



LGE

12th position, 3.5/10

LGE scores 3.5 points and moves up to 12th place. LGE receives points on a strong precautionary principle policy, but lacks sufficient advocacy follow up.

All of LGE’s mobile phones are free of polyvinyl chloride plastic (PVC) and brominated flame retardants (BFRs), and free of phthalates, antimony trioxide and beryllium oxide. While TVs and notebooks have many PVC/BFR-free parts, LGE has not publicly disclosed information on its movement to phase these substances out from TV monitors and PCs by 2012, and household appliances by 2014. In other **Products** categories, LGE retains points for its strong statement in support of more stringent Energy Star verification standards, and gains a point for more detailed information about warranties and replacement parts.

LGE scores modest points on the **Energy** criteria. It sets a weak target of a 10% reduction in greenhouse gas (GHG) emissions from its operations by 2020 – the company should aim for a more ambitious target of at least 30% by 2015. LGE has achieved a yearly GHG reduction of approximately 20,000 tonnes through various energy efficiency measures. LGE’s low carbon strategy now includes renewable energy use, but it needs an ambitious target to dramatically increase renewable electricity use by 2020 and an implementation strategy of how to do this without over-reliance on renewable energy credits. It earns a point for its support for mandatory emissions cuts of at least 30% in industrialised countries by 2020. LGE also reports on its GHG emissions for its operations and business travel. Although LGE has verified its emissions from a third party in Korea, it is still awaiting third party verification for its global emissions.

LGE scores best in **Sustainable Operations**, but still has plenty of room for improvement. It provides a take-back programme in 52 countries for obsolete mobile phones, but needs to continue to expand its programme for all its products in non-OECD countries. LGE no longer reports its recycling rates as a percentage of past sales. Its chemicals policy is based on the precautionary principle, and its communication with its suppliers on chemicals management reflects its hazardous substance phase-out plans. LGE does not yet publish data on GHG emissions from its supply chain, but has begun to work with suppliers to gather this information. LGE is in the process of addressing conflict minerals, but has not publicly mapped smelters or suppliers, and does not yet have a policy. It improves its score for paper sourcing by pledging to no longer buy from Asia Pulp and Paper, until the company no longer practices illegal logging and deforestation in Indonesia. LGE should expand that stance into a more comprehensive paper policy that excludes purchasing from other companies practising deforestation.

		ZERO	LOW	MEDIUM	HIGH
ENERGY	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				
PRODUCTS	Product energy efficiency				
	Avoidance of hazardous substances in products				
	Use of recycled plastic in products				
	Product life cycle				
OPERATIONS	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				

