our partnership with WWF.

The WWF Water Risk Filter considers physical, regulatory and reputation risks. Result shows Nokia factories to have low company related water risks, but Reynosa, Beijing and Chennai are located in fairly high risk water basins. For example Hanoi area does not have problem with water quantity, but area gets high risk scores on water pollution and regulatory risks.

![Water use was in the same level as in the previous year](image)

![WWF water risk matrix of our factories](image)
When improving the factory environmental management, one of the key areas we focus on is air emissions. During the assembly process, some volatile organic compounds (VOCs) are released. VOC emissions arise from the use of solvents in the soldering and cleaning processes. We minimized these emissions by reducing the consumption of alcohol-based solvents or replacing them with water-based solvents. In 2013, our VOC emissions were 20 tons, including all Nokia factories, which is at the same level as the previous year.

We did not use ozone-depleting substances in our products or production. Most Nokia facilities used HFC-type refrigerants in cooling and air conditioning systems, with some of the oldest locations still also using HCFC refrigerants. These systems were sealed, and we took care to prevent leaks during operations and maintenance. Some trace amounts do evaporate from all of the systems, with the amount of annual emissions varying due to changing refill needs. HFC refrigerants are not dangerous to the ozone layer, but they are greenhouse gases.

Protecting our ecosystem is crucial for life on Earth, and scarcity of natural resources poses risks to business. Safeguarding biodiversity provides an opportunity to create new value and contribute to sustainable development.

As a mobile device manufacturer, our main impact on biodiversity took 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 believe that halting biodiversity loss requires a multi-stakeholder effort, and we want to ensure that we do our part. That’s why Nokia cooperates with NGOs on biodiversity issues, and supports various nature conservation programs.

Regarding our sites’ effect on biodiversity, we track and if needed, mitigate the risks related to our sites in or adjacent to protected areas or areas of high-biodiversity value outside protected areas. In 2013, our leased research and development site in Vancouver, British Columbia, was located in an area protected by the provincial government under a “land, wetlands and animals” program.
8.7 **A LEADING ENVIRONMENTALLY-RESPONSIBLE PRODUCT RANGE**

After the completion of the sale of the Devices & Services business on April 25, 2014, we are no longer managing the business described in the sections 8.7 – 8.12 excluding any mention to HERE. Since the beginning of the fourth quarter 2013, the D&S business has been reported as Discontinued Operations.

At Nokia, we think every device should be made with the environment in mind. That’s why we were continuously improving the environmental credentials of all our mobile devices, both in the high-end smart device portfolio as well as in the more affordable feature phone range.

We were a pioneer in collecting and managing full material data and proactively phasing out substances of concern from our products even if not required by any laws. But we didn’t stop there. We also looked at:

- improving energy-efficiency
- using renewable materials and smart packaging
- creating services that encourage people to adopt more sustainable lifestyles.

In addition, we created effective end-of-life practices which close the lifecycle loop, putting energy and valuable materials back into circulation.

**Showcasing eco-innovation**

In 2013, we introduced our very first phone using recycled plastics in the product cover, the Nokia Lumia 1520 black variant. The phone continued our range of ‘eco hero’ devices, such as the Nokia Lumia 820 and Nokia Asha 311, which showcased the widest range of environmental features and innovations in our product range.

We also developed services and applications aimed at improving the ecological footprint of people using our devices.

- We updated the ecologically-themed Nokia Climate Mission game which combines the fun of gaming with the discovery of how to reduce your own ecological footprint and learn about climate change.
- We extended the reach of HERE Transit application which offers public transportation route planning, raising awareness of environmentally sound public transportation as a journey option and making it easier to use. Pedestrian navigation and bicycling is made easy with HERE Maps, and our precise maps can help people in cars plot the most optimal route to their destination, making it possible to cut down on carbon emissions.
- We used recycled plastics in the product cover for the first time in the Lumia 1520 black variant.

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In addition, we created effective end-of-life practices which close the lifecycle loop, putting energy and valuable materials back into circulation.
The total emissions for creating, using and recycling a typical Nokia mobile

We take a proactive approach when considering how our activities might impact the environment. Our product creation is guided by lifecycle thinking which means we minimized the environmental impacts across the entire life of a product. The greenhouse gas emissions across the entire lifecycle of the device are presented in the diagram above.

The total emissions for creating, using and recycling a typical Nokia mobile device is on average 18kg CO$_2$e. This is equal to driving 125 km in a typical car used in Europe. The results of a lifecycle assessment depend on the calculation method, scope and assumptions used, and reflect our understanding at the time of publication.

Design for the environment

A dedicated design for the environment (DfE) specialist worked actively throughout every product development project at Nokia. During each project, the DfE specialist verified the implementation of both legal environmental requirements and our own internal voluntary requirements, and promoted the most sustainable alternatives for material choices and other design considerations.

Part of the output of the DfE specialist’s work was an ‘eco profile’ for all Nokia devices. These profiles contain information on our products’ environmental impact, material use, energy-efficiency, packaging, disassembly and recycling, and they were available on our website since 2001.
Product Lifecycle Assessment (LCA)
We used an externally audited life cycle assessment methodology to assess and quantify the impacts of our products and activities. We carried out environmental impact assessments since the mid '90s and the findings were public since 2009.

Lifecycle thinking and assessments helped us identify environmental impacts from raw material acquisition to end-of-life. They also helped us understand the relative importance of the different activities and stages. Based on the findings, we were able to determine where to focus our efforts in improving the overall environmental performance of our products, plus they helped us monitor how the performance changes over time.

Based on the data we monitored, the devices available for purchase today have up to 25% less impact in terms of GHG emissions than they would have had with 2006 manufacturing and charging technology.

This is due to measures we took at the various stages of the lifecycle, for example reducing greenhouse gas emissions and increasing the utilization of waste at our manufacturing facilities, reducing the no-load power consumption of Nokia chargers, decreasing greenhouse gas emissions due to logistics, encouraging emission reductions with suppliers of key components, and decreasing VOC emissions per device.

The first mobile phone manufacturer to fully declare materials used in devices
Nokia is an industry leader in substance and materials management. We were also the first mobile phone manufacturer to fully declare the materials used in our mobile devices. By knowing all the substances in our products, not just those that raise concerns, we were able to respond swiftly if new concerns arised about the materials we used.

Each year, we published the Nokia Substance List (NSL) in which both the legislative and voluntary material restrictions were documented. We implemented substance and material phase-outs in collaboration with our entire supply chain.

Extra precautions to protect human health and the environment
Along with meeting the basic regulatory health and environmental requirements in substance and materials management, Nokia also follows the precautionary principle. We may, for example, ban a material from our products when we have reasonable grounds for concern over the possibility of severe or irreversible damage to health or to the environment. In such an instance, we may decide to act voluntarily, for example, by substituting substances of concern with safer alternatives, where feasible alternatives are available.

As a mobile device manufacturer, we went beyond
## NOKIA'S PHASEOUTS OF SUBSTANCES OF CONCERN

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<td>Restriction of Hazardous Substances (RoHS) Directive</td>
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<td>Restricted Flame Retardants (RFP) &amp; Other Bromine &amp; Chlorine Compounds</td>
<td>Sb203, BFR, CFR restricted for certain product categories</td>
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<td>Beryllium compounds restricted on new Nokia products excl. gear products</td>
<td>All new products free of beryllium compounds as defined in NSL</td>
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<td>Organic tin compounds restricted to include diorganic DBT, DOT, &amp; triorganic tin compounds</td>
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### NOKIA'S PHASEOUTS OF SUBSTANCES OF CONCERN

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current legal compliance, not merely taking it as a baseline but as a starting point for further improvement. Our goal was that our devices contain no substances of concern. We continuously reviewed and updated our substance list to comply with any new requirements or restrictions. Moreover, we continuously explored and introduced new environmentally-sound materials.

During the last few years, we were active in introducing new, more sustainable materials into our devices, including bio-plastics, bio-paints, recycled metals and recycled plastics. Such innovations in materials helped us:

- Reduce our dependency on fossil-based raw materials and need for virgin metals.
- Use less energy in raw material acquisition.
- Introduce more sustainable industry practices.

In 2013 we introduced the Nokia Lumia 1520, and the black variant was our first phone using recycled plastics in the product cover.

**EU RoHS and EU Reach compliance**

All our mobile devices and accessories, worldwide, are compliant with the EU RoHS ¹, and all national requirements of the same type as RoHS.

Our approach was that Nokia’s mobile devices and accessories comply with the EU REACH ². EU REACH compliance requires suppliers to communicate to recipients of their products if any substance included in the Candidate List of Substances of Very High Concern (SVHC) is present in their product above 0.1% by weight. In January 2013 was found that three of our older products contained two substances over the limit of 0.1%, immediate corrective actions were taken and notifications were sent to recipients of these products. Notification process was reviewed and updated. Excluding the case described above, our mobile devices and accessories were compliant with the EU REACH during 2013.

EU REACH compliance is part of Nokia Substance List (NSL) requirements. All Nokia suppliers have the liability to comply with these requirements. We assessed the substances and their uses in Nokia products and production operations and we were in active communication with our supply chain regarding REACH and its implementation.

Since 2009, all our new products must be free of BFR (brominated flame retardants) and RFR (restricted flame retardants), as defined in the NSL.

**Improving energy efficiency of our devices**

We were continuously improving the energy-saving features throughout our product portfolio, including energy-efficient chargers, to help our customers save energy. With over a billion people using Nokia phones around the world, small steps like these can make a difference.

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¹ EU ROHS = EU RoHS Directive 2011/65/EC on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment.

² EU REACH = EU Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals.
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 it's not unplugged from the outlet after the phone is fully charged. The rating is displayed on a unique label, which is featured in the product's eco profile and on the packaging of our AC-charger products.

Since 2004, we reduced the no-load power consumption of our chargers by over 83% and in our best-in-class chargers by over 90%. In 2013, we introduced one new energy-efficient charger: the AC-60, for our high end phones. Since 2012, all new Nokia devices were shipped with four-star or five-star chargers.

Our target for the average no-load was to reduce it with 75% to 0.07W from the 2006 value of 0.278W. We reached 0.061W, a reduction of 37% from 2012. The charger no-load power consumption values are calculated as volume weighted average charger no-load power consumption for phone products per year.

In addition to our work on the energy efficiency of our chargers, Nokia in 2007 became the first mobile manufacturer to put alerts into mobile phones to remind people to unplug their chargers once their phones were fully charged. We also introduced features to reduce the energy use of our devices. All Nokia devices come with power-saving standby settings, and the Lumia smartphones have a battery-saving feature. Browsing the internet and making video calls is more energy-efficient with a mobile device, compared to a laptop or desktop computer.

8.8 SMALLER FOOTPRINT WITH SMARTER USE OF THE DEVICE

Traditionally, environmental activities have focused on minimizing the environmental impact of products and business operations. We took it further and started also looking at how using Nokia products can have a net positive impact, by offering our customers devices and services that promote sustainable living and help them reduce their environmental footprint. We were doing this by:

- Helping people reduce their daily environmental impact by using their mobile
- Raising environmental awareness through applications and ‘games for good’.
- Developing functionally-rich smartphones that can replace several other products.
Helping people reduce their daily environmental impact by using their mobile

Using the full capabilities of today’s mobile devices can significantly reduce CO₂ emissions:

**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 one 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 TONS OF CO₂** emissions per year.

This equals the annual greenhouse gas emissions of around 374,000 cars.

**USING MOBILE DEVICES TO WORK REMOTELY**

If only 10% of people using Nokia devices used their mobile phone to work remotely once a week instead of driving to work, there would be a reduction of about **62 MILLION TONS OF CO₂** emissions each year.

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

**USING MOBILE DEVICES TO AVOID UNNECESSARY BUSINESS TRAVEL**

If only 1% people using Nokia devices used their mobile phone for a meeting instead of traveling there by plane, even once a year, there would be a reduction of about **8.8 MILLION TONS OF CO₂** emissions.

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

**USING MOBILE DEVICES FOR VIDEO CALLS**

With the same amount of energy used for a ten minute webcam conversation using 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.

**USING MOBILE DEVICES FOR IN-CAR NAVIGATION**

If 10% of people using Nokia devices reduced their driving-related CO₂ emissions by 5% with the help of navigation, that would result in a reduction of **22 MILLION TONS** per year. This equals the annual CO₂ emissions of about 6.5 million cars.

**USING MOBILE DEVICES TO WORK REMOTELY**

If only 10% of people using Nokia devices used their mobile phone to work remotely once a week instead of driving to work, there would be a reduction of about **62 MILLION TONS OF CO₂** emissions each year.

This is more than the annual fossil fuel-based emissions of countries like Portugal, Colombia or Nigeria.
Raising environmental awareness through applications and ‘Games for good’

Mobile applications are probably the most efficient distribution channel for innovations, offering easy development and immediate distribution in app stores, reaching millions of potential customers. The apps that people spend by far the most time with are games. Hence, it is natural to invent games to promote sustainability. Yet the selection of such games is limited. One pioneering game has been Climate Mission, which Nokia introduced for various platforms.

Climate Mission game for Nokia Lumia smartphones tells about global warming and you play to mitigate climate change. By playing it you learn about key issues affecting climate change, and gain skills for use in daily life.

In 2013 Nokia revised Climate Mission, introducing a new public transportation game. Altogether, Climate Mission has been downloaded more than three million times from the Nokia Store and Windows Phone Marketplace. The game has consistently received good reviews from players.
A recent study shows that many people have already done this:

- 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

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

If only 10% of the over one billion people using Nokia devices used their mobile phone instead of buying a separate music player, camera, video camera, PC, fixed-line phone and car navigator...

If only 10% of the over one billion people using Nokia devices used their mobile phone instead of buying a separate music player, camera, video camera, PC, fixed-line phone and car navigator...

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

...there would be a reduction of about 73 million tons of CO₂ emissions each year.

A recent study shows that many people have already done this:

- 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 CO₂ emissions.

PureView camera technology, with impressive results even in low-light conditions, as well as HERE Drive for in-car navigation provide excellent solutions for replacing other products.
Making a Difference with Optimized and Certified Packaging

All products need protection to stay in excellent shape while they travel to the hands of consumers. On top of this, the packaging design needs to emphasize the product design and also support the efficiency in logistics and manufacturing. Designing a package is about challenging the size and the materials used to produce best possible outcome.

Nokia’s packaging portfolio is based on our product portfolio, which means that each value category has the best-in-class package. We were continuously challenging our way of working and focusing on maximal efficiency of our packaging without compromising its look and feel. Smaller charger design, tight cable wrapping and optimized user manuals enabled us to use lighter materials and design smaller packages.

Our Progress in 2013: Toward More Sustainable Packaging Materials

In 2013, we continued to find more sustainable materials both in fiber packages – where most materials were already certified – and plastics. We worked toward a goal to have all virgin-fiber-based packaging materials certified by 2015, and we were certain to be on the right path during the year.

Toward 100% Recycled or Certified Material Use

In 2013, we increased the use of recycled fibers in our packaging. At the end of the year, 78% (compared to 66% in 2012) of our retail and transport packaging materials were made of recycled fibers, of which a large proportion were also certified. The increased use of recycled fibers and related material choices reduced the need for virgin fibers to 22% (34% in 2012), of which 40% was certified.

We improved the material suitability in every packaging component throughout the whole packaging portfolio. For instance, we only used plastics in those packages where transparency was needed to show the products to customers, usually accessory packages.

We were also working with our suppliers to get them accredited with the FSC (Forest Stewardship Council) and/or PEFC (Programme for the Endorsement of Forest Certification), and were happy to see that most of them had already completed the accreditation.

Combined retail and transport material used during 2013:
- PAPER: 18,111 tons (25,444 tons in 2012); 78% recycled (66% in 2012), certified virgin material: 9% (20% in 2012), 13% not certified virgin material (14% in 2012)
- PLASTIC: including bags and protective foils: 473 tons (611 tons in 2012);

Retail packaging material used during 2013:
- PAPER: 11,527 tons (18,857 tons in 2012); on average 69% recycled (52% in 2012)
- PLASTIC: including bags and protective foils: 473 tons (611 tons in 2012);

Transport packaging material used during 2013:
- PAPER: 6,584 tons (9,569 tons in 2012); on average 91% recycled (89% in 2012)

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In 2013, our logistics activities accounted for around 9% of the total greenhouse gas emissions across the life cycle of a Nokia phone. This included transporting components from component manufacturers to Nokia sites (inbound), transporting our products from Nokia manufacturing sites to our customers (outbound), as well as logistics activities for repair, reuse and recycling. As logistics operations were conducted by third-party operators, the greenhouse gas emissions from logistics were categorized as Greenhouse Gas Scope 3, i.e. indirect impact for Nokia.

Our approach to greener logistics: measuring and minimizing

To minimize emissions from logistics, we needed comparable data from our logistics providers. Environmental data collection from logistics was challenging as there is no standardized way to measure greenhouse gas emissions in the logistics industry. For individual logistics service providers, the interconnected, extensive reach of the logistics network also complicates efforts to measure their own emissions. Nevertheless, since 2011 we worked with our logistics service providers to refine our data collection process. Within Nokia, we focused on integrating emissions as part of the existing logistics processes to fully align with the anticipated greenhouse gas protocol for Scope 3 emissions.

We made great progress in the past two years. In 2013, our logistics service providers provided us with their CO₂ emissions figures per shipment on a monthly basis. These figures were embedded into existing logistics processes and reporting, which was a significant step towards more reliable data and the full traceability of emissions. Nevertheless, given the extensive reach of our network in 2013, data quality continued to be a challenge to be addressed.

In addition to measuring logistics environmental performance, we also put a lot of effort into minimizing negative environmental impacts of transportation in 2013. We began a Lean Distribution journey in all regions where we operated. Lean focuses on creating value for the end customer by eliminating anything wasteful in the process. To identify and eliminate waste in different parts of the distribution process, we started to use value stream mapping, Gemba walks, SIPOCs and many other Lean tools. After the first six months of our Lean Distribution journey, we kicked off a second phase where we started deploying all key actions to avoid waiting time, extra work tasks etc.

Finding greener transport methods

We’re also continuously 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 used ocean transport instead of air whenever possible, taking into account the need to protect quality and ensure availability.
On the routes where we shifted from air to ocean transport, we achieved an estimated 80% reduction in CO\textsubscript{2} emissions.

