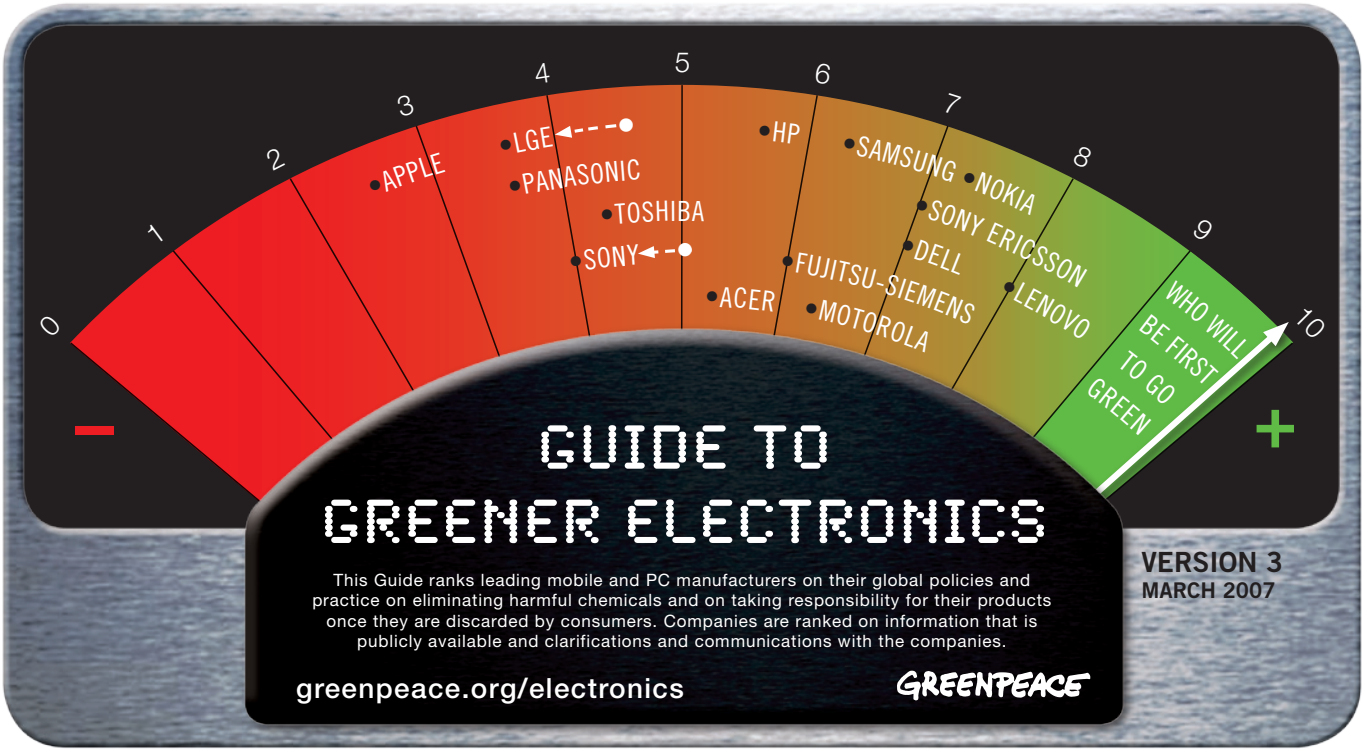

Ranking criteria explained

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 it sells its products, 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 will be updated every quarter. However penalty points will be 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.

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

One penalty point has been deducted from the overall scores of Sony and LGE for corporate double standards on Individual Producer Responsibility (IPR) for products discarded by consumers.

Sony is a founding member of the European Recycling Platform which supports IPR; however, in the US, Sony is part of a Coalition that has been opposing Producer Responsibility and lobbying for U.S. consumers to pay an Advanced Recycling Fee (ARF).

While LGE's global website states that the company believes that the producer (not consumer) should be responsible for financing the waste management of its own brand products when they are discarded; in the US, LGE is part of a Coalition that has been opposing Producer Responsibility and lobbying for U.S. consumers to pay an Advanced Recycling Fee (ARF).

LENOVO Ranking = 8/10

Lenovo is one of the fastest-moving companies up the ranking, having graced bottom position when the Guide was first launched in August 2006. Reasons for this surge forward are improvements in Lenovo's position on Precautionary Principle and Individual Producer Responsibility (IPR) as well as providing global takeback and recycling services wherever its products are sold – the first company to achieve this goal. However, Lenovo still fails to score any points for providing models on the market that are free of PVC and BFRs.