Energy		9/32
Disclose and set targets for operational GHG emissions and RE supply	<p>LGE reports global GHG emission data (Scope 1,2 &3) for 2009 - 2012. The data includes 14 Korean operations and 30 overseas manufacturing operations. Emissions from business travel are also reported. LGE provides third party verification for Scope 1, 2 & 3 (business travel) by DNV for GHG emissions data from 2007 – 2011 in Korea, and up to 2010 for overseas. More information.</p> <p>LGE has set a target to reduce absolute emissions of GHG's by 10% by 2020, compared to a baseline of 2008. Emissions in 2011 have decreased to 1,361mt CO₂e compared to from 1,463mt CO₂e in 2008, however, they have increased compared to 2009 and 2010. More information.</p> <p>LGE 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>	3/8
Disclose and set targets for supply chain GHG emissions and RE supply	<p>LGE estimates that emissions from its supply chain were 13 million tonnes CO₂e in 2011. LG Electronics states that it is implementing a "low carbon supply chain management" strategy for suppliers to actively participate in the GHG reduction. We plan to purchase over KRW 50 trillion of components annually by the year 2020 from the companies conducting sustainable GHG reduction plans. We are supporting suppliers for reducing GHG emissions such as education, consulting etc.</p> <p>Additionally, we plan to facilitate suppliers' voluntary reduction of GHG emissions by creating low carbon management guidelines specified for the electronics industry and making them available to all our suppliers." More information.</p> <p>LGE has carbon footprint labels that are third party certified for 24 of its products and six components, from the Korea Environmental Industry and Technology Institute. See p. 36, Sustainability Report 2011-2012</p> <p>LGE lists the life cycle emissions for its main product groups.</p>	2/8
Clean Electricity Plan (CEP)	<p>LGE "understands renewable energy is the one of the most important sources to reduce GHG emissions in our global sites and plans to increase its voluntary use".</p> <p>In the US, purchases of wind and biomass energy will make up 8% of electricity purchases by 2013, with the aim of cutting GHG emissions by 50% by 2020 (compared to 2007). 24% of electricity consumption in Europe was renewable energy purchases. However, details of REC purchases aren't provided.</p> <p>As of 2011, solar power generating systems with a total capacity of 126KW are in operation at the production sites at Gumi, Changwon in Korea and also in Thailand.</p> <p>LGE sets out its low carbon strategy on its website and in its Sustainability Report (p.43). It aims to achieve its GHG reduction targets through activities such as production process innovation, facility/operation efficiency improvement and renewable energy use. It reduced 30,000 tons of GHG emissions in 2011 by investing in high efficiency equipment such as automatic building energy control systems, small capacity boilers and high efficiency turbo air compressors. However, it also includes the purchase of steam from a municipal waste incinerator as one of its sources of renewable energy; however, incineration can't be considered as renewable energy and can release toxic substances. Solar power is LGE's new energy business. See p. 42,43 & 44, Sustainability Report 2011-2012</p>	2/8
Clean Energy Policy Advocacy	<p>"In November 2011, LGE officially supported the 2°C Challenge Communiqué proposed by the Corporate Leaders Network For Climate Action and clearly expressed its strong commitment towards GHG reductions and expanding renewable energy use. The communiqué urges governments and businesses around the world to participate in the effort to stabilize global warming to under 2°C and was conveyed to international leaders at the 17th Conference of the Parties (COP 17)."</p>	2/8

Greener Products		6/16
Product energy efficiency	<p>LGE last reported on the percentage of its products that comply with Energy Star in August 2010. At that time, 78% of its TVs comply with Energy Star 4.1. However, it continues to supplies a list of all its Energy Star qualified products (TVs, monitors, notebooks/tablets). More information.</p> <p>LGE now makes a strong statement in support of more stringent ES verification Standards. More information.</p> <p>LGE's strategy for improving products' energy efficiency is by formulating a five-year Technology Roadmap (TRM) for each product line, and then achieving the detailed goals. LGE has already met ERP (Energy-related Products) regulation and has set goals to reduce energy consumption and standby power.</p>	3/5
Avoidance of hazardous substances in products	<p>LGE backtracked on its commitment to eliminate PVC and BFRs in all its products by 2010. New information on the company's progress towards new goals or the percentage of products that are now PVC/BFR free have been provided.</p> <p>All LGE mobile phones are free from PVC and BFRs, as of 2010. Other substances include phthalates and antimony trioxide from January 2011 and beryllium oxide from 2002.</p> <p>Other products are partly PVC/BFR free, for example, monitors (mechanical plastic parts), LCD TVs, laptops, steam cleaners and vacuum cleaners.</p> <p>All Optical Disk Drives are PVC/BFR free from 2009.</p> <p>PVC and BFRs will now be banned from TVs, monitors and PCs by 2012.</p> <p>PVC and BFRs will be totally banned from use in household appliance models by 2014.</p> <p>The use of phthalates and antimony will be prohibited for all new TVs, monitors, PCs by 2012 and all new household appliances by 2014. As of yet, only 3 types of phthalates have been phased out and antimony is not mentioned.</p> <p>The use of beryllium oxide in mobile phones has already been phased out and other kinds of beryllium compounds will be prohibited in new products by 2012. More information.</p>	1/5
Use of recycled plastic in products	<p>LGE is trying to increase its use of post-consumer recycled plastic aiming for use across all products. The amount of post-consumer recycled plastics is 3,298 tons in 2011, which has increased from 989 tons in 2009 and 2,014 tons in 2010.</p> <p>LGE gives examples of products containing post-consumer recycled plastics, including a refrigerator, a washing machine, an air conditioner, mobile phones and monitors.</p> <p>LGE does not currently have a clear target with defined milestones to increase its use of post-consumer recycled plastic.</p>	1/3
Product life cycle	<p>LGE is making efforts to minimise e-waste by prolonging product life; as part of this, it has warranty and parts holding periods as follows: (1) Mobile phones – 1-2 years warranty and 3-5 years parts; (2) TV – 1-3 years warranty; (3) Air conditioner – 1.5 years; and (4) Washing machine, refrigerator etc. 1-3 years. It also provides 7 years spare parts availability for these 3 product lines.</p> <p>LGE also needs to provide this information specifically for its best-selling products within these categories. See p. 40, Sustainability Report 2011-2012</p> <p>LGE also gives some examples of life cycle improvements.</p>	1/3

