



NOKIA Ranking = 7.3/10

Nokia stays in 1st place with a slightly reduced score of 7.3, losing a point for failing to do proactive lobbying for the revised RoHS (Restriction of Hazardous Substances in electronics) Directive to adopt a methodology for further restrictions of hazardous substances, and immediately ban chlorinated and brominated substances. As of this version of the Guide, Criterion C1 has been sharpened to require companies not only to have a chemicals policy underpinned by the precautionary principle, but also to support a revision of the RoHS Directive that bans further harmful substances, specifically brominated flame retardants (BFRs), chlorinated flame retardants (CFRs) and PVC vinyl plastic.

Overall, Nokia does best on the toxic chemicals criteria, followed by energy, and does least well on e-waste issues. It gains a point for having almost all its new models of mobile phones free of BFRs. Nokia scores very well on toxic chemical issues; all its new models have been free of PVC since the end of 2005, and it is now aiming to have all new models free of all brominated and chlorinated compounds and antimony trioxide from the start of 2010.

Nokia scores maximum points for its comprehensive voluntary take-back programme, which spans 85 countries providing almost 5,000 collection points for end-of-life mobile phones. It also scores top marks for the information it provides to customers on what to do with their discarded products. However, its recycling rate of 3 to 5 percent is very poor; more information is needed on how Nokia calculates these figures; it also needs to start using recycled plastics beyond just for packaging.

Nokia's score on energy has dropped slightly due to a point lost for failing to clarify concerns about the additionality of its renewable energy purchases and to provide more information about the EU RECs (Renewable Energy Credits) it is buying; it sourced 25 percent of its total energy needs from renewable sources in 2007 and has a target to increase its use of renewable energy to 50 percent by 2010. Top marks (doubled) are given for product energy efficiency as all but one of its mobile phone chargers exceed the Energy Star requirements by between 30 and 90 percent. It provides a third party verification certificate for its disclosed CO₂ emissions - however, while it scores full marks for committing to reduce its own absolute CO₂ emissions by a minimum of 10 percent in 2009 and 18 percent in 2010, from a baseline year of 2006, it fails to score any points on its support for global cuts in greenhouse gas (GHG) emissions. Nokia needs to call for GHG emissions to peak by 2015 and for industrialised countries as a group to accept mandatory cuts of at least 30 percent by 2020.

NOKIA Overall Score

	BAD (0)	PARTIALLY BAD (1+)	PARTIALLY GOOD (2+)	GOOD (3+)
Precautionary Principle and support for revision of RoHS Directive.				
Chemicals Management				
Timeline for PVC & BFR phaseout				
Timeline for additional substances phaseout				
PVC-free and/or BFR-free models <small>(companies score double on this criterion)</small>				
Individual producer responsibility				
Voluntary take-back				
Information to individual customers				
Amounts recycled				
Use of recycled plastic content				
Global GHG emissions reduction support				
Carbon Footprint disclosure				
Own GHG emissions reduction commitment				
Amounts of renewable energy used				
Energy efficiency of new models <small>(companies score double on this criterion)</small>				

NOKIA Detailed Scoring

Chemicals

Precautionary Principle and support for revision of RoHS Directive.	Chemicals Management	Timeline for PVC & BFR phaseout	Timeline for additional substances phaseout	PVC-free and/or BFR-free models (double points)
PARTIALLY GOOD (2+)	GOOD (3+)	GOOD (3+)	PARTIALLY GOOD (2+)	PARTIALLY GOOD (2.5+)
Nokia's definition of the precautionary principle supports taking voluntary steps to eliminate potential hazardous substances despite lack of full scientific certainty. More information. Despite some remaining ambiguities (which Nokia needs to clarify to stay on 2 points), Nokia states that it supports a methodology for further restrictions in RoHS, where restriction criteria are based on <i>potential</i> risk in the full product life cycle. It supports further restrictions for chlorinated and brominated substances but does not specify restrictions on at least PVC, CFRs and BFRs in the next 3-5 years. For 3 points Nokia should show evidence of proactive advocacy.	Nokia has already phased out some harmful chemicals and identified future substances for elimination. More information. New version (2009) of Nokia's substance list.	Nokia has eliminated remaining uses of PVC. See PVC elimination case study. More information. Nokia aims to have all new products across its global product range launched from 2010 free of restricted flame retardants, including all brominated and chlorinated compounds, not just those in PVC and flame retardants, as well as antimony trioxide. More information.	Nokia has banned the use of beryllium and its compounds in all new products developed from 1/1/09 with the exemption of use as gold dopant. The intentional addition of 10 types of phthalates is also banned in new products. More information. All products from 2010 will be free of antimony trioxide. However, there is no target to phase out other antimony compounds. More information.	Nokia scores 2.5 points (doubled) as it has almost achieved its goal. New models are PVC-free since the end of 2005. As from January 2007, the first products without components containing BFRs have been introduced. Starting from 2010 Nokia aims to have all new products launched free of brominated and chlorinated compounds and antimony trioxide. More information. Eco-declarations provided for all Nokia products. All new models of mobile phones are PVC free, free of brominated and chlorinated compounds and antimony trioxide.

