Technology

Technology is the path from an idea drawn on a napkin to an astronaut standing on the moon. What happens in between — innovation, investment and determination — is at the very core of who we are. AT&T creates realities to a world of endless possibilities.
Accessibility

Materiality Assessment Topics: Inclusivity – Access & aging; Innovation

Issue Summary
People have a variety of communication needs, and the information and communications technology industry plays an important role in providing accessible products and services for these needs.

Our Position
For us, accessibility is more than a word. It’s a commitment to help all our customers and employees communicate everywhere they live and work by offering a range of innovative and accessible products and services to meet a variety of disability and age-related needs.

Our Action
We provide products and services that meet a variety of needs. For example, accessible smartphones and software enable people with disabilities to use cutting edge technology and experience the many opportunities that modern communications equipment affords. Customers who are deaf, hard-of-hearing or have speech loss benefit from Text Accessibility Plans (TAP) which were designed with input from the disability community and only include texting and data and not the voice minutes that they cannot use.

Corporate Accessibility Technology Office and Chief Accessibility Officer
Accessibility has always been one of AT&T’s core commitments and in 2012 we launched the Corporate Accessibility Technology Office to promote accessibility in our products and services. A newly appointed Chief Accessibility Officer will lead the new office and will also add defined accountability into the corporate governance structure to advance AT&T’s efforts in this important field.

Universal Design Policy
As a leader in the field of technology access, we embrace Universal Design. We encourage app developers and handset manufacturers to consider the needs of seniors and customers with disabilities when designing products and services by following Universal Design Principles. We made our Universal Design methodology available on our website, hoping to increase the number of innovative and accessible products and services.

AT&T’s Advisory Panel on Access & Aging
We stay close to the needs of customers with disabilities thanks to our ongoing work with the disability community and the Advisory Panel on Access & Aging (AAPAA). Comprised of national leaders in assistive technology, aging and cross-disability issues, AAPAA provides disability-related advice and counsel to our subsidiaries, affiliates and leadership teams. This expert panel meets regularly with business unit leaders from across the company (from AT&T Labs, to marketing to diversity) and provides ongoing
input on accessibility efforts. Read more about AAPAA.

**Innovation**

We not only offer products and services that improve our customers’ communications access, but we help other companies and startups to improve access through innovative initiatives such as the release of AT&T’s Speech APIs. This tool will enable app developers around the world to improve accessibility by adding AT&T’s Watson℠ speech recognition and text-to-speech technology to a wide range of products and services.

We also introduced the innovative U-Verse Easy Remote App, which makes it easier for U-verse TV customers, including those with disabilities such as vision and hearing loss, to control their TV. The app enables customers to easily use their smartphones or tablets as a U-verse remote control and includes a voice initiated remote control, voice search and other accessibility features such as multiple screen color, button and font size choices, voice initiated remote control, voice command feature, gesture commands and one-touch access to closed captioning.

**Customer Call Centers**

We operate dedicated customer care centers to assist people with disabilities, including the National Center for Customers with Disabilities for AT&T Mobility and the AT&T Sales and Service Centers for Disability and Aging for our landline customers.

These centers can arrange for customers to receive bills in an alternate format, such as Braille or large print, and can advise customers with hearing, vision, mobility and/or speech disabilities about equipment, accessories, features and calling plans.

We now have centers dedicated to serving the disability and aging markets across our entire wireline footprint. Additionally, we now provide a Click-To-Chat option for all customers, though it may be especially beneficial to customers who are deaf or hearing impaired.

**Workforce Inclusion**

We provide our employees with the resources and tools they need to do their job and have taken a number of steps to create a diverse workforce. Through our Project CapABILITY initiative we have trained and attracted new employees with disabilities in distribution centers around the country. We also have an established relationship with Career Opportunities for Students with Disabilities and have enhanced our programs to recruit college graduates with disabilities. To learn more about our diverse workforce, please visit our [Workforce Diversity Issue Brief](#).
Conflict Minerals

Materiality Assessment Topic: Conflict minerals

Issue Summary

Mobile phones and other electronics contain an array of metals in small amounts that allow them to function properly. Some of these metals – in particular tin, tantalum, tungsten and gold (also known as “conflict minerals”) – have been linked to armed conflict in the Democratic Republic of the Congo (DRC) and adjoining countries (“conflict zones”). The area has suffered devastating wars and millions of deaths for more than a decade. Metal mining in this region often uses forced labor and may financially benefit armed groups in these conflict zones. While most metals in electronics are mined from locations outside the conflict zones and involve no known human rights violations, it is those conflict minerals from the conflict zones that give cause for concern.