In 2013, ocean transportation represented about 15% of the inbound logistics (in weight). Traditionally, ocean transportation has been used mainly for inbound but we started extending it to outbound transportation activities. Since August in 2013, we transported selected shipments from our Manaus factory to customers in the Northeastern Region of Brazil on ships instead of planes. This reduced CO\textsubscript{2} emissions from transportation significantly. We also transferred transportation from air to road for internal shipping in Asia and to trains in India, reducing CO\textsubscript{2} emission levels there. Some of our logistics service providers minimized their environmental impact by consolidating inbound shipments into large containers.

Also in 2013, we adopted Loose Carton Management (LCM), a totally new way of delivering shipments of 500 devices or less, starting with deliveries to our European customers. Instead of packing master cartons on wooden pallets for transportation, the pallet was removed and master cartons were shipped loose. There are many benefits of the loose carton deliveries. The environmental benefits are for example:

- When the weight of the wooden pallet is removed, carbon dioxide emissions decrease.
- The loose carton helps our customers reduce waste, as excess packaging material, i.e. pallets, are eliminated.
- Although they contain several master boxes, loose cartons are still convenient to handle. The outer box maximum weight is 25 kg (55 lb), so it can be lifted and carried by one person.

We were testing this innovation and it was therefore applied only in deliveries from selected factories to some of our customers in Europe.

We also awarded the 2013 Nokia Supplier Sustainability Award to Agility, one of our logistic suppliers, for rethinking current transportation practices. This solution was about further optimization of air transportation and encompassed removing unnecessary packaging waste and consolidating component shipments and supplier packages to better utilize the space available in airplanes. The solution reduces lead time, damages, costs and waste, and has resulted in a reduction of up to 5,000 metric tons of carbon emissions over the past three years. In 2013, several Nokia factories were using it.
8.11 CREATING RECYCLING SOLUTIONS FOR MOBILE DEVICES

We have supported the creation of better collection structures and recycling possibilities globally for over a decade. Our own recycling programs for mobile devices consisted of identifying safe and reliable recyclers, developing the infrastructure for reverse logistics and offering a variety of our own take-back options for consumers.

In 2013, our take-back and recycling programs continued to develop, assured that mobile devices end up in environmental, sustainable and safe recycling processes. As people also return products for recycling through various other channels, our initiatives included partnerships with mobile operators, retailers, NGOs, other manufacturers, authorities, universities and schools as well as mail-in recycling programs around the world.

We collected 388 tons of used mobile phones, batteries and accessories through these campaigns and channels.

Working together with authorities, recyclers and other stakeholders to create long-term solutions

For over 10 years, we have worked with recyclers to ensure that our selection and requirements management process is world-class, and to ensure the information about the recycling processes is accurate. In 2013, we worked globally with a number of recyclers and we assessed their processes with respect to both environmental and social requirements. Though collection was the more visible part of our efforts, getting the recycling process right was equally important. In addition, we believe that regulation is one of the cornerstone requirements for creating long term sustainable solutions for nationwide end-of-life product management. By committing to the principle of “Extended Producer Responsibility”, we were collaborating with national stakeholders such as governments, international organizations, NGOs and recyclers with the aim to elaborate sustainable framework policies and pilot collection and recycling schemes that contribute to finding sustainable practices and long term solutions. We strongly believe in multi-stakeholder dialogue and are proud to participate in many forums, panels and working groups that have taken up this challenge. There are still many countries which do not yet have functioning solutions for household waste management, even less so for the management of old electronics. In some countries, where the collection and recycling of consumer electronics is already well structured and legislated, we participated in collective recycling schemes with other equipment manufacturers (Europe, Canada, China and Australia).
OUR MEMBERSHIPS IN 2013:

- Nokia was an active contributor to the Producer Environmental Group of the IT Association of South Africa, a highly proactive group working on national management plans in line with the South African regulation and in collaboration with stakeholders in the market.
- Nokia contributed as an industry advisor in the Ethiopian E-waste Project of the Ethiopian Government which is operated by UNIDO and financed by the Global Environmental Facility (GEF).
- Within the European Union, Nokia actively participated in the amendment of the Waste Electrical and Electronic Equipment (WEEE) directive. With the extended requirement to collect small electronics in retail, we hope this will make it even more convenient for consumers to return obsolete equipment to the appropriate national collection organizations for recycling.
Our challenge
Over the years we learned that the challenge in general lies in getting the phones back to offered recycling points. Old mobile phones are among the most valuable electronics for recyclers and material recovery which makes them a desirable resource by many actors for reuse, repair, refurbishment, second hand sales, etc. To be able to create a recycling culture where these valuable materials eventually are recovered to be used in new products, it is very important to understand what are the drivers and options for recycling locally. In 2013, we worked hard to dive into these realities, aiming to better understand the actions on the ground and the drivers that shape the flow of old phones and related material. We believe such work can greatly contribute to creating future collection and recycling networks.

Our biggest mission in 2013 was to expand and contribute to improving recycling practices within Africa.

Where no local high standard electronics recyclers didn’t yet exist, we worked with global Nokia approved recyclers. In addition, we contributed pro-actively to support local emerging recycling operations e.g. in Ghana, South Africa and Kenya.

CASE: UNDERSTANDING THE REALITIES ON GROUND IN AFRICA

Nokia was one of the founding members of the “Alliance for E-waste Solutions in Africa”. Together with representatives from DELL, HP and Philips, we have been pioneering towards new ways of sustainable end-of-life electronics management in developing countries. The work is supported by international UN organizations and research institutes. The group continuously works to pilot how a national model and the enforcing policy framework can support future solutions in line with the “Extend Producer Responsibility” understanding – particularly for African countries that do not have functioning waste management systems – and even less so for e-waste. Kenya has been the priority country of the “Alliance” work during 2012 and 2013. The group has been contributing to sustainable policy elaboration and pilot recycler work on Kenya’s way towards a national solution – with a holistic solution on its way as one of the first in Africa.
PRODUCT SAFETY IS A TOP PRIORITY FOR US

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

Reporting product safety information
Since October 2001, Nokia voluntarily made specific absorption rate (SAR) information available in product user guides and also on Nokia.com. Following the sale of substantially all of our devices and services business to Microsoft in April 2014, such information is now provided by Microsoft.

Over many years, we supported the World Health Organization (WHO) in its efforts to coordinate global regulations on electromagnetic fields. These regulations are based on the widely recognized guidelines issued by the ICNIRP.

Research into the health effects of mobile phones
From time to time, there are reports in the media of individual research studies that 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 and studies 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. The WHO identified areas for further research and is currently in the process of conducting a health risk assessment of electric and magnetic fields (EMF).

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 government 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.
UNLEASHING THE POTENTIAL OF TECHNOLOGY FOR GOOD
Around the world, billions of people live in remote or under-resourced communities, lacking access to adequate education, healthcare or even up-to-date news. Affordable mobile technology has a potential to transform the delivery of these services, improve their quality and make them available to many more people. By extending the power of mobile technology, we were helping to address global sustainability challenges like education, livelihoods, accessibility, and helping Nokia users lower their environmental footprint.

This chapter focuses on describing our sustainability activities mostly related to the Devices & Services business substantially all of which was acquired by Microsoft in April, 2014.
With over 1.3 billion people using Nokia devices, we saw both an opportunity and a responsibility to make a real difference in their lives. A key pillar of our strategy in 2013 was to bring access to the internet and information to a billion people who currently don’t have it.

There are three main interconnected barriers contributing to the digital divide: cost, a lack of skills and education, and disabilities. Overcoming them and finding innovative solutions requires a 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. In 2013, we were aiming at providing the next billion with the best access to the internet and information, with products that offer the most compelling experiences.

**The Nokia Asha product range, designed for the challenges of the next billion**

Nokia Asha products are affordable yet powerful smartphones. They include innovations that help people in emerging markets cope with the typical challenges of internet connectivity: cost and speed. Dual SIM and Data Control features provide options for selecting and controlling data usage. A variety of connectivity options – GPRS, 3G and WiFi – give people the ability to choose the best and most affordable way of accessing the online world. Nokia Xpress Browser is up to three times as fast as other mobile browsers. It compresses data by up to 90%, using less bandwidth than other mobile browsers. This makes using the Nokia Xpress Browser less expensive for people to use.

In 2013, the Asha product range was updated with four products: Nokia Asha 500, Nokia Asha 501, Nokia Asha 502 and Nokia Asha 503. These new products offer upgradable software platform and most of the popular social media and messaging applications such as WhatsApp. Hence, the Asha product family became a true inexpensive smartphone fleet. Nokia Asha 503 even includes 3G connectivity making internet data transfer fast. The Asha 500, 501 and 503 come in single and dual SIM variants. For many new owners, Asha products provided the first access to the internet.
Around the world, over 700 million adults – some 16% of the global population aged 15 and over – lack the basic reading, writing and numeracy skills needed in everyday life. Of these, two thirds are women, mostly living in remote rural areas. Added to this, we face a global shortage of around 10 million teachers. Clearly, action needs to be taken to address this critical issue, and mobile products and applications can play a key role.

The beauty of mobile technology is that it frees knowledge, information and education from the constraints of classrooms, libraries and expensive urban areas. It can provide access to quality learning and services that people can use when and where they need them. Providing good quality learning content through mobile technology can also help reduce costs. What’s more, it adds new dimensions to learning, making it a more personal, engaging and interactive experience.

From 2010 until the sale of the D&S Business on April 25, 2014, Nokia had a partnership with UNESCO to support individuals, organizations and governments who are working to achieve the six goals of the global Education for All (EFA) agreement. The EFA movement is a commitment to provide quality basic education for all children, youth and adults.

In 2013, we responded to these needs with solutions like Nokia Mobile Mathematics, Nokia Education Delivery, Nokia Flashcards, Nokia Notebook for Learning and Nokia Life.

**BRINGING MATHS EXERCISES INTO MOBILE PHONES**

Nokia Mobile Mathematics is a mobile service that combines official mathematics curricula with possibilities for peer support. In 2008, we launched a pilot scheme for mobile mathematics in South Africa for grades 10-12. Evaluations show that students using Nokia Mobile Mathematics have on average 7 percentage points higher grades than their peers, corresponding to a significant improvement on their scores. In 2013, Nokia and the Department of Science and Technology announced that Nokia Mobile Mathematics will be available to all across South Africa. We also partnered with South African mobile operators MTN and Cell C to zero-rate the data for the solution, meaning students were able to use the service for as long as possible without incurring a cost.
Also in 2013, we launched a new browser-based version of the service, which is available globally for anyone online. The new service works on any phone and PC with a data connection, without the need to download an app. After a quick sign-up process, students can practice problems in a number of categories such as finance, trigonometry, calculus and statistics. While working on questions, learners can read background theory, see examples of solved problems and engage with others. Points are awarded for successfully completed exercises.

**DELIVERING QUALITY EDUCATION OVER MOBILE NETWORKS TO HARD-TO-REACH AREAS**

Nokia Education Delivery is software enabling delivery of quality education materials over mobile networks to the classroom, which is particularly useful in hard-to-reach areas. Combined with teacher training and community engagement, it has shown to improve academic results and increase retention among students, especially girls. In 2013, the service was used in India, Vietnam, Kenya, Bangladesh, Indonesia, Tanzania, Haiti, South Africa, Nigeria, Colombia, the Philippines, Pakistan, Mexico, and on a pilot basis in Uganda.

In addition to the existing solutions, we launched Nokia Flashcards for literacy and language learning, Nokia Note-book for Learning which encourages students to write stories in a notebook either based on their own initiative or following teacher’s guidance. We also partnered with SkillPixels to bring SmartKid Maths to Windows Phones. This mathematics curriculum based game helps children to lay the foundation for learning mathematics.

In addition to our own learning solutions, we worked with various organizations to improve learning through impactful programs, and combined the expertise from private, public and civil sectors. We believe in projects that help empower communities and individuals to drive their own development. In 2013, we joined two education-focused industry coalitions: the Global Business Coalition for Education and the Matuto Literacy for Life.

**CASE: GLOBAL LITERACY PROFESSIONAL DEVELOPMENT NETWORK IN INDONESIA AND BANGLADESH**

Nokia, the Pearson Foundation, the International Reading Association and local reading associations are using Nokia Education Delivery to make continuous professional development materials available for teaching literacy. The results to date include: increased student engagement by 26% in Indonesia and by 16% in Bangladesh, improved quality of instruction by 16% and 10%, respectively, and improved physical learning environment improved by 18% and 8%, respectively. The program won the Regional Corporate Citizenship category in the Public Affairs Asia Gold Standard Awards 2013 for improving literacy.
CASE: BRIDGEIT IN INDIA

This program targets to improve student learning of 5th and 6th grade English and Science curricula by training teachers in using videos and other educational resources from curriculum-aligned catalogues available in the Nokia Education Delivery. The program is a collaboration between Nokia, the Pearson Foundation, EZ Vidya (local education and research partner), and the State Departments of Education in Tamil Nadu and Andhra Pradesh, involving 86 urban, semi-urban and rural schools in the two states, plus 17 control schools in a quasi-experimental trial. During the first two years of the program, 160 teachers were involved, engaging more than 4,800 students. The program had a strong and positive effect on student learning for both science and English. Students in BridgeIT schools out-gained those in control schools by an average of eight percentage points in English, and by an average of 15 percentage points in science.

CASE: IMPROVING THE QUALITY OF PRIMARY EDUCATION IN RURAL AREAS IN HAITI

Together with the International Rescue Committee (IRC), the Pearson Foundation, the Haitian Ministry of Education and other local partners, Nokia was working on a technology-based program to improve the quality of primary education in rural areas, particularly the first three years of schooling. As part of efforts to support rural Haitian schoolchildren in a setting that is constantly impacted by natural disasters, social unrest, poverty and very poor infrastructure, the program was set to improve teachers’ practices through participation and application of techniques learning in a school-based teacher training program, delivered through innovative ICT solutions, including videos and mobile phones. Today the project is providing in-service training to 220 first, second and third grade teachers in 32 rural primary schools, leading to better quality education in literacy and reading for 13,000 Haitian children.
In May 2013, we launched a service, Nokia Life+ English Teacher, which was created to assist primary school English teachers in Nigeria by providing free professional development support through their mobile phones. The service was created in partnership with UNESCO and with the support of the British Council and the National Teachers’ Institute of Nigeria. The service was one of the first initiatives in Nigeria to offer help to teachers using mobile technology, and education professionals gave top marks for the service. Through the Nokia Life+ web app on their mobile phones, primary school teachers in Nigeria were able to access high quality English teaching techniques, resources, activities and other materials to help them in the classroom. The aim was that by providing teachers with Continuous Professional Development (CPD) materials, they would be better equipped to prepare Nigerian children with the vital English skills needed to make the most of their opportunities in the future. Within three months of its launch, the service had over 70,000 users.
In addition to improving the quality of education and learning, Nokia invested in programs where mobile technology and new services can bring sustainable improvement to people's lives.

**IMPROVING DATA COLLECTION**

Nokia Data Gathering is a mobile service that can be used to create tailored questionnaires and distribute them to multiple mobile phones using a normal mobile network. Field personnel surveying local conditions can quickly complete the questionnaires and immediately transmit their findings to a central database. The system also allows organisations to geo-tag data with GPS location information to build a more detailed picture of local conditions. So far the service has been used in making data collection more efficient in around 70 countries and by over 300 registered organizations for fields such as birth registration, agricultural production monitoring, water surveys, the fight against dengue fever and more.

In 2013, the number of organizations using Nokia Data Gathering almost doubled and the solution was increasingly adopted for larger scale projects. Therefore our development and community activities focused on introducing features and functionalities supporting projects at scale. In December, 2013, we also held the first-ever Nokia Data Gathering user conference aimed at those using the solution in scale.

Mobile data collection continues to offer benefits across several sectors of society and sets of organizations. Regardless of the size of the organization or the data gathering effort, it can be implemented without specific technical knowledge.

**CASE: MOBILE DATA COLLECTION TECHNOLOGY HELPS FOR DROUGHT PREPAREDNESS IN UGANDA**

The ICT work of The Food and Agriculture Organization of the United Nations (FAO) in Karamoja, Uganda, is an innovative best practice of implementing ICT in agriculture. As part of a regional initiative, community chiefs in 55 village centers in Karamoja were equipped with mobile devices to collect and collate digital data on signs of drought. Via its social responsibility programme, Nokia provided the open-source software, Nokia Data Gathering, to collect the data, enabling remote access to realtime information. As a result, drought analysis is more accurate with the transmission period reduced to between five and seven days.
Accessibility means making products and services usable and accessible to the greatest possible number of people, including users with disabilities.

In 2013, we took a more structured approach towards accessibility. Our efforts were driven by increasing consumer needs and new legislation as the 21st Century Communication and Video Accessibility Act (CVAA) became enforced in the USA. We identified the key consumer groups as well as key accessibility requirements – for smartphones and mobile phones – for every identified group. The six key consumer groups requiring accessible mobile devices were: people with vision impairment, people with hearing impairment, people with motoric and dexterity challenges, people with cognitive challenges, people with speech impairment, and elderly people.

We engaged in the accessibility discussion with consumer and advocacy groups, most frequently in Finland. Globally we worked with selected partners and through industry associations, such as Mobile Manufacturers’ Forum, Digital Europe and CTIA in the USA. We found the GARI-database, which is offered by Mobile Manufacturers’ Forum and is made for publishing the accessibility features of products, to be useful in our discussions with trade customers and policy makers.

We also continued improving the accessibility features in our devices. We made the Lumia devices usable also for the blind and people with severe sight impairment by launching the Mobile Accessibility screen reader for the Windows Phone operating system. The application was first made available for download in the US. We launched several phones with traditional physical keyboards, which are particularly appreciated by the elderly. For hard-of-hearing people, we gathered the largest hearing-aid manufacturers together to create a new, open, Bluetooth-based standard for a direct connectivity between phone and the hearing aid. Additionally, in partnership with the Royal National Institute of Blind People (RNIB), we invited developers to create new apps that will make the lives of people with low vision easier; or update their existing apps to make them more accessible in general.
In December 2012, the Global e-Sustainability Initiative (GeSI) released a report, SMARTer2020, which identifies the role of ICT in driving a sustainable future and decreasing global greenhouse gas (GHG) emissions. According to the report, increased use of ICT offers the potential to reduce the projected 2020 global greenhouse gas emissions by 16.5%, which means the sector’s abatement potential (helping others decrease their emissions) is seven times the size of its own carbon footprint – a fact that has been underestimated until now.

