



Toshiba drops to 15<sup>th</sup> position with 2.3 points. Toshiba has, as of March 2012, removed polyvinyl chloride plastic (PVC) and brominated flame retardants (BFRs) from most parts of its products. External cabling is not included, and not all wiring boards are BFR-free. It had previously released a PVC and BFR-free PC in March 2011. After having a penalty point imposed in 2010, Toshiba made a new commitment to phase out PVC, BFRs, antimony and compounds, beryllium and compounds, and phthalates by FY 2015 from all its consumer products. This timeline is too slow compared to its competitors, but the fact that Toshiba’s commitment covers all products and a range of hazardous substances is welcome.

Toshiba also scores poorly on other **Products** criteria. The company does not publish information on its warranties and availability of spare parts. Toshiba has a new target, set for fiscal year 2012, to increase the ratio of recycled plastics used for products to 3% in fiscal year 2015. It also needs to report on the percentage of its products that meet and exceed Energy Star standards for each product range.

It also scores poorly on **Energy** criteria. Toshiba has reduced its emissions of CO<sub>2</sub> in line with its previous targets, and aims to keep CO<sub>2</sub> emissions below 60% of the fiscal year 1990 level. The presentation of these objectives is confusing and difficult to compare with the need to reduce its GHG emissions by at least 30% by 2015 for its own operations. Toshiba uses pre-Fukushima electricity emission co-efficients for the Japanese energy mix, which is misleading. Toshiba gives some examples of energy efficiency measures and use of renewable energy, but does not have a clean energy strategy. Toshiba aims to use renewable energy for a wider range of its operations, and needs to set a target to dramatically increase renewable electricity use by 2020 and use political opportunities like the draft Feed-In Tariff (FIT) law in Japan to advocate for more access to renewable energy. It reports its greenhouse gas (GHG) emissions for its operations, but not for business travel and does not provide third-party verification for this data.

Toshiba scores relatively better on **Sustainable Operations**, though it has made little progress since the last edition. The company provides data on its global recycling rates for TVs and PCs, together with a detailed breakdown, though it has no substantial information on its India programme. Toshiba still needs to expand its take-back programme to non-OECD countries for its TVs. On conflict minerals, Toshiba has carried out supplier surveys and begun tracing, but has not yet publicly mapped its smelters and suppliers. Toshiba has a detailed chemicals management programme that is based on the precautionary principle. Toshiba fails to score on paper sourcing as it does not have a paper procurement policy that excludes suppliers who are 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>5/32</b>
<b>Disclose and set targets for operational GHG emissions and RE supply</b>	<p>Toshiba discloses its GHG emissions (Scopes 1 &amp; 2) in accordance with GHG Protocol, on page 21 in its Environmental Report 2012. In FY2011, Toshiba reduced 320,000 tons of GHG emissions by using power-saving measures and reorganisation of business and production sites, but total emissions increased to 80,000 tons due to the deterioration of CO<sub>2</sub> emission coefficient for electricity by 36% as a result of the Great East Japan Earthquake in 2011. See <b>p.21, Environmental Report 2012</b>. Toshiba Group's GHG emissions have decreased since FY2007 (and are 40% lower than those in FY1990). Toshiba Group expects that in FY2012 GHG emissions will be reduced by 25% (3.43 million tons) compared to the previous plan, down from 3.93 million tons in <b>FY2007</b>.</p> <p>Toshiba aims for its total GHG emissions (compared to FY1990 levels) to be 3.45 M ton (51%) by 2012 and 4.39 M tons by 2015, a reduction of 35% compared to 1990 levels (although this is an increase of 9% compared to 2007). Emissions are expected to reduce slightly after this date. It has <b>set a target</b> to reduce total energy-derived CO<sub>2</sub> emissions per unit production by 10% compared to FY2010 levels. Toshiba previously aimed to stop increasing emissions by FY2012. It planned to control the absolute reduction at a level of 1.96 million tons by FY2012, to have emissions peak at 70% less than the FY1990 level, and decrease them by a further 10% by 2025. The plan to keep emissions below 60% of the FY1990 level is less ambitious. <b>More information.</b> Toshiba 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>1/8</b>