Our Position

Mining activities in the conflict zones could involve serious human rights violations and require increased transparency. We support industry efforts to redress this situation.

Our Action

We’ve sought to actively address the issue of conflict minerals from the conflict zones for some time now. Before President Obama signed the Dodd-Frank legislation that addressed conflict zone mineral sourcing into law, AT&T worked with non-governmental organizations and our suppliers on this issue.

As a large device retailer, we encourage the responsible mining of these minerals. We have taken the following steps to address these issues.

- We do not employ forced, compulsory or slave labor and have the same expectation for our suppliers. We have a Human Rights Policy and Principles of Conduct for Suppliers that are clear in this respect.

- We remain involved in this issue through our membership in the Global e-Sustainability Initiative (GeSI). Through that membership and our participation in both the Electronic Industry Citizenship Coalition (EICC)-GeSI Conflict Free Sourcing Initiative and the GeSI Extractives Project Team, we support the continued development of the Conflict-Free Smelter Program and the use of the EICC-GeSI Conflict Minerals Reporting Template. Through continued collaboration with suppliers, we are...
committed to the responsible mining of these minerals.

• In October 2011, we joined as a participant in the Public-Private Alliance for Responsible Minerals Trade — an alliance set up by the U.S. State Department, USAID, NGOs and company/industry organizations to address conflict minerals concerns. It promotes solutions to encourage those involved in responsible minerals trade in the DRC and the Great Lakes Region of Central Africa.
Deployment for Rural and Underserved Areas

Materiality Assessment Topic: Deployment for rural and underserved areas

Issue Summary

Innovation in communications technology drives consumer demand and continual growth in the industry. People in all corners of the country seek the benefits of high speed broadband at home and at work — as students and as entrepreneurs and business-owners. But access to communications technologies is not evenly distributed across the United States. Currently, many lower income or rural communities have limited access to next-generation Internet Protocol (IP)-based networks.

Our Position

Our customers embraced increased choice in how they connect to each other and to the Internet in many aspects of their daily lives, including smart phones, tablets or IP-enabled TVs. As innovation introduces new opportunities for our customers every day, we are competing vigorously to improve and expand their service.

Through Project Velocity IP (VIP), AT&T’s $14 billion investment plan to expand and enhance AT&T’s wireless and wireline IP broadband networks over the next three years, we seek to accelerate the transition to next-generation networks. IP-based networks boost affordability and the rate of broadband adoption, enhance broadband service quality, generate economic growth, maximize private investment and strengthen U.S. global competitiveness.

Data Highlights

2012 Key Performance Indicators

- Investment in wired and wireless networks: Nearly $20B
Our Action

To help meet the needs of our customers today and for the future, AT&T announced VIP, which will accelerate the transition to IP-based networks, in November of 2012. Project VIP is a three-year, $14 billion investment plan to expand and enhance AT&T’s wireless and wireline IP broadband networks to support growing demand for high speed Internet access and new mobile, app and cloud services. We also recently filed a petition at the FCC that asks the agency to work together with the industry to begin a national dialogue about, and start an incremental transition to, IP-networks.

IMPROVING RELIABILITY AND SPEED, ALL WHILE PREPARING FOR THE NEXT GENERATION OF INNOVATION

Project VIP consists of several wireless and wireline initiatives, which are outlined below:

- Over the next three years, we plan to deploy more than 10,000 new macro sites, more than 1,000 distributed antenna systems and more than 40,000 small cells.
- Plan to expand our 4G LTE network to cover 300 million people in the United States by year-end 2014.
- Plan to expand and enhance our wireline IP network to cover approximately 75 percent of customer locations in our wireline service area by yearend 2015.
- Plan to expand our fiber network to reach an additional 1 million business customer locations by year-end 2015.

