



## SHARP, 11th position, 3/10

Sharp takes 11th place, with a score of 3. On the **Energy** criteria it does comparatively well on public support for a clean energy policy, for advocating to the Japanese Government to expand the use of renewable energy, stressing the importance of setting a good feed in tariff. It has a relative long term target to reduce CO<sub>2</sub> emissions globally by 2 percent (per production unit) compared to the previous year, for every fiscal year, but no clear target for absolute reductions; it needs to set ambitious targets and aim to reduce its own greenhouse gas (GHG) emissions by at least 30 percent by 2015 for its operations. Its use of renewable energy was approximately 0.5 percent of the electricity used worldwide and it intends to increase this use, however, there is no target, even though it is a solar power manufacturer. It needs to aim to dramatically increase renewable electricity use by 2020. Sharp reports its GHG emissions from its own operations, which are externally verified, but does not report on business travel.

It scores most of its points on the **Products** criteria for the energy efficiency of its products, reporting that all of its TVs meet the latest Energy Star standard, with 90 percent of them exceeding the requirements for sleep mode. 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. Sharp has many products that are free from polyvinyl chloride plastics (PVC) but its phase out of brominated flame retardants (BFRs) is mostly limited to casings and it has not met its commitment; it needs to communicate the dates when new products will be free of PVC, phthalates, BFRs and antimony. It reports on its use of recycled plastics but not as a percentage of total plastics used. Sharp provides some examples of extending product life cycle but does not publicly disclose the length of warranty and spare parts availability for its main product lines.

Sharp scores least points on the Sustainable **Operations** criteria; it only scores a few points for its take-back programme which is focussed on countries with existing legislation, with expansion plans only where future legislation is likely. Sharp provides detailed reports on GHG emissions of its main manufacturing sites, but does not present these as a total or have an overall reduction plan. It scores no points for chemicals management as it is not implementing its support for the precautionary principle or communicating commitments it has made on phasing out hazardous substances in a consistent way to its supply chain. Also lacking is any significant initiative to address the conflict minerals issue or to exclude the sourcing of paper from suppliers that are involved in deforestation and illegal logging.

## SHARP 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				

# SHARP Detailed Scoring

## Energy

Disclose own operational GHG emissions	GHG emissions reductions and targets	Clean Electricity Plan (CEP)	Clean Energy Policy Advocacy
<b>2/3</b>	<b>1/8</b>	<b>2/8</b>	<b>3/8</b>
<p>Total GHG emissions from Sharps operations are reported as 1,634 thousand tonnes CO<sub>2</sub>-e in fiscal 2010; the data is subdivided into emissions from Sharps plants in Japan, overseas plants, offices in Japan and overseas and PFCs. <b>More information.</b> Scope 3 emissions for business travel are not reported, but Sharp plans to establish a reporting method.</p> <p>Data is also reported in <b>Sharps CSR report</b> (see ESR p 060)</p> <p><b>Verification</b> is provided.</p> <p>Sharp also reports on its scope 3 emissions for shipping in Japan as 50,000 tons CO<sub>2</sub>.</p> <p><b>More information.</b></p> <p>Sharp provides background information and analysis on the source of its GHG emissions. For more points it needs to report on its GHG emissions from business travel.</p>	<p>Sharp reports an increase in total greenhouse gas emissions in fiscal 2010 of 9% compared fiscal 2009, as a result of increased production of LCD panels and solar cells. Levels are still below their baseline year of 2007. <b>More information.</b></p> <p>By fiscal 2012, Sharp's goal is to have emission reductions that result from customer use of Sharp energy-creating and energy-saving products be more than double the total GHG emissions from business activities. <b>More information.</b></p> <p>Sharps aims to increase this target to 5 times its GHG emissions by fiscal 2015 and 10 times by fiscal 2020. However, the proportion of emissions reduction from operations that makes up this objective is not explained. <b>More information.</b></p> <p>Sharp's global long term target is to reduce CO<sub>2</sub> emissions by 2% (per production unit) compared to the previous year, for every fiscal year. For 10 of its plants in Japan, it aims to make absolute cuts to below 2007 levels, every fiscal year, and to cut by 3% compared to business as usual (BAU), every fiscal year. See p. 030 <b>ESR 2911.</b></p> <p>Sharp needs to focus on both absolute and relative reductions and set objectives separately for its consumer products and its solar power businesses. It needs to set ambitious targets and aim to reduce its own GHG emissions by at least 30% by 2015 for its operations and dramatically increase renewable electricity use by 2020.</p>	<p>Sharp has installed photovoltaic power systems at all of its domestic production sites; the electricity generated by renewable energy was approximately 0.5% of the electricity Sharp used worldwide in the same year. Sharp plans to install further solar power using available roof space. <b>More information.</b></p> <p>Sharp also uses renewable energy in the US and Europe; 10 sites in Europe operate on renewable energy and in the US two sites use 85% renewable energy. <b>More information.</b></p> <p>It aims for reductions in GHG emissions through energy efficiency at its sites worldwide and provides detailed case studies – see <b>ESR p. 055, 056, 057 CSR report.</b></p> <p>Sharp aims to become a total solutions business for solar-generated electric power. <b>More information.</b></p> <p>However, there are no specific mid or long term targets for increasing use of renewable energy or reducing emissions through energy efficiency.</p>	<p>On August 26th, 2011, Mr. Katayama, president of Sharp Corporation and also the chairman of JPEA (Japan Photovoltaic Energy Association), advocated to the Japanese Government to expand the use of renewable energy and publish a report, stressing the importance of setting a good tariff which is attractive enough for investments from companies. <b>More information.</b></p> <p>Mr Katayama was interviewed by the Wall Street Journal about solar power. <b>More information.</b></p> <p>Sharp previously stated its support for a mandatory global initiative that requires industrialised countries to reach their peak greenhouse gas emissions by 2015 and cut their greenhouse gas emissions at least 30% by 2020, and that calls for worldwide emissions to be reduced at least 50% from 1990 levels by 2050. It needs to update its webpages to re-state this support.</p>

