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.

Addressing Climate Change

Materiality Assessment Topics: Products and services that enable social and environmental benefit | Global Reporting Initiative Standard Disclosures: Products and services that enable social and environmental benefit MA

Issue Summary

Environmental challenges like resource scarcity and volatile weather can disrupt a company's business operations, customers and communities. Technology companies are in a unique position to help customers —from individuals to large enterprises and government organizations—mitigate their environmental impacts and improve their resiliency.

Our Position

Our Climate Change Policy states that AT&T recognizes climate change is happening and that greenhouse gas emissions are contributing to it. We believe that our technology can help lower emissions for both our company and our customers. Our technology plays a critical role in transitioning to a more resource-efficient world by addressing harmful effects of climate change, increasing business resiliency, and improving daily lives. At the same time, we must address our own impact.

Data Highlights

2020/2025 Goals

- **2020 Goal:** We will continue to drive reductions in emissions and increases in resource efficiency and alternative energy deployment. 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: Develop and deploy a robust methodology to understand the impact of the AT&T network's greenhouse gases on society. • **PROGRESS**: After engaging with leading non-government organizations (NGOs), industry groups and peer companies, AT&T developed a credible methodology to measure the greenhouse gas impacts of customers' use of AT&T technology in an effort to track progress against our 10x goal. The methodology can be found on our 10x website.
	2025 Target: Enhance network efficiency to enable the achievement of the net positive ratio. • **PROGRESS:** As we pursue our 10x goal, which represents a net positive ratio between our operational footprint and the carbon reductions our technology makes possible for customers using our services, we are working to enhance our network efficiency through energy management and the integration of renewable energy. Please see our Energy Management and Greenhouse Gas Emissions issue briefs for more information.
	2025 Target: Deliver customer solutions to achieve a net positive ratio. • **PROGRESS:** As we pursue our 10x goal, which represents a net positive ratio between our operational footprint and the carbon reductions our technology makes possible for customers using our services, we are engaging customers to understand, measure and promote the benefits they're achieving. In 2017, we began a collection of 10x case studies that demonstrate and quantify the emissions impacts of 2 interesting technology-use cases: the connected shipping pallet and smart rice farming. These case studies can be found on our 10x website.

We work with other companies, governments, non-profits and academia to promote technology that tackles climate change and resource challenges.

At the same time, we must continually strive to reduce our own energy intensity and greenhouse gas emissions, and increase resiliency throughout our operations.

Technology's Role in Shifting to a Low-Carbon Economy

Information and Communication Technology (ICT) solutions—comprising hardware, software, and broadband and wireless technologies—can enable people and businesses to make more energy-efficient choices and reduce environmental impacts by:

- Providing connectivity to make things “smarter”;
- Improving transportation and distribution systems;
- Managing business operations and equipment remotely and in near real-time;
- Moving work to people rather than people to work;
- Connecting remotely rather than traveling; and
- Connecting people to the “knowledge economy” through e-learning, e-health, business and agricultural initiatives.

The Global e-Sustainability Initiative’s (GeSI) SMARTer2030 report found that the increased use of ICT can enable a 20% reduction of global CO_2 emissions by 2030, holding emissions at 2015 levels—an avoidance of 12.08 Gigatonnes carbon dioxide equivalent ($GtCO_2e$) of GHG emissions. This translates into a benefit 9.7 times higher than ICT’s own footprint in the same period. The report also found that ICT has the potential to generate more than $11 trillion in economic benefits by 2030. ICT will connect 2.5 billion extra people to the knowledge economy by 2030, giving 1.6 billion more people access to healthcare and half a billion more people access to e-learning tools.

Internet of Things

The Internet of Things (IoT) can be defined as the connection of everyday objects and machines so they work seamlessly together across modern networks. IoT provides one means of enabling reductions in greenhouse gas emissions. AT&T is helping companies of all sizes develop IoT solutions to help lower costs, gain efficiencies and improve competitive advantage. While IoT can help businesses compete, it can also help address major social and environmental challenges in our world. Through our IoT for Good initiative, we highlight our IoT solutions and projects that can transform the ways we—and our customers care—for society and the planet.

AT&T IoT solutions are focused on verticals including:

- Vehicle Solutions: AT&T offers a wide range of fleet management solutions for commercial truck and van fleets. These solutions can help users reduce costs, fuel and ultimately, GHG emissions. In addition to selling these solutions to our customers, AT&T utilizes many of these features in our own fleet. Read more about these solutions at our wireless and enterprise business sites.

- Asset Management: Asset management technologies help track and monitor assets such as industrial equipment, heavy machinery, storage tanks and containers. These solutions help maximize asset utilization, enable preventative maintenance and save fuel by avoiding unnecessary trips. In turn, the fuel and resource efficiencies gained through these technologies can help reduce carbon emissions. Read more about these solutions in our 10x case studies.
- Smart Cities: AT&T is helping make cities smarter by delivering IoT solutions that offer proven capabilities to engineer and manage large, complex ecosystems. We focus on cites because by 2030, almost 60% of the world's population will live in cities. These cities currently account for 60–80% of energy consumption and 75% of carbon emissions on Earth.[1] We see cities as a significant opportunity for the application of technology to help address economic, social and environmental issues. AT&T is helping to make cities cleaner, safer and stronger by providing connectivity and introducing new tech solutions. Learn more about how AT&T is using IoT solutions in Smart Cities.

