



APPLE Ranking = 4.9/10

Apple drops to 9th place from 5th, with the same score of 4.9.

Apple does best on the toxic chemicals criteria, where it scores most of its points. All Apple products are now free of PVC vinyl plastic and brominated flame retardants (BFRs), with the exception of PVC-free power cords in countries where their safety certification process is still ongoing. For this Apple continues to score full marks (doubled). Apple scores points for its chemicals policy informed by the precautionary principle and for lobbying the EU institutions for a ban on PVC, chlorinated flame retardants and BFRs during the current revision of the EU's RoHS Directive (Restriction of Hazardous Substances in electronics), but for full marks it needs to provide a public position on its support for immediate restrictions in RoHS 2.0 on organo- chlorine and bromine compounds. It also needs to clarify its stance regarding the position of the trade federation TechAmerica on further immediate restrictions and in particular PVC and BFRs. Apple scores only one point on information about its management of chemicals and its supply chain communications; this criterion evaluates disclosure of information flow in the supply chain. Apple also continues to score poorly for the minimal information it provides about its future toxic chemical phase-out plans.

It scores substantially less on the e-waste criteria than on toxic chemicals. Apple has improved coverage of its take-back programme with take-back and recycling services now extended to Brazil and to the Asia-Pacific region, including India, China, Hong Kong, Malaysia, Singapore, New Zealand, Korea and Australia. It reports a 2008 recycling rate (as a percentage of sales seven years ago) of 41.9 percent, up from 38 percent in 2007 and 18 percent in 2006; however, it needs to provide details on how this is calculated. Apple has set a goal of achieving a 50 percent recycling rate by 2010.

On the energy criteria, Apple discloses full product lifecycle emissions, including supply chain and reports on the amount of CO₂-equivalent emissions saved through use of renewable energy (RE) in 2008. However, it provides no indication of the amount of RE used as a portion of Apple's electricity use, which depends on the fossil fuel source displaced by this RE use. Apple scores a point for reporting that its greenhouse gas (GHG) emissions were reduced by 3 percent year over year from 2006 to 2007. Despite having left the US Chamber of Commerce over differences in climate policy, it is disappointing that Apple has yet to make a statement on the need for mandatory reduction of GHG emissions. Its score on the energy efficiency of its products would improve if it provided data on what proportion of its products exceeds the latest Energy Star standards and by how much.

Apple's web-site has been updated since this assessment was made.

APPLE Overall Score

	BAD (0)	PARTIALLY BAD (1+)	PARTIALLY GOOD (2+)	GOOD (3+)
Precautionary Principle and support for revision of RoHS Directive.				
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 <small>(companies score double on this criterion)</small>				

APPLE Detailed Scoring

Chemicals

Precautionary Principle and support for revision of RoHS Directive.	Chemicals Management	Timeline for PVC & BFR phaseout	Timeline for additional substances phaseout	PVC-free and/or BFR-free models (double points)
PARTIALLY GOOD (2+)	PARTIALLY BAD (1+)	GOOD (3+)	BAD (0)	GOOD (3+)
Apple refers to its 'precautionary approach' to substances. Its progress in eliminating hazardous substances seems to be guided by three important elements of this principle: preventive action, voluntary elimination and proactive search for safer substitutes. More information. Evidence of lobbying on RoHS 2.0. To score full marks, Apple needs to provide a public position on its support for immediate restrictions in RoHS 2.0 on at least PVC, BFRs and CFRs (within 3-5 years), as well as an end-of-life focused methodology for adding future substance restrictions. It also needs to clarify its stance regarding the position of the trade federation TechAmerica on further restrictions of hazardous substances.	Apple provides examples of substances that it has eliminated e.g. arsenic in LCDs and mercury by moving to LEDs. It plans to have all products free of elemental bromine and chlorine – not just PVC and BFRs but there is little information about Apple's communications with its suppliers. C2 evaluates disclosure of information flow in the supply chain. More information. Apple refers to its Regulated Substances Specification which details a broad range of substances that are restricted or banned, yet still fails to disclose its Substance Specification 069-0135.	Apple planned to completely eliminate the use of PVC and brominated flame retardants in its products by the end of 2008. Currently all Apple products are free of BFRs and PVC. Apple plans to eliminate all forms of chlorine and bromine, not just those in PVC and flame retardants. More information here and here.	Apple is banning DEHP and other phthalates from all new product designs (although the other types of phthalates are not specified). Arsenic in glass and mercury in backlighting are in the process of being eliminated. However, no timeline for completing phase-out of the above substances is given. Antimony is not mentioned and Beryllium is no longer referred to. More information.	All Apple products are now free of BFRs and PVC; all iPod, iPhone and iPads ship with PVC-free cables worldwide; all notebook, Apple TV, Mac mini, iMac, and 27-inch LED Cinema Display products ship with PVC free cables in the U.S. and in other countries where agency approvals are granted. Apple scores full marks on this criterion as there is no intentional use of these substances. More information. Mercury and Arsenic have also been eliminated from MacBook Pro notebooks. More information. See Environmental reports and specs for desktops, notebooks, cinema display, server, iPhone and iPod.