LENOVO 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				

LENOVO Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle				Lenovo scores top marks by improving its definition of Precautionary Principle. **More information.**
Chemicals Management				Lenovo has now updated its Engineering Specification 41A7731 to reflect its commitments on eliminating PVC and BFRs. **More information.**
Timeline for PVC phaseout				Lenovo's target for elimination of all uses of PVC by 2009 earns the company top marks. **More information.**
Timeline for BFR phaseout				Lenovo's target for elimination of all BFRs by 2009 earns the company top marks. **More information.**
PVC-free and/or BFR-free models (companies score double on this criterion)	Although Lenovo has added Product Environmental Data Sheets, no products are entirely free of PVC or BFRs. **More information.**			

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility				Lenovo earns an extra point for strengthening their IPR position and for their support for legislation. **More information.**
Provides voluntary takeback where no EPR laws exist				Voluntary takeback is now offered in all countries where Lenovo has sales of its products. In December 2006, Lenovo announced in China, free take back and recycling of Legend and Lenovo branded PCs, laptops, monitors and servers, and ThinkPad laptops, ThinkCentre PCs, and ThinkVision Monitors, whether produced by Lenovo or IBM. **Product recycling programs. More information.**
Provides info for individual customers on takeback in all countries where products are sold				Lenovo now provides takeback information to both business and individual customers in all the countries where the company's products are sold. **Product recycling programs.**
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled				Lenovo now provides figures of e-waste recycled based on past sales, but is hampered by many of its business customers selling their e-waste to other companies and the fact that Lenovo's global sales operations is only a year old. **More information.**

NOKIA Ranking = 7.3/10

Nokia has already eliminated PVC from new models of mobiles. Since the start of 2007, they have launched the first phones without any components containing brominated flame retardants (BFRs). However, Nokia loses points for having failed to provide a timeline for the elimination of PVC and BFRs from its entire product portfolio – including network equipment.

Nokia gets top marks on its support for Individual Producer Responsibility (IPR means that each company must take care of the electronic waste from its own-branded discarded products). But Nokia loses a point for poor reporting on how many discarded mobiles it recycles
.

NOKIA 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				

NOKIA Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle				**Nokia's definition of the precautionary principle earns them top points.**
Chemicals Management				Nokia has already phased out some harmful chemicals and identified future substances for elimination, including beryllium, nonyl phenols and NPEs (nonyl phenol ethoxylates), antimony. **Nokia substance list.**
Timeline for PVC phaseout			Nokia has added network equipment to its PVC elimination plan, but has yet to provide timelines for phase out of this application**.** **More information.**	
Timeline for BFR phaseout			**Timelines still missing on some applications.**	
PVC-free and/or BFR-free models (companies score double on this criterion)			New models are PVC-free since the end of 2005. From January 2007, Nokia will launch the first products without components containing BFRs, although some models will still contain components with BFRs. **Eco-declarations are provided for all Nokia products. More information.**	

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility				Nokia scores top marks for supporting IPR. **More information.**
Provides voluntary takeback where no EPR laws exist			Still many gaps on Nokia's global takeback map of the world especially in Latin America (e.g. Bolivia, Peru, Venezuela, Peru) and Africa – only North and South Africa. **More information. Free mail-back for US. Greenbox China. More information here** and **here from Hungary.**	
Provides info for individual customers on takeback in all countries where products are sold			**No information in countries where no takeback services.**	
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled		Nokia now provides a figure of 2% for mobiles recycled, but it unclear if this is as a percentage of all Nokia sales, or all brands of mobiles returned – and over which period. Nokia provides data on production waste, but the Guide ranks on end-of-life product waste. **More information here** and **here.**		

SONY ERICSSON Ranking = 7.0/10

Sony Ericsson maintains its position near the top of the ranking, by stating strong support for Individual Producer Responsibility. The company has now set a timeline of 1st January 2008 for eliminating the use of BFRs in two remaining applications, and the same timeline for substituting phthalates, beryllium and some uses of antimony compounds. All new models of mobile put on the market from 2006 are free of the worst chemicals. On the down side, Sony Ericsson loses points for failing to report on the amounts of discarded mobile phones it takes back and recycles.

