ANNUAL DATA - GOLD

ANNUAL | 2018

LG Electronics, USA

Please submit all numbers in tons or units, as indicated. Note that reporting in tons is required (*), while reporting in units is optional.

An asterisk (*) denotes a required field. Participants cannot submit the data form until all fields marked with an asterisk are complete.

Total Collected for Reuse & Recycling from all Streams		
Total Collected for Reuse & Recycling: 1	21,203.90 tons	
Total Units Collected for Reuse and Recycling (optional):		
Equipment: 2 (optional) *	20,890.19 tons	
Units of Equipment Collected for Reuse and Recycling (optional):		
Cell Phones and other Mobile Devices: 3 (optional) *	1.23 tons	
Units of Cell Phones / Mobile Devices Collected for Reuse and Recycling (optional):		
Accessories: $\frac{4}{2}$ (optional) *	312.48 tons	
Units of Accessories Collected for Reuse and Recycling (optional):		
Total:	21,203.90 tons	
Total Units:		
Reuse and Recycling Data		
Total sent to third-party certified recyclers from All Streams: 5 *	21,203.90 tons	
Total Units sent to third-party certified recyclers (optional):		
Percentage sent to third-party certified recyclers:	100.00 %	
Has collection increased compared to the previous yea	r? *	
© Yes		
© No		
	e.g. decrease weight in electronic devices). * npared to 21,203.90 tons in 2018 for a difference of 170.57 tons. Whil	

In 2017, LG recycled 21,374.47 tons of electronics compared to 21,203.90 tons in 2018 for a difference of 170.57 tons. While essentially unchanged from 2017, the modest decline is attributable to shrinking form factors (i.e. smaller and more lightweight products) across the industry. There has been a continuous trend of light-weighting and smaller devices in the recycling stream (i.e. CRTs vs. flat screen TVs and monitors and switch to lighter-weight materials like aluminum from steel), which impacts our collection totals in all programs – states with and without take-back laws. The evidence for these trends have been seen in reports by state programs (i.e. WMMFA in WA) and by researchers (i.e. Callie Babbit from RIT). Collecting more than 21,000 tons of e-waste again in 2018 reflects LG's continued strong commitment to providing a convenient and responsible program.

Gold participants are required to increase collection each year of all used electronics collected for reuse and recycling to third party certified

recyclers. Please contact EPA if you have questions about this requirement.

State Reporting Data

Total Collected for reuse and recycling from all streams (Note: The total from the below categories should equal the total recycled)

Weight of electronics collected in states with take-back laws explicitly to meet these laws. * 20,458.43 *tons*

Weight of electronics that exceeds state take-back laws, collected in states with take-back laws. * 0.00 *tons*

Total Units collected in states with take-back laws (optional):

Weight of electronics collected in states without take-back laws. * 419.57 tons

Total Units collected in states without take-back laws (optional):

Weight of electronics collected but not attributable to a specific state (e.g., collected by mail-back program, regional agreement, or other method that does not allow a company to track). *

325.89 tons

Total Units collected but not attributable to a specific state (optional):

Please use this space to convey any details to EPA about your approach for arriving at your state data (i.e., with and without take-back laws) and any company-specific contributing factors and other useful information (e.g., did your company sell pounds to other OEMS? if so, how many?) *

1) Weight of electronics collected in states for regular take back program to meet state regulation and LG voluntary program : 20,878.01 tons* (Connecticut, Maine, Vermont, Washington collections are estimated by state program and LG share) 2) Weight of electronics collected in our service center (Alabama, Texas, Illinois) : 318.2 tons 3) Weight of electronics collected in our offices (California, Illinois, New Jersey, Georgia, Kansas) : 6.7 tons 4) Weight of electronics collected through our mail-back program (nationwide) : 0.99 tons

Did your company increase collection, recycling and/or reuse in two states without take-back laws? *

Yes

C No

Provide two states without a take-back law and actual data (i.e., not derived from an estimate) in which you achieved a total increase in recycling.

State: *

Georgia

Previous Year's Data: *

0.00 tons

Previous Year Total Units collected (optional):

Current Year's Data: *

0.05 tons

Current Year Total Units collected (optional):

Please explain how you achieved this increase in the text box below. *

As consumers are looking for convenient ways to recycle, particularly in states where there are no take-back laws, LG guides consumers to use our free mail-back program to safely and responsible recycle their electronics.

