



APPLE, 4th position, 4.6/10

Apple takes 4th place in the re-launched Guide, with a score of 4.6. It scores most of its points on the Sustainable **Operations**; it gets near to maximum points on the e-waste criteria, where it reports that in 2010, its global recycling exceeded its 70 percent goal (as a percentage of sales 7 years ago), a level that it is confident will be maintained through 2015, though it can still make improvements by providing a breakdown of its recycling data and by further extending its take-back programme. Together with HP, Apple is also a top scorer for its policies and practices on the sourcing of conflict minerals, for publishing its suppliers and engaging effectively in the Electronics Industry Citizenship Coalition's conflict-free smelter program. Apple would score more points on the other criteria with greater transparency of its data in reporting the greenhouse gas emissions (GHG) of its supply chain and disclosure of the documents it uses to communicate with its supply chain for chemicals management. It scores zero on paper sourcing, and needs to develop a paper procurement policy which excludes suppliers that are involved in deforestation and illegal logging.

Apple scores poorly on the **Energy** criteria; GHG emissions data of its operations needs to have external verification and it does not specify any target to reduce emissions. Apple earns more points for the steps it has taken to improve energy efficiency and its use of renewable energy, which represents more than 13 percent of Apple's facility-related electricity consumption. Apple could increase its score by setting an ambitious goal for boosting its renewable energy use by 2020. Apple provides no specific examples of clean energy policy advocacy.

It continues to score well on the **Products** criteria; 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; however, it does not mention plans to phase out antimony or beryllium. Apple scores a point for its information on battery life for the product life cycle criterion, but it needs to publicly disclose the length of warranty and spare parts availability for its main product lines. It provides no information on its use of post-consumer recycled plastics. It gets maximum points for reporting that all of its products meet or exceed the latest Energy Star standards for energy efficiency, however, it risks a **penalty point** in future Guide editions as it is a member of a trade association that has commented against stringent energy efficiency standards; it needs to distance itself from such regressive positions with a strong statement.

APPLE Overall Score

	ZERO	LOW	MEDIUM	HIGH
Disclose own operational GHG emissions				
GHG emissions reductions and targets				
Clean Electricity Plan (CEP)				
Clean Energy Policy Advocacy				
Product Energy Efficiency				
Avoidance of Hazardous Substances in Products				
Use of Recycled Plastic in Products				
Product Life-Cycle				
Measure and reduce energy consumption in the supply chain				
Chemicals Management and Advocacy				
Policy and practice on sustainable sourcing of fibres for paper				
Policy and practice on avoidance of conflict minerals				
Provides effective voluntary take-back where no EPR laws				

APPLE Detailed Scoring

Energy

Disclose own operational GHG emissions	GHG emissions reductions and targets	Clean Electricity Plan (CEP)	Clean Energy Policy Advocacy
2/3	1/8	3/8	0/8
<p>Apple reports on its GHG emissions in 2010 as 14.8 million metric tons, which divides as follows: for manufacturing (46%), transportation (5%), product use (45%), recycling (1%) and facilities (2%). Facilities accounted for 303,000 metric tons of greenhouse gas emissions. GHG emissions are calculated in accordance with guidelines and requirements as specified by ISO 14040 and ISO 14044. For full marks Apple needs to supply external verification. More information.</p> <p>A breakdown of these emissions is provided in Apple's facilities report, although all figures are presented as 'per employee'. This includes employee travel which amounts to 135,040 metric tons of CO₂e (an unspecified portion of this is business air travel) More information.</p> <p>For more points Apple needs to provide external verification and present the breakdown of its figures as totals as well as per employee.</p>	<p>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.</p> <p>While total energy consumption grew approximately 14 per cent in 2010, emissions increased by only 9 per cent year over year from 2009 to 2010 (due to energy efficiency measures and the use of renewable energy). Total 2010 energy consumption included 371 million kWh of electricity and 3 million therms of natural gas. More information.</p> <p>Revenue has grown by 74% since 2008, while GHG emissions grew by only 57%. More information.</p> <p>Apple needs to focus on both absolute and relative reductions of GHGs. It needs to set ambitious targets and aim to reduce its own GHG emissions by at least 30% by 2015 for its operations and use 100% renewable electricity by 2020.</p>	<p>Apple does not provide targets to increase use of renewable energy or reduce energy consumption through energy efficiency, or a plan to achieve this. However, it does report on the steps it has taken to improve energy efficiency and its use of renewable energy, in its facilities report.</p> <p>Its facilities located in Austin, Texas; Elk Grove, California; and Cork, Ireland are powered by 100 percent renewable energy resources.</p> <p>Approximately 27.5 million kilograms of CO₂e emissions were avoided through the use of renewable energy programs in fiscal 2010 (this compares to 8.3 million kgs in 2008).</p> <p>Apple states that these programs have converted more than 48 million kWh's worth of consumption per annum to local renewable sources, which represents more than 13 per cent of Apple's facility-related electricity consumption.</p> <p>Apple states that it will continue to look at adding renewable energy to its energy portfolio. More information.</p>	<p>No information.</p>