The SMARTer 2020 report identifies a number of applications and technologies that can help. At Nokia, we see a large potential to help reduce carbon emissions in the area of transportation. The latest advances in both smartphones and feature phones can help people better see the world around them, and their place in it. And at Nokia, we see an opportunity to help people become more aware of the footprint they’re leaving – and even change it.

HERE Transit makes using public transportation easier, offering route planning in hundreds of cities around the world. By encouraging and enabling more people to use public transportation, the savings would have a meaningful impact especially in bigger cities. In December 2013, HERE Transit covered 800 cities in 53 countries, but we’re not stopping there. We are continuously working with public transport technology providers and leading public transport agencies to extend and improve our coverage. Ease of access to reliable information on routing and timetables may have a big impact when deciding which mode of transport to use.

In addition, our precise maps, combined with in-car connectivity, create possibilities for helping people in cars plot the most optimal route to their destination, making it possible to cut down on carbon emissions.

**DID YOU KNOW?**

Small changes add up to big differences in reducing emissions. For instance, a research study dedicated to everyday driving (versus “being lost” scenarios) has shown that drivers using navigation devices drive shorter distances and spend less time driving.

- Drivers with navigation saw their fuel efficiency increase 12%, with fuel consumption falling from 8.3 to 7.3 liters/100kms
- This increase in fuel economy translates to a 0.91 tons (metric) decrease in carbon dioxide emissions every year per driver
- With an annualized decrease in driving of nearly 2,500 fewer kilometers per driver, it is estimated that in Germany alone, 1.19 million tires would also be saved from disposal due to the decrease in wear and tear

Read more how small changes add up to big differences in the section Smaller footprint with smarter use of the device.
MAKING CHANGE HAPPEN TOGETHER
By teaming up with other organizations, we can make an even greater impact in efforts to achieve a more sustainable, socially responsible world. We drive improvements together with others in our industry, collaborate with policy makers, work with NGOs building a better future, engage with developers, universities and research institutions, and drive improvements with suppliers.
Most of our stakeholder dialog takes place as part of our normal business practice. From a responsible business point of view, our most important stakeholders are our employees, suppliers and customers. We also rely upon good relationships with our shareholders, governments and other policymakers, universities, NGOs, developers and the wider community.

Listening to stakeholders and translating their expectations into business value is an important activity at Nokia. We are an active participant in many industry and sector organizations, not only those specifically concerned with sustainability. This helps us to be better informed about issues and trends and to share our learning with others for the greater good of all. We regularly contribute to working groups and committees of various industry organizations. We also participate in a number of public policy development initiatives around the world in areas that are close to our business, including telecommunications, trade, technology, industry, education and the environment.

We constantly strive to activate new channels concerning the ways in which we meet our existing expectations. 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 we can make improvements.

Nokia actively works with governments and other policymakers in the development of meaningful and transparent policies. Some of the key areas where Nokia was involved in 2013 included requirements regarding e-waste, substance management and energy efficiency.

When communicating with policymakers, we typically work through industry associations and sustainability organizations. In 2013, some of the working groups were:

- Global e-Sustainability Initiative (GeSI), to realize ICT’s potential in creating a low-carbon economy. We also participated in a variety of working groups to support sustainable supply chain.
- DigitalEurope, to improve the business environment for the European digital technology industry and to promote our sector’s contribution to economic growth and social progress in the European Union. We par-
ticipated in many different working groups, the most relevant for sustainability deal with resource efficiency, eco-design, chemicals and waste related topics.

- ITI, the Information Technology Industry Council, to promote the global competitiveness of the ICT industry through tech friendly public policy. The sustainability topics that we primarily engaged with were related to materials restrictions, electronics recycling and green purchasing standards in the US, Canada and Latin America. We also engaged with ITI’s policy positions, priorities, and strategies on global energy efficiency programs.

- SteP Solving the e-waste problem, to initiate and facilitate approaches towards the sustainable handling of e-waste.

- ECFIC (Executive Committee of Foreign Investment Companies in China), a self-regulatory and services-oriented institution composed of foreign invested holding companies in China, to provide input to the government on improving the investment environment and the related policies and regulations. The sustainability topics that we participated in included chemicals management, e-waste and climate issues.

- Federation of Indian Chambers of Commerce and Industry (FICCI), to work with a wide range of stakeholders including but not limited to policy makers, regulators, industry, other associations, recyclers, etc. on progressive environmental development.

Raw materials and resource efficiency are increasingly important areas. Also the importance of climate issues and how technology can help reach climate targets. In 2013, we participated in two European Innovation Partnerships (EIP) and a climate campaign organized by the European Commission, all addressing these critical issues.

Nokia was an active contributor in the European Innovation Partnership on Raw Materials which brings together the EU Member States and other relevant stakeholders to promote innovation along the entire value chain of raw materials. The stakeholders include companies such as refiners, recyclers, mining companies as well as downstream users, NGOs, researchers etc. The participants are contributing to the EU’s Industrial Policy objectives set for 2020 as well as objectives of the ‘Innovation Union’ and ‘Resource Efficient Europe’ flagship initiatives by ensuring the sustainable supply of raw materials to the European economy whilst increasing benefits for society as a whole. The next steps include selecting and implementing the most relevant projects and commitments that help in reaching the set targets. In 2013, Juha Putkiranta, Nokia’s Executive Vice President, Operations, was a member of the High Level Steering Group in this important initiative.

Nokia also supported the European Commission’s climate campaign ‘A world you like. With a climate you like’ that aims to raise awareness about the benefits of moving towards a low-carbon society and to convince businesses, citizens and public authorities of the necessity, feasibility and affordability to take urgent climate action. In addition to attending the campaign workshop, we entered the World You Like Challenge with our HERE Transit.
We also engaged in the European Innovation Partnership for Smart Cities and Communities, which is an initiative between different organizations including policy makers, cities and industry representatives. The initiative intends to combine Information and Communication Technologies (ICT), energy management and transport management to come up with innovative solutions to the major environmental, societal and health challenges facing European cities today.

10.3 SUPPORTING OUR TRADE CUSTOMERS’ SUSTAINABILITY AGENDA

We support our trade customers’ sustainability agenda and work toward creating value for them through many routes.

In 2013, we continued to focus on providing the greenest portfolio of mobile devices for our trade customers. We did this by considering sustainability throughout the whole device life cycle – from the product design to recycling, and through our supply chain. We continued to supply data to additional operator-specific product sustainability rankings, where Nokia products continued to perform well. We also worked together on initiatives such as joint take-back and recycling campaigns.

We had continuous dialogue with our trade customers to find the right approach for both to reach maximum impact. Workshops and seminars as well as more daily dialogue gave us a wider understanding and benefited our own work in focusing sustainability activities.

We continued to receive and respond to inquiries and assessment requests from our customers about social and environmental performance. We also used industry-common tools for requests related to our supply chain. In these tools, the questions are aligned with the aim of delivering more consistent and robust impact throughout the supply chains. One example of this is the joint industry initiative E-TASC (Electronics – Tools for Accountable Supply Chains), a common approach for assessing and managing companies’ supply chain risk. It aims to drive performance improvement related to labor practices, health and safety, ethics and environmental activity consistently throughout the supply chain.
10.4 ENGAGING WITH DEVELOPERS, UNIVERSITIES AND OTHER ACADEMIC INSTITUTIONS

Developer activation
In 2013, we continued to systematically harness developer creativity towards applications for sustainability. We arranged a set of Nokia Do Good Hackathons with more than 170 developers participating in Delhi, Bangalore and Pune, India.

In order to improve the productivity of the hackathons, we created a hack-at-home contest for developers. In the hack-at-home, developers have couple of months to develop applications. Consequently, the applications are likely to be more mature and ready to launch.

We also launched the Nokia Do Good Mission with a special theme of accessibility. We partnered with the Royal National Institute of Blind People in defining the scope. The contest proved to be a success with around 140 submissions. The winner was an app specially designed for visually impaired kids, called The Funnies.

Collaboration with universities
Nokia’s collaboration with academic institutions was broadly split into two types of activities: the Nokia Research Center (NRC) university collaborations and the Nokia Donations Program.

The NRC focused 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 2013, we had nine strategic partners: Aalto University of Helsinki, University of Tampere and Tampere University of Technology in Finland, the University of Cambridge in the United Kingdom, Tsinghua University and Beijing University of Posts and Telecommunications in China, the Massachusetts Institute of Technology, University of California, Berkeley, and Stanford University in the United States.

The Nokia donation program supported topics that had a high potential in terms of both technology and social impact. We focused our donations on the following areas: exploratory cooperation, future talent and developer reach. In 2013, we reached 67 universities through the program and around the same number of universities through various networks. One of our most notable partners in student collaboration has been the Student Nokia Developer community in India, which aims to bring out the best of the best innovations that are possible with our devices.
In the People&Planet Report 2012, we explained how Nokia, together with infoDev (part of World Bank), was implementing the ‘Creating Sustainable Businesses in the Knowledge Economy’ (CSBKE) program, funded by the Finnish Ministry for Foreign Affairs, in five target countries: Kenya, South Africa, Vietnam, Armenia and Pakistan. The purpose of this program is to build capacity of ICT startups operating in developing countries.

In 2013, we continued our efforts in the program. Since its beginning, Nokia has been providing in-kind contributions in the form of technical assistance, training material, devices and online tools for the testing laboratories (mLabs), and mentoring of mobile entrepreneurs. We have also helped to organize developer events and competitions, and purchasing services, such as locally-relevant applications, localized content and potential research projects from the entrepreneurs that the mLabs have incubated.

During the first three years of the program, the CSBKE program has opened mLabs in Kenya, South Africa, Vietnam and Armenia. These 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 people.

We are proud to say that the CSBKE program, coordinated by infoDev and executed by partner organizations on the ground, has already reached around 32,000 developers and entrepreneurs since its establishment in 2010 and led to concrete results. Close to 100 startups have been created and almost 300 startup teams have received mentoring and coaching. Over 500 apps have been brought to market, with more than 200 of those generating revenue. Additionally, the supported startups have created around 280 direct jobs.

In addition to the infoDev collaboration to establish innovation hubs around the world, Nokia has established its own (proprietary) mobile innovation laboratories. Just as infoDev supported mLabs, these laboratories provide support for local entrepreneurs and innovators in refining their ideas and taking them to market. The hub network now includes above-mentioned four mLabs located in South Africa, Kenya, Armenia and Vietnam, and three Nokia Mobile Labs located in Mexico, Nigeria and Egypt.
Nokia works with other organizations to help achieve a more sustainable, equitable world. We look beyond traditional cooperation with non-governmental organizations (NGO), and seek projects that unleash the value of technology for a better tomorrow. In 2013, our social responsibility projects concentrated on making education available for all, and environmental partnerships were supporting nature conservation projects and improving the environment with help from mobile technology.

Our main objective when cooperating with NGOs in education projects was that the projects can be self-sustaining. We had local partnerships or one-off projects in most countries where we operated as well as a number of global partnerships in place with various NGOs. Our global partnerships in 2013 are described below.

**Nokia and WWF – 10 years of cooperation for nature conservation**

In 2013, we celebrated 10 years of partnership with the nature conservation organization WWF. We are proud that our partnership was honored for its impact and innovative approach by the European Union’s first CSR award, highlighting the best corporate social responsibility partnerships in Europe. Our work with WWF aims to further improve our environmental performance, raise environmental awareness and develop mutually beneficial activities that promote sustainable development.

WWF helps us improve our environmental performance by, for example, coaching us on reducing our environmental impact in different areas. In 2013, we focused on our water footprint in our own operations, as well as in our supply chain. Additionally, as one of the leading principles in this 10-year collaboration has been to integrate cooperation into our core business and own operations, we continued working with WWF Green Office certification scheme. The Salo site in Finland was certified as the second Nokia Green Office in December 2013. We also observed WWF Earth Hour in all our major offices around the globe.

**CASE: TECHNOLOGY FOR SPECIES CONSERVATION: THE AFFORDABLE ANIMAL TRACKER**

The Affordable Animal Tracker was developed in collaboration between Nokia, WWF and the Nokia Institute of Technology in an attempt to make technology more relevant and affordable for species conservation. The Affordable Animal Tracker uses GPS, mobile networks and mapping software to collect and transmit data about the location of tracked or collared animals. Better data on the location and movement of tracked animals can help develop more informed and effective policies and initiatives to protect their populations and habitats.

To make the benefits of the work done by Nokia and WWF available to the wider nature conservation community, we have made the technical specifications of the Affordable Animal Tracker available under a liberal End User License Agreement aimed at organizations working on animal protection or species conservation research. The Licensed Material includes the specifications, documentation and code for both the device and software components of the solution.
Besides the projects directly related to our own operations, we also continued our support for WWF’s extensive conservation work, including projects such as the Living Himalayas Network Initiative and Tiger Conservation in India’s Corbett National Park and the Hawksbill Turtle Conservation in Malacca, Malaysia. Some projects innovatively combined conservation work with our core business, such as the biodiversity project in China’s Yangtze River involving finless porpoises, where we have used Nokia Data Gathering. Knowing the importance of mangrove forests in protecting people, structures and livelihoods in the coastal area from tsunamis and storm surges, we have supported mangrove re-forestation projects in Vietnam and Thailand in addition to a re-forestation project in Indonesia. The projects are tied to our mobile phone take-back programs in these countries.

**Nokia and Plan International**  
**– helping to improve child rights and early childhood care**

Plan and Nokia have been working together in developing countries since 2006 to improve children’s rights and early childhood care. Together we are also working towards achieving Education for All goals by bringing learning opportunities for children, youth and adults through mobile technology. Finding new and innovative ways to use mobile phones in the areas of learning and improving child rights is an important part of the cooperation. We believe the power of mobility plays a key role in the development of these areas. In 2013, we piloted new ways of using mobile phones for better school governance and learning in Uganda.

**Nokia and Oxfam**  
**– helping people to improve their lives with mobile technology**

Oxfam is a global movement of 17 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 and countries – and around the world. Our partnership with Oxfam has inspired a range of projects. These include the Ring for Change project in Indonesia, where we leverage mobile technology to promote access of women and vulnerable community members to information, and a joint mobile game enhancing environmental awareness among young Nokia consumers.

**Nokia and UNESCO**  
**– helping everyone’s access to education**

Nokia had an ongoing partnership with UNESCO, the United Nations Educational, Scientific and Cultural Organization, since 2010 until the sale of substantially all of our devices and services business to Microsoft in April, 2014. This partnership harnessed mobile technology to support individuals, organizations and governments as they strive to achieve the six goals of the UN’s global Education for All agenda. The partnership produced tangible results and laid a firm foundation that will enlarge the impact, influence and prominence of mobile devices as credible learning tools.
In 2013, the partnership continued to demonstrate a number of ways in which mobile devices can improve and facilitate learning while expanding its reach and decreasing its costs. We leveraged mobile technology to build the capacity of teachers in Mexico, Nigeria, Pakistan and Senegal. The projects advanced pioneering models of teacher development that can be emulated elsewhere, especially in developing countries where access to fixed-line ICT is non-existent or scarce.

With other private sector partners, we supported a second UNESCO Mobile Learning Week which brought together over 300 key stakeholders from almost 50 countries to explore how mobile technology can be utilized to expand and enrich learning opportunities for all. Drawing on almost two years of research, input from specialists in diverse fields, and contributions from over 20 UNESCO member states, the UNESCO-Nokia Policy Guidelines for Mobile Learning were published. The guidelines describe the unique benefits of mobile learning and articulate strategies to build enabling policy environments in which these benefits can take root and grow. The document is used at key education events around the world.

During the year, Nokia supported two UNICEF initiatives that strengthen digital literacy and cross-cultural interaction skills, while ensuring the optimal and safe use of digital tools by adolescents and young people. The agreed activities advanced the development of curricula and training of youth and educators in the use of digital tools and youth reporting, as well as progress in understanding the risks and opportunities that access to digital tools and social media present to children. The two initiatives were part of Voices of Youth, UNICEF’s flagship digital engagement community for adolescents and young people. The projects can be followed on the UNICEF website. Nokia’s financial contribution supported the implementation of projects in three countries: Zambia, South Africa and Kenya.

**IUCN**

— raising awareness on the importance of biodiversity

Our partnership with IUCN, the International Union for Conservation of Nature (www.iucn.org), continued until April 2013. During our partnership Nokia supported IUCN’s conservation and climate resilience project in the Indian Himalayas as well as SOS – Save Our Species initiative which is a global partnership designed to protect wildlife, their habitats and the people who depend on them (www.SaveOurSpecies.org).

In May 2012, Nokia and UNICEF, the United Nations Children’s Fund, signed global corporate partnership to support young people in the safe and beneficial use of digital media.
Weak school governance is a major gap in the implementation of Universal Primary Education in Uganda. This occurs because of three mutually reinforcing reasons which contribute significantly to the low accountability of schools to stakeholders, poor quality of learning outcomes and high school dropout rates.

- A belief by parents that education is solely the responsibility of the government and that parents have no role, nor competence, in it, so there a lack of effective parental and community involvement in their children’s education;
- A lack of systematic information flows among schools, students, parents and local education authorities hindering stakeholders from supporting schools and demanding children’s rightful education;
- Very limited community knowledge and organizational capacity to oversee the schools in its area.

**DESCRIPTION OF THE PROJECT:**

This project aims to mobilize teachers, parents, students and local education authorities with the support of mobile services and radio to take an active role in school governance and improve communication flow among the stakeholders. Project was first piloted in 5 schools and has now been extended to 105 schools in Luweero; one of Plan Uganda Project Areas. The use of mobile services enables children and parents to give feedback, ask questions and receive information from schools via SMS.

“Using mobile phones has made a significant positive impact for pupils, parents and teachers in the project schools. For example, pupil attendance rates are higher than before and children are better able to communicate on issues that are important to them.”, says Mika Välitalo, ICT4D and Corporate Program Manager in Plan Finland.

Improving school governance contributes towards the achievement of the Education For All (EFA) objectives by ensuring that children receive the high-quality education, which is their right. It also contributes indirectly towards achieving gender equality, lifelong learning opportunities for youth and adults, and adult literacy.

The project supports directly:

- 30,000 school boys and girls from 105 schools. They will benefit from improved education service delivery.
- 700 teachers, 200 local leaders and 32 district education officials, who will receive participatory governance training
- 12,000 parents and community members will be mobilized and sensitized to effectively engage in school governance

and indirectly:

- 660,000 community members in the project area will be reached through radio educational programs on school governance
In addition to our regular engagement with NGOs, we work with non-profit partners around the world when disaster strikes. We evaluate every crisis situation individually and our response depends on the severity of the situation, our presence and our ability to make a meaningful contribution. Naturally, this often involves financial or in-kind support.

