



### 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.

## HP Ranking = 3.7/10 - 1 = 2.7/10

HP drops from 13th to penultimate (16th) position weighed down by a penalty point imposed for backtracking on its commitment to eliminate PVC and brominated flame retardants (BFRs) in computing products by end of 2009. Although HP still communicates this timeline on its website, in a call with Greenpeace in February 2009, the company admitted that it would be unable to meet its commitment. There is no new timeline which means in effect, no commitment. In addition, HP has no products on the market free of these toxic substances.

HP also loses points on energy, because it no longer reports the percentage of PCs that are Energy Star compliant or exceed the ES standard.

On the other energy criteria, HP discloses externally verified greenhouse gas emissions from its own operations and estimates the supply chain greenhouse gas emissions of 80% of its first tier suppliers. It scores top marks for its goal to reduce GHG emissions of operations and products to 25 percent below 2005 levels by 2010. HP gains a point for reporting its use of renewable energy as 2% of global energy consumption with a goal to double global purchases of renewable power from under 4% in 2008 to 8% by 2012.

HP gains a point on e-waste, because it has launched a free 'Consumer Buyback' recycling programme in the US for HP and Compaq-branded product waste. But its voluntary take-back programme continues to be weak, being mainly oriented towards its business rather than individual customers. The company gains points for reporting a reuse and recycling rate in 2007 of 15% of relevant sales, although more information is needed on how this is calculated. HP also needs to prove that energy recovery (namely, waste incineration) is not part of its 15% recycling performance and if so, exclude it from future calculations.

## HP 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				

# HP 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>GOOD (3+)</b>	<b>GOOD (3+)</b>	<b>BAD (0)</b>	<b>BAD (0)</b>	<b>BAD (0)</b>
HP's definition of Precautionary Principle reflects the need to eliminate potentially harmful chemicals even without full scientific certainty of harm . <b>More information.</b>	HP scores top marks on its chemical management. <b>More information.</b> <b>General Specification for the Environment.</b>	HP's goal is to eliminate all remaining uses of BFRs and PVC from new computing products as technologically feasible alternatives become readily available. But, in a call with HP in February 2009, HP already informed Greenpeace that it would be unable to meet its commitment to eliminate PVC and BFRs in computing products by end of 2009. No new timeline is provided, without which there is no real commitment. Hence the zero score. <b>More information.</b>	Beryllium and beryllium compounds, and phthalates have been identified for future possible restriction but no timeline for their elimination is given. There is no reference to antimony. <b>More information here and here.</b>	No HP products are completely free of PVC or all BFRs. Although no BFRs are used in external casings, they are still used in the circuit boards. Some products are free of PVC except for cables. Substitution of BFRs and PVC in these key applications is needed before substantial progress is recognised. <b>More information.</b> <b>Information about other products here and 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>PARTIALLY GOOD (2+)</b>	<b>PARTIALLY BAD (1+)</b>	<b>PARTIALLY BAD (1+)</b>	<b>PARTIALLY BAD (1+)</b>	<b>PARTIALLY BAD (1+)</b>
<b>HP supports and lobbies for IPR.</b> HP has a <b>good statement</b> that specifies individual responsibility for its own products and clarifies that if this is not (physically) possible that it supports an approach to IPR that is based on producers accepting the financial responsibility for recycling their share of products. <b>In Europe,</b> Hewlett Packard is a founding member of the European Recycling Platform that supports IPR. To regain top marks, HP will need to explore options for operationalising IPR and continue to lobby for IPR, inter alia by ensuring that the revised WEEE legislation sets clearer requirements (enforcement criteria) for the implementation of IPR and does not allow indefinite use of the Visible Fee.	HP has launched a free 'Consumer Buyback' recycling programme in the US for HP and Compaq-branded product waste. <b>More information here and here.</b> HP has also unveiled conclusions and next steps of a project to tackle e-waste in Africa, including a pilot project in South Africa. <b>More information.</b> Besides Canada, Hong Kong, Puerto Rico and the state of Victoria in Australia, HP's voluntary take-back programme is only for business customers. For PC hardware take-back, major gaps in Africa and South America. <b>More information here and here.</b> <b>Trade in and product reuse.</b>	HP provides information to consumers in the US on voluntary take-back. <b>More information.</b> HP only scores one point as it fails to provide information to its individual customers in Latin America, Africa, India, New Zealand, but the information provided is good and accessible. <b>More information here and here.</b> <b>Info on a range of options (asset recovery, donation).</b>	HP reports a reuse and recycling rate in 2007 of 15% of relevant sales, and no longer includes consumables in the calculation. <b>More information.</b> To score more points, HP needs to prove energy recovery (aka incineration) is not part of the 15% recycling performance and if so, exclude it from future calculations. More information is also needed on how the 15% is calculated, specifically for the EU where companies currently pay for recycling collectively, by current market share. To earn more points, HP needs to provide EU figures from own brand sampling of return rate, undertaken in at least one Northern EU country, one Southern EU country and one new Member State – and provide indications of how it intends to expand this sampling in the future.	HP used more than 5 million pounds (2,300 tonnes) of recycled plastic in its original HP inkjet cartridges in 2007, and has committed to using twice as much in 2008. <b>More information.</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 BAD (1+)</b>	<b>PARTIALLY GOOD (2+)</b>	<b>GOOD (3+)</b>	<b>PARTIALLY BAD (1+)</b>	<b>BAD (0)</b>
HP supports the IPCC recommendation that global GHG emissions be reduced by well below half of the emission levels in 2000 by the middle of this century, but does not differentiate the need for greater cuts by industrialised countries. <b>More information.</b> HP is a signatory of the Bali Communiqué. For top marks, HP needs to support concrete global targets (numbers) and cuts by industrialised countries of at least 30% by 2020. <b>More information here and here.</b>	HP reports GHG emissions from its operations, estimates its supplier GHG emissions and reports on product transport. HP could score full marks, but it estimates – and only estimates - the supply chain GHG emissions of just 80% of their first tier suppliers. <b>More information. Details of emissions from operations. External verification details.</b> HP recently delivered on its goal to report emissions from first-tier suppliers but this information conflicts with the above about estimating just 80% of first tier suppliers. <b>More information here and here.</b>	HP's overall goal is to reduce the combined energy consumption and associated GHG emissions of HP operations and products to 25 percent below 2005 levels by 2010. <b>More information.</b> HP aims to reduce GHG emissions from HP-owned and HP-leased facilities worldwide to 16 percent below 2005 levels by 2010. HP provides detailed information on its use of 2005 as a baseline year ( <b>see footnote #2</b> ) To stay on 3 points, HP needs to provide projections on GHG reductions to the year 2012, to show commitment to continued improvement.	HP reports that it purchased 50 million kWh of renewable energy credits in the US in 2007, representing 2% of its global energy consumption. <b>More information.</b> HP has announced renewable energy initiatives in its facilities, research and products to support a new goal to double global purchases of renewable power from under 4 percent in 2008 to 8 percent by 2012. <b>More information.</b>	HP offers the 80% efficient power supply that is part of the Energy Star requirement for all products and have select ENERGY STAR models preconfigured. However, no information is given on the percentage of PCs that are Energy Star compliant or exceed the ES standard. <b>More information.</b> <b>HPs products that qualify for ENERGY STAR®</b>