Greener Products

Product Energy Efficiency	Avoidance of Hazardous Substances in Products	Use of Recycled Plastic in Products	Product Life-Cycle
5/5	4/5	0/3	1/3
<p>All of Apple's products meet and exceed the United States Environmental Protection Agency's strict ENERGY STAR guidelines for efficiency. Apple products are at least twice as efficient as the ES standard, and in the case of the Mac mini, six times as efficient. More information.</p> <p>Apple designs its products to use more efficient power supplies, use components that require less power, and use power management software. More information.</p> <p>However, Apple is a member of CEA, an industry association that recently made comments against the battery chargers systems regulation in the California Appliance Efficiency Regulations. It needs to reiterate its support wherever possible for more stringent energy efficiency standards for all electronic products. It needs to distance itself from such regressive positions or risk incurring a penalty point in future editions of the Guide.</p>	<p>iMac and MacBook now ship with PVC-free power cords in the U.S., Canada, Mexico, Colombia, El Salvador, Guatemala, Panama, Peru, Puerto Rico, the U.S. Virgin Islands, and Venezuela. All Apple products are now free of BFRs and other 'harmful toxins' such as PVC and phthalates, with the exception of power cords which are undergoing certification in regions outside of those mentioned above. Products are also mercury free and have arsenic free glass. More information.</p> <p>Environmental reports and specs for desktops, notebooks, cinema display, server, iPhone and iPod.</p> <p>Apple planned to completely eliminate the use of PVC and brominated flame retardants in its products by the end of 2008 – and were the first company to achieve this goal for PCs.</p> <p>Apple plans to eliminate all forms of chlorine and bromine, not just those in PVC and flame retardants. However, antimony is not mentioned and beryllium is no longer referred to. More information.</p>	<p>Apple provides no information on its use of post-consumer recycled plastics. Apple products are designed using recyclable materials. More information.</p>	<p>Apple includes information on longer lasting products. It gives the example of the built-in battery in the MacBook Pro line-up. Other notebook batteries can be charged only 200 to 300 times. The MacBook Pro battery can be charged up to 1000 times. And because this battery lasts up to five years, MacBook Pro uses just one battery in about the same time a typical notebook uses three. However, Apple does not warrant the battery beyond 1 year. More information.</p> <p>Apple needs to publicly disclose the length of warranty and spare parts availability for its main product lines for more points. For maximum points it also needs to show some innovative measures that increase lifespan and durability of whole product systems, rather than only individual parts.</p>