SONY ERICSSON 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				

SONY ERICSSON Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle		Sony Ericsson gets just one point for referring to the Precautionary Principle, but failing to define what it means. **More information.**		
Chemicals Management				Sony Ericsson is ahead of many companies in already making efforts to eliminate substances that others have only identified for future action. The company has now set a timeline of 1st January 2008 for eliminating phthalates, beryllium and some uses of antimony compounds. **SE's pdf List of Banned & Restricted Substances.**
Timeline for PVC phaseout				All SE products are PVC free – except for cables in a few early models of chargers and accessories, and these are being phased out. **More information. Banned & Restricted Substances.**
Timeline for BFR phaseout				The SE List of Banned and Restricted Substances sets a deadline of 1st January 2008 for the phase out of two remaining uses, otherwise all products are BFR-free. **More information.**
PVC-free and/or BFR-free models (companies score double on this criterion)			All SE products are now PVC-free, with the exception of cables in early models of chargers; and BFR-free with two exemptions until 1st January 2008. **More information. Environmental product declarations.**	

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility				Sony Ericsson has a strong statement in support of Individual Producer Responsibility. **More information.**
Provides voluntary takeback where no EPR laws exist			Voluntary takeback services provided globablly product-by-product E.g. for W300: **More information here** and **here** and **here for US consumers.**	
Provides info for individual customers on takeback in all countries where products are sold			Information on what customers should do with their discarded mobiles provided product-by-product. **More information here** and **here.** E.g. for W300	
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled	No information on amounts of WEEE collected and recycled.			

DELL Ranking = 7/10

Dell's strong position near the top of this scorecard is due to its strong definition of the precautionary principle, its timelines for substituting toxic polyvinyl chloride (PVC) and brominated flame retardants (BFRs) and explicit support for Individual Producer Responsibility. Dell has announced its intention to provide global takeback and recycling services to individual consumers wherever its products are sold. But Dell slides down the scale for not yet having models free of PVC and BFRs on the market.

DELL 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				

DELL Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle				Definition of precautionary principle reflects need to eliminate potentially harmful chemicals even without full scientific certainty of cause and effect and earns Dell top marks. **More information.**
Chemicals Management				Dell's chemicals management programme lists substances targeted for substitution and provides good description of how it manages its supply chain to achieve its substitution goals. **More information.**
Timeline for PVC phaseout				Dell has **committed to eliminate all remaining uses of PVC** in new products by 2009.
Timeline for BFR phaseout				Dell has **committed to eliminate all remaining uses of BFRs** in new products by 2009. Dell now provides a link that shows the R&D they are doing on halogen-free materials, including a joint industry database of halogen free materials listed by suppliers to assist designers. **More information.**
PVC-free and/or BFR-free models (companies score double on this criterion)	**No PVC-free or BFR-free products on the market.**			

DELL Detailed Scoring

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility				**Strong support for IPR** and legislation embracing IPR. **More information on policy.**
Provides voluntary takeback where no EPR laws exist			Voluntary takeback service is planned to be virtually global, with timeline of end of 2007 for additional countries in Latin America. **More information here** and **here.** **Links to various countries and regions.**	
Provides info for individual customers on takeback in all countries where products are sold			Information provided to Dell's individual customers, but not yet worldwide: **Dell Recycling Program.** **Asset Recovery Service.** Canada at: **Dell Recycling.** Also NZ and Australia as well as US.	
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled			Provides metrics for product recycling & reuse globally but based on annual and cumulative weight – not as % sales, although this is acknowledged as a challenge for future. More information at hyperlinks below: **Link 1** **Link 2** **Link 3** **Link 4**	

SAMSUNG Ranking = 6.3/10

Samsung moves up the ranking having regained the points lost in December for double standards on Individual Producer Responsibility. By withdrawing from the US Electronic Manufacturers' Coalition (EMCRR) Samsung also avoided a penalty point for double standards. The company gets top marks for providing reasonable timelines for phasing out the worst substances and has improved the information to consumers on what to do with their discarded products.

Samsung loses points because although it provides voluntary product take back of its electronic waste, this is only in a few countries and only for some product groups.

