



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 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/greenelectronics](https://www.greenpeace.org/greenelectronics)

A penalty point has been deducted from Nokia'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.

MICROSOFT Ranking = 4.7/10

Another newcomer to the Guide at the last ranking, Microsoft rises to joint 15th position, up from number 16. The company has improved its score across many of the chemicals criteria; it now has a definition of the Precautionary Principle (although it is difficult to access) and scores full marks for its chemicals management and for setting a new timeline of 2010 to eliminate polyvinyl chloride (PVC) plastic and all brominated flame retardants (BFRs).

Microsoft now accepts individual responsibility for its e-waste (although there is room for improvement in its definition) and is reporting on the amounts of e-waste recycled as a percentage of past sales, albeit only for Europe. Microsoft fails to provide voluntary take-back for its customers' end-of-life products or sufficient information to customers to score any points.

MICROSOFT Overall Score

	BAD (0)	PARTIALLY BAD (1+)	PARTIALLY GOOD (2+)	GOOD (3+)
Precautionary Principle				
Chemicals Management				
Timeline for PVC phaseout				
Timeline for BFR phaseout				
PVC-free and/or BFR-free models (companies score double on this criterion)				
Individual producer responsibility				
Voluntary takeback				
Information to individual customers				
Amounts recycled				

MICROSOFT Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle			Microsoft now has a definition of the Precautionary Principle, as defined in the UN Rio declaration. However, for top marks, the policy principle needs to be made more prominent on the website. It is currently hidden away on the last (p.14) of Microsoft's H00594 Restricted Substances Specification. More information here and here.	
Chemicals Management				Microsoft lists its Chemical Specifications and has added a procedure for identifying future substances for elimination (see Section D, page 14 of H00594 Restricted Substances Specification). Suspect substances for potential future elimination include those on California Proposition 65 List and the Canada Environmental Protection Act Domestic Substance List. However the California Proposition 65 List includes 100s of substances, most of which are not even used by the electronics industry. Restricted Substances Specifications. Restricted Substance Specification for Hardware Products and Packaging (H00594). Restricted Substance Control System (H00642). California Proposition 65 List.
Timeline for PVC phaseout				Microsoft is committed to eliminating PVC from all of its hardware products by or before 2010. More information here and here.
Timeline for BFR phaseout				Microsoft is committed to eliminating brominated fire retardants from all of its hardware products by or before 2010. More information here and here.
PVC-free and/or BFR-free models (companies score double on this criterion)	No products free of PVC and BFRs.			

MICROSOFT Detailed Scoring

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility			Although Microsoft now states that it “supports the mandatory collection and recycling of consumer electronics funded by individual producers...”, for full marks support for the principle of Individual Producer Responsibility needs to be more explicit. More information here and here.	
Provides voluntary takeback where no EPR laws exist	Microsoft now provides a link to CEA's recycling website for its US customers. CEA's recycling pages. Microsoft's Authorised Refurbisher (MAR) Programme extends the lifespan of otherwise obsolete PCs. More information.			
Provides info for individual customers on takeback in all countries where products are sold	Microsoft provides a link to CEA's recycling site @ mygreenelectronics.org which gives information about recycling in the US, although Microsoft/Xbox is not one of the companies/products listed. A link listing Microsoft's recycling partners in the EU is too large to download. Links to individual EU country sites are not very helpful, as they connect to main government websites and not even the respective Environmental Ministries responsible for WEEE Directive enforcement or to the Producer Responsibility Organisations in each EU Member State. E.g. For UK links to UK govt website – not even DEFRA. E.g. for Poland, link to main PL govt website – not even MOS, the Env Ministry.			
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled		In 2006, Microsoft funded the direct recovery and recycling of over 1.3 million kgs of consumer electrical and electronic goods from European households, which represents some 37% of their year 2000 hardware sales volume in Europe. This metric available only for Europe. However, in Europe Microsoft pays for recycling historical waste by current market share and not for the actual amount recycled. So, there is no relationship between what Microsoft pays for recycling and the amount actually recycled. More information.		