Connect to Planet

Consider a future where connected cars produce more efficient traffic patterns on crowded city streets. Connected buildings are smart enough to reduce their own energy use. Learn how our technology is turning potential into reality. Smart businesses and smart cities are here.

Product Life Cycle

Materiality Assessment Topics: Energy efficiency of products; Product recycling/ reuse; Hazardous or harmful materials in products (toxics)

Issue Summary

To make sustainable decisions, customers need accurate information about the environmental and social impacts of the products and services they buy.

Our Position

AT&T strives to empower consumers by providing them with relevant, easy-to-understand information when they're making purchasing decisions. Customers can use our products and services to manage many aspects of their daily lives —including energy in their homes and their health and wellness. We provide avenues for people to dispose of phones, accessories and other products responsibly.

Data Highlights

2017 Key Performance Indicators

Total number of devices reused or recycled through AT&T: **30M+**
- U-verse set-top boxes reused or recycled: **Nearly 5M**
- DIRECTV set-top boxes reused or recycled: **More than 12.6M**
- Broadband devices reused or recycled: **Nearly 4.6M**
- Mobility devices reused or recycled: **More than 8M**

2020/2025 Goals

- **2020 Goal**: We will enable AT&T customers to lead more sustainable lives by expanding access to technology, further integrating sustainability solutions into products and measuring the impacts.
- **2025 Goal**: AT&T will enable carbon savings 10 times the footprint of our operations by enhancing the efficiency of our network and delivering sustainable customer solutions.

Learn more about our 2020/2025 Goals

Targets to our 2020/2025 Goals

In Progress

2020 Target: Collect more than 200 million devices for reuse, refurbishment or recycling by end-of-year 2020.

- **PROGRESS**: As of the end of 2017, AT&T has refurbished or recycled approximately 146 million devices since 2007. This includes: 63 million DIRECTV refurbished devices (2007-2017); 18.5 million DIRECTV recycled devices (2011-2017); 19.3 million U-verse devices (2012-2017); and 45.1 million AT&T mobility devices (2009-2017).

2020 Target: Provide sustainability information for all AT&T-branded network-connected consumer wireless devices.

- **PROGRESS**: By the end of 2017, AT&T, working with Business for Social Responsibility (BSR), had developed the initial roadmap for the next iteration of Eco-Ratings. Eco-Ratings 3.0 will be designed to provide consumers with an expanded base of information on environmental attributes and responsible recycling practices for all AT&T-branded network-connected wireless devices. Work will commence in 2018 with external stakeholders and device manufacturers to provide data that shapes the updated ratings system and expands to a broader portfolio of devices (e.g., Internet of Things). In 2017, 58% of devices scored under the Eco-Ratings system earned a 2–3 star rating (out of 5 stars) and were verified by UL, a credible third-party partner firm. 100% of UL reviewed devices complied with Global Reporting Initiative sustainability reporting standards.

2020 Target: Demonstrate the environmental and social enablement power of consumer devices and solutions to live smarter, healthier and more independent lives by collaborating—both internally and externally—to help quantify the environmental and social sustainability enablement impacts of AT&T consumer devices and solutions (e.g., Internet of Things, connected car, education, accessibility).

- **PROGRESS**: In 2017, Aira was the first product to come out of the AT&T Foundry for Connected Health. Aira's remote technology uses wearable smart glasses to connect those with diminished vision to a network of certified agents. The visual agents, connected via our reliable and secure wireless network, provide a real-time account of what's around them so users can engage with their surroundings.