SAMSUNG 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				

SAMSUNG Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle			Although Samsung states they will 'consider' cases where the scientific evidence on a suspect chemical is conflicting, it states nowhere in the definition what that 'consideration' means in practice e.g. substitution or just restriction and management. **More information.**	
Chemicals Management				Samsung now scores full marks on this criterion, by identifying future chemicals to be targeted for elimination. **Identification and management of targeted substances. Eco-Partner Certification Program (pdf).**
Timeline for PVC phaseout				Full marks for providing a reasonable timeline for phasing out PVC. **Timeline.**
Timeline for BFR phaseout				Samsung scores a yes for providing a reasonable timeline of 2010 for phasing out BFRs in all applications.. **Timeline.**
PVC-free and/or BFR-free models (companies score double on this criterion)	No BFR-free or PVC-free models on the market – so far only assemblies but no product systems. **More information.**			

SAMSUNG Detailed Scoring

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility				Samsung regains the 3 points it lost due to practising double standards on IPR. In late December 2006, Samsung Electronics America (SEA) withdrew from the Electronic Manufacturers' Coalition for Responsible Recycling (EMCRR) and thus avoided a penalty point. **Samsung's policy on IPR. Statement confirming withdrawal from EMCRR (scroll over USA).**
Provides voluntary takeback where no EPR laws exist		Despite new webpages on a mobile takeback programme, Samsung provides voluntary takeback only in a few countries and only for some product groups **New website on mobile 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. New pages on mobile take-back.**	
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled			Samsung has updated its Global Recycling volumes, providing some data for Korea, Japan and China, EU and US. **More information here** and **here.**	

MOTOROLA Ranking = 6.3 /10

Motorola has clarified its understanding of the precautionary principle. Although Motorola provides information on products on the market that are free from brominated flame retardants (BFRs), the company has still to commit to timelines for eliminating all BFRs and PVC from their entire product portfolio.

Motorola scores top marks for their support of Individual Producer Responsibility. The company provides information to customers on recycling their old phones and runs voluntary take-back/recycling services in 80% of the countries where its products are sold. Motorola also reports on the amounts of discarded mobile phones it takes back and recycles – though not on a percentage sales basis.

MOTOROLA 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				

MOTOROLA Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle				Motorola has a definition of the precautionary principle which identifies precautionary measures to be taken. **More information.**
Chemicals Management				Motorola provides a list of banned and reportable substances in its Global Common Specification No. 12G02897W18 **More information. As a pdf. Training and resources provided to suppliers.**
Timeline for PVC phaseout	No commitment to eliminating all uses of PVC. **More information.**			
Timeline for BFR phaseout	No commitment to eliminating all uses of BFRs. **More infomation.**			
PVC-free and/or BFR-free models (companies score double on this criterion)			Motorola provide information about 34 models which are free of BFRs. They have developed PVC-free products, but have not yet provided potential customers with the information to choose PVC-free. **More information.**	

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility				Motorola makes a clear statement in support Individual Producer Responsibility. **More information.**
Provides voluntary takeback where no EPR laws exist			Motorola provides voluntary take-back in Canada, US, Europe (individuals can post their old phones to Motorola); in other countries collection is expanding with growth of sales (eg. Ecomoto bins are provided at central points in some countries). Voluntary takeback is now offered in more than 80% of countries where products are sold. **More information.**	
Provides info for individual customers on takeback in all countries where products are sold			Information is provided to individual customers in the countries where they have voluntary programmes, but not in countries where they don't. In the US, Canada & Europe pre-paid envelopes are provided for return of old phones. **More information.**	
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled			Motorola has updated reports on the quantity (in metric tons) collected worldwide, but does not present this as a percentage of historical sales. **More information.**	

FUJITSU-SIEMENS Ranking = 6/10

Fujitsu Siemens' (FSC) score has not changed since the last update, when the company improved its definition of the Precautionary Principle and stated support for Individual Producer Responsibility. Although no final timelines are given for the phase out of polyvinyl chloride (PVC) and brominated flame retardants (BFRs), FSC has products on the market which do not use BFRs.

