

Progress Toward Our Network & Customers 2020 Goal

Reduce our Scope 1 emissions by 20% by 2020, using a 2008 Scope 1 baseline of 1,172,476 mtons CO₂e.

In 2016, we emitted 1,140,631 mtons CO₂e (Scope 1). This represents a 2.72% decrease compared to our 2008 baseline, although it is a slight uptick from 2015. Due to changes in the business, two challenges we're experiencing with this Scope 1 goal are growth in our ground fleet and our expanded fuel cell capacity:

Our U.S. ground fleet emissions were up from 2015, as a result of the DIRECTV acquisition and inclusion of its fleet.

Emissions from natural gas were up from 2015, driven in part by additional fuel cells. Fuel cells are a key component to our resiliency and efficiency, and have the added benefit of reduced emissions. Because fuel cells are counted as Scope 1 emissions rather than Scope 2, our usage of them will put pressure on our ability to meet our Scope 1 goal.

Reduce the electricity consumption of our company relative to data growth on our network by 60% by 2020 (baseline of 2013).

Relative to our 2020 target for Energy Intensity (93MWh electricity/Petabyte of network traffic), AT&T has achieved a 43% reduction compared to the 2013 baseline of 233 MWh/Petabyte.1 AT&T's electricity consumption (in Megawatt Hours) per Petabyte of data carried on its network (AT&T's Energy Intensity Metric) for 2016 is 139 MWh/Petabyte.

¹Portions of the traffic data volume are measured, and others must be estimated. U-verse estimation methodologies and data sources have evolved from providing varied and coarse estimates, since inception and through 2015, to the use of the IP Analytics portal in 2016. As of January 2016, U-verse data is now more accurate than it has ever been, though it is actually much lower than previously anticipated. The improved U-verse TV traffic data methodology has been applied retroactively to recalculate the Energy Intensity that would have been reported from January 2014 to present.

Our Network & Customers (continued)



Develop and deploy robust methodology to understand AT&T's network impacts to society.

In 2016, AT&T engaged with leading NGOs, industry groups and peer companies to develop a credible methodology to measure the greenhouse gas impacts of customers' use of AT&T's technology in an effort to track progress against our 10X goal.



By mid-year 2019, AT&T will have expanded its all-fiber Internet access service to reach at least 12.5 million mass market customer locations, such as residences, home offices and very small businesses. Combined with AT&T's existing high-speed broadband network, at least 25.7 million customer locations will have access to broadband speeds of 45Mbps or higher.²

By the end of 2016, we deployed fiber Internet access service to nearly 4 million locations, well exceeding the year-end milestone for 2016.



For a four-year period beginning in 2015, AT&T will offer up to 1 Gbps service to any eligible school or library requesting E-rate supported services, where we have deployed fiber-based broadband Internet access services.²

AT&T offered 1 Gbps service in response to any eligible schools and libraries that submit bids for 1 Gbps speeds for the 2017 E-rate funding year in areas where AT&T has deployed fiber-based internet access service.



For a four-year period beginning in 2016, AT&T will offer discounted wireline broadband service where technically available within AT&T's 21-state wireline footprint to low-income households that qualify for the government's Supplemental Nutrition Assistance Program. In locations where it's available, we will offer service with download speeds of at least 10 Mbps for \$10 per month. Elsewhere, we will offer 5Mbps service for \$10 per month or 3Mbps for \$5 per month, where such services are available.²

On April 22, 2016, AT&T launched Access from AT&T, the discounted broadband services program, throughout its 21-state wireline footprint. Since that time Access from AT&T has helped to shrink the digital divide by connecting lowincome Americans to the internet As part of our Access from AT&T outreach efforts, we've connected with more than 600 national, state and local groups that work with low-income individuals and families to help make sure qualified individuals and households are informed about and have access to the program. These organizations include social service groups and groups representing veterans, seniors, non-English speakers and others. We also began a collaboration with the US Department of Housing and Urban Development to hold a series of local events to help increase awareness of our program among HUD residents. Additionally, we've reached out to local school districts across our footprint, asking them to include information about the program in communications to families.

²Conditions of FCC DTV Merger Order.

Our Network & Customers (continued)



Reduce the emissions of our fleet by 30% by 2020 from our 2008 baseline (includes DIRECTV's fleet).

By the end of 2016, AT&T reduced fleet emissions by 99,000 metric tons of $\rm CO_2e$, or 12% from our 2008 baseline. 100% of passenger sedans procured in 2016 were hybrid vehicles. In addition, AT&T reduced the size of its domestic fleet by 1,800 vehicles.



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

At the end of 2016, approximately 120 million devices have been refurbished or recycled. This includes: 58 million DIRECTV refurbished devices (2007–2016); 16.9 million DIRECTV recycled devices (2011–2016); 9.7 million U-verse recycled devices (2012–2016); and 37.1 million AT&T mobility devices (2009–2016).



Expand our on-site alternative energy capacity to at least 45 MW — more than double our 2014 capacity — by the end of 2017 and intensify our pursuit of off-site renewables with competitive financials.