In April 2013, we responded to relief efforts when a 7.0-magnitude earthquake struck in China. We donated 2 million RMB for disaster relief and gave mobile phones to the relief efforts managed by the China Foundation for Poverty Alleviation (CFPA). In addition, our employees in China worked to support those in need. The activities included checking that all Nokia employees from the Chengdu office and their families were safe. They also closely worked with a local NGO partner to find the fastest way to help, and the local Staff Club provided an opportunity for personal contribution by organizing an employee donation campaign.

In November 2013, we responded to the relief efforts when Typhoon Haiyan – known locally as Typhoon Yolanda – struck the south-easterly islands of the Philippines, killing thousands, leaving millions homeless and destroying vast swathes of critical infrastructure.

Between Networks (former NSN), HERE and Nokia, we had an extended team of more than 870 people in the Philippines and Nokia made donations in excess of EUR 250,000:

- to the local Red Cross and Red Crescent organization in support of immediate relief and rescue operations on the ground, providing people with clean water, food, shelter and warmth, and protecting lives at risk.
- to Oxfam for reconstruction and rehabilitation efforts: helping people whose livelihoods were destroyed or in peril, striving to get children back to school as soon as possible so as to normalize daily life, and rebuilding housing and infrastructure.

We also donated more than 1,000 Nokia mobile phones to support local communication and recovery efforts. Some of these mobile devices will be used at a makeshift radio station in Tacloban to assist in connecting people with their loved ones and to facilitate various rescue/relief operation teams. Employees in Finland and other sites around the world also took action. In Finland, our Nokia Helping Hands program helped to raise funds through the Finnish Red Cross.
In this chapter we refer to the supply chain we had before the sale of substantially all of our Devices & Services business to Microsoft in April 2014.

We have worked with our suppliers to improve social and environmental conditions throughout the supply chain for over a decade. We hold ourselves accountable not only for the sustainability practices at our own factories, but carry responsibility towards the societies and the people we impact along the chain.

We interact with thousands of suppliers every day, which gives us a great responsibility. Corporate responsibility throughout a supply chain is a journey that requires continuous improvement. The supplier landscape is constantly evolving as new suppliers come onboard, new materials are introduced, advanced technology developed or new countries and markets open. With our supply chain sustainability activities, we seek innovative solutions that holistically combine environmental, social and economic goals and increase the positive impact of our efforts. Our values and strict ethical
practices provide clear guidance to our suppliers and partners on our business integrity and the fundamental principles for business conduct we expect from them. We also collaborate with industry peers and stakeholders to raise standards and build sustainability capabilities throughout the supply chain.

Operating a global supply chain requires a good understanding of the environmental, social or ethical challenges that might arise. Some of the sustainability risks are related to our industry, some to the countries where we or our suppliers operate, some are supplier-specific, and some are related to Nokia’s internal systems. By systematically mitigating sustainability risks, we are able to reduce potential supply chain interruptions and respond to unethical behavior proactively.

**Industry-related risks:** The electronics industry is still quite labor-intensive and dependent on a skilled workforce. High employee attrition, excessive working hours and deficient personal identification are some of the possible risks in a factory that employs thousands of workers. In addition to this, a variety of process chemicals are used during the manufacturing of electronic equipment.

**Country-related risks:** In some countries, certain ethical, social or environmental risks are more common than in others. For example, freedom of expression and association, business integrity and corruption are higher risks in some countries than in others. A couple of these risks are explained in more detail in the social conditions chapter.

**Supplier-related risks:** Many suppliers are already well on the way to managing their operations ethically and sustainably. Supplier risks can relate to the efficiency of their management systems or the extent or quality of the training programs they provide to their workforce, for example.

**Internal risks:** Some of our own practices may impact the sustainability performance of our suppliers. For example, a fluctuation in demand may present challenges for suppliers to plan resources according to sustainable practices. We have recently focused on improving our planning accuracy. This facilitates our suppliers’ ability to better predict their own resourcing needs, and makes it easier for them to comply with the human resources management requirements we expect from them.

**ENSURING COMPLIANCE**

Nokia Supplier Requirements and the Nokia Supplier Code of Conduct provide clear guidance on the environmental, social, ethical as well as health and safety expectations we have for our suppliers. These requirements are based on international standards such as ISO 14001, SA 8000, OHSAS 18001, ILO and UN conventions. For over a decade, they have been enforced through contractual agreements and compliance verified by assessments.

Our aim is to ensure that suppliers provide a safe work environment, exercise good labor practices and use environmentally-sound manufacturing processes.
To ensure a holistic approach to corporate responsibility, the requirements have been aligned with the labor condition and environmental and health and safety standards of our own manufacturing facilities. We, for example, prohibit the use of child labor, do not tolerate excessive working hours or discrimination. Factory workers must have the right to collective bargaining and joining a labor union if they choose. Natural resources are to be used efficiently and proper protective equipment and regular safety training shall be provided to reduce the risk of hazards at the workplace.

Potential new suppliers to Nokia are screened regarding their labor, health and safety and environmental practices. As part of the onboarding process, suppliers are also requested to conduct a self-assessment to analyze their own understanding of how well they fulfill the Nokia Supplier Requirements. Suppliers’ sustainability capabilities and potential environmental, ethical, health and safety and labor risks are also analyzed using a third-party risk tool. The tool calculates a risk level based on the suppliers’ answers on current practices and location of operations.

To monitor compliance, on-site assessments of new supplier factories and existing ones has been part of our sustainability efforts for many years. These assessments provide us with snapshots of current supplier performance and are used as a basis for understanding root causes of non-compliance and in driving corrective actions and improvements. An assessment usually involves a review of the supplier’s complete processes and management systems and is mostly conducted by trained Nokia assessors. Thus we can ensure a strong linkage between actual supplier performance level and daily business operations at Nokia. Suppliers also undergo our environmental and ethical in-depth assessments for a variety of reasons, including identified risk, non-conformance or strategic importance.
In 2013, we focused our assessment efforts on Asia, especially greater China. Overall, we were satisfied with the compliance and improvement level of our suppliers, while noticing that some usual challenges related to our industry still needed improvements in our supply chain as well.

We screened all new desired hardware and mechanics suppliers to Nokia in regards to labour, human rights, environmental, and health & safety criteria, and all potentially new factories of existing hardware and mechanics suppliers were analyzed in regards to their capabilities to meet Nokia Supplier Requirements. Altogether 371 supplier facilities were risk self-assessed in relation to labor, ethics, health and safety, and environmental practices at their factories. In addition, we conducted 42 Nokia Supplier requirements on-site assessments and 13 Environmental and Ethical in-depth on-site assessments.

### Supplier Risk Self-Assessments

<table>
<thead>
<tr>
<th>Risk self-assessment tool 1</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour (average figure)</td>
<td>90%</td>
<td>90%</td>
<td>89%</td>
</tr>
<tr>
<td>Ethics (average figure)</td>
<td>89%</td>
<td>89%</td>
<td>86%</td>
</tr>
<tr>
<td>Health &amp; Safety (average figure)</td>
<td>93%</td>
<td>93%</td>
<td>92%</td>
</tr>
<tr>
<td>Environment (average figure)</td>
<td>90%</td>
<td>90%</td>
<td>89%</td>
</tr>
<tr>
<td>Amount of supplier facilities assessed</td>
<td>310</td>
<td>345</td>
<td>292</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour, Ethics (average figure)</td>
<td>88%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Health, Safety, Environment (average figure)</td>
<td>86%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Amount of supplier facilities assessed</td>
<td>61</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Coverage of hardware and mechanics estimated business value* | 90% | 90% | – |

Risk self-assessment level and coverage of the hardware and mechanics supplier facilities supporting Nokia business. The facility risk self-assessments of the suppliers have been done by one of two very similar risk self-assessment tool developed for our industry.

Any percentage above 85 is considered to be low risk.

*Estimated Business value is based on the estimated volume of the year

### On-Site Assessments

<table>
<thead>
<tr>
<th>2013</th>
<th>2012</th>
<th>2011</th>
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</thead>
<tbody>
<tr>
<td>Nokia Supplier Requirements assessment</td>
<td>42</td>
<td>23</td>
</tr>
<tr>
<td>Environmental &amp; Ethical in-depth assessments</td>
<td>13</td>
<td>10</td>
</tr>
</tbody>
</table>

On-site assessments of hardware and mechanics supplier facilities supporting Nokia business.
The most common findings from our on-site assessments were:

**Overtime hours**
- One of the most commonly found non-conformances at our suppliers’ facilities related to working hours. According to our requirements, the supplier shall ensure that working weeks do not exceed the maximum working hours as defined by local labor laws or more than 60 hours, whichever is stricter. This includes overtime as well. Furthermore, overtime work must be voluntary. Some of our suppliers still faced challenges in this area, with their overtime levels exceeding our specifications. To help address this, we provided support in finding lasting solutions for controlling and reducing overtime. We helped the supplier analyze the adequacy of their corrective actions, looking at their work-hour practices and systems, work shifts, and hiring. We offered benchmarking against the human resources practices in place at our factories, and provided consultancy with our in-house subject matter experts.

**Young workers**
- According to our requirements, child labor is strictly prohibited and we have zero tolerance for it. Under-age labor is rare in our supply chain. According to our requirements and the International Labor Organization guidelines, we do however allow young workers (above the age of 15 but under 18, or older if so specified by local legislation) to work in factories as long as they do not perform work that is likely to jeopardize their health or safety. This includes amongst others heavy lifting, night work, overtime or work with toxic materials. During the 2013 assessments, we came across a few cases where better management of young workers’ working hours was needed. This was a finding that we took very seriously and requested the suppliers to immediately act upon.

**Sub-supplier monitoring**
- Nokia requires its suppliers to set environmental, ethical, labor conditions, and health and safety requirements for their sub-contractors and expects full accountability from each tier in the supply chain for the sustainability performance of their suppliers. Based on our assessments in 2013, we discovered that although most suppliers had sub-supplier requirements in place, regular monitoring to ensure compliance could still be improved. We became actively involved to ensure that suppliers take corrective actions. Usually we offer whatever help they might need in this, including sub-contractor training, performance monitoring, and risk mapping.

**Chemical and waste management**
- IT manufacturing involves a number of process chemicals that can pose health and safety risks in the workplace. Our findings from 2013 indicated that proper management of chemicals could still be further improved, e.g. in regards to the consistent use of proper personnel protective equipment, adequate first
aid measures and definition of emergency responses. If a health or safety incident occurs, it is critical that each worker knows how to act. Holistic understanding of associated risks and proactive mitigation of these risks is one of the key areas we promote in our supplier collaboration.

GAINING A DEEPER UNDERSTANDING OF THE SOCIAL CONDITIONS AT OUR SUPPLIER SITES

Improving the social conditions along the supply chain requires a more holistic approach than merely monitoring compliance against requirements through assessments. To bring long-term value, we combine different approaches including capacity building, development programs and training.

Nokia introduced three new social metrics related to health, safety and labor issues in 2010. With these metrics, we sought a deeper understanding of the social conditions at our supplier sites. The metrics concern occupational injuries and illnesses, employee attrition and employee satisfaction surveys. They are similar to the key performance indicators in place at our own factories. We encourage our suppliers to have internal reduction targets in place for these metrics and use them to identify root causes of problems.

It is essential that the factory workers know their rights in regards to issues such as working hours, compensation and benefits, human treatment and non-discrimination, company rules and grievance procedures, and that they are offered efficient training programs.

In 2013, Nokia joined the IDH Electronics program, a multi-stakeholder initiative supporting the development of sustainable workforce management of suppliers in South China. We invited and enrolled two of our suppliers and one of our own factories for the program. Nokia was contributing by covering 50% of suppliers’ program costs, and by actively participating in the program steering.

<table>
<thead>
<tr>
<th>REPORTING YEAR</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIR, injury and illness incidence rate (average figure)</td>
<td>0.3</td>
<td>0.5</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Employee attrition (average figure)</td>
<td>19%</td>
<td>18%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Employee satisfaction survey (average figure)</td>
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<td>3.1</td>
<td>2.8</td>
<td></td>
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<tr>
<td>Coverage of hardware and mechanics estimated business value in reporting year*</td>
<td>85%</td>
<td>80%</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

* estimated business value is based on the estimated volume for the year

Injury and illness incidence rate represents the amount of reportable occupational injuries or illnesses for every 100 employees during the calendar year.

Employee attrition represents staff turnover; employees that leave the organization divided by the total number of employees.

Employee satisfaction survey practices at our supplier sites in 2012 was 3.0 on a scale from 1 to 4 (3.1 in 2011), which indicates that at supplier sites in general, around 60% of all employees are covered by an annual employee satisfaction survey.
Maplecroft’s Child Labor Risk Profiles in Countries Where We Directly Source Hardware, Components and Parts

Maplecroft, a global risk analytics, research and forecasting company has evaluated the risk levels and divided them into extreme, high, medium, medium and low. The risks have been evaluated on a general country level does not e.g. consider industrial or regional differences. Please note that this map might not cover all countries where our suppliers operate.

Pro-activeness against child labor

According to our requirements, child labor is strictly prohibited and we have zero tolerance for it. Suppliers located in countries with a high or extreme risk of child labor, shall also have a child labor remediation plan in place. The plan describes the actions to be taken in case a child is found working in the supplier premises. Although child labor is rare in our industry, we take a proactive approach to ensure that the suppliers know how to act in case of incident. In 2013, the on-site assessments we carried out had no findings indicating employment of underage children.

Elimination of all forms of forced or compulsory labor

In our industry, bonded labor commonly takes the form of high recruitment fees which workers sometimes have
to pay third-party labor agencies to gain employment at a factory. Workers are required to work for the factory until the debt for the recruitment fee has been paid to the labor agency. At Nokia we strictly prohibit this kind of activity and the use of forced, bonded or imprisoned labor. Factory workers shall therefore not be required to give financial deposits such as recruitment fees or hand over government-issued identification, passports or work permits to the supplier or labor agencies. We encourage our suppliers to pay for any possible employees’ recruitment fees or at minimum ensure that recruitment fee paid by candidates to labor agents does not exceed one month’s net salary. We also encourage that our suppliers include a regular monitoring of the recruitment agents and adherence to good practices into their supplier management activities to proactively avoid such issues arising.

Maplecroft has evaluated the risk levels and divided them into extreme, high, medium, medium and low. The risks have been evaluated on a general country level does not e.g. consider industrial or regional differences. Please note that this map might not cover all countries where our suppliers operate.
Respecting the right of factory workers to join labor unions

Employees must be free to form and join trade unions of their choice and to bargain collectively to raise concerns to the attention of the management. In cases where this is restricted by law, or unions have not been established, suppliers must ensure that an effective alternative exists.

During our assessments, we have come across instances where the workers’ right to choose and join a union has been limited, or where an alternative for ensuring effective dialog with management to enable collective bargaining does not operate sufficiently well. In such cases, corrective actions can take many forms. They can involve working with the supplier’s management to develop an understanding of the importance

Maplecroft’s freedom of association and collective bargain risk profiles in countries where we directly source hardware, components and parts

Maplecroft, a global risk analytics, research and forecasting company has evaluated the risk levels and divided them into extreme, high, medium, medium and low. The risks have been evaluated on a general country level does not e.g. consider industrial or regional differences. Please note that this map might not cover all countries where our suppliers operate.
of freedom of association and the benefits of a functioning, balanced dialog in the workplace. It can also involve addressing election mechanisms of employee representation, development of negotiation and representation skills, or it can involve focusing on the topics that the employee representatives are trying to raise with the management.

**DRIVING ENVIRONMENTAL IMPACT REDUCTIONS WITHIN THE SUPPLY CHAIN**

Environmentally responsible manufacturing and efficient use of resources in the supply chain is a key objective for us in our efforts to reduce the company’s overall environmental footprint. We want to ensure that our suppliers have a well-established environmental management system in place and that environmental aspects are effectively monitored at the facilities delivering components and parts for us. In 2008, we reported that majority of our suppliers accounting for at least 98% of our hardware purchasing had ISO 14001 certified environmental management systems in place. Since then we have been supporting our suppliers in ensuring operation of their management systems.

In accordance with Greenhouse Gas Protocol Scope 3 and based on primary data of good quality, we worked towards the establishment of a baseline for the impact of Nokia’s hardware, component and part suppliers to enable us set a holistic reduction target across the tier. Data collection and improvement programs focused on six environmental aspects and categories: energy use, greenhouse gas emissions, water use and water recycling rate as well as generated hazardous and non-hazardous waste. The reduction of energy and greenhouse gas emissions was a priority. In 2013, we began to see the benefits of work that started in 2007. By the end of 2013, we reached a data quality level at which we feel comfortable with externally sharing the impact figures.

In 2013, our goal to drive environmental impact reductions within the supply chain was based on three main activities;

1. establishing a baseline to the improved energy efficiency of the second tier of our supply chain (our hardware, component and part supplier base),
2. driving significant emission reductions with suppliers of key components or high impact areas and
3. going further down the chain.

While measurement and estimating the baseline was the first step, we started to encourage greater energy efficiency and reduced carbon emissions in our supply chain by helping suppliers establish carbon-reduction programs through energy audits, energy improvement action plans, and by sharing best practices to reduce energy use, greenhouse gas emissions and costs.

Secondly, with suppliers of key component or high-impact areas (such as integrated circuit, printed wired board and flex printed circuit suppliers) we agreed drive sig-
significant emission reductions. Component specific measurement units and reduction targets were developed in close collaboration with the suppliers, with progress monitored on a monthly basis. We started to see the results of our joint effort. For example between 2010 and 2013, the flex printed circuit suppliers’ greenhouse gas emissions decreased by a minimum of 30%. For the printed wired board production, the positive reduction trend started in 2011. Between 2011 and 2013, all printed wired board suppliers were able to reduce their greenhouse gas emissions. In 2013, this type of activity was expanded to other component types as well. Our third impact reduction effort, extending our efforts further down the supply chain targeting the third tier didn’t yet start in 2013.

