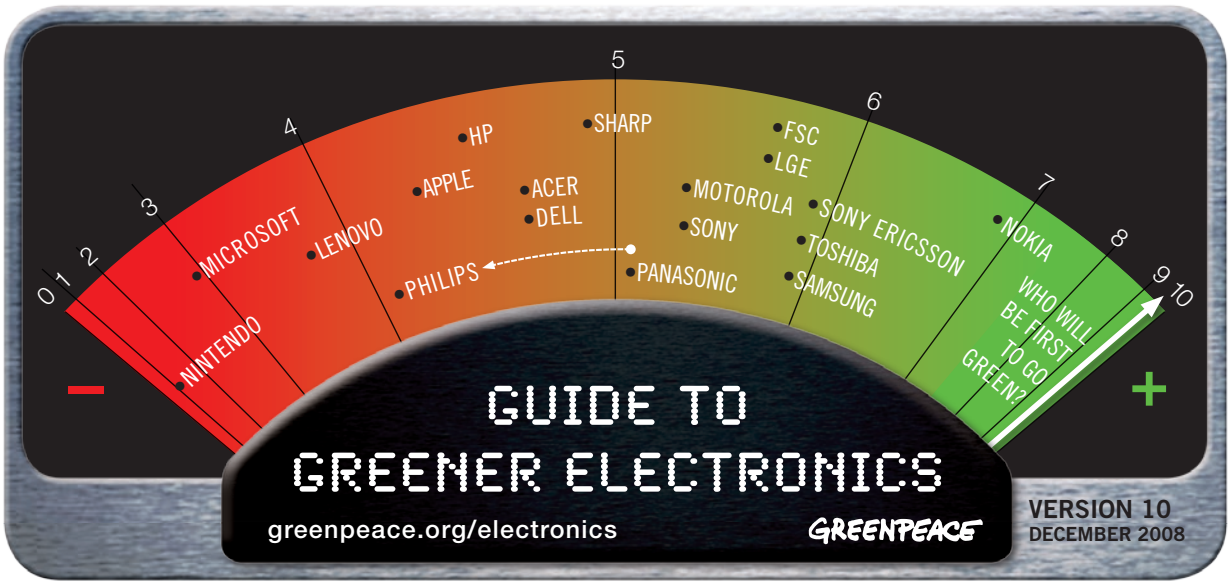

Criteria on Toxic Chemicals

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 (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.

For the latest version **greenpeace.org/greenerelectronics**

Philips continues to get a penalty point; however, this is no longer for double standards (as the Electronic Manufacturers' Coalition for Responsible Recycling has been dissolved), but for bad lobby in the EU on Revision of WEEE Directive.

SHARP Ranking = 4.9/10

Sharp climbs up the ranking from 16th place with a score of 3.1 to 10th with 4.9 points.

Sharp scores well for its policy and practice on toxic chemical issues and gains a point for providing a timeline of 2010 for eliminating phthalates and antimony. It has launched many models of LCD TVs and solar modules that are free of PVC (except accessories).

On e-waste criteria, Sharp is now supporting Extended Producer Responsibility – though not Individual Producer Responsibility. It also gains points for reporting its recycling rate in Europe. Sharp provides information to consumers in a few countries on what to do with their discarded Sharp branded products and reports on the use of small amounts of recycled plastic.

Sharp's sharp rise up the ranking is primarily due to improvements in its energy score. It scores top marks for supporting global cuts in greenhouse gas (GHG) emissions of 50% by 2050 and at least 30% in industrialised countries by 2020. Sharp discloses third party verified GHG emissions from its own operations and reports that 0.2% of the electricity generated at its Japanese production sites in 2007 and 85% of electricity used at its US sites came from renewable energy sources. Sharp's reporting of energy efficiency of its products continues to be weak.