Ohio

Previous Year's Data: '

0.00 *tons*

Previous Year Total Units collected (optional):

Current Year's Data: '

0.04 tons

Current Year Total Units collected (optional):

Please explain how you achieved this increase in the text box below. *

As consumers are looking for convenient ways to recycle, particularly in states where there are no take-back laws, LG guides consumers to use our free mail-back program to safely and responsible recycle their electronics.

Reporting Requirements

Due Diligence

Have you verified that your company conducts due diligence to ensure that the recycler of first entry into the system, as well as any vendors receiving materials after the initial recycler (i.e., downstream vendors), either:

- are certified to an established third-party certification standard, or

- are examined by the company's auditors at least semi-annually to ensure safe management practices?

If a certifying body conducts an annual audit, only one additional in-person or paper audit is required per year. *

• Yes

C No

Provide the methodology used for verification: *

Yes, LG issued our own audit check-list and performed paper audit for all facilities during November - December 2018.

Certified Recyclers and Programs *

Is this information included in the final, publicly-posted report? *

• Yes

C No

List names of certified recycler(s) used and certification programs:

	CERTIFIED RECYCLER NAME *	CERTIFIED RECYCLER LOCATION - CITY, STATE, COUNTRY (IF APPLICABLE) *	CERTIFIED PROGRAM *
1	Electronic Recyclers International, Inc. [ERI]	Fresno, CA 93711 USA	R2 and e-Stewards
2	GEEP Inc.	Redford, MI 48239 USA	R2 and e-Stewards
3	URT Solutions	Janesville, WI 53546 USA	e-Stewards
4	Vintage Tech, LLC	Plainfield, IL 60544	R2 and e-Stewards

Education & Outreach

List and describe public education and outreach activities on safe management of used electronics and available collection opportunities. *

LG Electronics has partnered with several R2 and e-Steward Certified Recyclers (ERI, WMRA, URT, MRM, and Vintage Tech) to establish a national recycling program to collect, transport, and recycle electronic waste. LG's user-friendly website describes the rationale for and elements of the program while providing consumers with information regarding free and convenient ways of recycling their used, unwanted,

obsolete, or damaged consumer electronic products. The site describes the free, nationwide mail-back program for electronic equipment, cell phones, other handheld devices, and packaging and lists designated eCycling Centers where consumers can drop off their unwanted electronic devices. In addition, the website provides toll-free numbers for our Recyclers' Customer Service and LG Customer Service, as well as Frequently Asked Questions. All electronic products collected under the LG Electronics Recycling Program are recycled in an environmentally sound manner. LG's recycling partners are signatories of the Basel Action Network (BAN) Recycler's Pledge of True Stewardship, e-Stewards certified, and maintain environmental quality systems accredited to the requirements of ISO 14001. Consumers may drop off unwanted consumer electronic products, including televisions, monitors, netbooks, tablets, audio equipment, video cassette players and recorders, DVD players and recorders, combination TV/VCR and TV/DVD units, set top boxes and accessories associated with those products.

Website where public education and outreach activities are listed (optional):

http://www.lgrecyclingprogram.com/ Ensure website address begins with http:// or https://

Company Policies Favoring Recycling and Reuse

List and describe company policies that favor recycling and reuse of electronics equipment and/or components, as opposed to energy recovery, incineration, or land disposal. *

LG Electronics contracts only with recycling vendors who meet our requirements: • Do not incinerate electronic waste or dispose of it in a landfill • No electronic waste may be exported to developing countries • No prison labor can be employed during any phase of the recycling of electronic waste • Recyclers must have sound environmental management systems • Recycling vendors are audited to the requirements of the e-Stewards standards LG Electronics is the first "Global e-Stewards Enterprise", a company committed to responsible recycling of its electronic waste and choosing to use e-Stewards certified electronic recyclers worldwide.

Website

List website where EPA provided baseline/annual tier data is publicly posted: *

http://blog.lgrecyclingprogram.com/ Ensure website address begins with http:// or https://

Upstream Communication & Innovation

Answer two of the three questions.

How do you influence supplier behavior (e.g. in the areas of materials selection, design for product longevity, reuse and recycling, energy conservation, end-of-life management and corporate performance)?