In 2016, AT&T expanded its fleet of natural gas fuel cells by 13.32 MW, with 21 sites commissioned in California and one in New Jersey. This growth brings our total on-site alternative energy capacity to 39.9 MW. In just 2016, we made a 29% increase toward our alternative energy goal. The estimated combined energy production from these new facilities is almost 111 million kWh annually, and the estimated energy production of the entire renewable energy portfolio is over 298 million kWh annually. By the end of 2017, we fully expect to have exceeded our alternative energy capacity goal, and by a fair margin.

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



A comprehensive consumer strategy will provide a roadmap for providing Eco-Rating and/or responsible recycling/reuse information to consumers for most wireless devices sold by AT&T.

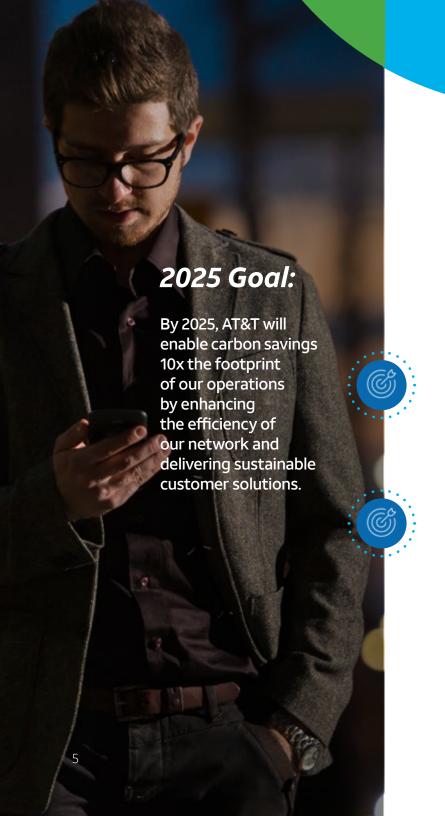
Since early 2016, AT&T has been collaborating with BSR to develop a roadmap across the enterprise that will provide consumers with information regarding environmental attributes and responsible recycling information for all AT&T-branded network connected wireless devices.

Demonstrate the environmental and social enablement power of consumer devices and solutions to live smarter, healthier and more independent lives.



Collaborate 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, Digital Life, Eco-Ratings, connected car, education, accessibility).

As AT&T builds an overarching measurement methodology to reach our 2025 goal of enabling carbon reductions 10 times the footprint of our operations, we consider the relevant consumer-facing products and services that will help us reach our goal. Working with our internal business units, we continue to identify the environmental and social benefits associated with specific devices and solutions, as well as their power to enable smarter, healthier and more independent lives.



Progress Toward Our Network & Customers 2025 Goal

Deliver customer solutions to achieve "net positive" ratio

AT&T joined BSR's Net Positive Project in 2016, a cross-sector coalition that aims to develop practices and tools companies can use to quantify, assess, communicate and enhance their positive impacts on society and the environment.

Enhance network efficiency to enable the achievement of the "net positive" ratio

We're working to reduce our operational carbon footprint. Please see our <u>Greenhouse Gas Emissions</u> and <u>Energy Management</u> issue briefs for more information.

Our Supply Chain

2020 Goal:

We will lead our supply chain to improve its social and environmental impacts by integrating sustainability performance metrics into our sourcing decisions for 80% of our spend.³

³ This goal is focused on network, consumer equipment and corporate services spend and does not include video content and entertainment companies. By the end of 2017, achieve an average score of 80% or higher for top suppliers on the Supplier Sustainability Scorecard, which covers four key categories including policy breadth, rigorous goals, reporting transparency and supply chain governance.

At the close of 2016, AT&T Global Supply Chain is pleased to report that it has achieved its 80% by 2017 goal with a score of 80.3.4 The goal was established in 2012 to measure the supplier base focused on our network, consumer equipment and corporate services. Going forward, we are working toward our new 2020 and 2025 goals that include shared industry approaches in measuring sustainability.

By the end of 2018, incorporate sustainability-oriented standards or analysis into our sourcing decisions with strategic suppliers.

Our Global Supply Chain organization held its third supplier conference in June 2016 where we presented the importance of our sustainability program to over 325 supplier representatives. This included a special emphasis on our goals, which require suppliers to adhere to our Principles for Conduct and participate in assessments and audits. AT&T continues to make progress with efforts including: incorporating sustainability clauses into agreements and RFPs, training our sourcing managers on the principles of sustainability and providing updates to sourcing managers on supplier sustainability performance. AT&T will continue to expand incorporation of sustainability-oriented standards and analysis into sourcing decisions.

⁴The 80.3 does not include video content and entertainment companies. Looking ahead, we are focusing on an industry-wide measurement for assessing our suppliers.



Progress Toward Our Supply Chain 2025 Goal

Establish clear, agreed-upon industry sustainability metrics

In 2016, working with TL9000 industry group QuEST Forum, www.questforum.org, we helped to develop and publish an industry sustainability measurement tool, the QuEST Sustainability Assessor. This tool provides actionable best practices for organizations that help accelerate their sustainability programs. In 2017, we plan to pivot from our AT&T supplier assessment to this third-party industry tool. Visit www.questforum.org/sustainability for information and updates.

