

Nokia – our environmental journey

Our vision is a world where everyone being connected can contribute to sustainable development. We want to shape our industry and drive best practices.

Materials used

We carefully select the materials that go into all of our products, ensuring environmental sustainability at every stage of the product lifecycle.

- In 2005 we introduced our first device to be compliant with the European legislation (RoHS) restricting the use of certain substances. The Nokia 5140i, was introduced over a year before the new law actually came into force.
- In 2006 our new devices, chargers and headsets were free of PVC.
- As a voluntary action, we are actively working on phasing out all Brominated and Chlorinated compounds, and Antimony Trioxide in all of our products.
- In November 2008 we introduced our first device, Nokia 7100 Supernova, that is free of Brominated compounds, Antimony Trioxide and also free of Chlorinated flame retardants.
- Since then we've launched ten more products free of these substances.

Energy consumption

An estimated two thirds of the energy consumed by a mobile device during its usage is lost when it is fully charged and unplugged but the charger is left connected to the mains – in so called “no-load” mode.

- In May 2007 we were the first mobile device manufacturer to put alerts into our devices to remind people to unplug their chargers. The power that could be saved globally by all Nokia phone users unplugging their chargers when no longer needed is equivalent to enough energy to power 100,000 average-size European homes.
- Over the last decade we have reduced the amount of energy our chargers consume in the no-load mode by an average of 80% and by over 95% for our most efficient chargers.
- During 2008 we began rolling out the AC-8 and AC-10, our most energy efficient chargers yet which consume only 0.03W in no-load mode. By shipping these instead of chargers with 0.3 W no-load consumption (AC-4) the amount of energy we will have saved by the end of this year could power 125,000 energy saving 15W light bulbs for a year.
- We are supporting the creation of a common mobile phone charger. By 2012 the majority of our devices will be able to use this and we will also ensure people can carry on using their existing Nokia chargers. In this way we can really maximise the goal of producing less waste.

Recycling

We operate the largest voluntary mobile phone recycling scheme in the world.

- People can bring their phones back for responsible recycling to around 5,000 Nokia Care Points located in 85 countries.
- Mobile devices and accessories contain raw materials which can be reused in many ways for example to make new parts for bikes, kettles, or even dental fillings.
- Up to 80% of any Nokia device can be recycled. Plastics can also be used to fuel the recycling process, thus minimizing waste.
- Only 3% of people owning mobile devices claim to recycle their devices. If all of the around 3 billion people using mobile phones globally recycled at least one of their unwanted devices this could save 240,000 tonnes of raw material and reduce gases to the same extent as taking 4 million cars off the streets.
- To raise consumer awareness and encourage people to recycle their old mobile devices Nokia runs regular recycling campaigns around the world. These offer many different ways to bring back the devices such as offering pre-paid postal envelopes or using highly visible collection boxes placed in stores and other public locations.

Business Benefits

We see clear business benefits in being environmentally responsible. It improves our risk management, often makes good economic and business sense, and reinforces our brand.

- During the years of 2006-2008 we have reduced the size of our packaging and used more recycled materials to make it. This has enabled us to reduce the use of paper based materials by almost 100,000 tonnes. This translates not only into financial savings of 474 million Euros but less packaging also means reduced transportation volume enabling us to take at least 12,000 trucks off the roads.
- Many Nokia factories are located within industrial areas that combine all of our operations including R&D, marketing services, production, logistics, distribution, and also many of our suppliers. This significantly improves efficiency of operations, slashing our CO2 and transportation emissions, decreasing the use of packaging materials, and saving on business travel and long-distance shipping costs. Our newest campus in Beijing uses this approach and is the world's largest mobile device industrial area.
- Ethical consumption also brings opportunities in creating new services.
- **Green Explorer** – helping people live in a more eco-friendly way. Accessible via the web, a mobi site, or a widget that can be downloaded to a number of Nokia devices. www.greenexplorer.ovi.com
- **Mobiledu** – a mobile education service with environmental content. It has over 3.5 million subscribers in China today.
- **Eco zone** – access to eco information, tips and services. Preinstalled in many devices and available via the Download! service on your device.

