



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.

MOTOROLA Ranking = 4.3/10

Motorola is in joint 9th place with HP, scoring 4.3 points, which are spread evenly across all the issues.

The company has launched 55 models of mobile phone whose circuit boards are free of BFRs. On waste issues, Motorola reports a global take-back rate of 3% of total handsets sold in 2005.

Motorola scores relatively well on energy for disclosing greenhouse gas emissions, committing to cuts, reporting a 5.4% renewable energy use (as proportion of all electricity purchased) in 2007 and reporting on the energy efficiency of its products. Globally, all Motorola mobile phone chargers meet Energy Star Level 4 requirements since March 2007 – not since the standard came into effect in 2005. In the U.S, all Motorola’s mobile phone chargers exceed ENERGY STAR Tier 2 requirements by more than 50 percent in sleep and standby/no-load modes – but what about chargers sold outside the US?

MOTOROLA 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				

MOTOROLA Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle				Motorola has a definition of the precautionary principle which identifies precautionary measures to be taken. More information.
Chemicals Management				Motorola provides a list of banned and reportable substances in its Global Common Specification No. 12G02897W18 (updated 15 May 2008) More information. As a pdf.
Timeline for PVC & BFR phaseout	By June 2008, Motorola is to restrict use of PVC and BFRs in newly designed mobile devices parts and products – only restrict, not eliminate and only in ECOMOTO mobile phones, not Motorola's whole product portfolio. More information.			
Timeline for additional substances phaseout	By June 2008, Motorola is to restrict the use of phthalates in newly designed mobile devices parts and products – only restrict, not eliminate and only in mobile phones, not Motorola's whole product portfolio. More information. Phthalates (and Arsenic) are listed as 'controlled', for ECOMOTO line only, in Motorola's list of banned and reportable substances. Antimony and compounds and Beryllium and compounds are listed as reportable. More information.			
PVC-free and/or BFR-free models (companies score double on this criterion)		Motorola lists 55 models of mobile phone whose circuit boards are free of BFRs. No models free of PVC are listed. Moreover, Motorola's product portfolio includes home network equipment (e.g. set top boxes, wireless routers) and network equipment (e.g. base stations), as well as walkie-talkies. More information.		

MOTOROLA Detailed Scoring

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility		Motorola makes a clear statement in support of Individual Producer Responsibility, but there is no reference to the need for brand differentiation and no evidence of active lobbying for IPR. More information.		
Provides voluntary take-back where no EPR laws exist			Motorola offers recycling services in 72 countries, representing over 90% of global mobile phone unit sales. Motorola has still to offer take-back services for the rest of their products e.g. network equipment, although in the US it is now taking back modems, routers and cordless phones. More information.	
Provides info for individual customers on take-back in all countries where products are sold			Information is provided to individual customers in the countries where Motorola offers voluntary programmes. More information.	
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled			In 2007 Motorola's global take-back rate was an estimated 3% of total handsets sold in 2005. The end-of-life mobiles are collected via regulatory and voluntary programmes, including Motorola's own 'bring back' events. More information.	
Use of plastic recycled content across all products - and timelines for increasing content	One of Motorola's product design goals is to increase the use of recycled materials in its products. However, no examples or quantities are given. More information.			

MOTOROLA Detailed Scoring

Energy score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for global mandatory reduction of GHG emissions	<p>Motorola makes no reference to supporting global mandatory cuts of GHG emissions. More information.</p>			
Company carbon footprint disclosure		<p>Motorola calculates that direct and indirect greenhouse gas emissions were 375324 tonnes CO2 equivalent. But there is no external verification and no data about product supply chain emissions. More information.</p>		
Commitment to reduce own direct GHG emissions		<p>As a founding member of the Chicago Climate Exchange (CCX), a voluntary emissions-reduction program, Motorola has committed to a 6 percent reduction in its absolute greenhouse gas emissions by 2010, compared with 2000 – not 2006-2008 baselines specified by Greenpeace. More information.</p>		
Amount of renewable energy used		<p>In 2007, 5.4 percent of Motorola's total electricity purchases were from renewable energy sources. Motorola will continue to try to increase use of renewable energy globally. More information.</p>		
Energy efficiency of New Models (Companies score double on this criterion)			<p>Globally, all Motorola mobile phone chargers meet Energy Star Level 4 requirements – since they were certified in March 2007 – not since the standard came into effect in 2005. In the U.S., all Motorola's mobile phone chargers exceed ENERGY STAR Tier 2 requirements by more than 50 percent in sleep and standby/no-load modes – but this pertains only to US models. More information.</p>	