

# 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 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.
- Already in 2006 our new devices, chargers and headsets were free of PVC.
- We are currently phasing out the use of Brominated and Chlorinated compounds and Antimony Trioxide across our product range. During 2009 we will be introducing devices free of these substances to all regions.
- We've just introduced our first device free of Brominated compounds, Antimony Trioxide and Chlorinated flame retardants, the Nokia 7100 Supernova

## 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.
- During the last decade we have reduced the amount of energy our best chargers consume in the no-load mode by more over 90%.
- During 2008 we began rolling out the AC-8, our most energy efficient charger yet which consumes 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.

## Recycling

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

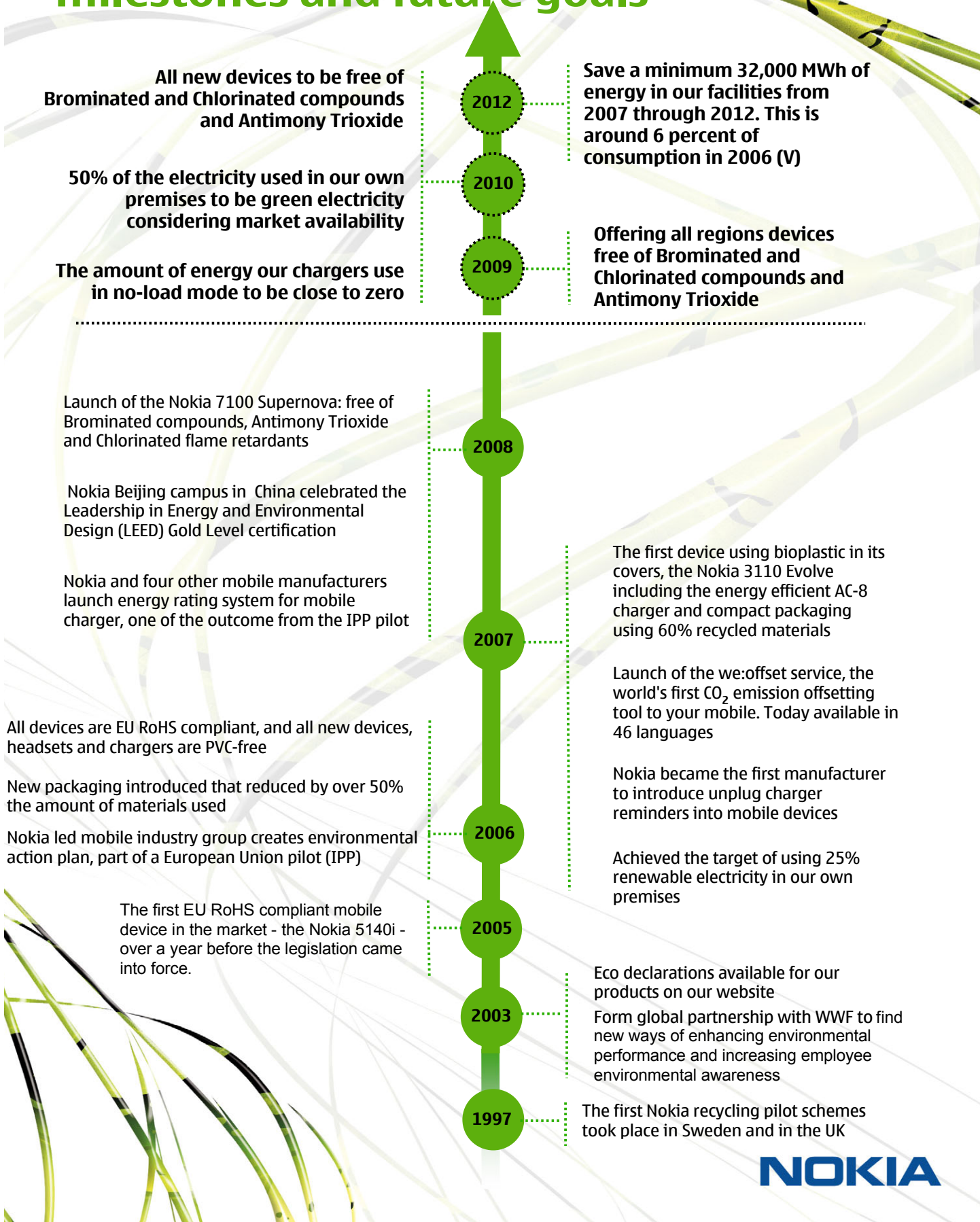
- People can bring their phones back for responsible recycling to around 5000 Nokia Care Points located in 85 countries.
- Mobile devices and accessories contain raw materials which can be reused in many ways, for example to make new parts for bikes, kettles, or even dental fillings.
- Up to 80% of any Nokia device can be recycled and the rest, mainly plastics, can be used to fuel the recycling process, ensuring that nothing is wasted.
- 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 also see clear business benefits in being environmentally responsible. It improves our risk management, often makes good economic and business sense operationally, and reinforces our brand.

- During the years of 2006-2008 we have been reducing the size of our packaging and using more recycled materials to make it. This has enabled us to reduce the use of paper based materials by almost 100,000 tons. 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 many of our suppliers. This significantly improves the efficiency of our operations, slashing our CO<sub>2</sub> and transportation emissions, decreasing the use of packaging materials, and saving on business travel and long-distance shipping costs. Our newest campus in Beijing, China uses this approach and has become the world's largest mobile device industrial area.
- Ethical consumption also brings us opportunities in creating new products and services.

# Environmental milestones and future goals



## What we can do 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 80 video conferencing facilities located around the world and plan to increase this to around 220. During 2007 Nokia employees used teleconferencing for about 145,000 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 CO<sub>2</sub> 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. Our new target is to increase the amount of green electricity to 50% by 2010 considering market availability.
- We have dedicated teams in Research and Development and Design looking at new ideas to address specific environmental and social issues including recycling, energy use and making the benefits of mobile technology available to more people. The "Remade" concept phone is such project, looking at whether it would be possible to create a device in future from nothing new.

## Did you know?

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

- Unplug the 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 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](http://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.

Further information: [www.nokia.com/environment](http://www.nokia.com/environment)

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