**RESPONSIBLE SOURCING OF RAW MATERIALS**

Nokia considers activities that fuel conflict, violate human rights or lead to serious environmental degradation as unacceptable. We took continuous action to ensure that our products are manufactured from responsibly sourced materials. The issue is currently especially acute with the extraction and trade of minerals in the Democratic Republic of Congo and surrounding countries, where certain minerals have been linked to armed conflict and serious human rights abuses. In 2013, we continued investigation of mineral origins, evaluation of our suppliers’ due diligence activities towards conflict-free sourcing, and contribution to activities that support responsible sourcing from high-risk regions.

*2011 data not part of assurance scope
Data was received from suppliers and representing in average 85% (2012) and 84% (2011) of the estimated business value in the reporting year.

The reduction trend in energy use and greenhouse gas emissions we see today, is a result of both improvement activities at supplier sites and a cause of the changes our business operations have undergone in regards to products and production flows.
Evaluating raw material sourcing during 2013

Nokia has been working with suppliers for years to identify the mineral smelters in our supply chain. The smelters are the pinpoint of conflict-free sourcing, as all minerals flow to downstream users through a fairly limited number of smelters where minerals from various sources are mixed together. This is why it is crucial to identify and validate a critical mass of the smelters.

In 2013, we continued to collect smelter information and evaluate our suppliers’ due diligence activities with regards to conflict-free sourcing.

We used the standard industry template to gather this information from all of our direct hardware suppliers. We reviewed each template, provided feedback to all suppliers, and agreed on corrective actions as necessary. We are in the process of directing our suppliers to source from validated conflict-free smelters only. Further information on our conflict minerals due diligence efforts will be provided in our public SEC report on Form SD for 2013.

Supporting responsible minerals trade from central Africa

While we have a strict policy on the avoidance of minerals linked to conflict, our aim is not to request our supply chain to avoid minerals from the DRC and adjoining coun-

CASE: RAISING WATER AWARENESS IN THE SUPPLY CHAIN

Water availability is both a global and local issue. To holistically approach resource efficiency, metrics focusing on water use and water recycling rate have been integrated and are part of our other supplier related environmental impact monitoring. Through water risk assessments, we identified industry-level water risks of the various materials and components used in our products, and determined whether any of our suppliers have factories situated in areas of water stress.

In 2011, Nokia established a company-level water strategy covering responsible water management within the supply chain. In 2012 and 2013, we facilitated our first water workshops, a joint effort between Nokia’s own factories and supplier facilities located in water-scarce areas to raise awareness and to discuss concrete actions. The latest workshop was held in December 2013 in Mexico. Concrete actions took place to reduce water use at some of our supplier facilities. These activities included the reuse of steam condensate water, recycle utilization of water in production lines as well as recycling and reusing of drainage.
tries altogether, but rather we seek to support positive development and responsible mining. Although Nokia does not purchase any minerals directly, Nokia participates in several initiatives that support conflict-free trade from Central Africa. In 2013, we joined the Conflict-Free Tin Initiative program, a pilot initiative to source conflict-free tin from the Democratic Republic of Congo. An agreement was made between Nokia and one of our suppliers to include validated, conflict-free CFTI tin in Nokia’s solder paste. We also continued to support Solutions for Hope, a similar initiative for tantalum, as well as the Public-Private Alliance for Responsible Minerals Trade, a joint initiative between governments, companies, and civil society, to support the development of conflict-free supply chains in the Great Lakes Region of Central Africa.

**Our due diligence activities**

Nokia’s due diligence approach is aligned with OECD guidance for responsible sourcing of minerals. Our due diligence activities include:

- Our conflict minerals policy (part of our Natural Resources Policy) and its communication to suppliers
- Conflict minerals requirements for suppliers in the Nokia Supplier Requirements
- Inquiry into our suppliers’ due diligence activities and corrective actions as necessary
- Establishing long-term relationships with suppliers and working with them to drive improvements
- Identification of smelters in our supply chain with the EICC-GeSI reporting template
- Contribution to, and reliance on, industry activities (such as the Conflict-Free Smelter program) via the Conflict-Free Sourcing Initiative
- Participation in multi-stakeholder initiatives to support legitimate and responsible trade from Central Africa (for example Public-Private Alliance, Solutions for Hope, Conflict-Free Tin Initiative).

More information about our approach to responsible sourcing of minerals can be found on our website and in our conflict minerals policy.
INDEPENDENT ASSURANCE
Selected key corporate responsibility indicators have been assured by an independent third party, PricewaterhouseCoopers Oy (Nokia’s statutory auditor).

Their assurance report can be found in the following pages.
Independent Assurance Report

To the Management of Nokia Corporation

We have been engaged by the Management of Nokia Corporation (hereinafter also the “Company”) to perform a limited assurance engagement on selected Nokia Corporation’s sustainability information for the reporting period of 1 January 2013 to 31 December 2013 included in Nokia Corporation’s People & Planet Report 2013, as disclosed on the Company’s website (hereinafter the “Selected sustainability information”).

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. The reporting boundary is Nokia, unless otherwise stated. “Nokia” means Nokia Group excluding Networks (formerly Nokia Solutions and Networks).

Environment:
• Facility related direct and indirect energy consumption and related greenhouse gas emissions (also Nokia Group) and comparison of year 2013 GHG emissions to base year 2006 emissions. For Nokia Group, Pricewaterhouse-Coopers Oy has not performed any assurance procedures on Networks’ (formerly Nokia Solutions and Networks) amounts. CO2 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.
• Water usage in facilities and recycling (also Nokia Group). For Nokia Group, PricewaterhouseCoopers Oy has not performed any assurance procedures on Networks’ (formerly Nokia Solutions and Networks) amounts.
• Green electrical energy portion of total electricity consumption (also Nokia Group). For Nokia Group, PricewaterhouseCoopers Oy has not performed any assurance procedures on Networks’ (formerly Nokia Solutions and Networks) amounts.
• VOC (Volatile Organic Compound) emissions from factories.
• Waste amounts and treatment.
• RoHS and REACH compliance of products.
• Charger no-load power consumption (average sold p.a.).
• Air travel emissions.
HR: The reporting boundary is Devices & Services
- Employees in production.
- Total training cost and Training cost/employee.
- Women in senior management.
- Non-Finnish nationalities in senior management.
- Rate of employee turnover (Voluntary attrition).
- Total incident frequency rate (TIFR) in production.

Supply Chain: The indicators cover Nokia's direct hardware and mechanics suppliers (the second tier of Nokia's supply chain).
- Suppliers’ compliance with Nokia Supplier Requirements: number of supplier assessments during 2013.
- Percentage of suppliers reporting on health, safety and labor metrics and average metrics results.
- Suppliers’ compliance with Nokia Supplier Requirements: number of supplier facilities using a risk self-assessment tool and average results.
- Environmental impact of supplier base (energy and CO₂ e).

Management’s responsibility
The Management of Nokia Corporation is responsible for preparing the Selected sustainability information in accordance with the reporting criteria as set out in the Company’s documented standards and GHG Protocol (hereinafter the “Reporting criteria”).

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 prepared in accordance with the terms of our engagement. We do not accept, or assume responsibility to anyone else, except to Nokia Corporation for our work, for this report, or for the conclusions that we have reached.

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 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 the Company.
- Interviewing employees responsible for collecting and reporting the Selected sustainability information.
- Testing the accuracy and completeness of the Selected sustainability information from original documents and systems on a sample basis.
- Testing the consolidation of the Selected sustainability information and performing recalculations on a sample basis.

**Conclusion**

Based on our work described in this report, 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. When reading our assurance report, the inherent limitations to the accuracy and completeness of sustainability information should be taken into consideration.

Helsinki, 20 May 2014

**PricewaterhouseCoopers Oy**

Sirpa Juutinen  
Partner  
Sustainability & Climate Change

Maj-Lis Steiner  
Director, Authorised Public Accountant  
Sustainability & Climate Change
We have used the GRI G4 guidelines to prepare our Sustainability report for the year 2013. We have executed a materiality analysis for identifying material aspects significant to Nokia’s and its stakeholders’ business. In this GRI index table we disclose all the material aspects identified as well as some indicators beyond significant materiality to us.
<table>
<thead>
<tr>
<th>STANDARD DISCLOSURE</th>
<th>STANDARD DISCLOSURE TITLE</th>
<th>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</th>
<th>DISCLOSED IN 20-F</th>
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<tbody>
<tr>
<td><strong>Strategy and analysis</strong></td>
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<tr>
<td>G4-1</td>
<td>Provide a statement from the most senior decision-maker of the organization.</td>
<td>2.0 Message from Risto Siilasmaa</td>
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<tr>
<td><strong>Organizational profile</strong></td>
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<tr>
<td>G4-3</td>
<td>Report the name of the organization.</td>
<td>First page</td>
<td>First page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-4</td>
<td>Report the primary brands, products, and services.</td>
<td>4.1 Nokia in 2013</td>
<td>4B. Business overview</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-5</td>
<td>Report the location of the organization’s headquarters.</td>
<td>4.1 Nokia in 2013</td>
<td>First page</td>
<td></td>
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</tr>
<tr>
<td>G4-6</td>
<td>Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.</td>
<td>4.1 Nokia in 2013</td>
<td>4D. Property, plants and equipment</td>
<td></td>
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<tr>
<td>G4-7</td>
<td>Report the nature of ownership and legal form.</td>
<td>Introduction and use of certain terms; 7A. Major shareholders</td>
<td></td>
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<tr>
<td>G4-8</td>
<td>Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).</td>
<td>4.1 Nokia in 2013</td>
<td>5A. Operating results</td>
<td></td>
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<tr>
<td>G4-9</td>
<td>Report the scale of the organization, including: • Total number of employees • Total number of operations • Net sales • Total capitalization broken down in terms of debt and equity • Quantity of products or services provided</td>
<td>4.1 Nokia in 2013</td>
<td>3A. Selected financial data; 5A. Operating results; 6D. Employees.</td>
<td></td>
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<tr>
<td>G4-10</td>
<td>a. Report the total number of employees by employment contract and gender b. Report the total number of permanent employees by employment type and gender c. Report the total workforce by employees and supervised workers and by gender d. Report the total workforce by region and gender e. Report whether a substantial portion of the organization’s work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors f. Report any significant variations in employment numbers</td>
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<tr>
<td>G4-11</td>
<td>Report the percentage of total employees covered by collective bargaining agreements.</td>
<td>7.4 Ensuring the highest standard for labor conditions at our factories</td>
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<td>Nokia recognizes the right of employees to join unions and enter collective bargaining agreements. However, practicalities vary according to country laws and practices. No consolidated data available.</td>
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<td>See Independent Assurance Report on p.120, “Employees in production”; “Women in senior management”; and “Non-Finnish nationalities in senior management”. The reporting boundary is Devices &amp; Services.</td>
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<tr>
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<tr>
<td>G4-12</td>
<td>Organizational profile</td>
<td>10.7 Driving improvements with suppliers</td>
<td>4B. Business overview</td>
<td></td>
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<tr>
<td>G4-13</td>
<td>Report any significant changes during the reporting period regarding the organization’s size, structure, ownership, or its supply chain, including: • Changes in the location of, or changes in, operations, including facility openings, closings, and expansions • Changes in the share capital structure and other capital formation, maintenance, and alteration operations • Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination</td>
<td>4.1 Nokia in 2013</td>
<td>5A. Operating results; 8B. Significant changes</td>
<td></td>
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<tr>
<td>G4-14</td>
<td>Report whether and how the precautionary approach or principle is addressed by the organization.</td>
<td>6.3 Managing sustainability</td>
<td></td>
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<tr>
<td>G4-15</td>
<td>List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.</td>
<td>10.1 Working with key stakeholders; 10.2 Addressing challenges with raw materials, resource efficiency and climate targets with policymakers</td>
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<tr>
<td>G4-16</td>
<td>List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization: • Holds a position on the governance body • Participates in projects or committees • Provides substantive funding beyond routine membership dues • Views membership as strategic</td>
<td>10.2 Addressing challenges with raw materials, resource efficiency and climate targets with policymakers; 10.3 Supporting our trade customers’ sustainability agenda; 10.4 Engaging with developers, universities and other academic institutions; 10.5 Looking beyond traditional cooperation with NGOs</td>
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</table>
**Identified material aspects and boundaries**

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</thead>
<tbody>
<tr>
<td>G4-17</td>
<td>a. List all entities included in the organization’s consolidated financial statements or equivalent documents. b. Report whether any entity included in the organization’s consolidated financial statements or equivalent documents is not covered by the report. The organization can report on this Standard Disclosure by referencing the information in publicly available consolidated financial statements or equivalent documents.</td>
<td>5A. Operating results</td>
<td></td>
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<tr>
<td>G4-18</td>
<td>a. Explain the process for defining the report content and the Aspect Boundaries. b. Explain how the organization has implemented the Reporting Principles for Defining Report Content.</td>
<td>5.2 Identifying key sustainability topics for Nokia</td>
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<tr>
<td>G4-19</td>
<td>List all the material Aspects identified in the process for defining report content.</td>
<td>5.2 Identifying key sustainability topics for Nokia; 12. Global Reporting Initiative Index</td>
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<tr>
<td>G4-20</td>
<td>For each material Aspect, report the Aspect Boundary within the organization.</td>
<td>5.2 Identifying key sustainability topics for Nokia; 12. Global Reporting Initiative Index</td>
<td></td>
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<tr>
<td>G4-21</td>
<td>For each material Aspect, report the Aspect Boundary outside the organization.</td>
<td>5.2 Identifying key sustainability topics for Nokia; 12. Global Reporting Initiative Index</td>
<td></td>
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<tr>
<td>G4-22</td>
<td>Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.</td>
<td>Possible restatements have been identified in Key Data table footnotes.</td>
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<tr>
<td>G4-23</td>
<td>Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.</td>
<td>5A. Operating results; 8B. Significant changes</td>
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</table>

**Stakeholder engagement**

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<tr>
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<tbody>
<tr>
<td>G4-24</td>
<td>Provide a list of stakeholder groups engaged by the organization.</td>
<td>7. Valuing people in everything we do; 10. Making change happen together</td>
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<tr>
<td>G4-25</td>
<td>Report the basis for identification and selection of stakeholders with whom to engage.</td>
<td>10. Making change happen together</td>
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<tr>
<td>G4-26</td>
<td>Report the organization’s approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.</td>
<td>5.2 Identifying key sustainability topics for Nokia; 7. Valuing people in everything we do; 10. Making change happen together</td>
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<tr>
<td>STANDARD DISCLOSURE</td>
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<tr>
<td><strong>Stakeholder engagement</strong></td>
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<tr>
<td>G4-27</td>
<td>Report 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. Report the stakeholder groups that raised each of the key topics and concerns.</td>
<td>5.2 Identifying key sustainability topics for Nokia; 7. Valuing people in everything we do; 10. Making change happen together</td>
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<tr>
<td><strong>Report profile</strong></td>
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<tr>
<td>G4-28</td>
<td>Reporting period (such as fiscal or calendar year) for information provided.</td>
<td>1.0 About this report</td>
<td></td>
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<tr>
<td>G4-29</td>
<td>Date of most recent previous report (if any).</td>
<td>7.5.2013</td>
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<tr>
<td>G4-30</td>
<td>Reporting cycle (such as annual, biennial).</td>
<td>1.0 About this report</td>
<td></td>
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</tr>
<tr>
<td>G4-31</td>
<td>Provide the contact point for questions regarding the report or its contents.</td>
<td>1.0 About this report</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
| G4-32               | a. Report the ‘in accordance’ option the organization has chosen.  
                      b. Report the GRI Content Index for the chosen option.  
                      c. Report the reference to the External Assurance Report, if the report has been externally assured. |                       | The CORE Option. See more 12. Global Reporting Initiative. Selected key corporate responsibility indicators have been assured by an independent third party, PricewaterhouseCoopers Oy (Nokia’s statutory auditor). |                  |
| G4-33               | a. Report the organization’s policy and current practice with regard to seeking external assurance for the report.  
                      b. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided.  
                      c. Report the relationship between the organization and the assurance providers.  
                      d. Report whether the highest governance body or senior executives are involved in seeking assurance for the organization’s sustainability report. | 1.0 About this report; 11. Independent assurance |                       |                  |
<p>| <strong>Governance</strong>     |                                           |                  |                       |                  |
| G4-34               | Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts. | 6.3 Managing sustainability | 6A. Directors and senior Management; 6C. Board practices |                  |
| <strong>Ethics and integrity</strong> |                                           |                  |                       |                  |
| G4-56               | Describe the organization’s values, principles, standards and norms of behavior such as codes of conduct and codes of ethics. | 7.1 Respecting human rights; 7.3 Applying the highest standards for good corporate governance and anticorruption; 7.5 Offering a good place to work for all our employees | 4B. Business overview; 168. Code of ethics |                  |</p>
<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</th>
<th>DISCLOSED IN 20-F</th>
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<th>EXTERNAL ASSURANCE</th>
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<tbody>
<tr>
<td>Economic</td>
<td>4.2 Our Economic Impact; 6.3 Managing sustainability; 7.5 Offering a Good Place to Work for All Our employees; 9. Unleashing the Potential of Technology for Good</td>
<td>68. Compensation; F-2, F-14-15, F-32-35</td>
<td>Management approach disclosed in conjunction with information on each aspect.</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td>8.2 Improving energy efficiency in our facilities and ways of working; 8.3 Saying no to waste; 8.4 Paying attention to our water usage; 8.6 Protecting biodiversity; 8.7 A leading environmentally-responsible product range; 8.9 Making a difference with optimized and certified packaging; 8.10 Creating greener logistics; 10.7 Driving improvements with suppliers</td>
<td>13. Key data</td>
<td>Management approach disclosed in conjunction with information on each aspect.</td>
<td></td>
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<tr>
<td>Labor Practices and Decent Work</td>
<td>7.4 Ensuring the highest standard for labor conditions at our factories; 7.5 Offering a good place to work for all our employees; 10.7 Driving improvements with suppliers</td>
<td></td>
<td>Management approach disclosed in conjunction with information on each aspect.</td>
<td></td>
</tr>
<tr>
<td>Human Rights</td>
<td>7.1 Respecting human rights; 7.3 Applying the highest standards for good corporate governance and anticorruption; 7.4 Ensuring the highest standard for labor conditions at our factories; 7.5 Offering a good place to work for all our employees; 10.7 Driving improvements with suppliers</td>
<td></td>
<td>Management approach disclosed in conjunction with information on each aspect.</td>
<td></td>
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<tr>
<td>CATEGORY</td>
<td>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</td>
<td>DISCLOSED IN 20-F</td>
<td>ADDITIONAL INFORMATION</td>
<td>EXTERNAL ASSURANCE</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------------</td>
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<td>-------------------</td>
</tr>
<tr>
<td>Society</td>
<td>4.2 Our economic impact; 7.3 Applying the highest standards for good corporate governance and anticorruption; 7.5 Offering a good place to work for all our employees</td>
<td></td>
<td>Management approach disclosed in conjunction with information on each aspect.</td>
<td></td>
</tr>
<tr>
<td>Product Responsibility</td>
<td>7.2 Protecting people's privacy; 8.7 A leading environmentally-responsible product range; 8.12 Product safety is a top priority for us; 10.3 Supporting our trade customers' sustainability agenda</td>
<td></td>
<td>Management approach disclosed in conjunction with information on each aspect.</td>
<td></td>
</tr>
</tbody>
</table>