	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				

FUJITSU-SIEMENS Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle			FSC has made progress in defining the Precautionary principle. Yet, they still fail to fully address the issue of suspect substances currently in use (just stating that they avoid their use). To score higher the company should clearly state that they aim to substitute or eliminate these potentially harmful substances with safer alternatives. **More information.**	
Chemicals Management				Fujitsu Siemens has now provided comprehensive lists of banned and restricted substances, materials specifications and associated documents and gets top marks. **More information.**
Timeline for PVC phaseout		No final timeline for complete PVC elimination, although there are good intentions. **More information.**		
Timeline for BFR phaseout		No final timeline for complete elimination of all BFRs, although there are good intentions. **More information.**		
PVC-free and/or BFR-free models (companies score double on this criterion)			The presentation of information on 'Green Products' has improved and the number of products has increased. 'Green Products' use halogen-free flame retarded plastics and halogen-free circuit boards for mainboard and power supply: ESPRIMO Q Series ESPRIMO C Series ESPRIMO E Series ESPRIMO P Series ESPRIMO Value Line FUTRO A Series FUTRO S Series FUTRO C Series CELSIUS H Series CELSIUS W Series CELSIUS M Series CELSIUS R Series CELSIUS V Series Accessories for your Workstation **More information.**	

FUJITSU-SIEMENS Detailed Scoring

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility				FSC makes a **clear statement** in support of Individual Producer Responsibility and 'recognises that increasing amounts of end-of-life products, if not properly disposed of, pose a significant threat to the environment.
Provides voluntary takeback where no EPR laws exist		Although Fujitsu Siemens is planning to provide takeback and recycling in countries where there are no EPR laws, the only country with where FSC offers voluntary takeback is in South Africa. NOTE, the FSC brand is only marketed in EMEA. **More information.**		
Provides info for individual customers on takeback in all countries where products are sold		Apart from South Africa, information for individual customers is provided only in countries with EPR laws, namely EU, Switzerland and Norway. **More information here** and **here.**		
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled			Information about recycling in FSC's recycling centre where the company claims a reuse & recycling rate of 74%. But, data provided only for the one recycling centre **More information here** and **here in German.**	

HP Ranking = 5.6/10

HP scores top points for providing a timeline for substitution of future substances on its radar and for being the first major company to devise an electronic waste take back / recycling metric based on percentage of sales.

But HP loses points for having failed to provide a timeline for the complete elimination of toxic polyvinyl chloride (PVC) and all brominated flame retardants (BFRs). The company also needs to strengthen its support for Individual Producer Responsibility, in line with improved declarations from its competitors.

HP 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				

HP Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle				HP has improved its definition of precautionary principle to reflect the need to eliminate potentially harmful chemicals even without full scientific certainty of harm. **More information.**
Chemicals Management				The Substitution timeline, with substances identified by stakeholders as materials of concern has been updated. This helps HP score top marks on this criterion. **General Specification for the Environment.**
Timeline for PVC phaseout		Internal communication with HP reveals that the timeline of 2007 is in fact only to provide a substitution plan for PVC elimination. **More information.**		
Timeline for BFR phaseout		Internal communication with HP reveals that the timeline of 2007 is in fact only to provide a substitution plan for BFR elimination. **More information.**		
PVC-free and/or BFR-free models (companies score double on this criterion)	No BFR-free or PVC-free models on the market. **More information here** and **here.**			

HP Detailed Scoring

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility			**HP's statement on IPR** needs to be strengthened to prioritise Producer Responsibility over the Shared Responsibilities of all the other actors to earn top marks. The statement also needs to be more prominent on their website.	
Provides voluntary takeback where no EPR laws exist			Voluntary takeback - not for all products and not in every region of the world. For PC hardware takeback, major gaps in Africa and South America. **More information here** and **here.** **Byteback prog** in **Victoria Australia, China, Thailand.**	
Provides info for individual customers on takeback in all countries where products are sold			No information for HP's individual customers in Latin America or Africa. **More information.** **Asset recovery, donation.** **HP Planet Partners** for many (non-EPR) countries but not all (e.g. not Latin America or Africa).	
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled				The first company to devise takeback metric based on % sales, **updated to provide figures for 2006.** **2006 GCR reports recycling/reuse volumes were 10.3%.**

ACER Ranking = 5.3/10

Acer has broken away from the laggards; in part this is due to their committing to a timeline for substituting PVC plastic and all brominated flame retardants in its products, by 2009. Acer has also improved communication of its waste policy and practice, but still needs to do more on providing voluntary takeback and recycling of its end-of-life products and reporting on the amounts of ewaste recycled.