Sustainable Operations

Measure and reduce energy consumption in the supply chain	Chemicals Management and Advocacy	Policy and practice on sustainable sourcing of fibres for paper	Policy and practice on avoidance of conflict minerals	Provides effective voluntary take-back where no EPR laws
2/5	3/5	0/3	4/5	7/8
<p>Manufacturing - including extraction of raw materials and product assembly - accounts for 46 percent of Apple's total greenhouse gas emissions. In 2010 the manufacture of Apple products resulted in 6,852,000 metric tons of greenhouse gas emissions. More information.</p> <p>No details are provided on how this figure breaks down, no targets for future reductions and no verification.</p> <p>Apple has estimated the life cycle GHG emissions, including a breakdown of their source, for individual models of products in Product Environmental Reports. See MacBook Air for example. For more points Apple needs to be more transparent by presenting a breakdown of its data.</p>	<p>Apple refers to its 'precautionary approach' to substances. More information.</p> <p>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.</p> <p>Evidence of lobbying on RoHS 2.0 here.</p> <p>Apple needs to provide a public position on its support for immediate restrictions in RoHS 2.0 on at least PVC, BFRs and CFRs organo- chlorine and bromine compounds (at least within 3-5 years), as well as an end-of-life focused methodology for adding future substance restrictions.</p> <p>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. More information.</p> <p>Apple's Suppliers Code of Conduct states that "suppliers shall comply with the most recent version of Apple's Regulated Substances Specification, 069-015 and with any applicable laws and regulations prohibiting or restricting the use or handling of specific substances." It is not possible to evaluate Apple's communications with its supply chain on hazardous substances without disclosure of the Specification. Although Apple clearly implements its chemicals policy through its supply chain, it needs to be more transparent and disclose its Regulated Substances Specification.</p>	<p>Apple provides no information on its policies and practices for sustainable sourcing of fibres for paper.</p> <p>It is reducing the size of its packaging to save transportation costs. More information.</p> <p>Apple needs to develop a paper procurement policy which excludes suppliers that are involved in deforestation and illegal logging and sets specific targets to reduce paper use and increase use of recycled and FSC fibres.</p>	<p>Apple is a member of the Electronics Industry Citizenship Coalition (EICC), which has an extensive programme on conflict minerals.</p> <p>Apple was the first company to map its suppliers and smelters in its 2011 Supplier Responsibility Report. It is also active in the EICC conflict-free smelter program and the EICC smelter audit process, where it helped get independent experts on the EICC audit review committee. It has an extensive new internal audit policy for suppliers on conflict minerals, including a requirement to source only from smelters that have passed the conflict-free audits. This is the only known company in the industry with such a procurement policy. However, Apple has not signed up to the Public Private Alliance and has not made statements on the need for a multi-stakeholder certification process or publicly committed to implement the OECD due diligence guidelines. It would be helpful if Apple signed on to the OECD pilot.</p> <p>Apple did not issue a statement against the Chamber of Commerce lawsuit or join the multi-stakeholder submission to the SEC on conflict minerals. Apple participated in the OECD due diligence drafting and has actively reached out to NGOs on conflict minerals.</p>	<p>Apple now operates or participates in recycling programs in countries where more than 95 per cent of its products are sold. More information.</p> <p>Apple has recently added Brazil and Costa Rica to its voluntary take-back programme for Apple branded e-waste. More information.</p> <p>Apple also has voluntary take-back of Apple branded e-waste in India, China, Hong Kong, Malaysia, Singapore, New Zealand, Korea, Taiwan and Australia. More information.</p> <p>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 the US, Canada, Europe, Japan, Asia Pacific/Australia and Brazil/ Costa Rica are provided. However, no information is available to customers in 'New Europe'.</p> <p>Apple's original goal for 2010 was to achieve a worldwide recycling rate of 50 percent (as a percentage of sales 7 years ago). In 2010, Apple global recycling exceeded its 70 percent goal, and it is confident that it will maintain this level through 2015. 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.</p>

Ranking Criteria Explained

Version 17, released in November 2011, of the Greenpeace Guide to Greener Electronics ranks companies in the electronics industry under three headings, Energy & Climate, Greener Products and Sustainable Operations.

The criteria used in version 17 of the Guide to evaluate the companies reflect Greenpeace's demands to electronics companies to:

- Reduce emissions of greenhouse gases (GHGs) with energy efficiency and renewable energy
- Clean up their products by eliminating hazardous substances;
- Take-back and recycle their products responsibly once they become obsolete,¹ and;
- Stop the use of unsustainable materials in their products and packaging

Previous versions of the Guide ranked companies on the following criteria: Chemicals, E-waste, and Energy. The ranking in version 17 sees a major change as it reorganizes the individual criteria under new headings (Energy & Climate, Greener Products and Sustainable Operations).