<b>Disclose and set targets for supply chain GHG emissions and RE supply</b>	<p>Toshiba <b>estimates its Scope 3 emissions</b> from its supply chain (defined as purchased products and services) as 742 m tons CO<sub>2</sub>-e, or 8% of total emissions, including product use, which are 9,177 m tons CO<sub>2</sub>-e. Toshiba estimates GHG emissions from each stage of a product's life cycle by using "Easy-LCA", developed by Toshiba in accordance with ISO 14040 and ISO14044. The LCA is performed at procurement, manufacturing, distribution, consumption and waste treatment. Toshiba presents the percentages of CO<sub>2</sub> emissions generated at different stages of the life cycle of Toshiba Group's products. Examples are also given of reducing energy use at certain points of the life cycle for various products; for manufacturing, the example of semiconductors is given. Total quantities of CO<sub>2</sub> emissions associated with each life cycle stage need to be provided. <b>More information.</b></p>	<b>2/8</b>
<b>Clean Electricity Plan (CEP)</b>	<p>Toshiba states that it is continuously striving to use renewable energy for a wider range of its operations. In FY2011, it used 35,695 MWh's worth of renewable energy, which is about 0.8% of total energy use. This resulted in a reduction of about 17,000 tons of CO<sub>2</sub> emissions. Toshiba Corp has been purchasing two million kWh of electricity under a green power certificate annually since January 2005. Though the amount of renewable energy is very limited in Japan (and companies are constrained in their construction of dedicated green power facilities), Toshiba aims to increase its use of renewable energy, and has set a target of more than 1%. See p.22, Environmental Report 2012. Toshiba has also set a target to improve its energy efficiency by 10% in FY2015 compared to the FY2010 level to reduce CO<sub>2</sub> emissions. (See <b>5th Environmental Action Plan</b>).</p> <p>Semiconductor operations accounted for about half of total energy-derived CO<sub>2</sub> emissions, and social infrastructure and liquid crystal display operations represented 21% and 11%, respectively. Toshiba aims to step up its initiatives to reduce energy derived CO<sub>2</sub> emissions mainly in the semiconductor unit, which is expected to see its energy-derived CO<sub>2</sub> emissions grow in the future. These will include using high-efficiency chillers and air-conditioning systems, as well as inverter-controlled compressors and other instruments, effectively utilising waste heat from factories, installing LED lighting, and introducing renewable energy.</p> <p>In FY2009, the Group used 23,020 MWh's worth of renewable energy. 70% of power consumption for the Toshiba Europe office building is from renewable energy. In addition, Toshiba Corp has used a green power system since January 2005 and has since entered into an agreement to purchase two million kilowatts of electricity under a green power certificate annually.) In Poland TTCE (Toshiba Television Central Europe) completely switched to renewable energy (i.e. hydroelectric power) for its total annual consumption of approximately 3 million kWh of electricity.</p> <p>Immediately after the 3.11 Earthquake, Toshiba Group implemented every possible measure to save power, including removing some fluorescent lamps and reducing the use of air conditioning at operating sites, stopping some elevators, and shifting production from daytime to nighttime. <b>More information.</b></p>	<b>2/8</b>
<b>Clean Energy Policy Advocacy</b>	<p>Toshiba refers to the Japanese government's goal of reducing greenhouse gas emissions by 25% compared to 1990 levels by 2020, but does not specifically state that it supports this. <b>More information.</b></p>	<b>0/8</b>

<b>Greener Products</b>		4/16