Measuring GHG Emissions Savings: Our 10x Goal

AT&T offers a wide range of ICT products that can create efficiencies and environmental savings. That's why we set our 2025 10x goal—to enable carbon savings 10 times the footprint of our operations by enhancing the efficiency of our network and delivering sustainable customer solutions.

To estimate the carbon savings we enable for our customers, we needed a credible methodology. We worked with Carbon Trust and BSR, 2 credible environmental non-profits, to assemble a methodology that utilizes many concepts from existing global standards.

With a methodology in place, we began our search for innovative solutions to highlight as 10x case studies. We looked for innovations our customers had developed that create environmental benefits that wouldn't be possible if AT&T technology were not involved. There can be many technologies or products that enable carbon savings, but AT&T technology needs to play a fundamental role for the solution to be a 10x case study.

One such case study we launched in 2017 highlighted PrecisionKing, whose RiceKing sensors enabled by AT&T IoT Connectivity were placed across farmers' rice fields where they read water levels once an hour, allowing for 24-hour monitoring. Concurrently, PumpKing remote monitors allow farmers to set customized parameters to remotely turn pumps on and off. Connected RiceKing water-level sensors, along with Whitaker Farms' other conservation practices, have helped reduce their water usage by up to 60%, while the connected PumpKing controls have reduced pump-energy usage by 20–30%.[2]

You can find the full 10x methodology and all our 10x case studies on our 10x website.

Promoting ICT's Role

We work with several groups to publicly promote the use of technology to address climate and resource challenges, including industry groups like GeSI and the Alliance for Telecommunication Industry Solutions (ATIS), and organizations such as BlueGreen Alliance and Business Round Table (BRT).

Global E-Sustainability Initiative (GeSI)

We are on the Board of Directors of GeSI, an organization that brings together leading ICT companies—including telecommunications service providers and manufacturers as well as industry associations—and NGOs committed to achieving sustainability objectives through innovative technology.

Through GeSI, AT&T participates in projects and activities centered on GeSI's 3 primary focus areas:

- Climate change (e.g., energy efficiency, SMARTer 2030 report sponsorship, ICT key performance indicators)
- Supply chain (e.g., conflict minerals)
- Human rights

Alliance for Telecommunication Industry Solutions (ATIS)

AT&T is a member of ATIS, the North American telecommunications standards development organization. AT&T initiated the creation of the Telecommunications Energy Efficiency (TEE) committee, which developed a methodology for measuring and reporting the energy efficiency of telecommunications equipment and radio-base stations. The TEE has developed and published individual standards for servers, transport, routers and Ethernet switch products, and has issued a technical report for measuring facility energy efficiency. AT&T has incorporated many of these energy efficiency reporting requirements into our network equipment standards. We are working with our major network suppliers to establish goals to improve the efficiencies of next-generation network equipment using the Telecommunications Energy Efficiency Ratio (TEER) metric. We are already seeing results collaborating with strategic network suppliers with TEER baselines and goals in our agreements.

Business Round Table (BRT)

AT&T is a member of BRT's Energy and Environment committee. The committee oversees issues including energy efficiency, energy generation, transmission and distribution, renewable

energy, climate change and sustainability. The committee believes “access to reliable, affordable energy undergirds U.S. national and economic security, and a clean, healthy environment is essential for economic prosperity now and for future generations.” BRT supports policies that “capitalize on America’s strengths in technology and energy diversity to maximize U.S. energy options and preserve environmental quality,” and states that “the business community has a special obligation to step forward and help build an environmentally and economically sustainable future.”[3]

Corporate Renewable Energy Buyers’ Principles

AT&T signed on to the Corporate Renewable Energy Buyers’ Principles, a group led by the World Wildlife Fund and made up of large energy buyers working to spur progress on renewable energy and fulfill their increased demand for it. AT&T is also a member of the Business Renewables Center, an initiative that, along with the Buyers’ Principles, forms part of the Renewable Energy Buyers Alliance (REBA). The Business Renewables Center streamlines and accelerates corporate purchasing of off-site, large-scale wind and solar energy, and REBA exists to make the transition to renewable power easier by helping companies understand the benefits of moving to renewables, connecting large buyer demand to renewable energy supply, and helping utilities to better understand and serve the needs of all energy buyers.

Managing Climate-Related Risks and Opportunities

One of the many risks climate change poses is uncertainty. AT&T seeks to better understand and address these uncertainties. We are engaged with internal and external experts to understand how we can best prepare for the risks and opportunities posed by climate change to make more informed business decisions.

To better understand how we are positioned to respond to climate change, we assessed risks for their potential impacts and the magnitude of these impacts on individual facilities, our brand, our products and the company. Once we have identified potential risks, we engage stakeholders to determine the significance of climate-related risks relative to other risks we face. In 2016, we worked with GlobeScan to conduct our 4th materiality assessment, which resulted in a table that prioritizes our top sustainability issues based on the assessment. The positioning of the issues illustrates the relative degree of importance for AT&T, with those in the top-right quadrant ranking highest for both our stakeholders and business success.

See our annual response to CDP for more about how our company manages climate change risks and opportunities. Our issue briefs also contain information on how we manage the following climate-related topics:

- Energy Management
- Greenhouse Gas Emissions

- Company Fleet and Transportation
- Water Management
- Disaster Response
- Engaging our Supply Chain

[1] United Nations: http://www.un.org/sustainabledevelopment/cities/

[2] http;//about.att.com/content/dam/csr/otherpdfs/10x-Precision-King-FINAL.pdf

[3] http://businessroundtable.org/issues/energy-environment