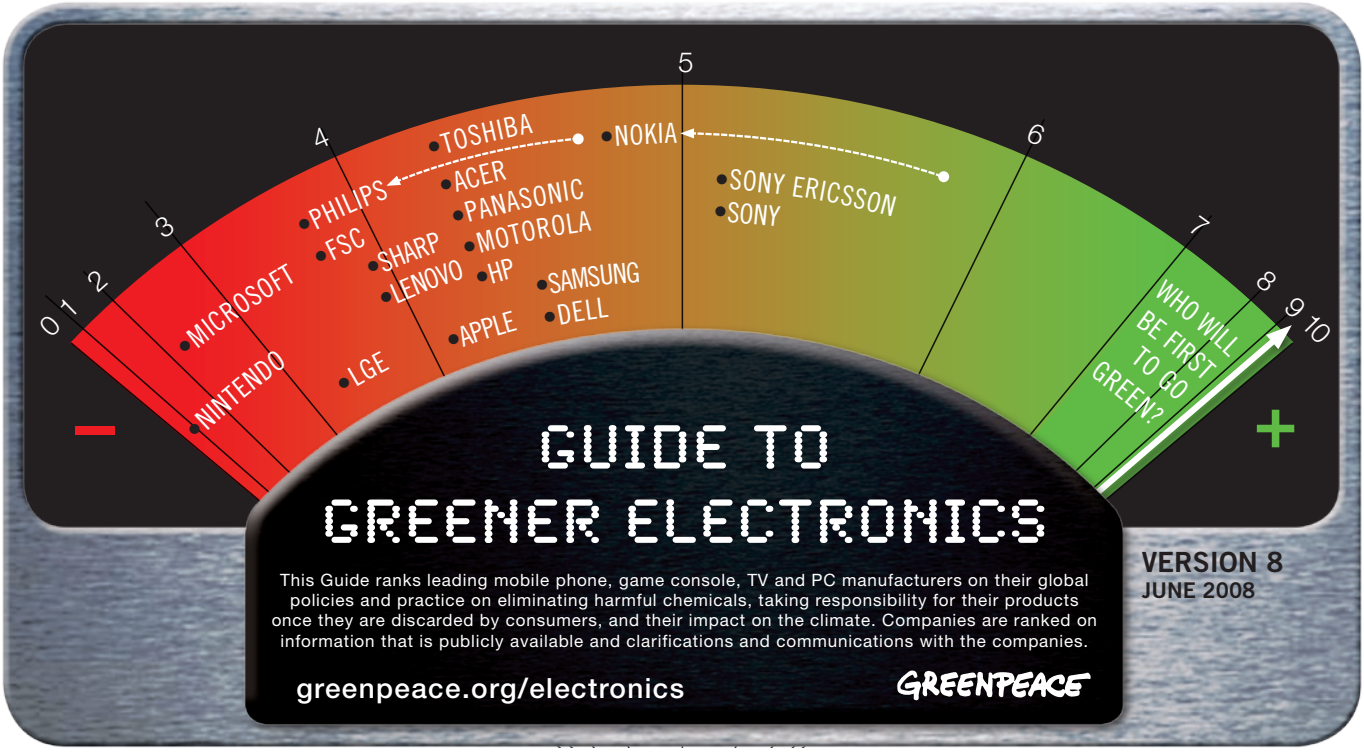

Ranking criteria explained

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

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 criteria on Precautionary Principle and Chemicals Management remain 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 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 (double points)

Click here to see more detailed information on the ranking

Ranking regrading: 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.

Change 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.

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A penalty point has been deducted from Nokia's overall score for corporate misbehaviour as a result of Greenpeace re-testing of the company's take-back practice in India which continues to be unsatisfactory.

Philips also gets a penalty point for double standards. On its global website, Philips recognises the benefits of Individual Producer Responsibility for product eco-design, but in the U.S. Philips is part of the Electronic Manufacturers' Coalition for Responsible Recycling, which does not support Producer Responsibility and wants to put the financial burden for collection and recycling of e-waste on the consumer.

LG ELECTRONICS Ranking = 3.3/10

LG Electronics comes in 16th position with a score of 3.3, gaining most of its points on chemicals and e-waste and scoring zero on all the energy criteria.