Sustainable Operations		9/21
<p>Chemicals management and advocacy</p>	<p>LGE provides a strong definition of the precautionary principle reflecting the need to take action to eliminate harmful chemicals even though their effects may not be scientifically proven. More information.</p> <p>However, LGE does not provide any evidence of advocacy for strong chemicals legislation or case studies demonstrating the process of substituting hazardous chemicals of concern.</p> <p>LGE's product specs in the updated (6th edition). "LG Electronics manual of the hazardous substance management in the parts and models" reflects its plans to phase out hazardous substances and also identifies the phase out of future substances to be reduced, such as musk xylene by 2014 from all products. Chlorinated flame retardants have also been phased out from mobile phones. LGE requires 'non-use certification' for its parts and products referring to its presence in the final product; this also needs to apply to the use of its listed substances in production processes. More information here and here.</p>	<p>3/5</p>
<p>Policy and practice on sustainable sourcing of fibres for paper</p>	<p>LGE reports on a 'Eco packaging development' which encourages suppliers to use FSC or PEFC sources of fibre and stipulates minimum recycled content of 50% for boxes and 80% for packaging paper. It also specifically excludes illegal sources of fibre. LGE still needs develop this policy further, in particular to set specific targets to reduce paper use and increase use of recycled and FSC fibres. PEFC sources are not acceptable. More information.</p> <p>LGE investigated the sourcing of its paper for catalogues in response to evidence that fibres from APP (responsible for illegal logging and deforestation in Indonesia) had been used. It could not be verified, however, LGE has now officially instructed its office supplies vendor to cease purchasing paper products made from APP materials as well as any paper derived from illegal logging sources and is also notifying all suppliers likewise. To keep these points, LGE must make announce this policy public.</p>	<p>2/3</p>
<p>Policy and practice on avoidance of conflict minerals</p>	<p>LGE has joined the EICC initiative and has publicly mapped smelters or suppliers. It has also joined the EICC audit process and has a internal audit policy on conflict minerals. LGE has not signed up to the Public Private Alliance; it 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>It did not issue a statement against the Chamber of Commerce lawsuit or join the multi-stakeholder submission to the SEC on conflict minerals. LG did not participate in the OECD due diligence drafting and it has not engaged the public on conflict minerals.</p> <p>LGE provides details on its website on its approach on conflict minerals and the measures it takes to show due diligence to prevent their use. More information.</p>	<p>2/5</p>
<p>Provides effective voluntary take-back where there are no EPR laws</p>	<p>LGE aims to establish a global take-back programme.</p> <p>LGE provides take-back of its discarded mobile phones in some 50 countries with 392 drop off points globally. About half of these countries represent voluntary take-back. However, large gaps still exist in Africa, Middle East and Latin America. LGE has a nationwide recycling programme in the US for LGE, Zenith and GoldStar brands of TVs, computer monitors and other consumer electronics products. More information here and here.</p> <p>US mobile phones.</p> <p>LGE is now offering take-back of its products in India, in addition to mobile phone take-back. More information.</p> <p>For more points, LGE needs to provide voluntary take-back of more product types and in more non-OECD countries.</p> <p>LGE reports the total quantities recycled in Europe, Korea, Japan and North America from 2007 to 2011. Data by country and by product type is also provided. However, LGE no longer reports its recycling rates as a percentage of past sales</p> <p>It has provided data on e-waste collected in India and details of compliance with India's new e-waste law to Greenpeace in India. More information.</p>	<p>2/8</p>