## Greener Products

Product Energy Efficiency	Avoidance of Hazardous Substances in Products	Use of Recycled Plastic in Products	Product Life-Cycle
<b>5/5</b>	<b>1/5</b>	<b>1/3</b>	<b>1/3</b>
<p>100% of Sharp TVs (61 models) meet the latest Energy Star requirements (May 1, 2010).</p> <p>Almost 90% of them are at least 50% more energy efficient than the Energy Star baseline requires in sleep mode, and almost 50% of them are at least 30% more energy efficient in on mode.</p> <p>100% of Sharp MFPs (88 models) meet the Energy Star requirements for imaging equipment (ver. 1.1). Although the Energy Star requirements have been changed since July 1, 2009, 30% of them are at least 30% more energy efficient than the Energy Star baseline requires. <b>More information.</b></p> <p>Sharp aims to continuously improve the energy efficiency of its products and sets objectives for the development of environmentally conscious products and devices as well as assessment standards for certification. <b>More information.</b></p> <p>However, Sharp 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>Sharp lists many products that are free from PVC and phthalates (except accessories), including LCD TVs, solar modules, LED lighting, small household appliances, mobile phones, calculators, electronic dictionaries. Model numbers are listed.</p> <p>BFR and antimony free products are listed as: LED Lighting, Theatre Racks, Home Video System, electronic dictionaries.</p> <p>Products with only casings free from BFRs are: LCD TVs, blue-ray recorders/players, video projectors, copiers/MFPs, supplies, mobile phones.</p> <p>Sharp's commitment was to phase out the use of PVC, phthalates, BFRs and antimony by fiscal year 2010, provided it can find suitable alternatives. Not all products are free from PVC and phthalates; BFRs and antimony have only been removed from casings in the majority of products such as LCD TVs. Sharp states that it will "continue these efforts to expand the product categories and models that require the elimination of BFRs and antimony compounds."</p> <p>However, as Sharp has now gone past its timeline without fully meeting its commitment, it needs to communicate the dates when new products and components will be free from PVC, phthalates, BFRs and antimony in order to complete its phase out.</p> <p>The company has already banned beryllium oxide, but there are many exemptions for which Sharp needs to find substitutes. <b>More information.</b></p> <p>Sharp's internal certification standards for its green products include "uses no halogenated flame retardants, uses polyvinyl chloride substitutes". (See p. 041 <b>ESR, CSR Report</b>)</p>	<p>Sharp has developed recycling technology for repeatedly recovering plastic from used consumer electronics and reusing it in parts of new consumer electronics. In fiscal 2010, the volume of plastic derived from this closed-loop plastic material recycling technology that was recycled and reused in new products increased to 1,300 tons. <b>More information.</b></p> <p>Also see p.034, <b>ESR, CR Report.</b></p> <p><b>Recycling technology for LED and LCD panels</b>, p. 035</p> <p><b>Recycling of bioplastics</b>, p. 036.</p> <p>Examples of products with environmental attributes, including the use of recycled plastics.</p> <p>P 044 – 048, <b>ESR – CSR 2011</b></p> <p>Sharp's objective is to use 1,500 tons of post-consumer plastic in 2012, p. 029. Sharp also needs to present its post-consumer plastics use and targets as a percentage of total plastics used. <b>More information.</b></p>	<p>One of Sharp's Green Device concepts is Long Life - to "extend the life of the product with exchangeable parts and consumables." <b>More information.</b></p> <p>Sharp has developed many long life products; see for example its products catalogue which shows the future of long life in products. <b>(See p.4)</b></p> <p>The Zenigata series LEDs for lighting has a design life of 40,000 hours or more. <b>More information.</b></p> <p>Sharp 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	0/5	0/3	0/5	3/8