E-Waste

Support for Individual Producer Responsibility	Provides voluntary take-back where no EPR laws exist	Provides info for individual customers on take-back in all countries where products are sold	Reports on amount of e-waste collected and recycled	Use of recycled plastic content in products - and timelines for increasing content
PARTIALLY GOOD (2+)	GOOD (3+)	GOOD (3+)	PARTIALLY BAD (1+)	BAD (0)
Nokia supports and lobbies for IPR. To regain top marks, Nokia will need to explore options for operationalising IPR. It also needs to continue to lobby for IPR, inter alia to ensure the revised WEEE legislation sets clearer requirements (enforcement criteria) for the implementation of IPR by enforcing: differentiated financing for own-brand real end-of-life costs (e.g. no longer collective financing such as market share but individual financing such as return share) for WEEE and preventing the indefinite use of the Visible Fee. More information.	Take-back is offered in 85 countries, including in Africa and Latin America, with almost 5000 Nokia collection points globally. More information here and here. Nokia has announced on their Argentine website that they will soon roll out a take-back programme in Argentina.	The information provided is very good, with addresses, phone numbers and directions to Nokia Care Centres and updates about the development of new take-back programmes, most recently those launched in 10 Middle Eastern countries and 11 African countries. More information.	Nokia states that it gets back just 3 percent of redundant phones. But it is unclear if this is as a percentage of all Nokia sales, or all brands of mobiles returned – and over which period and geography. More information here and here.	Nokia is still actively researching the use of recycled plastics, which are currently used only in packaging. It's about time Nokia started using recycled plastics in its mobile phones, as its competitors are doing. More information.

Energy

Support for global mandatory reduction of GHG emissions	Company carbon footprint disclosure	Commitment to reduce own direct GHG emissions	Amount of renewable energy used	Energy efficiency of New Models (double points)
BAD (0)	PARTIALLY GOOD (2+)	GOOD (3+)	PARTIALLY GOOD (2+)	GOOD (3+)
Nokia has signed the Bali Communiqué. For full marks, Nokia needs to support industrialised countries cutting emissions by at least 30% by 2020 and call for global GHG emissions to peak by 2015. The need for companies to act on this global issue is pressing. More information.	Nokia reports on 2008 energy consumption, as well as direct (231,000 tonnes of CO ₂ emissions) and indirect CO ₂ emissions. More details are needed on what comprises these indirect emissions. More information here and here. Nokia has published a verification statement.	Nokia is committed to reducing CO ₂ emissions by a minimum of 10% in 2009 and 18% in 2010, from a baseline year of 2006. Nokia is to ensure that its key suppliers set energy efficiency and CO ₂ emission reduction targets. More information. Details of the various measures and targets that Nokia is taking are given. More information.	Nokia's target for renewable electricity is to cover 25% of its total needs during 2007 – 2009, increasing to 50% in 2010. See p.49 here. The 2007 target has been achieved. Nokia provides details of the various renewable energy certificates that it purchases. Through its renewable energy purchases and energy efficiency measures it aims to reduce CO ₂ emissions by a minimum of 10% in 2009 and 18% in 2010, compared to 2006. Nokia loses a point because it fails to address concerns about additionality and provide more information about the EU RECs it is buying. More information here and here.	All Nokia's new models of chargers meet or exceed the EPA's Energy Star requirements. All except one of the currently available chargers exceed the requirements in no load mode by between 30 and 90%. More information.

Criteria on Toxic Chemicals

Greenpeace wants to see electronics companies clean up their act.

Substituting harmful chemicals in the production of electronics will prevent worker exposure to these substances and contamination of communities that neighbour production facilities. Eliminating harmful substances will also prevent leaching/off-gassing of chemicals like brominated flame retardants (BFR) during use, and enable electronic scrap to be safely recycled. The presence of toxic substances in electronics perpetuates the toxic cycle – during reprocessing of electronic waste and by using contaminated secondary materials to make new products.

The issue of toxicity is overarching. Until the use of toxic substances is eliminated, it is impossible to secure 'safe' recycling. For this reason, the points awarded to corporate practice on chemicals are weighted more heavily than criteria on recycling.