Specifically, completion of the IP transition is expected to help:

- Expand economic opportunity to help alleviate high unemployment in underserved communities. For example, a study by economists Robert Shapiro and Kevin Hassett shows that the transition from 2G to 3G wireless created about 1.6 million U.S. jobs.¹
- Boost broadband adoption by increasing competition and making home broadband more affordable. Help advance broadband access to those in rural communities.
- Enable improved communication around the country — connect people in ways that provide a better exchange of information and ideas.
- Improve access to quality health care, improve health outcomes, and cut health care costs. Broadband enables access to distant health care specialists and services. A range of health applications, including remote monitoring, enables better management of chronic conditions. These services can be especially helpful to rural communities.
- Broadband access helps communities to bridge educational divides. Online classes made more widely available through IP networks can also help address the shortage of advanced and expanded course offerings in rural and underserved schools, only 69 percent of which are able to provide Advanced Placement

classes, compared to 93 percent of city schools.²

Industry & Government Problem Solving

Materiality Assessment Topics: Products that enable social and environmental benefit; Relationship with government

Issue Summary
Environmental and social sustainability challenges are complex, and working with industry peers and governmental interests in appropriate ways to address these issues can be a valuable tool.

Our Position
We see the benefit of combining resources and coordinating efforts with our industry peers and governmental interests in appropriate ways to address persistent social and environmental challenges where there is a good match between our expertise and talent and the interests of our customers and shareholders.

Our Action
We work with industries, governments, nonprofits and academia on goals such as upgrading to a more energy-efficiency power supply and achieving sustainability through information communications technology solutions. See our Stakeholder Engagement Policy.

WORKING TOGETHER FOR ENERGY-EFFICIENCY SOLUTIONS

Updating the Country’s Power Supply
Smart grid technology has the potential to cut domestic carbon emissions from generating electricity by as much as 14 percent by 2020, saving $15 billion to $35 billion in energy and fuel costs.¹ This decrease will reduce the country’s reliance on fossil fuels, including imported oil, contributing to our energy independence. Smart grid technologies hold the potential to help integrate renewable energy sources like wind and solar power into our electricity supply mix. They will also help to facilitate the widespread adoption of electric vehicles. Learn more about the benefits of smart grid.

In order for smart grid technologies to achieve their full potential, consumers must be confident that their energy usage data is secure and available only to those entities with which they have chosen to share it. In 2012, we worked

with a variety of smart grid stakeholders to start up a voluntary privacy seal program. The program gathers industry best practices to help ensure that consumers enjoy effective, common-sense privacy protections when sharing their energy usage data with the service providers that use smart grid data to help consumers operate their homes more efficiently. We also engaged with several different state public utility commissions on issues relating to the privacy and security of consumer smart grid data.

The Green Grid
We continued our work with a global consortium dedicated to advancing energy efficiency in data centers and business computing ecosystems. As a contributing leader, we serve on the End User Advisory Council and several technical and liaison subcommittees and supported the development and investigation of the Sustainable Site Selection Tools and Papers. The End User Advisory Council is chartered to:

• Serve as an advisory body to The Green Grid's board of directors by providing input and guidance on the general direction of the consortium's strategies
• Actively participate in The Green Grid’s technical committee activities
• Help guide and shape the desired outcome of published materials, processes and recommendations from The Green Grid as one unified voice of the end-user community
• Drive greater awareness of The Green Grid within the broad community of data center end users

Alliance for Telecommunication Industry Solutions (ATIS)
We continued our work as a member and chairman of the board of directors of ATIS, the North American telecommunications standards development organization. We initiated and now chair the Telecommunications Energy Efficiency (TEE) committee, which developed a methodology for measuring and reporting the energy efficiency of telecommunications equipment. This methodology is being applied to new energy efficiency measurement standards by equipment types. The TEE has developed and published individual standards for servers and transport, router and Ethernet switch products, power plant rectifiers and a technical report for measuring facility energy efficiency. In 2011, the TEE published an energy efficiency standard for the measurement and reporting of Radio Base Station Metrics. The American National Standards Institute has approved these standards and AT&T has incorporated the energy efficiency reporting requirements in our equipment standards, “Network Equipment Power, Grounding, Environmental and Physical Design Requirements.”