<p>Sharp's objectives for absolute cuts (see E3) are focused on its 11 main plants in Japan. Its reporting on GHG emissions also covers its global operations. However, the scope that these reported emissions cover is not reported (eg. Scope 1, 2 &amp; 3 for its manufacturing supply chain). It has many plants, subsidiaries and affiliated companies outside Japan (<b>see list</b>).</p> <p>Each site has a detailed environmental report which includes GHG emissions, energy efficiency measures and use of renewable energy.</p> <p>Sharp provides data giving a breakdown of CO<sub>2</sub> emissions for products (LCD TVs, refrigerators and air conditioners) during their life cycle. <b>More information.</b></p>	<p>Sharp shows strong support for and understanding of the Precautionary Principle, however, in practice it is not fully implementing this principle. Sharp makes no mention of the need for RoHS 2.0 to adopt a ban on organo-chlorine and bromine substances (at least PVC, CFRs and BFRs within 3 – 5 years), as well as an end-of-life focused methodology for adding future substance restrictions.</p> <p><b>More information.</b></p> <p>Also in <b>Fundamental Orientation Concerning the Environment</b> (point 2.3).</p> <p>Sharp sets out its management system for <b>Green Procurement</b>. However, its list of substances no longer presents criteria for identifying future substances for elimination. In addition, "other BFRs" are listed as "managed substances" and not "banned, depending on the application" as PVC and phthalates are. Antimony is not listed at all. This contradicts Sharp's statement that it is making moves to "eliminate BFRs and antimony compounds from new products put on the market since the end of fiscal 2010" (see P2 above). Therefore Sharp scores no points for this criteria.</p> <p><b>List of substances.</b></p> <p>Suppliers are not required to report on their use of all BFRs or antimony. <b>More information.</b></p> <p>See also "<b>Request to Provide Information on Chemical Substances contained in Parts/Materials Related with REACH</b>".</p> <p>Sharp has a Manual for Survey of Chemical Substances Contained in Parts and Materials; however, it is no longer available to the public, see p.6 &amp; 12. <b>Green Procurement Guidelines</b> (new version, June 2011).</p>	<p>Sharp states that it has detailed measures in each step of the value chain for ensuring that business activities exert minimal impact on biodiversity. <b>More information.</b></p> <p>It requires suppliers to "establish a policy on the conservation of biodiversity and the sustainable use of natural resources in business activities". <b>Green Procurement Guidelines</b> (new version, June 2011), pp. 11 &amp; 18.</p> <p>Its <b>Green Office Certification Standards</b> require the use of FSC paper.</p> <p>Sharp 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>Sharp began asking suppliers in January 2011 whether such minerals are contained in products and materials supplied to Sharp, and, if so, what is their country of origin." <b>More information.</b></p> <p>However, this is the step that the leading companies took in 2008, so Sharp lags behind publicly mapping smelters or suppliers, as several companies have already done. Sharp has not joined the EICC audit process and does not have an internal audit policy on conflict minerals. It has not signed up to the Public Private Alliance, made statements on the need for a multi-stakeholder certification process or publicly committed to implement the OECD due diligence guidelines.</p> <p>Sharp did not issue a statement against the Chamber of Commerce lawsuit or join the multi-stakeholder submission to the SEC on conflict minerals. Sharp did not participate in the OECD due diligence drafting, and has not engaged the public on conflict minerals.</p>	<p>Sharp offers nationwide recycling in the US, including TVs and consumer electronics, which covers all US States.</p> <p>In the US, Sharp is part of US EPA's Plug-In To eCycling. It offers voluntary take-back of toner cartridges in Canada, France, Japan, Australia and New Zealand, and mobiles (Mobile Muster) in Australia.</p> <p>Links to local Sharp contacts for customers in EU, US, Canada, Japan and Australia are provided. In countries where recycling legislation is currently being considered, such as China, Thailand, and India, Sharp is actively cooperating with industry associations in the construction of effective recycling systems.</p> <p>Sharp needs to expand take-back services to non-OECD countries, especially those where recycling legislation is not likely in the near future, or it could lose points in the next version of the Guide.</p> <p><b>More information.</b></p> <p><b>US MRM recycling network.</b></p> <p>Total figures are provided for amounts of e-waste collected in 3 European countries and in the US, but not as a percentage of sales.</p> <p>For Japan, Sharp provides figures for recycling of TVs, copiers, PCs &amp; washing machines (by wt) from 2005 (40.1%) to 2010 (106.6%), based on sales 10 years ago.</p> <p><b>More information.</b></p> <p>It now provides a breakdown of the quantities and recycling rates for these 4 product categories.</p> <p><b>More information.</b></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,<sup>1</sup> 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](http://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.

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