LGE has launched new models of mobile phones with halogen-free housings, packaging and main printed wiring board. The company has compiled figures for e-waste recycling in Europe, Asia and North America and reports a recycling rate in relation to current sales for all regions. Globally, the recycling rate for total IT and telecom equipment is 13.2% and consumer equipment (that includes TVs) is 13.7%.

LG ELECTRONICS Overall Score

	BAD (0)	PARTIALLY BAD (1+)	PARTIALLY GOOD (2+)	GOOD (3+)
Precautionary Principle				
Chemicals Management				
Timeline for PVC & BFR phaseout				
Timeline for additional substances phaseout				
PVC-free and/or BFR-free models (companies score double on this criterion)				
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				

LG ELECTRONICS Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle				LGE provides a strong definition of the precautionary principle reflecting the need to take action to eliminate harmful chemicals even though their effects may not be scientifically proven. **More information.**
Chemicals Management				LGE's product specs in the Manual for Preparation of Environmental Regulations earn them top marks. **More information here** and **pdf here.** LGE provides a substance list that includes **future substances to be reduced**, including beryllium and antimony.
Timeline for PVC & BFR phaseout				The first PVC-free products are to be launched in 2008; the remaining uses of PVC are to be phased out by the end of 2010. All new models released in 2010 are to be BFR-free. **More information.**
Timeline for additional substances phaseout	Phthalates are listed as Level A-II, substances that are banned form use. Beryllium and Antimony are listed as substances that are to be either monitored or reduced. **More information.**			
PVC-free and/or BFR-free models (companies score double on this criterion)		Mobile phones now have halogen-free housing, packaging and main printed wiring board. **More information here** and **here.**		

LG ELECTRONICS Detailed Scoring

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility			LGE supports individual producer responsibility, although it recognises that for IPR to be operationalised, technically and economically feasible identification solutions are needed. There is no evidence of LGE lobbying for IPR. **More information.**	
Provides voluntary take-back where no EPR laws exist		LGE now provides voluntary take-back of its discarded mobile phones in some 50 countries with 392 drop off points globally. However, large gaps still exist in Africa, Middle East and Latin America. **More information.** LGE has added a free mailing service in the US for mobile phones and accessories. **More information.** To score higher marks, LGE needs to provide voluntary take-back of more product types. Info about take-back of other end-of-life products. **More information.**		
Provides info for individual customers on take-back in all countries where products are sold		**Information** to customers on what to do with discarded mobile phones. **Information on other discarded products here.**		
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled			LGE has compiled figures for e-waste recycling in Europe, Asia and North America. A total figure is also given, as well as the recycling rate in relation to current sales for all regions. Globally, the recycling rate for total IT and telecom equipment is 13.2% and consumer equipment (that includes TVs) is 13.7%. **More information.**	
Use of plastic recycled content across all products - and timelines for increasing content	There is no reference to the use of recycled plastics in LGE products.			

LG ELECTRONICS Detailed Scoring

Energy score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for global mandatory reduction of GHG emissions	LGE makes no reference to support for global mandatory cuts of GHG emissions. **More information.**			
Company carbon footprint disclosure	LGE is in the process of establishing an inventory for greenhouse gases for all its domestic facilities by November 2008. **More information.**			
Commitment to reduce own direct GHG emissions	LGE has reduced some 5000 tons of greenhouse gases at its Chang-Won facility and will begin reduction activities for all its other domestic facilities when the inventory establishment is complete (see E2), through an integrated greenhouse gas management system. **More information.** More details of LGE's plan for reducing energy costs are in its 2005 sustainability report (p. 20). **More information.**			
Amount of renewable energy used	LGE gives some examples of its use of renewable energy, but no data on generating capacity or CO2 emissions avoided or targets for increasing use of renewable energy. **More information here** and **here.**			
Energy efficiency of New Models (Companies score double on this criterion)	LGE states that the majority of its products meet the standards of Energy Star, and provides links to the Energy Star product lists for Battery chargers, TVs and computers. However, no info is provided on the percentage of new models meeting the ES standards. **More information.**			