- In collaboration with AT&T Advisory Panel on Access & Aging, BSR, G3ict and World Enabled, AT&T compiled insights and proposed guidelines to launch a report titled "Smart Cities for All: A Vision for an Inclusive, Accessible Urban Future," in June 2017. The report centered on helping cities identify ways in which smart city technologies can adopt a people-first approach to benefit those with disabilities and older citizens. The report complemented the Smart Cities for All initiative launched by G3ict and World Enabled in 2016. The initiative advances a vision of making cities all over the world smarter through more inclusive, accessible

Our Action

From a product's inception until the end of its life, the AT&T team works closely with our community of suppliers, customers and community groups to improve the product's sustainable performance. We outline our expectations for suppliers in our Principles of Conduct for Suppliers, which cover topics including ruling out wasteful practices, being more energy efficient, reducing total cost of ownership, reducing greenhouse gas emissions, using more sustainable packaging and creating end-of-life recycling alternatives.

To guide some of our efforts, we set a consumer 2020 goal focused on enabling AT&T customers to lead more sustainable lives by expanding access to technology, further integrating sustainability solutions into products and measuring the impacts.

Informing Our Customers

It's easy for customers to compare products on attributes such as cost, technology and appearance. But it's more difficult for them to gauge the environmental and social aspects of how the devices we sell are made. That's why we developed the AT&T Eco-Rating system in 2012. Eco-Rating provides customers with an easy way to understand the environmental and social factors associated with their devices. In 2017, we worked with UL to refine the evaluation approach, audited the evidence of original equipment manufacturer (OEM) submissions and assessed AT&T devices—including handsets and tablets—against performance criteria.

Under the Eco-Rating system, device manufacturers evaluate their products against a total of 20 performance criteria across 5 different attributes, assigning consumer labels of 1 to 5 stars based on how their devices meet the criteria. They then submit their assessments, which we review to confirm reported data. The 5 attributes against which devices are evaluated include:

- **Substances of concern:** Collection of data on device materials, restriction of antimony trioxide and beryllium compounds, restriction of extractable nickel, restriction of PVC, phthalates and chlorinated and brominated flame retardants
- **Environmentally preferred materials:** Lifecycle assessment, recycled plastic in housing and device contains recycled metals
- **Energy efficiency and charging:** Device charger complies with California Energy Commission (CEC) standards
- **End-of-life and recycling:** Battery is readily removable and device is easily disassembled by recycler, device contains recyclable materials equal to or greater than 65% of its mass
- **Environmentally and socially responsible manufacturing:** A Global Reporting Initiative (GRI) sustainability report; a conflict minerals disclosure; a standalone human rights policy

or statement and policy; management systems and public performance reporting for labor, occupational safety and environment at assembly and/or supplier facilities

We developed this rating system in collaboration with BSR, a global business network and consultancy focused on sustainability. Upon its launch, we also found that the system is driving innovation as we work with manufacturers to continuously improve performance. Rather than focus on a single device or environmental attribute, it helps us gain a holistic view of our entire portfolio across its lifecycle—from design to end-of-life—and advance accordingly. In fact, our device portfolio average was about a 3 Eco-Rating at launch.

AT&T also started research and strategy planning for Eco-Rating 3.0. The next phase of Eco-Rating will span a broader spectrum of consumer devices and products to provide consumers greater transparency on environmental impact and elevate compliance standards for suppliers. In 2018, we are planning to continue our work with BSR to develop an Eco-Rating 3.0 program by applying ratings to a larger range of devices, including IoT devices and accessories, and offering greater transparency for customers on the products they choose to purchase.

Design/Packaging

At AT&T, we are beginning to use a lifecycle approach to evaluate impacts of packaging changes on key sustainability metrics such as energy and water use, greenhouse gas emissions and packaging waste. We strive to ensure that the changes made minimize the environmental impacts of packaging. Our areas of focus include material reuse and reduction, use of environmentally friendly materials, increasing recycled/certified content, improving end-of-life recyclability and improving transportation efficiency. Past projects have focused on our prepaid phone packaging and our broadband and network equipment packaging.

