2019 EPA - Sustainable Materials Management Electronics Challenge

ANNUAL DATA-GOLD

The information below was submitted to the U.S. Environmental Protection Agency in accordance with T-Mobile's participation as a Gold member of the Sustainable Materials Management Electronics Challenge.

Total Collected for Reuse & Recycling from all Streams	
Total Collected for Reuse & Recycling: 1	2,132.49 tons
Reuse and Recycling Collection Data	•
Equipment: ²	1,154.66 tons
Cell Phones and other Mobile Devices: ³	977.83 tons
Accessories: 4	0.00 tons
Total sent to third-party certified recyclers from All Streams: 5	2,132.49 tons
Percentage of total electronics collected that were sent to third-party certified recyclers:	100.00%

Has collection increased compared to the previous year?

No, total reported reuse and recycling tonnage decreased in 2019 compared to 2018. This was driven by a 64% decrease in network equipment recycling. Network equipment recycling can fluctuate greatly year-over-year for various reasons, including network refreshes. While network equipment recycling decreased, cell phone and IT equipment reuse and recycling increased by 39% and 83%, respectively.

State Reporting Data	
Weight of electronics collected in states with take-back laws explicitly to meet these laws:	64.98 tons
Weight of electronics that exceeds state take-back laws, collected in states with take-back laws:	251.05 tons
Weight of electronics collected in states without take-back laws:	147.11 tons
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):	1,669.35 tons

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?)

The "weight of electronics collected in states with take-back laws explicitly to meet these laws" includes only cell phones returned in states with take-back laws that apply specifically to mobile device retailers like T-Mobile. The "weight of electronics that exceeds state take-back laws, collected in states with take-back laws," includes cell phones and IT equipment collected in states with electronics recycling laws that do not apply specifically to mobile device retailers like T-Mobile, according to the National Center for Electronics Recycling (NCER). The "weight of electronics collected in states without take-back laws" includes cell phones and IT equipment collected in states that do not have electronics recycling laws, according to NCER. The "weight of electronics collected but not attributable to a specific state" includes cell phones that were returned by mail or could not be tracked to an individual state, as well as recycled network equipment. These quantities include electronics collected by T-Mobile USA, Inc., and its subsidiaries, including Metro by T-Mobile, but do not include electronics collected by Sprint.

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

YES.

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:

Tennessee
Previous Year's Data:
4.54 tons
Current Year's Data:
9.85 tons

Please explain how you achieved this increase.

The increase in electronics collection from T-Mobile locations in Tennessee was driven by a 334% increase in recyclable IT equipment as the company transitioned to new, more energy-efficient office equipment.

State:
Kansas
Previous Year's Data:
2.70 tons
Current Year's Data:

6.10 tons

Please explain how you achieved this increase.

The increase in electronics collection from T-Mobile locations in Kansas was driven by a 1,616% increase in recyclable IT equipment as the company transitioned to new, more energy-efficient office equipment.

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. All recycling partners are R2 certified. Up-to-date R2 certifications are required during contract negotiations with vendors, and R2 certificates of current vendors are reviewed and validated on a semi-annual basis to ensure they do not expire.

Education & Outreach

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

External Communication:

T-Mobile engages customers and the general public directly through its corporate responsibility web pages, including dedicated pages for sustainability, customer involvement, and device recycling. T-Mobile's Device Recycling Program web page provides customers with information regarding the various options available to them including: device trade-ins (in-store and through mail), device recycling (in-store), and the Certified Pre-Owned purchase program. It also highlights T-Mobile's rigorous requirements for suppliers and partners that repair and recycle used electronics.

Additional external communication resources include:

- Sustainability web page
- Customer Involvement web page
- Case Study: GeSI. (2019). "Digital with Purpose: Delivering a SMARTer2030". 36-39.
- Twitter: @TMobile (Year-Round)

Memberships:

T-Mobile is an active member of the Global e-Sustainability Initiative (GeSI), the collaborative organization that drives sustainability initiatives in the Information and Communications Technology (ICT) industry. As a member, T-Mobile contributes resources, ideas, and content to GeSI's climate change, energy/resource efficiency and e-waste management, responsible supply chain practices, and human rights working groups. T-Mobile is also an active member of the Retail Industry Leaders Association (RILA) and its Sustainability and Zero Waste Committees, which strive to advance materials management throughout supply chains, improve diversion, and explore collaboration on the path to a more circular economy.

- Global e-Sustainability Initiative (GeSI)
- Retail Industry Leaders Association (RILA)
- CTIA Green Working Group
- BSR™ (Business for Social Responsibility™)

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.

All electronic equipment and components under T-Mobile's operational control are sent or sold to R2 certified recycling and reuse partners at end-of-life. T-Mobile does not utilize energy recovery, incineration, or land disposal methods for any such equipment.

T-Mobile has a stringent and publicly posted <u>Supplier Code of Conduct</u> that its business partners must follow. This Code of Conduct applies to T-Mobile's recycling and reuse partners, and it requires them to reduce their environmental footprint through various means, including equipment recycling and reuse. Partners are expected to continually seek opportunities to reduce the environmental impact of [their] products and services, including by:

- Reducing their carbon footprint
- Minimizing wasteful practices
- Maximizing use of recycled materials and implementing end-of life recycling alternatives
- Increasing energy efficiency and reducing water use
- Reducing use of paper and pulp
- Responsibly sourcing product materials, especially minerals and virgin wood, pulp and fiber
- Developing and using more efficient and sustainable packaging

Website

List website where EPA provided baseline/annual tier data is publicly posted: Data is available on T-Mobile's Device Recycling web page.

Upstream Communication & Innovation

1. 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)?

T-Mobile suppliers must follow the Supplier Code of Conduct, as outlined previously.

In addition to T-Mobile's Supplier Code of Conduct, suppliers must also follow <u>T-Mobile's Responsible Sourcing Guidelines</u>. These guidelines are designed to guide suppliers to improve their sourcing practices and protect the environment. Suppliers are expected to exercise additional due diligence on the source and custody of materials derived from natural resources and operate in a manner that:

- Protects the environment;
- Aligns with our commitment to human rights, equal opportunity, fair labor standards, and a safe and healthy workplace; and
- Includes participation in multi-stakeholder initiatives towards responsible sourcing.

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

T-Mobile encourages customers and its retailers to purchase certified pre-owned devices. These devices go through a rigorous, 80-point inspection to earn our 90-day limited warranty. The <u>Certified Pre-Owned purchase program</u> provides customers more sustainable options when purchasing electronics products, as the re-use of devices reduces the consumption of virgin materials and energy, resulting in a smaller environmental footprint.

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.
- 4. Accessories: 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).