ACER 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				

ACER Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle				Acer scores a 'yes' on its statement on the precautionary principle that recognises the need for preventive action, even if scientific evidence is not conclusive. **Precautionary principle.**
Chemicals Management				Top marks for describing the mechanisms for identifying **future substances of concern.** **Supply chain management HSF Plan.**
Timeline for PVC phaseout				Acer pledges to prohibit PVC from use in new products by 2009, in their **Hazardous Substances Free (HSF) plan.** **HSF implementation report.**
Timeline for BFR phaseout				**Acer pledges to prohibit BFRs from use in new products by 2009, in their Hazardous Substances Free (HSF) plan.**
PVC-free and/or BFR-free models (companies score double on this criterion)	No PVC-free or BFR-free models on the market **More information.**			

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility				Acer scores top marks for supporting IPR. **More information.**
Provides voluntary takeback where no EPR laws exist	Acer mainly provides takeback services only when required to do so by national EPR laws, except for US customers. **More information.**			
Provides info for individual customers on takeback in all countries where products are sold		Recycling information provided for EU, Japanese, Taiwanese, Indian and US customers only. **More information here** and **here** and **here for India.**		
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled	No information on the amounts of e-waste collected and recycled.			

TOSHIBA Ranking = 4.3/10

Toshiba has improved its ranking by providing timelines for elimating PVC and BFRs in their PCs, though not their entire product portfolio. The company offers laptop models with circuit boards free from brominated flame retardants (BFRs) and EcoMark-certified products without polyvinyl chloride (PVC).

The company loses points for its lack of support for Individual Producer Responsibility and for the poor information it provides to customers regarding what to do with the products they discard

TOSHIBA 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				

TOSHIBA Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle		No specific reference to precautionary principle but they do state that they 'try to avoid the use or emission of any substance that, although not prohibited… is recognised as a threat to the environment'. Toshiba also signs onto the UN Global Compact, which refers to the precautionary approach. **More information here** and **here.**		
Chemicals Management				Toshiba has Green Procurement Guidelines for suppliers and ranks suppliers. **More information.**
Timeline for PVC phaseout			Toshiba is committed to phasing out all remaining uses of PVC from their notebook PCs by 2009, but PCs are just one part of Toshiba's large product portfolio. **More information.**	
Timeline for BFR phaseout			Toshiba is committed to phasing out all remaining uses of BFRs from their notebook PCs by 2009, but PCs are just one part of Toshiba's large product portfolio. **More information.**	
PVC-free and/or BFR-free models (companies score double on this criterion)		Toshiba make a range of notebook PCs including the 'Dynabook', 'Satellite', 'Tecra' and 'Portege' models which have circuit boards free of halogens and antimony. Toshiba also make EcoMark-certified products, some of which do not contain PVC. It is a shame that the information on PCs with halogen-free and antimony-free circuit boards is ONLY in Japanese as this does not help build GLOBAL consumer demand for cleaner electronics. **More information here** and **here in Japanese.**		

TOSHIBA Detailed Scoring

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility	No reference to Toshiba's support for individual producer responsibility.			
Provides voluntary takeback where no EPR laws exist		North American customers can trade in various brand products and recycle all Toshiba notebooks for free. **More information here** and **here.** **Information on the TERRE program in Canada.** **European Information.** **Japanese Information.**		
Provides info for individual customers on takeback in all countries where products are sold		Comprehensive information is provided for customers in the US and Canada, however, information in Europe is limited. **More information here, here** and **here.**		
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled		Toshiba provides information on recycling of home appliances and PCs in Japan, but only in Japan. **More information.**		

SONY Ranking = 4.0/10

Sony is falling down in the ranking, due to the penalty point served on the company for corporate double standards on Individual Producer Responsibility. Sony is a founding member of the European Recycling Platform which supports IPR; however, in the US, Sony is part of a Coalition that has been opposing Producer Responsibility and lobbying for U.S. consumers to pay an Advanced Recycling Fee (ARF). On chemicals, Sony has still to provide timelines for eliminating all PVC and BFRs.