LG Electronics operates "Green Program Plus" (GP Plus), a sustainability management program for its supply chain. The program helps our suppliers improve their environmental performance by transferring our green technologies and related know-how. Initially implemented in 2005 to manage hazardous substances as a regulatory response, this program has been expanded to include GHG emissions at our suppliers' sites and can be upgraded to a comprehensive management program for environmental performance. Not only does the program help us promote our suppliers' competitiveness in sustainability management, but it also enables us to identify risks existing in our supply chain and address global regulatory requirements. Also, in order to strengthen green partnerships with its suppliers, LG Electronics provides annual training on green technology, compliance response for hazardous substances, and GHG emissions management to suppliers (staff members who handle environmental management) and our employees in charge of the partnership. In 2013, we also introduced a new program to foster experts in collecting hazardous substance data (Environmental Data Collection Expert Program), and provide training to our suppliers' equipment testing operators.

Website where company activities or programs are listed (optional):

Ensure website address begins with http:// or https://

How have you helped customers reduce their electronics packaging waste (e.g., through creative packaging design, innovative material choices, and better logistics)?

Website where company activities or programs are listed (optional):

Ensure website address begins with http:// or https://

How do you encourage customers (including large purchasers) to buy sustainable or "green" electronics products?

When consumers shop for our monitors, TVs, and mobile phones they can see the EPEAT certification level and other components like Energy Star Qualified, which highlight the green features of our products. LG Electronics has nearly 100 monitors listed as EPEAT certified, a certification system that ensures the highest environmental performance of products. Our EPEAT products are recycled for free for our business customers even in states where recycling programs are not mandatory. This convenience offers a benefit and perk for our business customers to choose these products which have superior environmental quality and allows them a way to safely have their products recycled. LG's Recycling website highlights some products with sustainable features like those mentioned above. When consumers come to our recycling website, they are looking to recycle an old product, so they might be considering what new product to purchase. By offering these highlighted products when consumers are considering replacing old electronics, the consumer can learn about sustainable options for their future electronics purchases.

Website where company activities or programs are listed (optional):

Ensure website address begins with http:// or https://

Notes:

1. Total Collected for Reuse and Recycling: This is the total amount of used electronics collected for reuse and recycling, including the amount sent to certified and non-certified recyclers. It can include company assets, business to business, warranty returns, and electronics collected and/or purchased to meet state take-back laws. See below for definitions of "reuse", "all streams" and "units".

2. Equipment: Defined as electronics equipment such as central processing units (CPUs), desktops, laptops, televisions, printers, monitors, copiers, fax machines, scanners, imaging equipment, radios, tablets, e-readers, slates, netbooks, and heavy equipment such as servers. It further includes any other or new (future) types of equipment that are designed primarily to store or convey information electronically and have a 4-inch screen or larger measured diagonally.

3. Cell Phones & Other Mobile Devices: Defined as electronic equipment such as cell phones, personal digital assistants (PDAs), organizers, tablets, e-readers, slates, smart phones, compact disc players, gaming systems, calculators, and MP3 devices. It also includes any other or new (future) types of equipment that are designed primarily to store or convey information electronically and that are lightweight, mobile in design, and have a 4-inch screen or less measured diagonally.

<u>4. Accessories</u>: Defined as headphones, speakers, CDs, toner cartridges, USB sticks, keyboards, game system accessories, cables, chargers, and other small, miscellaneous items as defined by the Participant. It further includes any other or new (future) types of accessories to either the equipment or cell phone and other mobile devices equipment. The participant is welcome to provide a separate breakout of any of the items listed as accessories.

5. Total sent to third-party certified recyclers: For the purposes of the SMM Electronics Challenge, the term "recycler" denotes refurbisher or recycler certified to a recognized third-party certified recycling program. Similarly, the term "recycling" denotes recycling, refurbishment and reuse. Currently, Responsible Recycling Practices (R2) and e-Stewards are the only recognized certification standards for recyclers. However, EPA may recognize additional standards at a later date. Also see definition of 'all streams' below.

Reuse: Denotes an electronics object, or component of an electronics object that is used again by a different owner either for its original purpose or for a similar purpose, without significantly altering the physical form of the object or material. The electronics object may be cleaned, repaired, or refurbished between uses.

All Streams: Denotes used electronics collected for recycling or reuse from the various return streams used by the participant. Streams could include consumer take-back programs, asset recovery programs, retired lease returns, collection events, or trade-in programs.

Baseline: The year a participant joins the challenge. Annual results are compared to the baseline as well as preceding years' results.

Units: Individual items collected for reuse and recycling, including equipment (e.g., televisions, computers, printers), cell phones and mobile devices (e.g., smartphones, tablets, MP3players), and accessories (e.g., USB drives, headphones, keyboards).

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