Better Plants, Better Buildings Program (formerly called the Save Energy Now LEADER® initiative)
In 2009, we were among more than 30 companies to join the U.S. Department of Energy's Save Energy Now LEADER initiative (now called Better Plants, Better Buildings Program). The initiative is an ambitious national public-private plan aimed at driving significant energy intensity and carbon emission reductions across the U.S. industrial sector. Program partners pledge to reduce their energy intensity by 25 percent or more by 2019. Following our efforts in 2012, we have already reduced the electricity consumption of our company relative to data growth on our network by 57 percent compared to our 2008 baseline. Learn about the progress AT&T is making on its energy intensity reductions.
PURSUING SUSTAINABILITY THROUGH ICT SOLUTIONS

AT&T Sustainability Advisory Council

In 2009, AT&T established the AT&T Business Sustainability Advisory Council to better quantify the environmental benefits of our products and services. The council’s defined mission includes a commitment to demonstrating the power of information communications and technology (ICT) in minimizing environmental impact and developing credible measurement methods for communicating the environmental impact of various solutions that aid in reducing greenhouse gas emissions.

Reducing the Need for Business Travel

Technology has changed the way we communicate and collaborate, yet the fundamental power of face-to-face connections remains a constant. AT&T Telepresence Solution® lets brings people together in a live video conference, whether they’re across town or around the world. Telepresence continues to see customer acceptance and continued growth from 1,281 endpoints in 2009 to more than 5,000 at the end of 2012. Our users held over 21 million minutes of meetings on telepresence systems in 2012. And the impact is not limited to customers within the United States. More than one-third of the endpoints connected to the AT&T Business Exchange are outside the United States, and we now support over 75 countries with the expanded offerings.

To promote the global ability to reduce travel though telepresence, we reached inter-provider agreements with other service providers. This enables immersive teleconferences with customers of BT and, most recently, Orange Business Services.

We also practice what we preach and extensively use telepresence as a tool to improve our business efficiency while reducing travel. We grew internal deployment to more than 240 telepresence sites spanning more than 20 countries. In 2012, our company collectively logged more than 100,000 telepresence meeting hours. Over that same period, we realized more than $19 million in travel dollars saved and more than 11,600 metric tons of CO₂ emissions averted.

Global e-Sustainability Initiative (GeSI)

We actively participate in GeSI, an effort to foster open cooperation across international boundaries and promote technologies that foster sustainable development. GeSI brings together leading ICT companies — including telecommunications service providers and manufacturers as well as industry associations — and non-governmental organizations (NGOs) committed to achieving sustainability objectives through innovative technology.

Through the GeSI organization, AT&T is represented in projects and activities centered in GeSI’s three primary focus areas. Those focus areas are Climate Change (i.e., energy efficiency, SMART 2020, ICT KPIs), Supply Chain (i.e., conflict minerals), and Human Rights.

In 2012, AT&T helped support the SMARTer 2020 study. The study was conducted by the Boston Consulting Group on behalf of GeSI. The report showed that the information and ICT industry can enable a low-carbon society and help respond to the climate change challenge by 2020. It demonstrated that the ICT industry has the potential to save 9.1 gigatons carbon dioxide (GtCO₂e) by 2020, which equates to a savings amount of over $1.9 trillion in gross energy and fuel by 2020.
Digital Energy and Sustainability Solutions Campaign (DESSC)

As a member of DESSC — a coalition of technology companies and environmental NGOs working to educate policymakers about the role of ICT in the shift to a low-carbon economy — we’re collaborating on public policies that encourage government, businesses, utility companies and communities to use ICT to address energy challenges. Our ultimate goal is to use technology to improve energy efficiency while decreasing GHG emissions — all while promoting a strong economy.

DESSC members include Dell, Hewlett-Packard, Infineon, Intel and Texas Instruments. DESSC also works with organizations such as The Climate Group, the Center for Climate and Energy Solutions and the Alliance to Save Energy.

AT&T Consulting Solutions

In addition to our technology products, AT&T Consulting Solutions provides a broad spectrum of services to business, federal and GEM (Government, Education and Medical) customers. These services focus on planning, architecting and integrating complex technologies, helping customers better leverage technology in their business operations.