<b>Product energy efficiency</b>	<p>Toshiba <b>reports</b> that all note PCs developed since 2009 (as of September, 2010) comply with Energy Star Version 5.0 for all configurations (except no-OS models). Toshiba informs Greenpeace that 88% of the above products exceed more than 30% of the standard. For LCD TVs, 49.2% comply with latest Energy Star Version 5.3. Toshiba reports to Greenpeace that two of its TV models (55L6200U, 47L6200U) have received “Energy Star Most Efficient 2012”. It is not clear if this is Toshiba’s entire PC range.</p> <p>Most note PCs are equipped with Toshiba’s Eco Utility Program, which helps and encourages users to save power; energy saved is displayed as the value of CO<sub>2</sub> reduction. <b>More information.</b></p> <p>Toshiba also refers to its “power peak shift” technology for PCs and TVs, which detects peak electricity periods and automatically shifts to battery power. <b>More information.</b> Toshiba’s home IT system “<b>Feminity</b>” monitors and controls energy consumption in the home.</p> <p>For more points Toshiba needs to report information on its website on the percentage of its products that meet and exceed ES standards for each product range.</p>	2/5
<b>Avoidance of hazardous substances in products</b>	<p>In March 2011 Toshiba released a PC that is 100% PVC and BFR-free, the Tecra A11-EV1, on the US market. Other models that have a PVC-free main body and have no BFRs in the case and all plastic parts weighing 10g or more are the Portege R600,R700, R830, the Libretto W100 and the Tecra R840/850. <b>More information.</b></p> <p>Toshiba has a commitment to phase out PVC, BFRs, antimony and compounds, beryllium and compounds and phthalates by FY2015 from ALL its consumer products, if alternatives are available. Previously, Toshiba had a commitment to phase out PVC and BFRs from all its products – not only from their notebook PCs and mobiles - with a timeline of FY 2009; although it now has a PVC/BFR free PC it did not meet this commitment for all products. Toshiba also had a commitment to replace phthalates, beryllium and compounds and antimony and compounds by 2012 in all its consumer electronic products, if alternatives are available. <b>More information.</b></p> <p>Although the timeline of 2015 is unreasonable, the fact that the commitment it covers all products and a range of hazardous substances is welcome. Toshiba will be rewarded with more points in future versions of the Guide, as more products come onto the market in line with its new objectives. The plan for phasing out PVC and BFRs is also now in Toshiba’s <b>Fifth Environmental Action Plan</b>, where it is specified that PVC and BFRs will be abolished in 20 product groups by 2012 and 80 product groups by 2015. The other hazardous substances are not mentioned.</p>	1/5
<b>Use of recycled plastic in products</b>	<p>Toshiba reports that its use of post-consumer recycled plastics from end-of-life products in FY2011 was about 1300 tons. This was used in the base plates of TVs, notebook PCs, washing machines, refrigerators, and some other products. Several products, such as LCD TV (TL 963 series, RL933 series) and washing machine (TW-Z9100, TW-Z9200) use a ratio of 15% recycled plastics.</p> <p>Toshiba aims to apply these production technologies to other products in order to achieve its new target in its 5th Environmental Action Plan (see below). See <b>p. 41, Environmental Report 2012.</b></p> <p>A new target has been set in FY2012 to increase the ratio of recycled plastics used for products to 3% in FY2015 in Toshiba Group’s 5th Environmental Action Plan. Toshiba has <b>a guideline</b> for every note PC to use recycled plastic. <b>Case studies</b> showing the use of recycled plastics.</p>	0/3
<b>Product life cycle</b>	<p>Toshiba has informed Greenpeace that the basic warranty period for PCs is 1 to 2 years, with an extended warranty of 3 to 5 years as an option, which it believes surpasses the industry standard, however, a summary of this information needs to be available publicly. <b>Warranty information</b> for products is provided. Examples of lengthening product life, which contributes to reduction of additional use of materials are also given, such as protection of hard disc drives from accidental shock, honeycombed rib structure for PC case, adoption of SSD (Solid State Drive). <b>More information.</b></p> <p>Examples for TVs are <b>use of LED back light, safety against overturning (breakdown) features, software to enable linkage between several products, digital terrestrial tuners for analog TVs.</b> Toshiba produces the <b>SciB rechargeable battery</b>, which is designed to guarantee safety and a long life. Toshiba is also manufacturing <b>energy efficient LED bulbs.</b></p> <p>Toshiba 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		7/21