In 2016, we expanded our efforts by including DIRECTV product packaging. The "bulk pack" packaging design for our new DIRECTV equipment allowed us to package multiple set-top boxes within a single corrugated overpack box, resulting in a reduction of total packaging materials compared to the traditional "master pack" design. Additional benefits of the bulk pack include an increase in units per pallet, reducing the number of trips and the transportation-related carbon emissions.

In addition, the interior thermoform (plastic) trays from the packaging of new units are collected, sorted, cleaned and inspected for reuse in the packaging of refurbished equipment. Due to the structural integrity of thermoform, these trays can be reused a minimum of 10 times—resulting in a reduction of corrugated materials. The entire suite of packaging—both the corrugated box and the plastic trays—is fully recyclable at the end of its lifecycle.

Energy Efficiency

AT&T is committed to working with our suppliers on the development of state-of-the-art devices that provide the best performance at the lowest energy consumption practicable. We expect our device manufacturers to keep current on best-in-class energy efficiency practices such as analyzing the lifecycle performance of the device to estimate energy impacts, using energy management features on devices and establishing energy efficiency goals. In that regard, our handset device manufacturers are increasingly designing smartphones to be highly efficient without compromising user experience, including features—such as power-saving designs—that help optimize battery standby and usage time.

Television

AT&T and DIRECTV are signatories to the Set-Top Box Energy Conservation Agreement, a consortium of industry-leading multi-channel video providers and device manufacturers. According to the group's Annual Report, "during the 4 years of the Voluntary Agreement (2013-2016), set-top box energy consumption has been reduced by an estimated 16.8 TWh, saving consumers approximately $2.1 billion and avoiding 11.8 million metric tons of CO_2 emissions. Through the terms of the program, at least 90% of all new set-top boxes purchased and deployed after 2016 will meet the U.S. Environmental Protection Agency (EPA) ENERGY STAR® 4.1 efficiency levels."

On April 20, 2017, DIRECTV was awarded the EPA's highest ENERGY STAR® honor, the ENERGY STAR® Partner of the Year Sustained Excellence Award, for its outstanding leadership in protecting the environment through superior energy efficiency achievements. DIRECTV has been named an ENERGY STAR® Partner of the Year by the EPA each year since 2013. The award represents a commitment by AT&T to continue the leadership DIRECTV has set as the only TV provider to receive such an award.

In addition, DIRECTV NOW customers do not have the energy consumption associated with set-top boxes, as the video streaming service eliminates the need for this hardware. DIRECTV NOW customers represent the next generation of consumers who are reducing the energy consumed by traditional TV set-ups. Since its launch in late 2016, DIRECTV NOW has grown to nearly 1.2 million customers by the end of 2017.

Internet

In 2015, AT&T joined several other companies and industry associations in announcing a voluntary agreement to improve the energy efficiency of internet modems, routers and other in-home equipment that delivers broadband service to millions of Americans. The Small Network Equipment Voluntary Agreement sets rigorous requirements to increase the energy

efficiency of small network equipment by 10–20% compared to typical, recently deployed devices. It covers more than 90% of U.S. broadband households—roughly 80 million homes. While the initial commitments of this Voluntary Agreement expired on December 31, 2017, signatories, including AT&T, have been working diligently on a multi-year extension that will include further improvements to the energy efficiency levels. During this extension process, AT&T has continued to comply with the efficiency commitments of the expired agreement.

Paper Use

Minimizing paper use can help reduce pollution, waste and unnecessary consumption of water, energy and land resources. Companies have an opportunity to reduce paper use at several points in their operations, including customer billing.

Billing is an important part of the relationship we have with consumers while they're using our products and services. We encourage customers to use paperless billing through our website att.com/shop/bill-payments. At the end of 2017, AT&T had more than 27.1 million accounts receiving paperless billing—including billing for DIRECTV Now, a paperless billing–only service. Our goal is to continue to grow the number of customers using paperless billing.