AT&T, working with CDP Supply Chain, annually reaches out to about 500 of its suppliers — representing approximately 80% of its spend — to report on greenhouse gas emissions. Using industry-accepted methods, we gather and analyze data on these suppliers' emissions, reduction goals and progress. As a result, in 2016 we were able to report our third-annual estimate of our supplier emissions.

Also in 2016, AT&T joined the <u>Joint Audit Cooperation (JAC)</u>, which facilitates collaboration among peer telecom companies and Information Communication Technology suppliers to verify and audit supply chains on areas such as labor practices, human rights, health and safety, ethics and the environment. JAC Corporate Social Responsibility (CSR) Audits are conducted by recognized independent third-party auditors at suppliers' manufacturing facilities using a common audit framework.



Promote the use of these metrics in industry sourcing.

AT&T suppliers are currently using CDP Supply Chain metrics to measure and report their greenhouse gas emissions. This is providing our company and the other participating companies the necessary means to benchmark supplier emissions and work with suppliers on making improvements.

See <u>www.questforum.org/sustainability</u> for information and updates.

Develop and follow an industry roadmap toward truly sustainable performance.

AT&T is moving its suppliers along an industry roadmap with CDP Supply Chain and QuEST Forum to continuously improve measurements, benchmarking and results in sustainable supplier performance.



Progress Toward Our Communities 2020 Goal

Plan to contribute an additional \$250 million by 2017 to drive innovation in education, support effective local programs and create collective impact.

We completed this goal and increased our total commitment through AT&T Aspire to \$400 million by the end of 2017. Program highlights included:

- · Working with Udacity to expand the Nanodegree program, which offers new educational online pathways to industry-relevant skills, to prepare more people with the skills needed for high-demand tech jobs requiring technological expertise. There are now more than 25,000 learners taking Nanodegree courses.
- Supporting a number of organizations that help underserved students develop computer science and coding skills, including Girls Who Code, Black Girls Code and Code.org.
- · Contributing to innovative organizations such as iCouldBe, iMentor and We Teach Science to help even more students explore their potential through online mentoring.

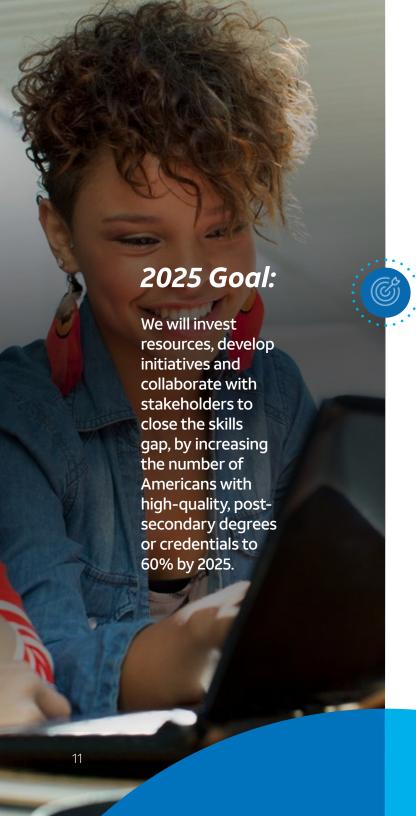


Encourage technology application to solve vexing education challenges through the AT&T Aspire Accelerator for non-profits and for-profits.

In 2016, AT&T selected 6 organizations for the second AT&T Aspire Accelerator class to support with a customized program that includes financial investment, access to expert services and mentorship. The 11 participants from the first 2 classes have thrived in the program and together have reached more than 4 million students.

Offer \$100 million of free mobile broadband access through 2017 in collaboration with the White House ConnectED initiative.

In 2014, AT&T committed — as part of the White House's ConnectED initiative — to provide \$100 million of free mobile broadband connectivity for mobile learning to students and teachers in Title I schools across the country over the next few years, starting in 2016. Although the ConnectED initiative is no longer an active program, AT&T has committed to provide connectivity to approximately 30,000 devices made available by a third-party manufacturer that also is a ConnectED participating company. Connected devices are being provided to students and teachers based on the deployment decisions and readiness of the participating schools, and we consider this goal to be completed.



Progress Toward Our Communities 2025 Goal

By the end of 2017, promote STEM training by co-developing and attracting 10,000 students to the Georgia Tech online master's degree in computer science program and 23,000 students to the Udacity Nanodegree program.

As of EOY 2016, more than 25,000 learners have enrolled in Nanodegree programs sponsored by AT&T, nearly 2,000 of whom are AT&T employees. These learners are earning credentials that propel them to the next stage in their careers. Worldwide, more than 1.9 million learners have benefitted from Nanodegree curriculum, gaining new, industry-aligned knowledge.

Additionally, the Georgia Tech online computer science project has attracted more than 10,000 students through applications and enrollments and more than 400 AT&T employees are actively enrolled in the program as of end of 2016.