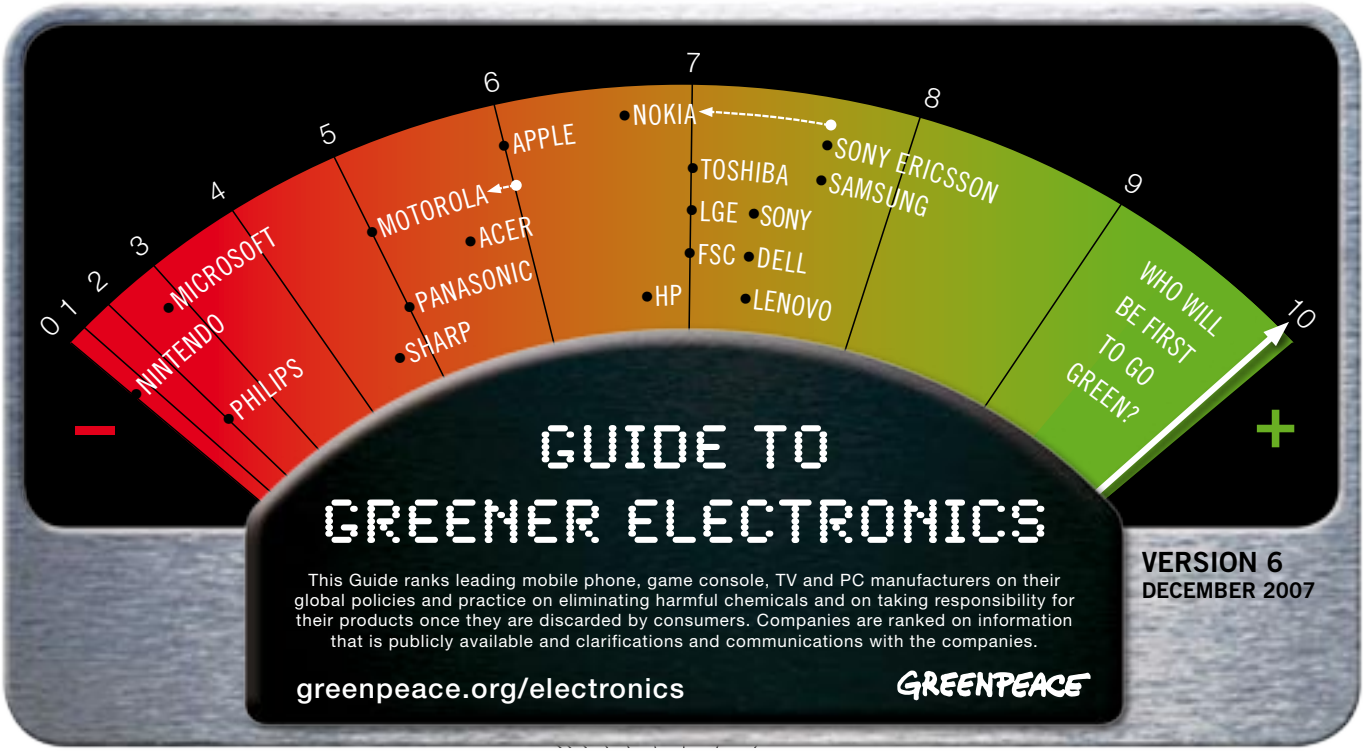


Ranking criteria explained

The ranking criteria reflect the demands of the Toxic Tech campaign to the electronics companies. Our two demands are that companies should:

- clean up their products by eliminating hazardous substances;
- takeback and recycle their products responsibly once they become obsolete.

The two issues are connected. The use of harmful chemicals in electronics prevents their safe recycling when the products are discarded. Companies score marks out of 30, which are then re-calculated to give a mark out of 10 for simplicity.

Toxic chemicals criteria

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.

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 (five criteria, double points for PVC – and BFR-free models) are weighted more heavily than criteria on recycling, because until the use of harmful substances is eliminated in products, it is impossible to secure 'safe', toxic-free recycling.

Where two companies score the same number of total points, the company with the higher score on the chemicals criteria will be ranked higher.

The electronics scorecard ranks companies on:

Chemicals policy and practice (5 criteria)

1. A chemicals policy based on the Precautionary Principle
2. Chemicals Management: supply chain management of chemicals via e.g. banned/restricted substance lists, policy to identify problematic substances for future elimination/substitution
3. Timeline for phasing out all use of vinyl plastic (PVC)
4. Timeline for phasing out all use of brominated flame retardants (not just those banned by EU's RoHS Directive)
5. PVC- and BFR-free models of electronic products on the market.

Policy and practice on Producer Responsibility for taking back their discarded products and recycling (4 criteria)

1. Support for individual (financial) producer responsibility – that producers finance the end-of-life management of their products, by taking back and reusing/recycling their own-brand discarded products.
2. Provides voluntary takeback and recycling in every country where its products are sold, even in the absence of national laws requiring Producer Responsibility for electronic waste.
3. Provides clear information for individual customers on takeback and recycling services in all countries where there are sales of its products.
4. Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled.

Click here to see more detailed information on the ranking

Ranking regrading: Companies have the opportunity to move towards a greener ranking as the guide is updated every quarter. However penalty points are deducted from overall scores if Greenpeace finds a company lying, practising 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. The guide does not rank companies on labour standards, energy use or any other issues, but recognises that these are important in the production and use of electronics products.

Ranking guide addition: 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 have 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.