On the positive side, Sony scores well for having models on the market that are free of the worst chemicals

SONY 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				

SONY Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle			Sony gains 2 points for stating that they will take steps to reduce, substitute and eliminate the use of substances that are potentially hazardous to the environment. **More information.**	
Chemicals Management				Information on SS-00259 (6th edition, March 2007) Management Regulations and Green Partner programme to ensure implementation of the Regulations **More information.**
Timeline for PVC phaseout		Sony has already phased out some applications of PVC, but no timelines on some applications and many exemptions.. **More information here** and **here.**		
Timeline for BFR phaseout		Some applications of BFRs already phased out, but no timelines for applications such as circuit boards. **More information here** and **here.**		
PVC-free and/or BFR-free models (companies score double on this criterion)			Sony has a range of environmentally-conscious products and "Eco-Info" mark products which are free of BFRs in housings and circuit boards. Sony is also reducing use of PVC in some applications . **More information here** and **here on BFR-free laptops and reducing PVC usage.**	

SONY Detailed Scoring

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility	Sony gets no points for IPR, after having lost the one point it had for its support of Extended Producer Responsibility in December 2006, due to double standards. In Europe, Sony is a founding member of the European Recycling Platform and claims to support IPR. **More information.** However, in the US, Sony is a member of the Electronic Manufacturers' Coalition for Responsible Recycling which does not support EPR, but is demanding that consumers pay ARFs (Advanced Recycling Fees) **More information.** Sony gets a penalty for double standards: accepting its responsibility for financing the recycling of its own-brand discarded products in Europe, but in the US expecting the consumer to pay these costs. **More information.**			
Provides voluntary takeback where no EPR laws exist		Sony provides voluntary takeback in North America and Japan, as well as takeback of batteries in Taiwan and Australia. **More information. Voluntary takeback of batteries in Taiwan. Voluntary takeback of batteries in Australia.**		
Provides info for individual customers on takeback in all countries where products are sold		Sony provides information for individual consumers (for PC monitors) but only in US and gives links to websites of PROs (Producer Responsibility Organisations) in some European countries. **More information. Japanese Sony consumer recycling information pages. Recycling of Computer Displays & PCs.**		
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled			Sony reports on the amounts of WEEE and batteries collected in N. America, recycling rates for TVs and PCs in Japan and recycling rates for batteries in Asia & Australia. **More information. Figures for recycling of TVs and PCs in Japan.**	

LG ELECTRONICS Ranking = 3.6/10

LGE is in a free-fall down the ranking due to a penalty point served on the company for corporate double standards on Individual Producer Responsibility. While LGE's global website states that the company believes that the producer (not consumer) should be responsible for financing the waste management of its own brand products when they are discarded, in the US, LGE is part of a Coalition that has been opposing Producer Responsibility and lobbying for U.S. consumers to pay an Advanced Recycling Fee (ARF).

On the positive side, LGE gains points for launching mobile phone models that are free of brominated flame retardants (BFRs). LGE needs to improve on product take back and recycling.

LG ELECTRONICS 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				

LG ELECTRONICS Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle				LGE provides a strong definition of the precautionary principle reflecting the need to take action to eliminate harmful chemicals even though their effects may not be scientifically proven. **More information.**
Chemicals Management			LGE provides a substance list that includes future substances to be reduced, including beryllium and antimony. **More information.**	
Timeline for PVC phaseout				The first PVC-free products are to be launched in 2008; the remaining uses of PVC are to be phased out by the end of 2010. **More information.**
Timeline for BFR phaseout				All new models released in 2010 are to be BFR- free. **More information.**
PVC-free and/or BFR-free models (companies score double on this criterion)		LGE's mobile phone division now has some BFR free models, with more models being put on the market soon. **More information.**		

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility	LGE lost 3 points (in support of IPR) in December 2006 due to double standards. LGE claims to support IPR on its **global website.** But in the US, LGE is part of the Electronic Manufacturers' Coalition for Responsible Recycling which does not support EPR, but is demanding that consumers pay ARFs (Advanced Recycling Fees) **More information.** LGE gets a penalty for double standards: accepting its responsibility for financing the recycling of its own-brand discarded products in Europe, but in the US expecting the consumer to pay these costs			
Provides voluntary takeback where no EPR laws exist	No information about LGE's voluntary takeback programmes on their website. **More information.**			
Provides info for individual customers on takeback in all countries where products are sold	No information on what customers can do with their discarded LGE e-waste. **More information.**			
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled		LGE provides information on their recycling rates only in Japan and Korea. **More information.**		

PANASONIC Ranking = 3.6/10

Panasonic is slipping down the ranking to second from bottom, failing to keep up with the progress of other companies. Although Panasonic provides examples of PVC-free components, it has no PVC-free products on the market and no timelines for eliminating PVC and all BFRs from its entire product portfolio.