We bring expertise in developing solutions for many of our largest clients in the areas of advanced infrastructure, convergence and contact centers, data centers, security and unified communications and collaboration. We also bring expertise in transforming computing infrastructure to a “world class” highly effective environment through our IT Service Management practice. This can lead to reduced operating costs, use of less energy and water, the production of less waste and reduced carbon emissions.

Find out more about AT&T Consulting Solutions.
Innovation

Materiality Assessment Topic: Innovation

Issue Summary

We innovate to help connect our customers to the future.

Our Position

Innovation is part of everything we do. Our culture of innovation is aimed at creating a connected world for customers at home, work or play. We’re working with innovators inside and outside AT&T to create unique personal, digital and mobile experiences that enrich and simplify their lives.

Data Highlights

2012 Key Performance Indicators

- Average number of patents (U.S. and foreign) received per day: >3
- Investment in ideas generated through The Innovation Pipeline — cumulative: $35 million committed for the development of 64 projects
- Prototypes of apps developed at AT&T Hackathons: >450

Our Action

INNOVATING FOR TODAY & TOMORROW

With a heritage that spans 137 years of technology and has produced eight Nobel Prizes, we’re a global leader in bringing new technologies to life.

To shape the technologies of tomorrow, we’re building an innovation ecosystem today that is open and collaborative. We’ve opened access to the world’s greatest network, and we’re actively collaborating with innovators inside and outside AT&T to advance the possibilities of technology.

Our innovation initiatives help deliver new technologies and services to our customers faster than ever before. Through our innovation platforms, we’re helping accelerate the cycle from idea to prototype to marketplace-ready product, app or service. As a result, our customers have access to technologies that can improve lives — from a Hackathon on technology to end texting and driving, to a cloud-based app that helps erase the language barrier, to an advanced wireless health sensor that may avert asthma attacks.

Examples of our innovation programs include:

AT&T Foundry Innovation Centers

At our AT&T Foundry innovation centers, we’re fast-tracking collaborations with developers and...
entrepreneurs to accelerate ideas to marketplace up to three times faster. The AT&T Foundry brings the expertise of AT&T innovators into a collaborative environment with key industry technology providers and developers. Project leads coming into the AT&T Foundry innovation centers get access to our network capabilities and test beds, as well as our technology experts and project coaches.

The Innovation Pipeline (TIP)
We believe that we have the world’s largest corporate crowdsourcing site to unearth new and innovative ideas from our employees. We built TIP, a crowdsourcing and collaboration tool, to tap the collective imagination of our employees. Ideas grow, get refined and enhanced, and the best ideas get turned into real products, applications and services for our customers.

AT&T Labs
Our researchers at AT&T Labs are addressing the most complex technical challenges faced by AT&T and its customers. Some of the world’s best innovators bring their expertise to the Labs to help shape the future of communications technologies, from the living room to the cloud.

Collaboration and Outreach
We’re reaching out to find and work with entrepreneurs and innovators outside AT&T. Our efforts aim to quickly identify new collaborators, quickly engage in collaboration and accelerate projects to market as rapidly as possible.

For more on AT&T’s innovation programs, visit att.com/innovation. Read Senior Executive Vice President — AT&T Technology and Network Operations John Donovan’s blog at www.attinnovationspace.com.

CELEBRATING INNOVATION & COLLABORATION
Each year, we internally recognize the accomplishments of employees in the technical community by bestowing AT&T Fellows Honors and Science and Technology Medals. These medals honor individuals for their sustained, outstanding and unique contributions to the company and the world through their technical and scientific achievements.

Additionally, our researchers are recognized for demonstrating outstanding proficiency in their field.

2012 Fellows
- Enrico Bocchieri, for contributions to computational models for speech recognition
- Ramon Caceres, for contributions to mobile computing and communications

IEEE Fellow
- Saeed Ghassemzadeh, for contributions to measurement and modeling of broadband wireless channels and their applications to system design
Network Reliability

Materiality Assessment Topics: Customer satisfaction; Network reliability

Issue Summary
Global communications networks revolutionized the way we live, work and play. Increased access to and adoption of mobile Internet services have the potential to help us transition to a more efficient economy. The proliferation of advanced smartphones allows more Americans to connect with family and friends, surf the Web and watch and share videos while on the go. This explosion in mobile Internet has also led to unprecedented increases in wireless data traffic.