SHARP 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				

SHARP Detailed Scoring

Chemicals

Precautionary Principle	Chemicals Management	Timeline for PVC & BFR phaseout	Timeline for additional substances phaseout	PVC-free and/or BFR-free models (double points)
GOOD (3+)	**PARTIALLY GOOD (2+)**	**GOOD (3+)**	**GOOD (3+)**	**PARTIALLY BAD (1+)**
Sharp scores top marks for its commitment and understanding of the Precautionary Principle. **More information.** **Basic Environmental Philosophy** (point 2.2).	To achieve top marks Sharp needs to define the criteria for identifying substances for future elimination. **Manual for Survey of Chemical Substances and Green Procurement Guidelines.** **Manual for Survey of Chemical Substances Contained in Parts and Materials.** **Green Procurement Guidelines.**	Sharp commits to eliminate PVC and BFRs from all products by the end of 2010, provided it can find suitable alternatives. **More information.**	Sharp commits to eliminate phthalates and antimony from all products by the end of 2010, provided it can find suitable alternatives. The company has already banned beryllium, but there are many exemptions for which Sharp needs to find substitutes. **More information.**	Sharp provides a list of many models of LCD TVs and solar modules that are free of PVC, except accessories. Many models of LCD TVs, DVD projectors, audio and video products have casings free of BFRs, but none are totally free of BFRs. **More information.**

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 BAD (1+)	**BAD (0)**	**PARTIALLY BAD (1+)**	**PARTIALLY BAD (1+)**	**PARTIALLY BAD (1+)**
In support of Extended Producer Responsibility, Sharp is taking a lead in recycling e-waste and designing more recyclable products. It is actively participating in the design of recycling systems now being considered in China and other parts of Asia. **More information.**	Sharp stays on zero as the voluntary take-back efforts to date are insufficient to score one point. **More information.** In the US, Sharp is part of US EPA's Plug-In To eCycling. Offers voluntary take-back of toner cartridges in Canada, France and Japan, and mobiles (Mobile Muster) in Australia: In Canada, Sharp also recycles old electronic equipment for a small fee, through a recycling partner, Accu-Shred. **More information.** Sharp has announced the beginning of nationwide recycling in the US, including TVs, which so far covers 10 States. **More information.**	Links to local Sharp contacts for customers in EU, US, Canada, Japan and Australia have improved with addition of phone numbers, but Sharp needs to expand takeback services so that it can serve more of its customers. **More information.**	Although Sharp provides figures for recycling of TVs, copiers, PCs & washing machines (in units and wt) as well as weight of batteries collected in Japan for 2007, it does not report this as a percentage of past (or even current) sales. **More information here** and **here.** Sharp also reports on amounts of used electrical products collected in Maine, Minnesota and as part of the EPA Plug-in to eCycling program. It reports on the amounts collected in Germany, UK and Czech Republic as a percentage of current sales. **More information.**	In 2007 Sharp recycled 850 tons of post-consumer plastics and has a target to increase this to 1000 tons in 2008.The data is not presented as a percentage of all plastic sourced. **More information here** and **here.**

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)
GOOD (3+)	**PARTIALLY GOOD (2+)**	**BAD (0)**	**PARTIALLY BAD (1+)**	**PARTIALLY BAD (1+)**
Sharp contributes to a mandatory global initiative that requires industrialised countries to cut their greenhouse gas emissions at least 30% by 2020 and calls for worldwide emissions to be reduced at least 50% from 1990 levels by 2050. To stay on 3 points, Sharp needs to make its support for cuts of at least 30% in industrialised countries by 2020 more explicit. **More information.**	Sharp reports on GHG emissions from its own operations in absolute terms and per production unit. **More information.** **Verification details.** **Calculation standards for Envi Performance Indices.**	Sharp has a target to reduce relative CO2 emissions (per adjusted production unit)by 28% compared to fiscal 1990 by 2010, but for domestic production sites only. There is no target for an absolute reduction of emissions of all GHGs. **See CSR report 2008** (p.24 - 25)	Sharp estimates that 0.2% of the electricity generated at its domestic production sites in 2007 came from renewable energy sources. **More information.** In Europe some of its companies are operating on 100% renewable sources of energy and 85% of electricity used at its US sites is renewable. However, no global percentage of renewable energy use is given and there is no commitment or timeline to increase its use. **More information.**	"Most" Sharp TVs launched in or after June 2005 meet the Energy Star standards, nearly 70% of these are at least 30% more energy efficient than the baseline requirements and 30% are at least 50% more energy efficient. Sharp needs to put a percentage on TVs meeting Energy Star standards, as 'most TVs' could be just over 50%. It also needs to report on energy efficiency of other 'specified products', namely mobile phone chargers (external power supplies) and PCs (sold only in Japan). **More information here and here.**