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
BAD (0)	PARTIALLY GOOD (2+)	PARTIALLY GOOD (2+)	PARTIALLY GOOD (2+)	BAD (0)
Apple no longer refers to its "individually responsible approach" to recycling its own take-back initiatives and participates in national collective take-back programmes. To score points, Apple needs to explicitly support and demonstrate an understanding of IPR, for example clarifying that it understands IPR as full internalisation and transparent feedback of its products real end-of-life costs, ie through differentiated financing that accounts for each brand separately (e.g. no longer collective financing such as market share but instead more real and individualised financing such as return share) for WEEE, and refer to the eco-design benefits of IPR. More information.	Apple now operates or participates in recycling programs in countries where more than 95 percent of its products are sold. Apple has recently added India, China, Hong Kong, Malaysia, Singapore, New Zealand, Korea and Australia to its voluntary take-back programmes that accept all Apple branded e-waste. More information. Free recycling for iPods & mobile phones of all brands (US only). In the US Apple offers a gift card for new equipment if an old computer is suitable for re-use, or free recycling for Apple branded equipment. Links to programs in Canada, Europe, Japan, Asia Pacific/ Australia and Brazil are provided.	Information is provided to individual customers on how to recycle e-waste in the US, Canada, Europe, Japan, Asia Pacific, Australia and Brazil; however, no information is available to customers in 'New Europe'. More information. US here and here. Canada. Europe. Japan. Asia Pacific & Australia. Brazil.	Apple recycled 30.5 million pounds of electronic waste and reports a recycling rate of over 41.9% in 2008, as a percentage of sales 7 years ago. This has surpassed its 2009 and 2010 goals and Apple has now set a new goal of achieving a 50% recycling rate by 2010. Apple exceeded that goal in 2009 with a rate of 66.4%. Apple's goal is to reach 70% in 2010, and to meet or exceed this thereafter. For more transparency, Apple needs to provide a breakdown of the recycling quantities of its various products (eg. iPods, PCs) that make up these figures. More information.	No information on overall amount of recycled plastic used. Apple products are designed using recyclable materials. More information.

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)
BAD (0)	PARTIALLY GOOD (2+)	PARTIALLY BAD (1+)	BAD (0)	PARTIALLY GOOD (2+)
Despite having left the US Chamber of Commerce over differences in climate policy, it is disappointing that Apple has yet to make a statement on the need for mandatory reduction of GHG emissions.	Apple reports on the metric tons of GHG emissions for manufacturing (45%), transportation (5%), product use (46%), recycling (1%) and facilities (3%). For full marks Apple needs to supply external verification. More information. Apple has estimated the life cycle GHG emissions, including a breakdown of their source, for individual models of products in Product Environmental Reports. More information here and here.	Apple seeks to minimise GHG emissions by setting stringent design-related goals for material and energy efficiency per model of product. However, there are no details of these goals. More information. Apple scores one point as its emissions were reduced by 3 percent year over year from 2007 to 2008, but it is not clear if this reduction was absolute or relative (per employee). More information.	Apple does not provide data on renewable energy sourced globally as a proportion of total electricity use. It reports that 8.3 million kgs (8,300 tonnes) of CO ₂ emissions were saved through renewable energy in 2008 (out of 275,718 metric tons of GHG emitted from facilities). The amount of RE used as a portion of the electricity use by Apple depends on the fossil fuel source these renewables displaced. Apple fails to score any points as it needs to disclose information on its renewable energy in a transparent and comparable way. More information here and here.	Apple states that its entire desktop and notebook product lines meet the strict requirements set by Energy Star, and met the ES version 5 standard before its July 09 effective date. More information. All Apple iPod and iPhone power adapters also exceed Energy Star efficiency requirements. See Product Environment Reports for details on Energy Star 5.0 compliance.

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 first criterion has been sharpened to require companies not only to have a chemicals policy underpinned by the Precautionary Principle, but also to support a revision of the RoHS Directive that bans further harmful substances, specifically BFRs, chlorinated flame retardants (CFRs) and PVC. The criterion on Chemicals Management remains 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. In the fourteenth edition the criteria for the Precautionary Principle was made more challenging.

For the latest version greenpeace.org/greenelectronics

Toshiba, Samsung, LGE, Dell and Lenovo continue to be penalised in this latest version of the Guide for backtracking on their commitments to phase out vinyl plastic (PVC) and brominated flame retardants (BFRs). Toshiba is served with a further penalty point for misleading its customers and Greenpeace by not admitting that it would not meet its commitment. In addition, Microsoft is served with a penalty point for the first time for backtracking on its commitment to phase out PVC and BFRs by the end of 2010.