Our Position
Combating wireless network congestion is a challenge that we and our industry peers face every day as customer demand continues to skyrocket. Mobile data traffic on our national wireless network has increased more than 30,000 percent from January 2007 through December 2012. It is important that we continue to take proactive measures to meet exploding customer demand. The raw material needed to support all that traffic is a scarce resource — wireless spectrum. AT&T and the industry as a whole need new spectrum to meet customer demand. As the FCC itself has acknowledged, “if we don’t act, the costs of not addressing the spectrum crunch — dropped connection, congested airways, lousy service and rising prices for data — will get higher every day.”

Data Highlights

Key Performance Indicators

- Investment in wired and wireless networks: Nearly $20B
Our Action

Within current spectrum constraints, we continue to invest in and enhance our network to drive service improvements.

- AT&T has invested nearly **$98 billion** in the U.S. economy over the past five years (2008-2012), more than any other public company. We expect to invest in the $21 billion range in 2013.
- To support growing customer demand, AT&T has launched Project VIP, a three-year (2013-2015), **$14 billion** initiative to significantly expand and enhance our wireless and wireline IP broadband networks. As part of the initiative, we plan to deploy more than 10,000 macro cells, more than 1,000 distributed antenna systems and more than 40,000 small cells by year-end 2015.
- We plan to expand our 4G LTE network to cover more than **300 million** people in the U.S. by year-end 2014, to expand our wired IP network to cover approximately **75 percent** of customer locations in our 22-state wireline service area by yearend 2015 and to expand our fiber network to reach 1 million additional business customer locations by year-end 2015.
- AT&T operates the nation’s largest Wi-Fi network including more than 33,000 AT&T Wi-Fi Hot Spots at popular restaurants, hotels, bookstores and retailers and provides access to more than 402,000 hotspots globally through roaming agreements.\(^1\)
- AT&T is an industry leader in alternative capacity techniques, such as deploying Self-Optimizing Networks to manage parameters in real time, but these measures are not sufficient to solve the impending spectrum crunch.

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\(^1\) A Wi-Fi enabled device required. Other restrictions apply. See [www.attwifi.com](http://www.attwifi.com) for details and locations.
AT&T Investment Drives Service Improvements

AT&T has invested nearly $98 billion to improve and expand its wireless and wireline networks over the past five years. We expect to invest in the range of $21 billion in 2013.

2012 Network Improvements

In 2012, we invested nearly $20 billion in our wired and wireless networks, including more than 160,000 wireless network improvements.

- 766,000 Square Miles of additional 4G coverage
- 4G LTE now covers over 170 Million people
- Installed 849 Distributed Antenna Systems*
- Deployed 81,000 new antennas
- Grew to more than 33,000 AT&T Wi-Fi Hot Spots in service
- Over 90% of traffic riding over enhanced backhaul

Our investment is paying off in better service

- Faster 4G LTE average download speeds than any competitors – PC World*
- LTE up to 10x faster than 3G
- AT&T’s national dropped call rate improved 32% in 2012
- iPhone 5 downloads fastest on AT&T’s 4G network
- AT&T recognized for best wireless network strategy for the second year in a row by Frost & Sullivan

And Project VIP is bringing even better things to come...

To expand access to high-speed Internet service and new mobile services to customers, AT&T launched Project VIP, an initiative to deploy more than 10,000 macro sites, 1,000 distributed antenna systems and 40,000 small cells. We plan to:

- Expand 4G LTE to cover over 300M people in U.S. by YE 2014
- Expand wired IP network to 57M customer locations, covering 75% of locations in wired service area by YE 2015
- Expand fiber network to reach 11M new business locations by YE 2015

*Based on select PC World speed tests, conducted in U.S. markets. Limited 4G LTE availability in select markets. 4G speeds delivered by LTE, or WiMAX+, where enhanced backhaul, where available. Deployment ongoing. Comparison based on combined voice and data network, LTE in all markets of ETE. Learn more an oss.cell.att.com/network

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Network Security

Materiality Assessment Topic: Network security

Issue Summary
AT&T is continuously researching and developing measures to help improve the security of our services. We have a specialized team within AT&T Labs that is dedicated to investigating security challenges in the wireless environment and developing specific solutions.