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

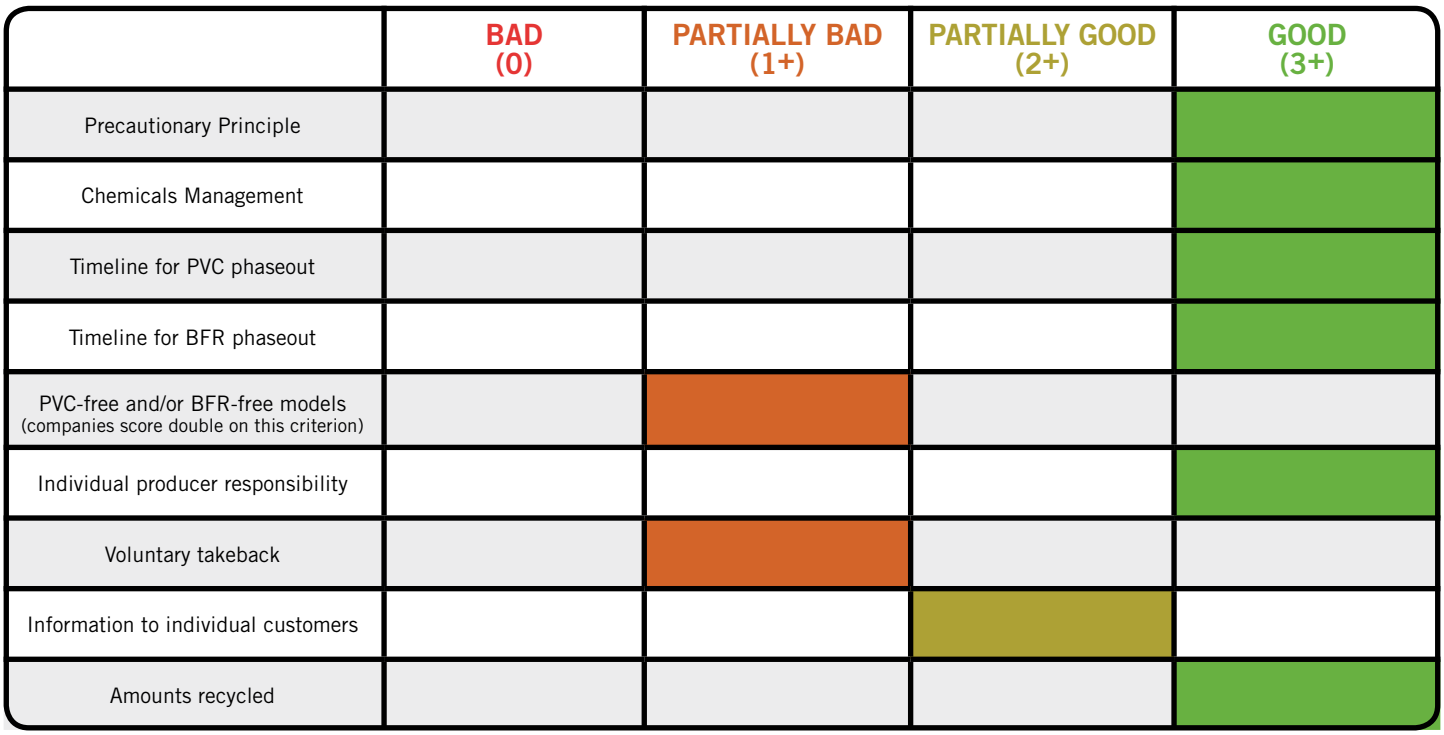
A penalty point has been deducted from Nokia and Motorola's overall score for corporate misbehaviour as a result of Greenpeace testing of the companies' takeback practice in the Philippines, Thailand, Russia, Argentina and India.

SAMSUNG Ranking = 7.7/10

Samsung has moved up from 8th position to 2nd as a result of introducing products free of the most harmful chemicals; all new models of LCD panels are now free from PVC plastic and all new models of mobile phones have circuit boards that are largely free of brominated flame retardants (BFRs), together with the housing and peripherals. The company scores top marks on all the other chemicals criteria.

Samsung has also improved its reporting on the recycling of obsolete products and supplies good information to consumers on what to do with discarded products – at least for those products for which Samsung offers a takeback service. On the down side, it loses points for providing voluntary takeback of electronic waste in only a few countries and for only some groups of products.

SAMSUNG Overall Score



SAMSUNG Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle				Samsung scores top marks on its support for and understanding of the Precautionary Principle. **More information.**
Chemicals Management				Samsung scores full marks on this criterion, by identifying future chemicals to be targeted for elimination. **Identification and management of targeted substances. SEC Standard 0QA-2049. Eco-Partner Certification Program.**
Timeline for PVC phaseout				Full marks for providing a timeline of 2010 for phasing out PVC. The first totally PVC-free mobile phones to be launched in April 2008. **More information here.**
Timeline for BFR phaseout				Timeline for phasing out BFRs in all new models is January 2010. **More information.**
PVC-free and/or BFR-free models (companies score double on this criterion)		Since 1st November 2007, all new models of LCD panels are PVC- free. Since 1st July 2007 all new models of mobile phone use BFR-free materials in most if not all circuit boards. The housings of all mobile handsets and peripherals are BFR-free. Samsung has developed halogen-free memory chips and semiconductors for certain applications. **More information.**		

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility				Samsung scores top marks for its support for IPR. **More information.**
Provides voluntary takeback where no EPR laws exist		Samsung provides voluntary takeback only in a few countries and only for some product groups. **Voluntary initiatives. Mobile phone recycling. Global recycling. Domestic (Korean) recycling**		
Provides info for individual customers on takeback in all countries where products are sold			Samsung scores an extra point for providing accessible information to consumers on what to do with their discarded products. **More information. Voluntary programmes.**	
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled				Samsung estimates that in 2006 its recycling rate as a percentage of current sales was 3.2%. **More information here.**