Environmental milestones and future goals

All new devices to be free of Brominated and Chlorinated compounds and Antimony Trioxide

Reduce CO₂ emissions by a minimum of 10% in 2009 and by a minimum of 18% in 2010, compared to the base year 2006

No-load energy consumption of our annually sold chargers to be halved from 2005 to 2010

Save a minimum 32,000 MWh of energy in our facilities from 2007 through 2012. This is around 6% of consumption in 2006 (V)

The majority of Nokia devices will be compatible with the common industry charger and existing Nokia chargers

Nokia Beijing campus in China celebrated the Leadership in Energy and Environmental Design (LEED) Gold Level certification

Nokia and four other mobile manufacturers launch energy rating system for mobile charger, one of the outcomes of the IPP pilot

Launch of the Nokia 7100 Supernova: our first device free of Brominated compounds, Antimony Trioxide and Chlorinated flame retardants

All devices are EU RoHS compliant

All new devices, headsets and chargers are PVC-free

New packaging introduced that reduced the amount of materials used by over 50%

Nokia-led mobile industry group creates environmental action plan, part of a European Union pilot (IPP)

The first EU RoHS compliant mobile device in the market - the Nokia 5140i - over a year before the legislation came into force

Already have an increasing share of device portfolio free of Brominated and Chlorinated compounds and Antimony Trioxide

Nokia supports GSMA industry-wide initiative to create a common charger for mobile devices

The first device using bioplastic in its covers, the Nokia 3110 Evolve including the energy efficient AC-8 charger and compact packaging using 60% recycled materials

Launch of the we:offset service, the world's first CO₂ emission offsetting tool to your mobile. Today available in 46 languages

Nokia becomes the first manufacturer to introduce unplug charger reminders into mobile devices

Achieve the target of using 25% renewable electricity in our own premises

Eco declarations available for our products on our website

Form global partnership with WWF to find new ways of enhancing environmental performance and increasing employee environmental awareness

The first Nokia recycling pilot schemes takes place in Sweden and the UK

2012

2010

2009

2008

2007

2006

2005

2003

1997

What else are we doing as a company?

As a global company, we have a responsibility to be mindful of the environment in the way that we operate and to ensure we minimize our own ecological footprint.

- We encourage our employees to use video and teleconferencing as much as possible to replace travel. We currently have 215 video conferencing facilities around the world and our employees used them for about 3,800 hours per month in 2008. Teleconferencing was used for about 150,000 hours per month.
- In 2007 we were able to achieve our target of using 25% renewable electricity in our own premises. By doing this we were able to reduce our CO₂ emissions by 27 400 tonnes compared to using conventional energy. This is equivalent to the emissions from a petrol-driven car (consuming 7.5 l/100 km) driving nearly 4,000 times round the globe.
- We have dedicated teams in R&D and Design looking at new ideas to address social and environmental issues including energy use, recycling, and making the benefits of mobile technology available to more people. The “Remade” concept is such a project, looking at whether it would be possible to create a device in future from nothing new.
- We are working on finding new ways to increase our energy efficiency including using energy saving technologies in our offices, and reducing commuting and travel by increasing remote working possibilities.

Did you know?

Tips on how to use your mobile device in the most energy efficient way:

- Unplug your charger when the battery is full.
- Decrease the brightness of your phone’s screen if you wish to use less energy.
- Set the standby time to the minimum to avoid unnecessary energy consumption.
- Turn off or disable the sounds you don’t need such as keypad tones. You may also want to adjust the volume of your phone to an average level, particularly if you are inside your home or office. Fewer sounds mean you’re using less energy.
- Turn off functionalities like Bluetooth, WLAN etc. when you’re not using them.
- Take your no longer needed mobile phone back for recycling. You can find the nearest recycling point at www.nokia.com/werecycle
- Consider using your mobile device to read emails and browse the internet. Research suggests doing this uses one thirtieth of the energy used by a laptop computer.
- Use Green Explorer to plan your travel in the most environmentally friendly way or check up on eco tips when you are on the move. www.greenexplorer.ovi.com
- If you have to fly, consider using the we:offset service on your mobile to offset your emissions. You can download the application at www.nokia.com/weoffset

Further information: www.nokia.com/environment