



LG Electronics produces a wide range of electronic devices, which include personal electronic devices such as PCs, laptops, and smartphones, as well as home appliances such as TVs and refrigerators. While often operating in the shadow of Korean rival Samsung in terms of market share among personal computing devices, LG has recently seen promising growth in several foreign markets. LG has recently shown more innovation in its product design than both Apple and Samsung, producing both partially modular smartphones and thin client laptop computers that are easy to repair. While LG has been successful in stabilizing its GHG emissions for its own operations, this has apparently been achieved in part by outsourcing more to its suppliers, with its supply chain emissions dramatically increasing. LG needs to expand its climate protection goals to include its supply chain footprint, and give much greater urgency to deploying and securing access to renewable sources of energy across both its own facilities and those of its suppliers.

## Renewable Energy & Climate Change

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**TRANSPARENCY.** LG publishes a detailed breakout of its Scope 1 & 2 GHG emissions and energy footprint for its own facilities, including total GHG emissions and electricity consumption by country, though only in its submission to CDP. While LG also reports its scope 3 supply chain GHG emissions in its submission to CDP, it excludes these emissions from its most recent Sustainability Report, even though supply chain emissions were nearly three times LG's own scope 1 & 2 emissions in 2016. LG breaks out its renewable energy purchases, but does not provide adequate detail on what mechanism it used to secure this supply outside of Korea, particularly in the US. LG does not publish its suppliers list or indicate how its supply chain footprint is allocated across its major suppliers. LG publishes product level carbon footprint assessments for a limited number of product lines.<sup>1</sup>

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**COMMITMENT.** LG has established an absolute GHG reduction goal of approximately 10% of its 2008 emissions, approximately 150,000tonnes CO<sub>2</sub>e, to be achieved by 2020.<sup>2</sup> Given the selection of a very high emissions base year prior to the economic downturn, LG appears to be well positioned to hit this target. LG does not currently have a measurable GHG or energy reduction goal that applies to its product supply chain emissions, which appear to have risen significantly in the past year.<sup>3</sup> LG has also set an intensity based GHG reduction target of 40%, (tied to emissions per unit of revenue) based on 2009 levels. Given the low amount of renewable energy powering LGs operations, and its rapidly expanding supply chain footprint, LG would be well served to establish aggressive renewable energy targets both for its own operations as well as its supply chain, and should include its supply chain in any future GHG goals.

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## Renewable Energy & Climate Change (continued)

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**PERFORMANCE.** While LG GHG emissions for its own operations have remained relatively flat the past two years, its supply chain emissions have dramatically increased, jumping 75% in one year.<sup>4</sup> While LG proudly touts its progress toward achieving its absolute target of 150,000 tonnes from its 2008 base year, its supply chain emissions increased by nearly that amount just in one year, and were nearly triple LG own combined Scope 1 & 2 emissions in 2015. LG has finally begun to deploy renewable energy in South Korea and elsewhere linked to its own operations, but given the rapid growth of its supply chain footprint, must be rapidly expanded both in ambition and scope to include driving renewable energy into its supply chain, as Apple has begun to do.

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**ADVOCACY.** No evidence found of positive or negative advocacy.

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## Sustainable Design & Resource Reduction

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**TRANSPARENCY.** LG publishes data on its take-back efforts, though data is far more comprehensive for efforts in US than in Korea and some other countries. LG does not publish info for Africa, Middle East, and large parts of Asia, including China.<sup>5</sup> While LG reports that the company requires suppliers to provide information on materials used for parts through LG's Hazardous Substance Management System, LG does not make this information public. LG does not publish material footprint data for its products. LG does report on its overall use of recycled plastic in smartphones and other electronics and home appliances in 2016 (5,302 tons), which is down from past years. (LG Electronics used 5,617 tons of PCR plastics in 2013, 7,885 tons in 2014, and 6,730 tons in 2015.)<sup>6</sup> To improve, LG should publish more information on overall material use, as well as use of recycled materials beyond plastic. Additionally, while LG reports on overall efforts to avoid conflict minerals (83% CFSP compliant, page 81 of 2017 CSR report), LG should publicly disclose its smelters.

