



**SHARP**  
Joint 13<sup>th</sup> position, 3.1/10

**Sharp falls back to joint 13<sup>th</sup> position with HCL, with a score of 3.1. Surprisingly, this solar power manufacturer does not have a renewable energy or energy efficiency target, and it only powers 0.5% of its electricity worldwide with solar. Sharp needs to aim to dramatically increase renewable electricity use by 2020.**

On the other **Energy** criteria it scores points for a clean energy policy that advocates that the Japanese government expands its use of renewable energy, and stresses the importance of setting a strong feed-in tariff. Sharp receives points for disclosing greenhouse gas (GHG) emissions, but lacks a clear absolute GHG emissions reduction target. The company needs to set ambitious targets to reduce emissions by at least 30% by 2015 for its operations.

Sharp 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% exceeding the requirements for sleep mode. Sharp has many products that are free from polyvinyl chloride plastic (PVC) but looks to be backtracking on this commitment. Sharp's internal green products certification standards no longer include the requirement "uses no halogenated flame retardants, uses polyvinyl chloride substitutes". Sharp needs to communicate the dates when new products will be free of PVC, phthalates, brominated flame retardants (BFRs) and antimony. The company reports on use of recycled plastics, stating 8% of its plastic is used and has set a new target of using 2,000 tonnes by fiscal year 2015. Sharp 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. Sharp is the only company that supports a 20% collection target under Indian e-waste rules, among all global companies. Sharp needs to expand its take-back programme beyond OECD countries, especially where e-waste recycling legislation is not likely, or it risks losing additional points on this criteria in the future. Sharp lacks significant initiatives in implementing a chemicals management programme, disclosing commitments to phase out hazardous substances, and excluding suppliers involved in deforestation and illegal logging.

		ZERO	LOW	MEDIUM	HIGH
<b>ENERGY</b>	Disclose and set targets for operational GHG emissions and RE supply				
	Disclose and set targets for supply chain GHG emissions and RE supply				
	Clean Electricity Plan (CEP)				
	Clean Energy Policy Advocacy				
<b>PRODUCTS</b>	Product energy efficiency				
	Avoidance of hazardous substances in products				
	Use of recycled plastic in products				
	Product life cycle				
<b>OPERATIONS</b>	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 there are no EPR laws				

<b>Energy</b>		<b>10/32</b>
<b>Disclose and set targets for operational GHG emissions and RE supply</b>	<p>Total GHG emissions from Sharps operations are reported as 1,180 thousand tonnes CO<sub>2</sub>-e in fiscal 2011 (down from 1,634); the data is subdivided into emissions from Sharps plants in Japan, overseas plants, offices in Japan and overseas and PFCs. <b>More information.</b></p> <p>A combined total (1.41 million tons CO<sub>2</sub>) for all GHG emissions and comparison with previous years <b>is provided.</b> Scope 3 emissions for business travel are now <b>reported. Verification is provided by KPMG.</b> Sharp provides background information and analysis on the source of its GHG emissions.</p> <p><b>Total greenhouse gas emissions</b> for the Sharp Group in fiscal 2011 decreased by 13.5% compared to the previous fiscal year (with CO<sub>2</sub> emissions for Sharp's 10 factories in Japan reduced by 12.9% compared to the previous fiscal year. In fiscal 2011, Sharp met its 2012 goal 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. 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 for 2015 is to reduce CO<sub>2</sub> emissions by 3% (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 2011.</b> 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>	<b>2/8</b>
<b>Disclose and set targets for supply chain GHG emissions and RE supply</b>	<p>Sharp reports GHG emissions of 5,240 thousand tons CO<sub>2</sub> from the manufacture of materials procured for the main products and devices<sup>1</sup> that the Sharp Group sold in 2011, out of a total of 8,442 thousand tons CO<sub>2</sub> scope 3 emissions. Sharp states that by 2020, GHG emissions reduction through Sharp's solar power-related business will be at least equal to the GHG emissions from Sharp business activities, including those in the supply chain and the use of Sharp products, but there is no absolute target to reduce supply chain emissions.</p> <p>Sharp's objectives for absolute cuts are focused on its 11 main plants in Japan. It also <b>lists</b> many plants, subsidiaries and affiliated companies outside Japan. Each site has a detailed environmental report which includes GHG emissions, energy efficiency measures and use of renewable energy.</p>	<b>3/8</b>
<b>Clean Electricity Plan (CEP)</b>	<p>Sharp has installed photovoltaic power systems at all of its domestic production sites; the electricity generated by renewable energy was approximately 0.55% of the electricity Sharp used worldwide in fiscal 2011. Sharp plans to install further solar power using available roof space. <b>More information.</b> 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 by awarding "Green Factory" and "Super Green Factory" status, and provides <b>detailed case studies. Energy conservation case studies in offices.</b></p> <p>Sharp aims to become a total solutions business for solar-generated electric power and will continue to pioneer an era of renewable energy through efforts in solar power generation. <b>More information.</b> However, there are no specific mid or long term targets for increasing use of renewable energy or reducing emissions through energy efficiency.</p>	<b>2/8</b>
<b>Clean Energy Policy Advocacy</b>	<p>On 26 August 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> Mr Katayama was interviewed by the Wall Street Journal about solar power. <b>More information.</b> Several of Sharp's top managers have given lectures and promoted renewable energy, for example at the Government joint session of the 23rd International Energy Agency (IEA).</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>	<b>3/8</b>