Although there are five criteria on both chemicals and waste, the top score on chemicals is 18 points, as double points are awarded for vinyl plastic-free (PVC) and BFR-free models on the market, whereas the top score on e-waste is 15 points.

The first criterion has been sharpened to require companies not only to have a chemicals policy underpinned by the Precautionary Principle, but also to support a revision of the RoHS Directive that bans further harmful substances, specifically BFRs, chlorinated flame retardants (CFRs) and PVC. The criterion on Chemicals Management remains the same. The criterion: BFR-free and PVC-free models on the market, also remains the same and continues to score double points.

The two former criteria: Commitment to eliminating PVC with timeline and Commitment to eliminating all BFRs with timeline, have been merged into one criterion, with the lower level of commitment to PVC or BFR elimination determining the score on this criterion.

A new criterion has been added, namely Phase out of additional substances with timeline(s). The additional substances, many of which have already been identified by the brands as suspect substances for potential future elimination are:

- (1) all phthalates,
- (2) beryllium, including alloys and compounds and
- (3) antimony/antimony compounds

Criteria on e-waste

Greenpeace expects companies to take financial responsibility for dealing with the electronic waste (e-waste) generated by their products, to take back discarded products in all countries with sales of their products and to re-use or recycle them responsibly. Individual Producer Responsibility (IPR) provides a feedback loop to the product designers of the end-of-life costs of treating discarded electronic products and thus an incentive to design out those costs.

An additional e-waste criterion has been added and most of the existing criteria have been sharpened, with additional demands. The new e-waste criterion requires the brands to report on the use of recycled plastic content across all products and provide timelines for increasing content.

Criteria on energy

The five new energy criteria address key expectations that Greenpeace has of responsible companies that are serious about tackling climate change. They are:

- (1) Support for global mandatory reduction of greenhouse gas (GHG) emissions;
- (2) Disclosure of the company's own GHG emissions plus emissions from two stages of the supply chain;
- (3) Commitment to reduce the company's own GHG emissions with timelines;
- (4) Amount of renewable energy used
- (5) Energy efficiency of new models (companies score double on this criterion)

Click here to see more detailed information on the ranking

Ranking criteria explained

As of the 8th edition of the Guide to Greener Electronics, Greenpeace scores electronics brands on a tightened set of chemicals and e-waste criteria, (which include new criteria) and on new energy criteria.

The ranking criteria reflect the demands of the Toxic Tech campaign to electronics companies. Our two demands are that companies should:

- (1) clean up their products by eliminating hazardous substances; and
- (2) take-back and recycle their products responsibly once they become obsolete.

The two issues are connected: the use of harmful chemicals in electronic products prevents their safe recycling once the products are discarded.

Given the increasing evidence of climate change and the urgency of addressing this issue, Greenpeace has added new energy criteria to encourage electronics companies to:

- (3) improve their corporate policies and practices with respect to Climate and Energy

Ranking regrading: Companies have the opportunity to move towards a greener ranking as the guide will continue to be updated every quarter. However penalty points will be deducted from overall scores if Greenpeace finds a company lying, practicing double standards or other corporate misconduct.

Disclaimer: Greenpeace's 'Guide to Greener Electronics' aims to clean up the electronics sector and get manufacturers to take responsibility for the full life cycle of their products, including the electronic waste that their products generate and the energy used by their products and operations.

The guide does not rank companies on labour standards, social responsibility or any other issues, but recognises that these are important in the production and use of electronics products.

Changes in ranking guide: We first released our 'Guide to Greener Electronics' in August 2006, which ranked the 14 top manufacturers of personal computers and mobile phones according to their policies on toxic chemicals and recycling.

In the sixth issue of the Guide, we added the leading manufacturers of TVs – namely, Philips and Sharp – and the game console producers Nintendo and Microsoft. The other market leaders for TVs and game consoles are already included in the Guide.

In the eighth edition, we sharpened some of the existing ranking criteria on toxic chemicals and e-waste and added a criterion on each issue. We also added five new energy criteria. In this edition the criteria for the Precautionary Principle has been made more challenging.

For the latest version greenpeace.org/greenelectronics

In versions 11 and 12 of the Guide, PC manufacturers HP, Dell and Lenovo were served a penalty point for backtracking on their commitment to eliminate vinyl plastic (PVC) and brominated flame retardants (BFRs) from their products from the end of 2009. The penalty point on HP was lifted in version 13; LGE was served a penalty point for backtracking on its timeline to eliminate PVC and BFRs in all its products by end of 2010. LGE, Dell and Lenovo continue to be penalised in this version and are joined by Samsung, who is served a penalty point for backtracking on its commitment to eliminate BFRs in new models of all products by January 2010 and PVC by end of 2010.