Our Position
Security is at the core of our networks and central to everything we do. AT&T has long been a pioneer in the development of cyber security capabilities, with AT&T Labs and our cyber security organization working closely together to provide industry leading-technology.

Our Action
We have built security strategies into the underlying infrastructure for our cloud systems within the AT&T global network. The underlying platform has built-in distributed denial of service (DDoS) protection, and we can detect suspicious traffic in real time, filter it and then divert it. These measures will improve the customer experience by preventing, detecting and mitigating attacks which could degrade service.
# Promoting Safety

## Issue Summary

Companies have an important role to play in helping our customers use our services and products in the manner that works best for themselves and their families.

## Our Position

We are dedicated to empowering our customers to use our products and services in a safe and responsible manner.

## Data Highlights

### Key Performance Indicators

- **Pledges to never text while driving through the "It Can Wait" campaign as of September 2013:** >3M

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<tr>
<th>2012 Goal</th>
<th>2012 Progress Toward Goal</th>
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<td>Gauge customer awareness of No Texting While Driving campaign and of the dangers of texting while driving by developing and issuing a survey during 1Q12, which will inform a goal for progress in 2013.</td>
<td>- <strong>30 percent</strong> of survey respondents indicated that texting while driving messages have an impact on their driving habits.</td>
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<td></td>
<td>- More than <strong>1.3 million</strong> no texting while driving pledges were generated through channels including ItCanWait.com, Facebook, Twitter and text-to-pledge.</td>
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### 2013 Goal

- Continue to increase the awareness of texting while driving so that greater than **65 percent** of consumers recognize the danger.
Our Action

To empower our consumers to seize the benefits of technology while avoiding some of the safety pitfalls, we have safety programs that include education campaigns, parental controls for mobile phone and media content and collaborations with nonprofits and government entities.

TEXTING WHILE DRIVING

AT&T is committed to saving lives by raising awareness and changing texting while driving behaviors.

Several initiatives comprise our no-texting-while-driving campaign, It Can Wait®. Originally introduced in 2009, the program aims to educate millions of wireless users, our employees and the general public — particularly teens — about the dangers of texting while driving. In 2012, we created the first “No Text on Board” pledge day to bring consumers, policymakers and companies together to help end this dangerous behavior. In 2013, Drive 4 Pledges Day, our second annual pledge day, included a national event with the Federal Highway Administrator, FCC commissioner and NTSB member. More than 2,000 activities were staged nationally, more than 500 state and local proclamations were issued and more than 129 million impressions were generated on Twitter.

Advertising/PSAs

A national ad campaign shared personal stories of those whose lives were impacted by a texting-while-driving crash. Ads were created with celebrities who appeal to teens including Demi Lovato, One Republic and Olympians Gabrielle Douglas and Jordyn Wieber. In addition, American Idol finalists participated in events throughout the country in 2012.

In May 2013, AT&T worked with Sprint, T-Mobile and Verizon to launch a multi-million dollar, co-branded advertising campaign focusing on stories of people living with the consequences of texting while driving. The stories were featured in 30-second PSAs that served as the basis of a new texting while driving documentary released in August.

Online Resources

Our online resource center features downloadable tools and tips for consumers, schools and companies, along with posters, educational guides, fact sheets, links to the Public Service Announcements (PSAs) and print advertisements for the campaign. We also created a teen-focused site (ItCanWait.com) where materials on our campaign, including a new texting while driving documentary, are also hosted.

Technology and Innovation Programs

AT&T has tapped into its innovation programs to help drive the It Can Wait movement. The AT&T DriveMode app to curb the urge to text while driving emerged from an employee’s submission to The Innovation Pipeline. The app continued to be enhanced in 2012. Additionally, the winning team of an It Can Wait hackathon was led by a 13-year-old girl.

AT&T Employees

AT&T engaged its 240,000 employees to help spread the word through outreach in their local communities. Through internal communications and websites we’ve encouraged employees to take the pledge and discuss the issue. Our employees have made presentations about the It Can Wait campaign to nearly 440 schools in 33
states and almost three-quarters of AT&T employees have taken the pledge.