<p><b>Chemicals management and advocacy</b></p>	<p>Support for the precautionary principle on Toshiba's global corporate site refers to taking action on toxic chemicals regardless of lack of full scientific certainty. However, Toshiba does not provide any evidence of advocacy for strong chemicals legislation or case studies demonstrating the process of substituting hazardous chemicals of concern <b>More information.</b></p> <p>Toshiba has Green Procurement Guidelines for suppliers and ranks suppliers. For prohibited substances there is "no intentional use" which excludes their use in production processes. <b>See pdf file.</b></p> <p>For Toshiba's Digital Products and Services Company, <b>see Guidelines for Green Procurement v.08.02.</b></p>	<p>3/5</p>
<p><b>Policy and practice on sustainable sourcing of fibres for paper</b></p>	<p>Toshiba is promoting the reduction of the amount of paper used and procurement of recycled papers. In FY2011, the amount of paper used was 75% of the FY2010 level.</p> <p><b>In FY2011</b>, approximately 192 tons of FSC-certified paper was used for printed materials (such as CSR Report) in Japan.</p> <p>Toshiba has internal guidelines for the use of FSC paper, for the printing of its <b>CSR report</b> for example.</p> <p>Toshiba 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>0/3</p>
<p><b>Policy and practice on avoidance of conflict materials</b></p>	<p>Toshiba has expressed its support for the use of conflict-free minerals on its website. <b>More information.</b></p> <p>Toshiba has done supplier surveys and joined the EICC in June 2011 but it needs to be an active member of the Extractives Working Group. It has begun tracing but it has not published or publicly mapped smelters or suppliers, as several companies have already done.</p> <p>Toshiba signed up to the Public Private Alliance but has not made statements on the need for a multi-stakeholder certification process or publicly committed to implement the OECD due diligence guidelines.</p> <p>Toshiba did not issue a statement against the Chamber of Commerce lawsuit or join the multi-stakeholder submission to the SEC on conflict minerals. Toshiba did not participate in the OECD due diligence drafting, but has begun engaging Japanese NGOs and companies on conflict minerals.</p>	<p>2/5</p>
<p><b>Provides effective voluntary take-back where there are no EPR laws</b></p>	<p>Voluntary take-back of PCs covering 80% of PC sales is provided in Canada, South Korea, Australia, New Zealand, China, Singapore, Thailand, the Philippines, Vietnam, Malaysia, Indonesia and India. Toshiba's recycling programmes don't include other Toshiba products like TVs, which are so problematic at end-of-life. For more points Toshiba needs to expand its TV take-back programme to non-OECD countries. <b>More information.</b></p> <p>Toshiba now provides <b>technical details</b> of TV recycling and is co-operating with a recycling company in Japan to increase recycling, however, there are no plans to extend this and no contact details are given.</p> <p>Toshiba provides recycling of computers, tablets, TVs and video and electronics and is part of US recycling joint venture MRM. <b>More information here and here.</b></p> <p>Comprehensive information to customers on the take-back of used PCs. Toshiba reports to Greenpeace that quantities of used products recycled in India are still small. See for example, <b>India.</b></p> <p>Toshiba has been involved in a <b>WEEE recycling project in Thailand.</b> Toshiba provides detailed data on its recycling. The overall volume of WEEE recycled was 130,000 t in 2011. Toshiba reports its ratio of "recycling weight to the sales weight" for "accumulated" products (including TVs, PCs and 3 types of home appliances) based on past sales. For 2010, the recycling rate is 15.3%. Toshiba provides separate global recycling rates for TVs (45% in 2011) and PCs (22.3% in 2011) based on sales 10 and 7 years ago, respectively. Toshiba needs to clarify how it calculates EU recycling rates. <b>More information.</b></p>	<p>2/8</p>