Guided by our Paper Procurement Policy, we strive to reduce, reuse and recycle paper products; increase our role in promoting responsible forest products; and encourage a market that conserves, protects and restores forests. In 2017, we used 25.23 million pounds of paper for billing, which is a 2% decrease from 2016 and a 37.3% decrease from the 2010 baseline.

The Paper Procurement Policy establishes a goal to increase Forest Stewardship Council (FSC)–certified purchases of direct mail and office paper to 50% and increase post-customer waste (PCW) to 15% by weight. In 2017, AT&T exceeded our FSC direct mail marketing and copier paper goal with a result of 92% FSC-certified paper. AT&T continues to strive to increase utilization of PCW paper requirements; the 2017 PCW result was 12%—or a 19% increase over 2016 year-end results.

End of Life

At AT&T, we strive to increase device recycling for all channels of our business and encourage our customers to be a part of this ongoing initiative. Because devices can be reused, refurbished or recycled, collecting these devices makes both business and environmental sense. In 2017, we collected more than 30 million devices for reuse and recycling.

Mobility Devices

In 2017, we recovered more than 8 million mobility devices.

At AT&T, customers can recycle their old phones by:

- Dropping them off at an AT&T retail store recycle bin;
- Taking advantage of the Trade-In Program with an AT&T retail associate or online at att.com/tradein; or
- Returning their AT&T Next phone when they upgrade.

When our customers turn in a phone, our goal is to see if the phone can be reused. First, our priority is to protect our customers' privacy. We offer our customers detailed information about wiping their devices before they return them. As an additional protection to our customers, once we receive a device, we wipe it of customer-saved data. If the phone can be refurbished, we do so and put it back into the marketplace. This is beneficial from an environmental perspective and has the benefit of making phones more affordable to those who might not be able to purchase a new phone at full cost. If the phone can't be reused in its entirety, we take it apart and pull out individual parts that might be reusable (e.g., the camera). The remaining plastics and metals are recycled responsibly. These materials end up in consumer products such as cell phones, PCs and tablets.

Our refurbishment centers perform services ranging from cosmetic parts replacement to full remanufacturing, depending on the extent of use and wear on the device. Cosmetic refurbishment involves the replacement of cracked screens and polishing of the outer plastic housing to produce a like-new device. Remanufacturing consists of disassembly, testing and replacement of nonfunctioning parts such as cameras and batteries. Devices continue to get thinner, lighter and more complex in their design, which requires sophisticated equipment to disassemble, repair and make them like new.

DIRECTV and U-Verse Electronics

AT&T is also committed to refurbishing or recycling customers' electronics from our DIRECTV and U-verse subscribers. In 2017, more than 12.6 million DIRECTV set-top boxes were reused or recycled. Since 2007, more than 63 million DIRECTV set-top boxes have been refurbished, and more than 18.5 million have been recycled since 2011. Similarly, for U-verse, nearly 5 million devices were reused or recycled in 2017, bringing the total number of U-verse devices reused or recycled since 2012 to approximately 19.3 million.

AT&T U-verse and DIRECTV customers can have their devices refurbished or recycled in several ways:

- Print off a free shipping label and mail the device to our recyclers via directv.com/recycle;
- Have the technician take the old equipment with them while they are in the customer's home;

- Drop off old equipment at Goodwill stores (in Colorado only);
- Return your equipment via the recovery kit provided to customers; or
- Drop off equipment at UPS or FedEx locations.

R2 Certification

To ensure responsible recycling, our device recycling and salvage vendors are R2 certified. The R2 Standard for electronics recycling and refurbishment facilities covers areas such as worker health and safety, environmental protection, chain-of-custody reporting and data security.

In 2017, AT&T Global Supply Chain expanded its policy, requiring all surplus liquidation buyers to also hold R2 Certification. This will cover 2 million liquidated devices each year.

AT&T has 2 representatives on the R2 Technical Advisory Committee, which informs the revisions of the R2 Standard. We also work with SERI, the housing body for the R2 Standard.