Greener Products		8/16
Product energy efficiency	<p>More than 90% of Sharp TVs meet the Energy Star requirements (ver. 5.3), which went into effect 30 September 2011. Almost 90% of them are at least 50% more energy efficient than the Energy Star baseline requires in Sleep mode, and over 30% of them are at least 30% more energy efficient in ON mode.</p> <p>A full 100% of Sharp MFPs (111 models) qualify under the version of the Energy Star requirements for imaging equipment (ver. 1.1). Although the Energy Star requirements have been changed since 1 July 2009, 34% 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>	5/5
Avoidance of hazardous substances in products	<p>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, the numbers of PVC free and part BFR free products that have come on the market in 2011 are less than in 2010.</p> <p>Sharp lists the products put on the market in 2011 that are free from PVC and phthalates (except accessories), including LCD TVs, solar modules, LED lighting, small household appliances, mobile phones, calculators, electronic dictionaries.</p> <p>BFR and antimony free products are listed as: LED Lighting, and water purifier. All other products listed (including LCD TVs, blue-ray recorders players, video projectors, copiers/MFPs, mobile phones) only have the casings free from BFRs; products that were previously listed as BFR/antimony-free, such as Theatre Racks, Home Video System and electronic dictionaries are also now only BFR free in casings.</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.</p> <p>Even 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. It also needs to provide the percentage of each product line that is free from each specified substance, to demonstrate progress towards elimination. The company has already banned beryllium oxide, but there are many exemptions for which Sharp needs to find substitutes. <b>More information.</b></p>	1/5
Use of recycled plastic in products	<p>Sharp has developed recycling technology for repeatedly recovering plastic from used consumer electronics and reusing it in parts of new consumer electronics. The volume of recycled and reused plastic reached 1,410 tons in fiscal 2011. <b>Sharp plans to expand this amount</b> to 2,000 tons in fiscal 2015 (which Sharp has informed Greenpeace is comparable to about 8% of total plastics in the products concerned).</p> <p><b>Recycling of bioplastics</b>, p. 036.</p> <p><b>Examples of products</b> with environmental attributes, including the use of recycled plastics. P039</p> <p>Sharp also needs to present its post-consumer plastics use and targets as a percentage of total plastics used.</p>	1/3
Product life cycle	<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 <b>products catalogue</b>, which shows the future of long life in products. (See p.4-6)</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>	1/3

Sustainable Operations		3/21
Chemicals management and advocacy	<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. <b>More information.</b> 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. <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> See also “<b>Request to Provide Information on Chemical Substances contained in Parts/ Materials Related with REACH</b>”. 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.8 &amp; 12. <b>Green Procurement Guidelines</b> (new version, May 2012).</p>	0/5
Policy and practice on sustainable sourcing of fibres for paper	<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> 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, May 2012 ), pp. 11 &amp; 18.</p> <p>In a backwards step, its <b>Green Office Certification Standards no longer</b> require the use of FSC paper. 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>	0/3
Policy and practice on avoidance of conflict minerals	<p>In response to a survey, over 80% of suppliers from whom Sharp purchases relevant parts and products responded that they do not use minerals from the DRC or adjoining countries. For suppliers that responded that they are uncertain whether or not they are using minerals from prohibited countries, Sharp is continuing to request that they refrain from using illegally mined minerals.</p> <p>Sharp states that it “will take swift and appropriate action against this problem by participating in the Responsible Minerals Trade Working Group of the Japan Electronics and Information Technology Industries Association (JEITA) as well as through other forums”. <b>See p.4.</b></p> <p>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. 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>	1/5
Provides effective voluntary take-back where there are no EPR laws	<p>Sharp offers nationwide recycling in the US, including TVs and consumer electronics, which covers all US States. 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, the US, the UK and New Zealand, and mobiles (Mobile Muster) in Australia. Sharp has worked with not-for-profit company PSA and the Australian government to devise a regulatory framework for end-of-life recycling of all TVs in Australia; compulsory take-back regulation for TVs came into force in July 2012.</p> <p>In India, Sharp has partnered with SIMS recycling which has two recycling facilities and 27 collection points to implement the new e-waste rule which came into force in May 2012. Sharp supports a 20% collection target under the current e-waste rule. 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 and Thailand, Sharp is actively cooperating with industry associations in the construction of effective recycling systems. 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. <b>More information.</b></p> <p><b>US MRM recycling network.</b> 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. For Japan, Sharp provides figures for recycling of TVs, copiers, PCs and washing machines (by wt) from 2006 (41.9%) to 2010 (81.4%), based on sales 10 years ago. <b>More information.</b></p> <p>It provides a breakdown of the quantities and recycling rates for these 4 product categories. <b>More information. Further details of its recycling technologies.</b></p>	2/8