The company also scores poorly for its lack of support for Individual Producer Responsibility and its limited voluntary take-back programmes.

PANASONIC 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				

PANASONIC Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle				Panasonic endorses the Precautionary Principle as defined in the 1992 Rio Declaration. **More information.**
Chemicals Management				Pansonic's web pages on chemicals management contain a lot of detailed of information. Managed substances include: antimony, beryllium, bismuth and phthalate esters. **More information.** Chemical Substances Management rank guidelines Ver.4 for products" and "Green Procurement Standards Manual Ver.4 were issued. **More information here** and **here.** **Chemical Substances Management Rank Guidelines for Factories. Chemicals substituted.**
Timeline for PVC phaseout		Panasonic has committed to eliminating PVC and some uses have already been substituted, but there is no timeline for complete elimination of PVC. **More information. Chemical Substances List.**		
Timeline for BFR phaseout	BFRs are only 'managed substances' and there is no commitment for their elimination in Panasonic products. **More information.**			
PVC-free and/or BFR-free models (companies score double on this criterion)	Panasonic provides examples of PVC-free substitutes for various components, including power cords, internal wiring & connecting cords, but no whole product systems. **More information.**			

PANASONIC Detailed Scoring

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility	No reference to Extended Producer Responsibility or Individual Producer Responsibility.			
Provides voluntary takeback where no EPR laws exist		Voluntary takeback programmes are not worldwide and do not cover all Panasonic's product groups, mainly mobiles and toner cartridges. **More information. Information on the different regions.**		
Provides info for individual customers on takeback in all countries where products are sold		Information to customers is available in European countries with EPR laws and for batteries and toner cartridges in US. **More information. US toner recycling. US battery recycling. EU customers.**		
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled			Panasonic provides data on home appliances and PCs recycled in Japan and recycling quantities for the Americas and Korea; information for Europe is in its infancy. **More information here** and **here.**	

APPLE Ranking = 2.7/10

For a company that claims to lead on product design, it is perhaps surprising to find Apple languishing at the bottom of the scorecard. While other laggards have moved upwards in the Guide, Apple has made no changes to its policies or practices since the launch of the Guide in August 2006. The company scores badly on almost all criteria. Apple fails to embrace the precautionary principle, withholds its full list of regulated substances and provides no timelines for eliminating toxic polyvinyl chloride (PVC) and no commitment to phasing out all uses of brominated flame retardants (BFRs). Apple performs poorly on product take back and recycling, but it does report on the amounts of its electronic waste recycled.

APPLE 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				

APPLE Detailed Scoring

Chemical Score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Precautionary Principle		Definition of precautionary principle reflects poor understanding of this principle in chemical policy. **More information.**		
Chemicals Management		Apple provides only examples of substances that are on its Regulated Substances Specification 069-0135, but the Spec itself is not publicly available. **More information.**		
Timeline for PVC phaseout		Although Apple commits to eliminating PVC, there is no timeline for complete phase out. **More information.**		
Timeline for BFR phaseout	Although Apple commits to halogen-free printed circuit boards, there is no mention of eliminating all BFRs, and no timeline for complete phase out. **More information.**			
PVC-free and/or BFR-free models (companies score double on this criterion)	No PVC-free or BFR-free product systems. Apple lists only some PVC-free peripherals on its website **More information.**			

EPR/recycling score	BAD	PARTIALLY BAD	PARTIALLY GOOD	GOOD
Support for Individual Producer Responsibility		Apple refers to its "individually responsible approach" to recycling through its own takeback initiatives and national collective take-back programmes. The definition of IPR needs to be more explicit. **More information.**		
Provides voluntary takeback where no EPR laws exist		No voluntary takeback for every country where Apple products are sold and not for every type of product. **More information here** and **here -** and **here for US and Canada, Europe, Japan, Taiwan.**		
Provides info for individual customers on takeback in all countries where products are sold		No information in every country where Apple products are sold, not even in every country with EPR laws. **More information here** and **here for EU, Japan and Taiwan (EPR laws).**		
Reports on amount of waste electrical and electronic equipment (WEEE) collected and recycled			Apple reports on amounts recycled based on weight and not percentage of sales. On the positive side, Apple acknowledges importance of responsible recycling i.e. no export of collected e-waste and bans recovery of plastics in smelters. **More information.**	