1 ABOUT THIS REPORT
2 A MESSAGE FROM RISTO SIILASMAA
3 ACHIEVEMENTS AND CHALLENGES IN 2013
4 ABOUT NOKIA
5 IDENTIFYING KEY SUSTAINABILITY TOPICS
6 OUR SUSTAINABILITY STRATEGY: CONNECTING TO EMPOWER
7 VALUING PEOPLE IN EVERYTHING WE DO
8 BEING GREEN AND CLEAN
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10 MAKING CHANGE HAPPEN TOGETHER
11 INDEPENDENT ASSURANCE
12 GLOBAL REPORTING INITIATIVE
13 NOKIA KEY DATA
### Economic Performance

<table>
<thead>
<tr>
<th>Aspect: economic performance</th>
<th><strong>G4-EC1</strong></th>
<th>Direct economic value generated and distributed</th>
<th>4.2 Our Economic Impact</th>
<th>F-2</th>
<th>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 chapter 9. Unleashing the Potential of Technology for Good</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>G4-EC2</strong></td>
<td>Financial implications and other risks and opportunities for the organization’s activities due to climate change</td>
<td>6.3 Managing sustainability</td>
<td></td>
<td>Not expected to cause material financial implications in the near term.</td>
</tr>
<tr>
<td></td>
<td><strong>G4-EC3</strong></td>
<td>Coverage of the organization’s defined benefit plan obligations</td>
<td>6B. Compensation; F-14-15, F-32-35</td>
<td></td>
<td>We have disclosed the financials of defined benefit schemes and country headcount and do not consider the actual participation numbers to be material.</td>
</tr>
<tr>
<td></td>
<td><strong>G4-EC4</strong></td>
<td>Financial assistance received from government</td>
<td></td>
<td></td>
<td>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 2013, Nokia received around 7 million EUR which was mainly used for co-operation projects with universities and Finnish business partners.</td>
</tr>
</tbody>
</table>

### Market Presence

| Aspect: market presence | **G4-EC5** | Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation | | | 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. |

### Indirect Economic Impacts

<table>
<thead>
<tr>
<th>Aspect: indirect economic impacts</th>
<th><strong>G4-EC6</strong></th>
<th>Proportion of senior management hired from the local community at significant locations of operation</th>
<th>7.5 Offering a Good Place to Work for All Our employees</th>
<th></th>
<th>Our policy is to employ local people wherever we work.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>G4-EC7</strong></td>
<td>Development and impact of infrastructure investments and services supported</td>
<td>9. Unleashing the Potential of Technology for Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>G4-EC8</strong></td>
<td>Significant indirect economic impacts, including the extent of impacts</td>
<td>4.2 Our Economic Impact; 9. Unleashing the Potential of Technology for Good</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### CATEGORY: ENVIRONMENTAL

<table>
<thead>
<tr>
<th>Material aspect: materials</th>
<th>STANDARD DISCLOSURE</th>
<th>STANDARD DISCLOSURE TITLE</th>
<th>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</th>
<th>DISCLOSED IN 20-F</th>
<th>MORE DETAILS</th>
<th>EXTERNAL ASSURANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4-EN1 Materials used by weight or volume</td>
<td>8.7 A leading environmentally-responsible product range</td>
<td>The packaging materials are disclosed. Nokia requires all parts and components manufacturers to notify all substances used in manufacturing and thus we are able to provide a detailed disclosure of our devices. For consumers we publish the used materials categorized in a chart, due to the thorough breakdown of the materials. Nokia Substance List is the material requirement specification for parts and components delivered by the suppliers to Nokia. The total materials used are not reported in GRI terms because part of the materials is Nokia suppliers' trade-secret information.</td>
<td></td>
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</tbody>
</table>

| G4-EN2 Percentage of materials used that are recycled input materials | 8.7 A leading environmentally-responsible product range; 8.9 Making a difference with optimized and certified 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. |

### Material aspect: energy

| G4-EN3 Energy consumption within the organization | 8.2 Improving energy efficiency in our facilities and ways of working; 13. Key data | See Independent Assurance Report on p.119, "Facility related direct and indirect energy consumption and related greenhouse gas emissions (also Nokia Group)"; and "Green electrical energy portion of total electricity consumption (also Nokia Group)". |

| G4-EN4 Energy consumption outside of the organization | 8.7 A leading environmentally-responsible product range |  |

<p>| G4-EN5 Energy intensity | 8.2 Improving energy efficiency in our facilities and ways of working; 13. Key data |  |</p>
<table>
<thead>
<tr>
<th>CATEGORY: ENVIRONMENTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STANDARD DISCLOSURE</strong></td>
</tr>
<tr>
<td><strong>Material aspect: energy</strong></td>
</tr>
<tr>
<td>G4-EN6</td>
</tr>
<tr>
<td>G4-EN7</td>
</tr>
<tr>
<td><strong>Material aspect: water</strong></td>
</tr>
<tr>
<td>G4-EN8</td>
</tr>
<tr>
<td>G4-EN9</td>
</tr>
<tr>
<td>G4-EN10</td>
</tr>
<tr>
<td><strong>Material aspect: biodiversity</strong></td>
</tr>
<tr>
<td>G4-EN11</td>
</tr>
<tr>
<td>G4-EN12</td>
</tr>
<tr>
<td><strong>Material aspect: emissions</strong></td>
</tr>
<tr>
<td>G4-EN15</td>
</tr>
<tr>
<td>G4-EN16</td>
</tr>
<tr>
<td>CATEGORY: ENVIRONMENTAL</td>
</tr>
<tr>
<td>-------------------------</td>
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<tr>
<td>Material aspect: emissions</td>
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<tr>
<td>Material aspect: effluents and waste</td>
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<tr>
<td></td>
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<tr>
<td>Material aspect: products and services</td>
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<td></td>
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<tr>
<td>ASPECT</td>
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<tr>
<td>compliance</td>
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<tr>
<td>transport</td>
</tr>
</tbody>
</table>
| supplier environmental assessment | environmental | G4-EN32 | Percentage of new suppliers that were screened using environmental criteria |  | 10.7 Driving improvements with suppliers | | See Independent Assurance Report on p.120, “Suppliers’ compliance with Nokia Supplier Requirements: number of supplier assessments during 2013”.
| G4-EN33 | Significant actual and potential negative environmental impacts in the supply chain and actions taken |  | 10.7 Driving improvements with suppliers | | | We see this indicator as material for our supply chain. For many years we have been working with this topic and have been partly disclosing the information. In order for us to reach the data quality and completeness level necessary for full disclosure reporting we are investing even more resources to ensure systematic and holistic assessments across the supply chain. We will aim at increasing our reporting coverage in the next reporting round to ultimately reach full disclosure of material indicators. |
| Environment grievance mechanisms | environmental | G4-EN34 | Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms | | | Not known any. | |
### CATEGORY: SOCIAL  
#### SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK

<table>
<thead>
<tr>
<th>STANDARD DISCLOSURE</th>
<th>STANDARD DISCLOSURE TITLE</th>
<th>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</th>
<th>DISCLOSED IN 20-F</th>
<th>ADDITIONAL INFORMATION</th>
<th>EXTERNAL ASSURANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aspect: employment</strong></td>
<td></td>
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</tr>
<tr>
<td>G4-LA1</td>
<td>Total number and rates of new employee hires and employee turnover by age group, gender and region</td>
<td>7.5 Offering a good place to work for all our employees</td>
<td>Nokia does not follow employee turnover, employee hires, return from parental leave and their retention by age group, gender or region and due that the data for this disclosure is not reported.</td>
<td>See Independent Assurance Report on p.120, “Rate of employee turnover (Voluntary attrition)”. The reporting boundary is Devices &amp; Services.</td>
<td></td>
</tr>
<tr>
<td>G4-LA2</td>
<td>Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation</td>
<td>6B. Compensation F-14-15, F-32-35</td>
<td></td>
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<tr>
<td>G4-LA3</td>
<td>Return to work and retention rates after parental leave, by gender</td>
<td>7.5 Offering a good place to work for all our employees</td>
<td></td>
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<tr>
<td><strong>Aspect: labor/management relations</strong></td>
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<tr>
<td>G4-LA4</td>
<td>Minimum notice periods regarding operational changes, including whether these are specified in collective agreements</td>
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<tr>
<td><strong>Aspect: occupational health and safety</strong></td>
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<tr>
<td>G4-LA6</td>
<td>Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender</td>
<td>7.4 Ensuring the highest standard for labor conditions at our factories</td>
<td>For 2013, the following information was reported for Nokia employees and external for all Nokia factories. There were no occupational diseases reported for 2013 (Note: Nokia excludes ergonomic incidents in this category). There were no fatalities. 512 lost work days were reported for employees and externals as a result of a work related injuries or illness. Absenteeism information is not available.</td>
<td>See Independent Assurance Report on p.120, “Total incident frequency rate (TIFR) in production”. The reporting boundary is Devices &amp; Services.</td>
<td></td>
</tr>
<tr>
<td>G4-LA7</td>
<td>Workers with high incidence or high risk of diseases related to their occupation</td>
<td>7.4 Ensuring the highest standard for labor conditions at our factories</td>
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<tr>
<td><strong>Aspect: training and education</strong></td>
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<tr>
<td>G4-LA9</td>
<td>Average hours of training per year per employee by gender, and by employee category</td>
<td>7.5 Offering a good place to work for all our employees</td>
<td>Nokia does not track training hours, only the cost of training.</td>
<td>See Independent Assurance Report on p.120, “Total training cost and Training cost/employee”. The reporting boundary is Devices &amp; Services.</td>
<td></td>
</tr>
<tr>
<td>G4-LA10</td>
<td>Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings</td>
<td>7.5 Offering a good place to work for all our employees</td>
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</tbody>
</table>
## CATEGORY: SOCIAL
### SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK

<table>
<thead>
<tr>
<th>STANDARD DISCLOSURE</th>
<th>STANDARD DISCLOSURE TITLE</th>
<th>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</th>
<th>DISCLOSED IN 20-F</th>
<th>ADDITIONAL INFORMATION</th>
<th>EXTERNAL ASSURANCE</th>
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<tbody>
<tr>
<td><strong>Aspect: training and education</strong></td>
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<tr>
<td>G4-LA11</td>
<td>Percentage of employees receiving regular performance and career development reviews, by gender and by employee category</td>
<td>7.5 Offering a good place to work for all our employees</td>
<td></td>
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<tr>
<td><strong>Aspect: diversity and equal opportunity</strong></td>
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<tr>
<td>G4-LA12</td>
<td>Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity</td>
<td>7.5 Offering a good place to work for all our employees</td>
<td>6A. Directors and Senior Management</td>
<td>Nokia does not track breakdown of employees by minority group memberships and according to age group. Number of women (2) / men (7) in board, and total number (9) of board members. Number of women (2) / men (7) in leadership team, and total number (9) of leadership team members.</td>
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<tr>
<td><strong>Aspect: equal remuneration for women and men</strong></td>
<td></td>
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<tr>
<td>G4-LA13</td>
<td>Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation</td>
<td>7.5 Offering a good place to work for all our employees</td>
<td></td>
<td>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.</td>
<td></td>
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<tr>
<td><strong>Aspect: supplier assessment for labor practices</strong></td>
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<tr>
<td>G4-LA14</td>
<td>Percentage of new suppliers that were screened using labor practices criteria</td>
<td>10.7 Driving improvements with suppliers</td>
<td></td>
<td>See Independent Assurance Report on p.120, “Percentage of suppliers reporting on health, safety and labor metrics and average metrics results”, and “Suppliers’ compliance with Nokia Supplier Requirements: number of supplier facilities using a risk self-assessment tool and average results”.</td>
<td></td>
</tr>
<tr>
<td>Standard Disclosure</td>
<td>Standard Disclosure Title</td>
<td>Disclosed in Nokia People &amp; Planet Report</td>
<td>Disclosed in 20-F</td>
<td>Additional Information</td>
<td>External Assurance</td>
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</tr>
<tr>
<td>G4-LA15</td>
<td>Significant actual and potential negative impacts for labor practices in the supply chain and actions taken 10.7 Driving improvements with suppliers</td>
<td>We see this indicator as material for our supply chain. For many years we have been working with this topic and have been partly disclosing the information. In order for us to reach the data quality and completeness level necessary for full disclosure reporting we are investing even more resources to ensure systematic and holistic assessments across the supply chain. We will aim at increasing our reporting coverage in the next reporting round to ultimately reach full disclosure of material indicators.</td>
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</table>

**Aspect: labor practices grievance mechanisms**

| G4-LA16             | Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms | No consolidated data available. | |

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2. A MESSAGE FROM RISTO SIILASMAA
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11. INDEPENDENT ASSURANCE
12. GLOBAL REPORTING INITIATIVE
13. NOKIA KEY DATA
### Aspects: Investment

<table>
<thead>
<tr>
<th>Disclosure</th>
<th>Title</th>
<th>Disclosure in Nokia People &amp; Planet Report</th>
<th>Disclosure in 20-F</th>
<th>Additional Information</th>
<th>External Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4-HR1</td>
<td>Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening</td>
<td>7.1 Respecting human rights</td>
<td>No significant investments. Nokia conducts human rights/social impact assessment for all major new investments e.g. new factories.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-HR2</td>
<td>Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained</td>
<td>7.3 Applying the highest standards for good corporate governance and anticorruption</td>
<td>Nokia does not track training hours. However 94% of Nokia employees have been trained 2013.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Aspects: Non-Discrimination

<table>
<thead>
<tr>
<th>Disclosure</th>
<th>Title</th>
<th>Disclosure in Nokia People &amp; Planet Report</th>
<th>Disclosure in 20-F</th>
<th>Additional Information</th>
<th>External Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4-HR3</td>
<td>Total number of incidents of discrimination and corrective actions taken</td>
<td>7.3 Applying the highest standards for good corporate governance and anticorruption</td>
<td>At Nokia we have a well-established Ethics and Compliance Office and Internal Investigation Committee who oversee our Discrimination &amp; Harassment Policy. Employees can access the full Discrimination &amp; Harassment Policy from the intranet and are free to contact their Manager, HR Central, or the ethics office either personally or anonymously with mediation and appropriate action being conducted and escalated based on the severity of each case. While HR Central has established a consultancy forum which has set out a process for handling the grievance incidents of all employment matters including incidents of discrimination, we are also in the process of piloting how to manage and scale globally an incident database. At present we do not maintain an incident database, but rather deal with incidents confidentially on a case-by-case basis. Thus information in GRI format not available.</td>
<td></td>
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</tbody>
</table>

### Aspects: Freedom of Association and Collective Bargaining

<table>
<thead>
<tr>
<th>Disclosure</th>
<th>Title</th>
<th>Disclosure in Nokia People &amp; Planet Report</th>
<th>Disclosure in 20-F</th>
<th>Additional Information</th>
<th>External Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4-HR4</td>
<td>Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights</td>
<td>7.1 Respecting human rights; 7.3 Applying the highest standards for good corporate governance and anticorruption; 7.4 Ensuring the highest standard for labor conditions at our factories</td>
<td>The risks have been recognized but they are not significant in our operations. Mitigation activities for these risks are implemented.</td>
<td></td>
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</tr>
<tr>
<td>CATEGORY: SOCIAL</td>
<td>SUB-CATEGORY: HUMAN RIGHTS</td>
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</tbody>
</table>

### STANDARD DISCLOSURE TITLE

**G4-HR5** Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor

**7.1 Respecting human rights; 7.3 Applying the highest standards for good corporate governance and anticorruption; 7.4 Ensuring the highest standard for labor conditions at our factories; 10.7 Driving improvements with suppliers**

The risks have been recognized but they are not significant in our operations. We review official documentation at hire. Mitigation activities for these risks are implemented.

### Aspect: child labor

### G4-HR6 Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor

**7.1 Respecting human rights; 7.3 Applying the highest standards for good corporate governance and anticorruption; 7.4 Ensuring the highest standard for labor conditions at our factories**

The risks have been recognized but they are not significant in our operations. Mitigation activities for these risks are implemented.

### Aspect: forced or compulsory labor

### G4-HR7 Percentage of security personnel trained in the organization’s human rights policies or procedures that are relevant to operations

On highest level the Code of Conduct training includes some security topics and it is the only mandatory training for all the employees with Nokia.

### Aspect: security practices

### G4-HR10 Percentage of new suppliers that were screened using human rights criteria

10.7 Driving improvements with suppliers

See Independent Assurance Report on p.120, “Suppliers' compliance with Nokia Supplier Requirements: number of supplier facilities using a risk self-assessment tool and average results”.