In areas where Greenpeace has seen some progress, multiple criteria have been folded together into one overall criterion, putting the focus on the implementation of previous commitments. In places where the industry needs to make further progress, such as energy policy and practice, we have re-written and strengthened the current criteria. Finally, new criteria on the sourcing of paper products and conflict minerals have been added under Sustainable Operations and on product life cycle under Greener Products.

In addition to these structural changes, the scoring system has also been changed. Depending on the complexity of the criteria the maximum points awarded per criteria will vary between 3, 5 and 8 points. There will no longer be double points for any criteria in the new scoring system. The maximum score is 69, which is converted into a score out of 10.

Given the urgency of tackling climate change, Greenpeace has re-focused and updated its energy criteria to encourage electronics companies to improve their corporate policies and practices with respect to Energy and Climate.

Criteria on Energy and Climate

The criteria that companies will be evaluated on are:

1. Disclosure of Greenhouse Gas (GHG) emissions
2. Commitment to reduce the company's own short term and long term GHG emissions
3. A Clean Energy Plan which includes increasing use of Renewable Energy (RE) and energy efficiency measures to implement cuts in GHGs
4. Advocacy for a Clean Energy Policy at national and sub-national level

Criteria on Greener Products

These criteria focus on the environmental performance of consumer electronics, across a number of different issues:

1. Energy efficiency of new models of specified products
2. Products on the market free from hazardous substances
3. Use of post-consumer recycled plastics in products
4. Product life cycle

Criteria on Sustainable Operations

These criteria examine how companies implement environmental considerations during manufacture in their supply chain through to the end-of-life phase of a product:

1. Reduction of supply chain GHG emissions by major suppliers
2. Policy, practice and advocacy on chemicals management
3. Policy and practice on sustainable sourcing of fibres for paper
4. Policy and practice on avoidance of conflict minerals
5. Producer responsibility for voluntary take-back of e-waste

Company scores

Companies have the opportunity to improve their score, as the Guide will be periodically updated. 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 e-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 electronic 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 criteria was made more challenging.

The 17th edition has been re-organised, to reflect campaign priorities and to provide a more comprehensive assessment of the areas where electronics companies impact the environment, under the three headings Energy & Climate, Greener Products and Sustainable Operations. Many elements of the previous criteria remain but they have been re-arranged and updated, with a greater focus on implementation rather than commitment.

It now ranks 15 top manufacturers of personal computers, TVs and mobile phones; Fujitsu, games console producers Nintendo and Microsoft are no longer included and the mobile phone manufacturer Motorola has been replaced with RIM.

For the latest version, see www.greenpeace.org/rankingguide

Sony is issued with a penalty point on its total score as it has made comments in opposition to energy efficiency standards in California, (specifically on the CA Title20 Battery chargers systems and the SB 454: Enforcement of energy efficiency appliance standards).

Sony and LGE are listed as clients of Asia Pulp and Paper (APP), which is responsible for illegal logging and deforestation in Indonesia. Sony and LGE should immediately and publicly commit to stop sourcing any paper or packaging needs from APP or risk being penalised in future versions of the Guide.

Companies that are members of the trade associations ITI and CEA are warned that they risk incurring a penalty point in future editions of the Guide; this affects all companies apart from Sony Ericsson, LGE and Acer. These industry associations have recently made comments against stricter energy efficiency standards in the scope of the California Appliance Efficiency Regulations (a. the inclusion of computers and servers; b. comments against battery chargers systems regulation, respectively). Companies need to distance themselves from such regressive positions and reiterate their support wherever possible for more stringent energy efficiency standards for all electronic products.

Penalty points previously imposed on Toshiba, Samsung, LGE, Dell and Lenovo for backtracking on their commitments to phase out vinyl plastic (PVC) and brominated flame retardants (BFRs) have been lifted as a result of progress made in bringing PVC/BFR-free products onto the market.

¹ The two issues are connected: the use of harmful chemicals in electronic products prevents their safe recycling once the products are discarded.