



### 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.

From this version of the Guide, Fujitsu Siemens Computers will no longer be scored. Fujitsu will acquire the Siemens share in Fujitsu Siemens Computers (FSC). The new company will operate under the brand Fujitsu from April 1, 2009. Fujitsu will be evaluated in the next Guide due in June 2009.

For the latest version [greenpeace.org/greenelectronics](http://greenpeace.org/greenelectronics)

In this version of the Guide, PC manufacturers HP, Lenovo and Dell have been served a penalty point for backtracking on their commitment to eliminate vinyl plastic (PVC) and brominated flame retardants (BFRs) from their products by the end of 2009.

## TOSHIBA Ranking = 5.3/10

Toshiba drops to 7th place with a reduced score of 5.3, losing points on the chemicals and energy criteria. It drops a point on its understanding of the precautionary principle due to a much poorer explanation of this important principle on Toshiba's Corporate website, as compared to its PC site. The company also loses points on its commitment to cutting GHGs, as the proposed cuts are only relative, and on the energy efficiency of its products. The reporting of the energy efficiency of its PCs is unclear and on TVs, Toshiba reports only on the efficiency of US TVs; the data on models exceeding the latest Energy Star v.3.0 standard is confusing.

Toshiba scores points on the energy criteria by reporting its use of renewable energy (although it needs to commit to increase this with a timeline) and for supporting global cuts in GHG emissions and greater cuts for industrialised countries; it also scores points for disclosing third party verified greenhouse gas emissions from its own operations.

Toshiba does well on chemicals by committing to introduce alternatives to phthalates, beryllium and antimony by 2012 in all its products. It has also launched models of laptops with circuit boards free from brominated flame retardants (BFRs), EcoMark-certified products without PVC, and makes other components and parts that are free from these harmful substances.

The company does not do as well on e-waste; although it reports a recycling rate of 12% for a group of 5 types of products that includes TVs, PCs and 3 types of home appliances, this rate is based on current (not past) sales and is only for Japan.

## TOSHIBA 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 <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				

# TOSHIBA 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)
<b>PARTIALLY GOOD (2+)</b>	<b>GOOD (3+)</b>	<b>GOOD (3+)</b>	<b>GOOD (3+)</b>	<b>PARTIALLY BAD (1+)</b>
Support for the precautionary principle (PP) on Toshiba's global corporate site would score just one point. Toshiba scores 2 points because of a better understanding of this principle by its PC division. To stay on 2 points, Corporate Toshiba needs to adopt the same position on PP as its PC division. <b>More information. For PC Division see commitment 4.</b>	Toshiba has <b>Green Procurement Guidelines</b> for suppliers and ranks suppliers. <b>See pdf file.</b> Toshiba's <b>PC and Network Company. Guidelines for Green Procurement v.6.</b>	Toshiba has committed to phasing out PVC and BFRs from all its products, with a timeline of FY 2009 – not only from their notebook PCs and mobiles. <b>More information.</b>	Toshiba has committed to replace Phthalates, Beryllium and compounds and Antimony and compounds by 2012 in all its Consumer Electronic products, if alternatives are available. <b>More information. For commitment to phase out these substances in notebook PCs.</b>	Toshiba makes notebook PCs with circuit boards free of halogens and antimony, and mercury free LEDs; info on the Dynabook notebook PC. <b>More information. Halogen-free Notebook PC, the Portégé. Information on mobile phones</b> including PVC free USB cables and halogen free printed circuit boards. Case studies of products that are free of PVC, BFRs or other hazardous substances <b>here.</b>