### Aspect: supplier human rights assessment

### G4-HR11 Significant actual and potential negative human rights impacts in the supply chain and actions taken

10.7 Driving improvements with suppliers

We see this indicator as material for our supply chain. For many years we have been working with this topic and have been partly disclosing the information. In order for us to reach the data quality and completeness level necessary for full disclosure reporting we are investing even more resources to ensure systematic and holistic assessments across the supply chain. We will aim at increasing our reporting coverage in the next reporting round to ultimately reach full disclosure of material indicators.
<table>
<thead>
<tr>
<th>Aspect: human rights grievance mechanisms</th>
<th>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</th>
<th>DISCLOSED IN 20-F</th>
<th>ADDITIONAL INFORMATION</th>
<th>EXTERNAL ASSURANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4-HR12 Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms</td>
<td>The formal channel to receive grievances in Nokia is the Board Channel. During 2013 there were no grievances about human rights impacts filed through formal grievance mechanisms.</td>
<td></td>
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</tbody>
</table>
### Aspect: anti-corruption

<table>
<thead>
<tr>
<th>STANDARD Disclosure</th>
<th>STANDARD Disclosure Title</th>
<th>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</th>
<th>DISCLOSED IN 20-F</th>
<th>ADDITIONAL INFORMATION</th>
<th>EXTERNAL ASSURANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4-SO3</td>
<td>Total number and percentage of operations assessed for risks related to corruption and the significant risks identified</td>
<td>7.3 Applying the highest standards for good corporate governance and anticorruption; 7.3 Offering a good place to work for all our employees</td>
<td></td>
<td>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 our factories i.e. our 1st tier suppliers every second year. There were no significant risks identified during 2013. There is a continuous process going on related to screening the potential risks areas. Mitigation activities for these risks are implemented.</td>
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</tr>
<tr>
<td>G4-SO4</td>
<td>Communication and training on anti-corruption policies and procedures</td>
<td>7.3 Applying the highest standards for good corporate governance and anticorruption</td>
<td></td>
<td>All employees receive regular communications and training of Code of Conduct.</td>
<td></td>
</tr>
<tr>
<td>G4-SO5</td>
<td>Confirmed incidents of corruption and actions taken</td>
<td>7.3 Applying the highest standards for good corporate governance and anticorruption</td>
<td></td>
<td>Nokia has no governmental investigations or litigation involving corruption. However, from time to time we find that our internal standards have not been followed. In those situations we take corrective action, including disciplinary action, as appropriate.</td>
<td></td>
</tr>
</tbody>
</table>

### Aspect: public policy

<table>
<thead>
<tr>
<th>STANDARD Disclosure</th>
<th>STANDARD Disclosure Title</th>
<th>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</th>
<th>DISCLOSED IN 20-F</th>
<th>ADDITIONAL INFORMATION</th>
<th>EXTERNAL ASSURANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4-SO6</td>
<td>Total value of political contributions by country and recipient/beneficiary</td>
<td>7.3 Applying the highest standards for good corporate governance and anticorruption</td>
<td></td>
<td>Nokia does not contribute to political parties or politicians.</td>
<td></td>
</tr>
</tbody>
</table>

### Aspect: anti-competitive behavior

<table>
<thead>
<tr>
<th>STANDARD Disclosure</th>
<th>STANDARD Disclosure Title</th>
<th>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</th>
<th>DISCLOSED IN 20-F</th>
<th>ADDITIONAL INFORMATION</th>
<th>EXTERNAL ASSURANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4-SO7</td>
<td>Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes</td>
<td>7.3 Applying the highest standards for good corporate governance and anticorruption</td>
<td></td>
<td>There were no significant legal actions against Nokia for anti-competitive behavior, anti-trust or monopoly practices in 2013.</td>
<td></td>
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</tbody>
</table>

### Aspect: compliance

<table>
<thead>
<tr>
<th>STANDARD Disclosure</th>
<th>STANDARD Disclosure Title</th>
<th>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</th>
<th>DISCLOSED IN 20-F</th>
<th>ADDITIONAL INFORMATION</th>
<th>EXTERNAL ASSURANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4-SO8</td>
<td>Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations</td>
<td>7.3 Applying the highest standards for good corporate governance and anticorruption</td>
<td></td>
<td>There were no significant fines or non-monetary sanctions for noncompliance with laws and regulations during 2013.</td>
<td></td>
</tr>
<tr>
<td>Aspect: customer health and safety</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>----------------------------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>G4-PR1</strong> Percentage of significant product and service categories for which health and safety impacts are assessed for improvement</td>
<td>8.7 A leading environmentally-responsible product range; 8.12 Product Safety is a top priority for us</td>
<td>Health and safety are essential part of our products and services life cycle management, from manufacturing to end of life.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>G4-PR2</strong> Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes</td>
<td>2 incidents of non-compliance resulting no further actions required by authority.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aspect: product and service labeling</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>G4-PR3</strong> Type of product and service information required by the organization’s procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements</td>
<td>8.7 A leading environmentally-responsible product range; 8.12 Product Safety is a top priority for us</td>
</tr>
<tr>
<td><strong>G4-PR4</strong> Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes</td>
<td>2 incidents of non-compliance resulting no further actions required by authority.</td>
</tr>
<tr>
<td><strong>G4-PR5</strong> Results of surveys measuring customer satisfaction</td>
<td>10.3 Supporting Our Trade Customers’ Sustainability Agenda</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aspect: marketing communications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>G4-PR6</strong> Sale of banned or disputed products</td>
<td>Not known any. 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 compliance.</td>
</tr>
</tbody>
</table>
### Aspect: customer privacy

<table>
<thead>
<tr>
<th>STANDARD DISCLOSURE</th>
<th>STANDARD DISCLOSURE TITLE</th>
<th>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</th>
<th>DISCLOSED IN 20-F</th>
<th>ADDITIONAL INFORMATION</th>
<th>EXTERNAL ASSURANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4-PR8</td>
<td>Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data</td>
<td>7.2 Protecting people’s privacy</td>
<td></td>
<td>Nokia wants to help consumers keep their devices and information secure and further develop the security and reliability of Nokia devices and services. While detailed information about our security and privacy issues is confidential, we would like to emphasize that Issue Response Management is one of the essential elements of our privacy compliance program. Accordingly, Nokia has in place policies, systematic procedures and resources to identify vulnerabilities and to manage any risks to individuals that these vulnerabilities may incur. Part of our policy is to make appropriate disclosures to individuals and authorities as required in the case of a data breach. In addition, Nokia has opened a public reporting channel for external security researchers to report any potential vulnerabilities they may find in our products and services.</td>
<td></td>
</tr>
</tbody>
</table>

### Aspect: compliance

<table>
<thead>
<tr>
<th>STANDARD DISCLOSURE</th>
<th>STANDARD DISCLOSURE TITLE</th>
<th>DISCLOSED IN NOKIA PEOPLE &amp; PLANET REPORT</th>
<th>DISCLOSED IN 20-F</th>
<th>ADDITIONAL INFORMATION</th>
<th>EXTERNAL ASSURANCE</th>
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</thead>
<tbody>
<tr>
<td>G4-PR9</td>
<td>Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services</td>
<td></td>
<td></td>
<td>There were no significant fines or non-monetary sanctions for noncompliance with laws and regulations during 2013.</td>
<td></td>
</tr>
</tbody>
</table>
NOKIA KEY DATA
These figures cover Nokia sustainability data 2009-2013 and exclude Nokia Solutions and Networks (NSN), which became a wholly owned subsidiary of Nokia in August 2013 and publishes its own detailed sustainability report and data. We have, however, consolidated some key data from both companies (the Nokia Group) in one data table, which can be found in the ‘Key Sustainability Data – Nokia Group’ section of this report. In the same Nokia Group data table we have provided the data of Nokia Continued and Discontinued operations as a consequence of Microsoft purchasing substantially all of Nokia’s Devices & Services business in April 2014.

This report covers last 5 years – if interested in longer term historical development please see Nokia’s older reports.
## ENVIRONMENTAL KEY DATA

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Greenhouse Gas Emissions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(tonnes)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHG Scope 1 (direct facility &amp; car fleet)</td>
<td>11,800</td>
<td>16,100</td>
<td>17,500</td>
<td>19,500</td>
<td>18,600</td>
</tr>
<tr>
<td>Direct CO₂ emissions from facilities total</td>
<td>8,200</td>
<td>10,600</td>
<td>13,200</td>
<td>14,200</td>
<td>14,400</td>
</tr>
<tr>
<td>Hydro-Fluoro-Carbon (HFC) (as CO₂e)</td>
<td>1,500</td>
<td>2,500</td>
<td>1,400</td>
<td>1,800</td>
<td>1,600</td>
</tr>
<tr>
<td>CH₄ (as CO₂e)</td>
<td>16</td>
<td>21</td>
<td>26</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>N₂O (as CO₂e)</td>
<td>6</td>
<td>8</td>
<td>11</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>CO₂ emissions from car fleet</td>
<td>2,100</td>
<td>3,000</td>
<td>2,900</td>
<td>3,500</td>
<td>2,600</td>
</tr>
<tr>
<td><strong>GHG Scope 2 (Purchased electricity and heat), net amount</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Indirect CO₂ from facilities, gross amount</td>
<td>187,100</td>
<td>224,800</td>
<td>251,800</td>
<td>286,400</td>
<td>280,600</td>
</tr>
<tr>
<td>CO₂ avoided due to purchased renewable energy (tonnes)</td>
<td>-41,700</td>
<td>-53,100</td>
<td>-54,100</td>
<td>-60,100</td>
<td>-69,500</td>
</tr>
<tr>
<td>CO₂ avoided due to Gold Standard offsets (tonnes)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-32,500</td>
<td>0</td>
</tr>
<tr>
<td><strong>GHG Scope 3 (see below)</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO₂ emissions from air travel (tonnes)</td>
<td>33,400</td>
<td>38,500</td>
<td>84,200</td>
<td>81,865</td>
<td>77,524</td>
</tr>
<tr>
<td>CO₂ emissions from employee commuting (tonnes)</td>
<td>40,600</td>
<td>53,100</td>
<td>72,100</td>
<td>74,600</td>
<td>NA</td>
</tr>
<tr>
<td>CO₂e emissions from the use of devices (tonnes)</td>
<td>690,000</td>
<td>920,000</td>
<td>1,200,000</td>
<td>1,470,000</td>
<td>NA</td>
</tr>
<tr>
<td>CO₂ emissions from supply chain (tonnes)</td>
<td>1,220,000</td>
<td>1,440,000</td>
<td>1,870,000</td>
<td>6,880,000</td>
<td>NA</td>
</tr>
<tr>
<td>CO₂ emissions from logistics (tonnes)</td>
<td>292,541</td>
<td>464,700</td>
<td>500,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Biologically sequestered carbon</strong></td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>CO₂ Key Performance Indicators</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logistics: CO₂ /sales package, kg</td>
<td>Continued to decline in 2013</td>
<td>1.39</td>
<td>1.68</td>
<td>3.50</td>
<td>3.06</td>
</tr>
<tr>
<td>Offices: CO₂/office headcount, gross, (tonnes)</td>
<td>3.77</td>
<td>3.22</td>
<td>2.68</td>
<td>2.83</td>
<td>3.10</td>
</tr>
<tr>
<td><strong>Other air emissions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC) Emissions to air total (tonnes)</td>
<td>20</td>
<td>20</td>
<td>38</td>
<td>66</td>
<td>65</td>
</tr>
<tr>
<td>Emissions of Ozone Depleting Substances (ODS), as ODP (tonnes)</td>
<td>0.08</td>
<td>0.12</td>
<td>0.16</td>
<td>0.16</td>
<td>0.17</td>
</tr>
<tr>
<td><strong>Energy consumption</strong></td>
<td>(1 GWh = 3 600 GJ)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nokia facilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased electricity, total (GWh)</td>
<td>338</td>
<td>411</td>
<td>485</td>
<td>538</td>
<td>537</td>
</tr>
<tr>
<td>District heating, total (GWh)</td>
<td>31</td>
<td>41</td>
<td>43</td>
<td>57</td>
<td>56</td>
</tr>
<tr>
<td>District cooling, total (GWh)</td>
<td>&lt;1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Solar water heating (GWh)</td>
<td>&lt;1</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
## ENVIRONMENTAL KEY DATA

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Fossil gas, total (GWh)</strong></td>
<td>41</td>
<td>56</td>
<td>66</td>
<td>68</td>
<td>72</td>
</tr>
<tr>
<td><strong>Biogas, total (GWh)</strong></td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Oil, total (GWh)</strong></td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td><strong>Energy, total (GWh)</strong></td>
<td>419</td>
<td>518</td>
<td>602</td>
<td>672</td>
<td>672</td>
</tr>
<tr>
<td><strong>Direct energy, total (GWh)</strong></td>
<td>49</td>
<td>64</td>
<td>72</td>
<td>75</td>
<td>77</td>
</tr>
<tr>
<td><strong>Indirect energy, total (GWh)</strong></td>
<td>370</td>
<td>454</td>
<td>530</td>
<td>597</td>
<td>595</td>
</tr>
<tr>
<td><strong>Renewable energy (GWh)</strong></td>
<td>126</td>
<td>169</td>
<td>193</td>
<td>196</td>
<td>189</td>
</tr>
<tr>
<td><strong>Renewable electricity share of total electricity</strong></td>
<td>38%</td>
<td>41%</td>
<td>40%</td>
<td>36%</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Energy, total kWh/m²</strong></td>
<td>449</td>
<td>438</td>
<td>489</td>
<td>485</td>
<td>486</td>
</tr>
</tbody>
</table>

**Nokia device chargers’ no-load power consumption (average sold per annum in W)**

<table>
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<tr>
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<tbody>
<tr>
<td>0.061</td>
<td>0.098</td>
<td>0.112</td>
<td>0.114</td>
<td>0.145</td>
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</table>

**Water (Nokia facilities)**

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Water withdrawal total (thousands m³)</strong></td>
<td>1,096</td>
<td>1,092</td>
<td>1,309</td>
<td>1,422</td>
<td>1,340</td>
</tr>
<tr>
<td><strong>Water withdrawal by source (%)</strong></td>
<td>93%</td>
<td>92%</td>
<td>95%</td>
<td>95%</td>
<td>94%</td>
</tr>
<tr>
<td>Municipal water supply</td>
<td>7%</td>
<td>8%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Ground water</td>
<td>93%</td>
<td>92%</td>
<td>95%</td>
<td>95%</td>
<td>94%</td>
</tr>
</tbody>
</table>

**Discharges to Water, Total (tonnes)**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>BOD5</td>
<td>307</td>
<td>399</td>
<td>549</td>
<td>619</td>
<td>548</td>
</tr>
<tr>
<td>TSS</td>
<td>405</td>
<td>527</td>
<td>724</td>
<td>817</td>
<td>723</td>
</tr>
<tr>
<td>N</td>
<td>49</td>
<td>64</td>
<td>88</td>
<td>99</td>
<td>88</td>
</tr>
<tr>
<td>P</td>
<td>12</td>
<td>16</td>
<td>22</td>
<td>25</td>
<td>22</td>
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</table>

**Water discharge destination (%)**

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</tr>
</thead>
<tbody>
<tr>
<td>Municipal treatment facility, %</td>
<td>90%</td>
<td>93%</td>
<td>92%</td>
<td>87%</td>
<td>86%</td>
</tr>
<tr>
<td>Piped to surface water after treatment, %</td>
<td>3%</td>
<td>4%</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Used for irrigation after treatment, %</td>
<td>7%</td>
<td>3%</td>
<td>5%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Recycled/reused water (thousands m³)**</td>
<td>137</td>
<td>125</td>
<td>133</td>
<td>178</td>
<td>141</td>
</tr>
<tr>
<td>Recycling/reuse % of total withdrawal</td>
<td>12%</td>
<td>11%</td>
<td>10%</td>
<td>12%</td>
<td>11%</td>
</tr>
</tbody>
</table>
## ENVIRONMENTAL KEY DATA

<table>
<thead>
<tr>
<th>Waste from Nokia facilities (tonnes)</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>22,600</td>
<td>31,400</td>
<td>45,900</td>
<td>59,800</td>
<td>53,200</td>
</tr>
<tr>
<td>Reuse</td>
<td>2,300</td>
<td>3,400</td>
<td>7,500</td>
<td>10,300</td>
<td>8,000</td>
</tr>
<tr>
<td>Recycle</td>
<td>17,600</td>
<td>24,600</td>
<td>34,100</td>
<td>43,900</td>
<td>38,700</td>
</tr>
<tr>
<td>Energy recovery</td>
<td>1,700</td>
<td>2,500</td>
<td>2,500</td>
<td>2,200</td>
<td>1,900</td>
</tr>
<tr>
<td>Incineration without energy recovery</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Landfill</td>
<td>900</td>
<td>800</td>
<td>1,700</td>
<td>3,200</td>
<td>4,400</td>
</tr>
<tr>
<td>Utilisation rate %</td>
<td>96%</td>
<td>97%</td>
<td>96%</td>
<td>94%</td>
<td>91%</td>
</tr>
<tr>
<td>Non-hazardous waste</td>
<td>22,500</td>
<td>31,200</td>
<td>45,700</td>
<td>59,400</td>
<td>52,900</td>
</tr>
<tr>
<td>Hazardous waste</td>
<td>140</td>
<td>230</td>
<td>240</td>
<td>420</td>
<td>300</td>
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</tbody>
</table>

E-waste collected outside own facilities (tonnes)  

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Waste from Nokia facilities (tonnes)</td>
<td>388</td>
<td>431</td>
<td>661</td>
<td>415</td>
<td>373</td>
</tr>
</tbody>
</table>
## Employees & Ethics

<table>
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<tr>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Average number of employees</td>
<td>37,824</td>
<td>48,204</td>
<td>56,714</td>
<td>58,642</td>
<td>56,462</td>
</tr>
<tr>
<td>Employees in production</td>
<td>18,743</td>
<td>17,972</td>
<td>25,428</td>
<td>29,234</td>
<td>22,935</td>
</tr>
<tr>
<td>Total employee training cost for non production staff, EUR million</td>
<td>15</td>
<td>24</td>
<td>29</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td>Average cost of training per employee for non production staff, EUR</td>
<td>1,100</td>
<td>1,100</td>
<td>980</td>
<td>850</td>
<td>748</td>
</tr>
<tr>
<td>Injury/illness rate within production, TIFR</td>
<td>0.11</td>
<td>0.20</td>
<td>0.53</td>
<td>0.32</td>
<td>0.49</td>
</tr>
<tr>
<td>Women in senior management, %</td>
<td>16.8</td>
<td>14.5</td>
<td>15.2</td>
<td>14.5</td>
<td>13.8</td>
</tr>
<tr>
<td>Non-Finnish nationalities in senior management, %</td>
<td>49.6</td>
<td>50.1</td>
<td>53.6</td>
<td>53.2</td>
<td>50.7</td>
</tr>
<tr>
<td>Voluntary attrition, %</td>
<td>8.9</td>
<td>10.8</td>
<td>14.2</td>
<td>12</td>
<td>12.8</td>
</tr>
<tr>
<td>Countries with community involvement programs</td>
<td>20</td>
<td>40</td>
<td>33</td>
<td>42</td>
<td>40</td>
</tr>
<tr>
<td>Employee Code of Conduct awareness, %</td>
<td>95</td>
<td>95</td>
<td>98</td>
<td>98</td>
<td>85</td>
</tr>
<tr>
<td>Languages of the Code of Conduct</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
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</tbody>
</table>
### SUPPLY CHAIN

<table>
<thead>
<tr>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Number of on-site assessments to supplier sites</td>
<td>55</td>
<td>33</td>
<td>43</td>
<td>37</td>
<td>63</td>
</tr>
<tr>
<td>Number of supplier risk self-assessments</td>
<td>371</td>
<td>345</td>
<td>292</td>
<td>26</td>
<td>59</td>
</tr>
<tr>
<td>Illness and injury incidence rate (IIR)</td>
<td>—</td>
<td>0.26</td>
<td>0.50</td>
<td>0.34</td>
<td>NA</td>
</tr>
<tr>
<td>Employee attrition</td>
<td>—</td>
<td>19%</td>
<td>17.8%</td>
<td>21%</td>
<td>NA</td>
</tr>
<tr>
<td>Employee satisfaction survey practices at supplier sites</td>
<td>—</td>
<td>3.0</td>
<td>3.1</td>
<td>2.8</td>
<td>NA</td>
</tr>
</tbody>
</table>

### ECONOMIC

Scope Nokia. More financial figures can be found in Nokia Group level data table

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Net sales, EUR million</td>
<td>12,178</td>
<td>16,397</td>
<td>24,618</td>
<td>29,785</td>
<td>28,410</td>
</tr>
<tr>
<td>Operating profit, EUR million</td>
<td>-491</td>
<td>-1,504</td>
<td>-773</td>
<td>2,756</td>
<td>2,836</td>
</tr>
<tr>
<td>Research &amp; development, EUR million</td>
<td>1,925</td>
<td>2,736</td>
<td>3,399</td>
<td>3,707</td>
<td>3,638</td>
</tr>
</tbody>
</table>
Facility related data covers 100% of square meters occupied by Nokia; data collection coverage has been 90–93% of all square meters, including all production sites and other sites greater than 3000 sqm (from year 2013 onwards greater than 1000 sqm, where data available). Data from smaller than 3000 sqm (1000 sqm in 2013) sites has been estimated based on Nokia averages.