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**COMMITMENT.** LG has a strategy for greener products which includes goals related to resource reduction, including the use of more recycled materials, and also a goal to increase recyclability, including design for easy disassembly.<sup>7</sup> To improve, LG must establish measurable goals with timelines related to these efforts.

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**PERFORMANCE: CIRCULAR PRODUCTION.** LG reports on the use of recycled plastic across its products line, though it's unfortunate to see this decreasing since 2014. On the bright side, LG has a policy against the export of e-waste in line with the Basel Convention and in 2011, LG announced that it would only work with certified e-Stewards recyclers,<sup>8</sup> which use the highest standards in the recycling industry. LG was the first company to agree to use e-Stewards recyclers exclusively globally and we applaud LG for making this commitment. LG goes slightly beyond legal requirements to offer take-back in 50 countries as of 2016.

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**PERFORMANCE: PRODUCT LIFE EXTENSION.** LG products score satisfactorily in iFixit repairability assessments (Average scores of the G4, G5, G6, smartphones the Gpad 7 tablet, and Gram laptop is 7.5/10), due in large part to the high-scoring LG G4 and G5 phones with their easily replaceable batteries. Unfortunately, LG appears to have moved away from this design feature with its latest flagship phone, the LG G6, which is sealed with tough adhesive. LG does not report on number of refurbished products sold and does not promote the sale of refurbished products in developed markets.

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**ADVOCACY.** No evidence found of positive or negative advocacy.

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# Hazardous Chemical Elimination: Products & Supply Chain

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**TRANSPARENCY.** LG publishes its PRSL which includes substances monitored in products and threshold limits; however, many chemicals listed are in fact those already banned by legislation.<sup>9</sup> LG does not publish an MRSL, yet it reports using an internal system for managing workplace chemicals. To improve in transparency, LG should make both its MRSL and supplier list public.

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**COMMITMENT.** LG reports that its work to phase out PVC and BFRs across its product lines is still ongoing, and the company no longer has a deadline, despite missing earlier deadlines it set in 2010 and 2012. The company claims to prohibit the use of one substance—methanol—in supplier facilities to protect worker health and safety. However, it is unclear whether they are implementing such policies limited to first-tier suppliers or it applies to entire supply chain.

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**PERFORMANCE.** LG reports some progress on removing PVC and BFRs from mobile phones since 2010, followed by phthalates and beryllium since 2011 and antimony trioxide since 2012.<sup>10</sup> LG should continue to move forward with its efforts on product detox across all products (including laptops) and accessories. In terms of worker health and safety, LG learned in 2016 that workers in its supply chain went blind after using methanol for aluminum cutting purposes. LG investigated the use of methanol at all supplier facilities, prohibited the use in production, and is providing trainings to 1st tier suppliers to ban the use of methanol.<sup>11</sup> To protect workers further, LG should monitor and restrict the use of other known manufacturing hazards, such as benzene, n-hexane, toluene, as other leading companies have done and publish more information about its screening method for identifying truly safer alternatives.

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**ADVOCACY.** Unlike Samsung, LG Display Co., Ltd.<sup>12</sup> announced support for comprehensive compensation for workers with occupational diseases, including supply chain workers.

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## ENDNOTES

1 <http://www.lg.com/global/sustainability/environment/greener-products/products-application>

2 <http://www.lg.com/global/pdf/Sustainability-Report/2016-2017%20Sustainability-Report.pdf>

3 LG Electronics 2016 CDP submission.

4 LG Electronics 2016 CDP submission.

5 <http://www.lg.com/global/recycling>

6 <http://www.lg.com/global/sustainability/communications/sustainability-reports>, 2017 CSR report, p. 57

7 <http://www.lg.com/global/sustainability/environment/greener-products/green-product-strategy>

8 <http://www.prnewswire.com/news-releases/lg-electronics-commits-to-using-the-most-responsible-e-waste-solution-worldwide-126244008.html>

9 <http://www.lg.com/global/sustainability/environment/management-of-hazardous-substances>

10 LG 2016-2017 CSR report, p. 55.

11 LG 2016-2017 CSR report, p. 67.

12 <http://www.hani.co.kr/arti/economy/marketing/796502.html>