## 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
<b>BAD (0)</b>	<b>PARTIALLY GOOD (2+)</b>	<b>PARTIALLY GOOD (2+)</b>	<b>PARTIALLY BAD (1+)</b>	<b>PARTIALLY BAD (1+)</b>
Toshiba believes that IPR provides incentives for Design for Recycling. To score points Toshiba needs to explicitly support IPR with no 'flexibility' caveat and for full marks it needs to lobby for IPR and explore how IPR can be operationalised. <b>More information.</b>	Voluntary take-back of PCs is provided in Canada, South Korea, Australia, New Zealand, China, Singapore, Thailand and much of SE Asia; there are plans to initiate a programme in India in 2009 and in future to Burma, Pakistan and Cambodia. Toshiba claims its recycling programs cover 80% of total (PC) sales volume, but don't include other Toshiba products like TVs, that are so problematic at end-of-life? <b>More information here and here.</b> Toshiba is part of recycling joint venture MRM, together with Sharp and Panasonic, which has announced US nationwide recycling for consumer electronics, including TVs, from Nov 1 2008, with take-back offered throughout the United States. <b>More information.</b>	Comprehensive information to customers on the take-back of used PCs mainly in OECD countries. <b>More information.</b> Information on take-back of consumer electronics including TVs in the US <b>here.</b>	Toshiba scores one point because the statistics it provides do not report separate recycling rates for PCs and TVs based on past sales. Toshiba reports its ratio of "recycling weight to the sales weight" for specified products (including TVs, PCs and 3 types of home appliances) based on current (not past) sales. For 2007, the recycling rate is 12%. Although Toshiba provides figures for the quantities recycled per product category globally, it does not provide a calculation of % recycled by product type (TVs and PCs), although this can be deduced and is below 25% per product group. <b>More information.</b> Toshiba needs to clarify how it calculates EU recycling rates.	Toshiba used 1,300 tons of recycled plastics in the manufacture of washing machines, Multi-Function Peripherals (MFPs), and other products in 2007, representing a recycled plastic ratio of 1.3%. Toshiba plans to increase the ratio of recycled plastics to up to 25% of total plastics use as part of its next voluntary plan. Toshiba also needs to provide a timeline for increasing use of recycled plastic. <b>More information. Example of recycled plastic parts used in PC case and in a Multi Function Peripheral.</b>

## 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)
<b>PARTIALLY GOOD (2+)</b>	<b>PARTIALLY GOOD (2+)</b>	<b>BAD (0)</b>	<b>PARTIALLY GOOD (2+)</b>	<b>PARTIALLY BAD (1+)</b>
Toshiba supports global mandatory cuts in GHG emissions by over 50% and by 60-80% for developed nations (as compared to 1990 levels) by 2050. The 2050 timeline for industrialised countries is unacceptable as it allows a period of business as usual, before any action is started. Also, there is insufficient differentiation between the cuts required by developed countries compared with those by developing ones. <b>More information.</b>	Toshiba reports on emissions from R&D, through procurement, manufacturing, use & recycling, <b>see P.49 of CSR report 2008.</b> GHG emissions are calculated in accordance with ISO14064. <b>More information.</b> Details of third party verification of data are provided <b>here.</b>	Toshiba commits only to making relative cuts to GHGs. There is no commitment to an absolute reduction. Toshiba aims to refrain from increasing emissions by FY2012, make them peak out at 70% of less than the FY1990 level and decrease them further by 2025. <b>More information. Also see p.33 CSR report 2008.</b> Toshiba has a target of reducing CO2 emissions by 47% by 2012, but this is a relative 'rate to net production output'. Reduction of non-CO2 GHG emissions is 38% by 2012 for total emissions. The baseline year is 2000. See p.48 CSR report 2008.	Toshiba gives some examples of renewable energy at Toshiba facilities and estimates that the percentage of renewable energy used by Toshiba Groups in total is approximately 10.1%. However, this includes renewable energy supplied as part of the general Japanese power supply (10% in Japan) which could result in double counting. To stay on 2 points, Toshiba needs to invest in renewable energy and set a target and timeline for increased use of RE globally. <b>More information.</b>	Toshiba reports that 93% of new PC platforms developed since July 07 can be configured to meet Energy Star 4. Toshiba needs to clarify what it understands by 'Energy Star compliant configurations'. PCs should not go out of ES compliance when consumers tweak power management settings. <b>More information.</b> Toshiba now reports that 38.2% of LCD TVs in the US since 1/7/05 are ES compliant, with 21 models exceeding the requirements but this is information only for the US market, not globally. Toshiba scores just one point as it reports only on US TVs and the data on models exceeding the ES 3.0 standard is confusing. <b>More information.</b>