



### 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.

# SONY Ranking = 5.1/10

Sony comes in 2nd with the same total score of 5.1 as Sony Ericsson, but with fewer points on the chemicals criteria, which determines the ranking when total scores are tied. Sony still does relatively well on chemicals, its score boosted by having models on the market that are partially free of PVC and BFRs, including three models of video recorders and many models of the Personal Computer VAIO, "WALKMAN", Camcorder and Digital camera.

On waste issues, Sony scores relatively high by supporting Individual Producer Responsibility, providing some voluntary take-back and recycling of the e-waste generated by its branded products and reporting a recycling rate of 53% based on past sales of TVs and PCs.

On energy Sony still has room for improvement; it does score points for disclosing externally-verified greenhouse gas emissions for over 200 sites, reporting on its use of renewable energy (1.02% as a proportion of total electricity use) in 2006 and committing to absolute cuts in GHG emissions.

## SONY Overall Score

	<b>BAD (0)</b>	<b>PARTIALLY BAD (1+)</b>	<b>PARTIALLY GOOD (2+)</b>	<b>GOOD (3+)</b>
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				

## SONY Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle			Sony scores 2 points for stating that it will take steps to reduce, substitute and eliminate the use of substances that are potentially hazardous to the environment. <b>More information.</b>	
Chemicals Management				Sony has set a timeline of 1st April 2008 for eliminating all uses of beryllium oxide. Information on SS-00259 (7th edition, March 2008) Management Regulations and Green Partner programme to ensure implementation of the Regulations. <b>More information.</b>
Timeline for PVC & BFR phaseout			Sony provides a timeline of end of 2010 to substitute PVC in all new models of Mobile products (excluding accessories), and BFRs in the casing and main PWBs of all new models of Mobile Products. <b>More information.</b>	
Timeline for additional substances phaseout		Sony is working to eliminate specific phthalates used as a plasticiser in PVC, although a timeline isn't specified. <b>More information.</b> Sony has banned beryllium oxide from April 2008, although beryllium copper is listed as a controlled substance with no timeline for elimination. Antimony is not listed. <b>More information.</b>		
PVC-free and/or BFR-free models (companies score double on this criterion)			Sony has several examples of products that are partially free of PVC and BFRs, including three models of video recorders to the many models of the Personal Computer VAIO, "WALKMAN", Camcorder and Digital camera. These models are free of PVC in the casings and internal wiring and free of BFRs in casings and main printed wiring boards. <b>More information.</b>	

## SONY Detailed Scoring

EPR/recycling score	<b>BAD</b>	<b>PARTIALLY BAD</b>	<b>PARTIALLY GOOD</b>	<b>GOOD</b>
Support for Individual Producer Responsibility			Sony scores 2 points on this criterion because it 'respects' rather than supports the principle of extended producer responsibility – rather than individual producer responsibility. <b>More information.</b>	
Provides voluntary take-back where no EPR laws exist			Sony has now established a nationwide recycling program in the US, together with WM Recycle America. There is also a Sony Notebook trade-in program in the US and Canada. <b>More information.</b> <b>Sony offers recycling programs in Korea, Taiwan, Brazil and Australia.</b>	
Provides info for individual customers on take-back in all countries where products are sold			Sony provides information to individual customers in the EU, North America (including batteries) and Japan. <b>More information.</b> <b>Also see Sony Take Back Recycling Program website for the US.</b>	
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled			In fiscal 2006, Sony recovered 36,355 tons of resources from e-waste from Japanese consumers, which included end-of-life TVs and PCs, equating to a "resource reuse/recycling ratio of around 53% for based on average lifespan of TVs and PCs." <b>More information.</b> Sony reports on the amounts of WEEE and batteries collected in N. America, recycling rates for TVs and PCs in Japan and recycling volumes for batteries in Asia & Australia. <b>More information here and here.</b> <b>Recycling in Europe and ERP</b>	
Use of plastic recycled content across all products - and timelines for increasing content		Sony currently uses approximately 10,000 tons recycled plastics annually in various products, including televisions, recording media, audio products, PCs and digital video cameras. Sony has set its reused/recycled materials ratio targets at 12% or higher. <b>More information.</b> In 2006 Sony used 16,000 tons of recycled plastics (mainly recycled polystyrene). Sony's target is to double its use of recycled polystyrene by fiscal 2010 (relative to fiscal 2006). <b>More information.</b>		

## SONY Detailed Scoring

Energy score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for global mandatory reduction of GHG emissions		Sony loses points because the Tokyo Declaration it co-signed uses a baseline year of 2000 (not 1990) and fails to differentiate between the higher cuts in GHG emissions required by industrialised countries. <b>More information.</b>		
Company carbon footprint disclosure			Sony discloses third party verified GHG emissions from its own operations (over 200 sites), from part of its logistics and estimates emissions from the use of its products by consumers. <b>More information.</b> <b>Enlarged version of chart.</b> <b>Methods and approach.</b> <b>Verification is detailed.</b>	
Commitment to reduce own direct GHG emissions		Sony is committed to reducing emissions from business sites by 7% or more by 2010, but uses emission data from 2000 as baseline – not 2006-2008 baselines specified by Greenpeace. Data and targets could be presented more clearly. <b>More information.</b>		
Amount of renewable energy used		The proportion of renewable energy used by Sony was 1.02% in 2006. <b>More information.</b> No specific target for renewable energy use is set, although this is included in the target for offsetting GHG emissions. <b>More information.</b>		
Energy efficiency of New Models (Companies score double on this criterion)	Sony lists 22 VAIO notebooks that qualify for Energy Star, but does not provide the percentage of new models (put on the market since 20 July 2007) that comply with or exceed the Energy Star standard. <b>More information.</b>			