1

Our approach to measuring greenhouse gas emissions follows the Greenhouse Gas (GHG) Protocol (www.ghg-protocol.org) developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). The GHG Protocol defines three scopes of CO₂ 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 NSN (both Nokia Siemens Networks and Nokia Solutions and Networks) 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. Our GHG measurements have been assured by third party since 2003 and assurance will continue on an annual basis. Read our [assurance statement](#). Direct CO₂e 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 CH₄ and N₂O produced during burning process have been included in CO₂e emissions and CH₄ and N₂O values are listed in the table already calculated to CO₂-equivalent (combined CH₄ and N₂O effect being 0.3% of direct CO₂e 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 CO₂-emissions (Scope 2 emissions) include emissions from purchased electricity and district heating and cooling. Emissions are calculated on country level by principles of a WRI/WBCSD GHG Protocol Initiative.
calculation tool: “Indirect CO\textsubscript{2} Emissions from the Consumption of Purchased Electricity, Heat, and/ or Steam”. Despite delay on IEA country statistics, data from previous years has not been updated with new factors. The year 2009 has been calculated with version “GHG emissions from purchased energy, version 21”. Year 2010 emission factors are from IEA’s “CO\textsubscript{2} emissions from fuel combustion, published in 2009 c OECD/IEA”, statistics from year 2007. The latest version of the IEA publication has been used also 2011-2013, as an example having 2010 statistics used for 2013. For USA latest EPA eGrid factors are used, e.g. 2007 statistics for 2011 and 2012 calculations and “eGrid 2012, year 2009 summary tables” for 2013. 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 has been calculated since 2009 with the GHG-tool value for purchased energy. As CO\textsubscript{2} typically represents over 99 percent of the GHG emissions in electricity and heat production, IEA indirect emission factors include CO\textsubscript{2} only. EPA factors are for CO\textsubscript{2}e.

### 2 TOTAL NET CO\textsubscript{2} EMISSIONS IN NOKIA FACILITIES BY REGIONS

<table>
<thead>
<tr>
<th>Region</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>153,600</td>
<td>182,300</td>
<td>210,900</td>
<td>208,000</td>
<td>225,500</td>
</tr>
<tr>
<td>Americas</td>
<td>7,800</td>
<td>7,500</td>
<td>19,000</td>
<td>34,200</td>
<td>14,200</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>132,000</td>
<td>147,900</td>
<td>157,700</td>
<td>127,500</td>
<td>157,400</td>
</tr>
<tr>
<td>Europe &amp; Africa</td>
<td>13,800</td>
<td>26,900</td>
<td>34,200</td>
<td>46,300</td>
<td>53,900</td>
</tr>
</tbody>
</table>

The figure represents CO\textsubscript{2} emissions from digital mapping operations by Nokia’s HERE business unit. Calculation of the emissions from cars is based on the distance driven and fuel type. Part of the data is based on vehicle-specific conversion factors.

Net and gross indirect CO\textsubscript{2} emissions: Gross emissions are emissions from purchased electricity and heat calculated with IEA (Internal Energy Agency) country emission factors and in USA with eGRID emission factors. Net emissions are gross emissions reduced with CO\textsubscript{2} avoided due to purchase of renewable energy (certificates) and carbon offsets. Onsite renewable energy reduces also gross emissions.

Nokia’s and L&C’s (NAVTEQ’s) air travel reporting has been consolidated in 2011, and 2008–2010 emissions have been updated based on historical travel data. Nokia’s travel figure includes travel by externals in cases where travel cost is covered by Nokia and bookings are made.
through Nokia’s designated travel agencies. The emissions figure covers 99.5% of Nokia’s air travel, and has been calculated with the most recent Greenhouse Gas Protocol emissions factors. Emissions have decreased by 13% during 2013, despite the 8% increase in travel kilometres. This is due to a new and more detailed calculation methodology, based on the most recent Greenhouse Gas Protocol emission factors.

6
In 2010 Nokia conducted an employee commuting survey in order to calculate the corresponding CO₂ emissions. The following information was required: country, how many days one works at the office/home, commuting distance, time and means of transport. 3,455 employees participated in the survey from 58 different countries. The emissions were then extrapolated to correspond with all Nokia employees for years 2010–2013.

7
ISO 14040 and ISO 14044 standards, complemented by ICT specific ETSI TS 103 199 and ITU-T L.1410, 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 entire lifecycle, including the raw materials acquisition, component manufacturing, Nokia’s own factory processes, 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. GHG emissions from supply chain and the use of devices reflect also the annual product volumes and portfolio. Impact from Nokia Gear is excluded from both supply chain and use of devices GHG figures.

8
Due to the lower sales volumes the total CO₂ level in tons in 2013 is smaller than previous years. The figures are based on the reporting of logistics service providers. 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 CO₂ calculation and data gathering from logistics service providers system wise, which means that the basis for our calculations has changed from previous years.

9
Biologically sequestered carbon (i.e. carbon dioxide emission from burning biomass/biofuels) and emissions from fermentation are not relevant for Nokia as we do not burn or fermentate biomass or biofuels on-site. We use biogas in fuel cells in one of our offices.

10
Gross CO₂ emissions from Nokia office and R&D buildings in metric tonnes, per Nokia employees and externals working in Nokia Offices and R&D. Ex-NAVTEQ sites were included in the metric in 2012, changing our 2006 baseline. In addition to 2006 and 2012, we recalculated year 2009 indicator but not the rest.
11 Volatile organic compounds (VOC’s) are released during the soldering process and when using solvents in the cleaning 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.

12 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.

13 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.

### ENERGY CONSUMPTION IN NOKIA FACILITIES BY REGIONS, GWh

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Purchased electricity, total</strong></td>
<td>338</td>
<td>411</td>
<td>485</td>
<td>538</td>
<td>537</td>
</tr>
<tr>
<td>Americas</td>
<td>70</td>
<td>83</td>
<td>91</td>
<td>114</td>
<td>110</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>173</td>
<td>182</td>
<td>197</td>
<td>202</td>
<td>196</td>
</tr>
<tr>
<td>Europe &amp; Africa</td>
<td>95</td>
<td>146</td>
<td>197</td>
<td>222</td>
<td>231</td>
</tr>
<tr>
<td><strong>District heating, total</strong></td>
<td>31</td>
<td>41</td>
<td>43</td>
<td>57</td>
<td>56</td>
</tr>
<tr>
<td>Americas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Europe &amp; Africa</td>
<td>31</td>
<td>41</td>
<td>43</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td><strong>District cooling, total</strong></td>
<td>&lt;1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Americas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Europe &amp; Africa</td>
<td>&lt;1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Solar water heating, total</strong></td>
<td>&lt;1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Americas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>&lt;1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Europe &amp; Africa</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Fossil gas, total</strong></td>
<td>41</td>
<td>56</td>
<td>66</td>
<td>68</td>
<td>72</td>
</tr>
<tr>
<td>Americas</td>
<td>6</td>
<td>7</td>
<td>14</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>22</td>
<td>25</td>
<td>22</td>
<td>27</td>
<td>26</td>
</tr>
<tr>
<td>Europe &amp; Africa</td>
<td>13</td>
<td>24</td>
<td>30</td>
<td>28</td>
<td>33</td>
</tr>
<tr>
<td><strong>Biogas, total</strong></td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Americas</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Asia-Pacific</td>
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<td>0</td>
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</tr>
<tr>
<td>Europe &amp; Africa</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Oil, total</strong></td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Americas</td>
<td>&lt;1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Europe &amp; Africa</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Energy, total</strong></td>
<td>419</td>
<td>518</td>
<td>602</td>
<td>672</td>
<td>672</td>
</tr>
<tr>
<td>Americas</td>
<td>81</td>
<td>97</td>
<td>108</td>
<td>129</td>
<td>125</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>198</td>
<td>208</td>
<td>222</td>
<td>235</td>
<td>225</td>
</tr>
<tr>
<td>Europe &amp; Africa</td>
<td>140</td>
<td>213</td>
<td>272</td>
<td>308</td>
<td>322</td>
</tr>
</tbody>
</table>
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.

The energy intensity KPI kWh/m² includes all types of energy used in Nokia facilities, as reported above. Facility area is the average area during each year.

<table>
<thead>
<tr>
<th>THE ENERGY INTENSITY KPI kWh/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility area, 1000 m²</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>933</td>
</tr>
</tbody>
</table>

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

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 recalulation for past years destination percentages.

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

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.

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.

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.

22 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.

23 Average number of employees include employees in HERE based on the financial release for 2013 and Devices & Services based on HR data. Furthermore, Devices & Services headcount figures include also all the employees of Advanced Technologies and Corporate Common. The figures for 2012 were based on the financial release. For 2011–2008 figures do not include employees in Nokia Location & Commerce (HERE since Jan 1, 2013) who were previously employed by NAVTEQ.

24 Figures for total training cost and training cost / employee were calculated based on employees working in Devices & Services only.

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-lost time incidents.

26 The figure for 2013 was calculated based on employees working in Devices & Services only. Previous year the figure included employees from HERE also. 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 The figure for 2013 and 2012 were calculated based on employees working in Devices & Services only. 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.

28 The figure for 2013 was calculated based on employees working in Devices & Services only. Previous year the figure included employees from HERE also. In 2012 the calculation methodology has been changed and the 2012 and 2013 figures do not include employees accepting a severance package related to Nokia restructuring. Figures 2009–2011 have not been restated.

29 2009 onwards figures are including Nokia direct and indirect sourcing system assessments including in-depth assessments.
30 Number of hardware and mechanics supplier facilities that have been risk self-assessed. The risk self-assessments of the suppliers have been done by one of two very similar risk self-assessment tool developed for our industry. The tools are used to gain an indication of potential environmental, ethical, health and safety and labor risk areas. Suppliers are requested to answer a comprehensive set of questions and based on their answers the tool calculates a risk level.

31 Injury and illness incidence rate IIR describes the total amount of reportable occupational injury and illness incidents for every 100 employees during a calendar year. Both internal employees and contract workers are included. Between 2010 and 2011 scope of suppliers reporting was expanded. 2013 data will be received later on during 2014.

32 Employee attrition (%) describes staff turnover, percentage of employees that leave the organization within a year. Both voluntary attrition and involuntary attrition is included. 2013 data will be received later on during 2014.

33 The average response regarding employee satisfaction survey practices at our supplier sites on a scale from 1 to 4. 4 indicates that at supplier sites in general, nearly or over 80% of total employees are covered by an annual employee satisfaction survey and number 1 indicates that no employee satisfaction survey conducted. 2013 data will be received later on during 2014.
KEY SUSTAINABILITY DATA – NOKIA GROUP

These figures cover Nokia sustainability data 2009-2013 and include Nokia Solutions and Networks (NSN), which became a wholly owned subsidiary of Nokia in August 2013. We have also provided the data of Nokia Continued and Discontinued operations as a consequence of Microsoft purchasing substantially all of Nokia’s Devices & Services business in April 2014.

This report covers last 5 years – if interested in longer term historical development please see Nokia’s older reports.
## ECONOMIC KEY DATA, NOKIA GROUP

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<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales, EUR million</td>
<td>12,709</td>
<td>10,735</td>
<td>23,444</td>
<td>30,552</td>
<td>42,446</td>
<td>40,984</td>
</tr>
<tr>
<td>Operating profit, EUR million</td>
<td>519</td>
<td>-590</td>
<td>-71</td>
<td>-2,299</td>
<td>-1,072</td>
<td>1,197</td>
</tr>
<tr>
<td>Earnings/share diluted, EUR</td>
<td>0.05</td>
<td>-0.22</td>
<td>-0.17</td>
<td>-0.84</td>
<td>-0.31</td>
<td>0.50</td>
</tr>
<tr>
<td>Market capitalization at year-end, EUR million</td>
<td>NA</td>
<td>NA</td>
<td>21,606</td>
<td>10,873</td>
<td>13,987</td>
<td>28,709</td>
</tr>
<tr>
<td>Research &amp; development, EUR million</td>
<td>2,619</td>
<td>1,130</td>
<td>3,749</td>
<td>4,739</td>
<td>5,545</td>
<td>5,844</td>
</tr>
<tr>
<td>Paid direct income taxes, EUR million</td>
<td>NA</td>
<td>NA</td>
<td>386</td>
<td>478</td>
<td>718</td>
<td>905</td>
</tr>
<tr>
<td>Interests paid, EUR million</td>
<td>NA</td>
<td>NA</td>
<td>208</td>
<td>277</td>
<td>283</td>
<td>235</td>
</tr>
<tr>
<td>Dividends paid, EUR million</td>
<td>NA</td>
<td>NA</td>
<td>71</td>
<td>755</td>
<td>1,536</td>
<td>1,519</td>
</tr>
<tr>
<td>Total purchases of goods and services, EUR million</td>
<td>7,248</td>
<td>NA</td>
<td>NA</td>
<td>21,125</td>
<td>27,572</td>
<td>30,500</td>
</tr>
<tr>
<td>Liquid assets at year-end, EUR million</td>
<td>8,971</td>
<td>—</td>
<td>8,971</td>
<td>9,909</td>
<td>10,902</td>
<td>12,275</td>
</tr>
<tr>
<td>Total liabilities at year-end, EUR million</td>
<td>13,803</td>
<td>4,728</td>
<td>18,531</td>
<td>20,745</td>
<td>22,289</td>
<td>22,892</td>
</tr>
<tr>
<td>Retained earnings at year-end, EUR million</td>
<td>2,581</td>
<td>—</td>
<td>2,581</td>
<td>3,997</td>
<td>7,836</td>
<td>10,500</td>
</tr>
</tbody>
</table>
ENVIROMENTAL KEY DATA  

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Indirect CO₂e from facilities energy consumption, tonnes, gross</strong></td>
<td>continuing operations: 275,100</td>
<td>discontinuing operations: 154,000</td>
<td>Nokia Group: 429,100</td>
<td>Nokia Group: 498,800</td>
<td>Nokia Group: 516,300</td>
</tr>
<tr>
<td><strong>Total waste utilisation, %</strong></td>
<td>continuing operations: 90%</td>
<td>discontinuing operations: 97%</td>
<td>Nokia Group: 95%</td>
<td>Nokia Group: 96%</td>
<td>Nokia Group: 94%</td>
</tr>
<tr>
<td><strong>Data reported from facility area, 1,000 m²</strong></td>
<td>continuing operations: 890</td>
<td>discontinuing operations: 782</td>
<td>Nokia Group: 1,672</td>
<td>Nokia Group: 2,002</td>
<td>Nokia Group: 2,445</td>
</tr>
</tbody>
</table>

EMPLOYEES  

|----------------------|---------------|---------------|---------------|---------------|---------------|
Figures are consolidated Nokia group data that include Nokia Solutions Networks and HERE (previously called L&C and NAVTEQ). The years are not directly compatible largely because of following reasons:*years 2009–2012 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.* As of October 1, 2011, Location & Commerce was formed by combining the NAVTEQ business with Devices & Services social location services operations. As of January 1, 2013, Location & Commerce business and reportable segment has been renamed as the HERE business and reportable segment.

The historical comparative financials presented in this report include certain changes to previously reported information. The changes result from the retrospective application of a revised IFRS accounting standard IAS 19, Employee Benefits, and the net sales for continuing operations and Nokia Group including the HERE sales to discontinued operations (EUR 154 million in 2013, EUR 374 million in 2012 and EUR 393 million in 2011).

For continuing/discontinued operations environmental data has been allocated on building level, i.e. where building was and/or will continue to be shared between continuing and discontinued operations, total consumption has been allocated to operations having majority in the site.

"Direct CO$_2$e from facilities" -data was updated in 2012 to include also minor fugitive HFC emissions from cooling systems, when earlier published values included only direct emissions from use of energy.

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 CO2 avoided due to purchase of renewable energy (certificates) and carbon offsets.

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.
For NSN share of Group data, environmental data only covers buildings that are larger than 3,000 m², and these sites represent around 80% of NSN’s overall real estate portfolio. In 2007–2009 and 2012–2013 waste data is covering only 70–83% of over 3000 m² buildings. In 2012, energy data represent facilities which were >3000m² at the beginning of the year 2012, totaling 819,049 m² (NIA sqm and closed NIA sqm) which is 72% of the entire RE portfolio. Some facilities’ Nov and Dec consumption has been estimated as the invoices detailing actual usage remain outstanding at the time of reporting. Due to these estimations 2012 energy, greenhouse gas and water figures are slightly updated from values published in 2012 report. More details related to NSN data coverage are available in NSN Sustainability report and for Nokia data above.

Include termination benefits and exclude social security expenses.