**It Can Wait Pledges**

In 2012, more than 1.3 million pledges to never text while driving were logged, and following Drive 4 Pledges Day, the movement surpassed 3 million total pledges.

**Social Media Engagement**

Twitter has been key to spreading the word and driving pledges. In a first-of-its-kind tactic, AT&T implemented a “tweet to pledge” feature that allows someone to pledge by including the hashtag with the words “I pledge” in a tweet. The AT&T social properties played a large role in sharing the pledge information. Tweet to pledge has significantly outperformed text to pledge — a surprise for a text-focused program. On Drive 4 Pledges Day, more than 19,000 tweets generated over 129 million impressions, and more than 85 celebrities encouraged their fans on social media to take the pledge.

**National “See for Yourself” Tour**

To bring the movement to life, in 2012 AT&T commissioned texting-while-driving car simulators and organized more than 200 local events for drivers to experience what happens while texting and driving. Since mid-August, AT&T has held an average of two events per day to help reach people where they live. An online simulation experience was also developed where users could experience firsthand, in a safe environment, the dangers of texting while driving.

**External Support**

Through more than 165 non-profit and corporate partners including NOYS, Big Brothers Big Sisters, DECA, RadioShack, Amazon, Wal-Mart and USAA, the *It Can Wait* message reached tens of millions of people in 2012 that AT&T might not have been able to reach alone. AT&T has created toolkits to enable these organizations to independently spread the word. There was significant engagement at the local and state levels in 2012, including 285 states and cities that issued don’t-text-and-drive proclamations, and 27 states ran don’t-text-and-drive messages on their LED highway signs.

AT&T has significantly expanded this program in 2013, including outreach to more than 1,500 organizations and companies, the deaf community through video messaging and more than 500 proclamations.

**Documentary**

Directed by acclaimed filmmaker Werner Herzog, *From One Second to the Next* focuses on the stories of four individuals who have been involved or caused a texting and driving accident. Released in August 2013, *From One Second to the Next* introduces new stories and faces on the subject following the successful release of *The Last Text* documentary in 2010. Through existing relationships, we shared the new documentary with 40,000 schools, hundreds of safety organizations and government agencies and many more across the country. To date, the video has been viewed more than 2.2 million times.

**Retail**

Employees in more than 5,500 AT&T locations wore *It Can Wait* T-shirts on pledge day in 2012, asked customers to pledge not to text and drive and distributed 9.6 million “No Text on Board” stickers to customers.

**Suppliers**

AT&T reached out to more than 1,000 of its strategic suppliers to seek their support and to get them to share the message with their
employees. Device makers were asked to preload the AT&T DriveMode app on devices, and they have responded.

Find out more at www.itcanwait.com.

**AT&T SMART CONTROLS (SM)**

AT&T Smart Controls is an all-in-one online destination offering customers access to helpful tips and tools for staying safe and connected.

Introduced in 2010, AT&T Smart Controls provides one-click access to safety and security tools, articles, expert tips, and more. Customers can use these resources to help manage mobile phones, the Internet and TV services. Featured products include AT&T Data Calculator, AT&T Smart Limits for Wireless(SM), AT&T Internet Parental Controls, AT&T Wireless Parental Controls, AT&T U-verse® TV Parental Controls, AT&T DriveMode® and more.

Find out more at www.att.com/smartcontrols.

**AT&T SMART LIMITS FOR WIRELESS (SM)**

Smart Limits (SM) is an online service that enables customers to provide their children with the freedom and security of a mobile phone, while setting sensible boundaries for the phone’s use. The service, which costs $4.99 a month per line, offers parents the ability to:

- Block unwanted calls and texts — up to 30 numbers
- Prevent 411 charges by easily blocking calls to 411 Info
- Restrict texting, browsing and outbound calling during specified times of day — can specify up to 15 “trusted” numbers
- Set limits for the number of text messages allowed per billing cycle
- Set limits for Web browsing/data usage per billing cycle (available on Smartphones 2Q13)
- Limit monthly purchases, such as apps and games, that are direct billed to an AT&T account

Find out more at www.att.com/smartlimits.

**AT&T FAMILYMAP®**

Ideal for today’s on-the-go families, AT&T FamilyMap is a convenient tool that lets customers see the location of family members on a map from their AT&T wireless phone, tablet, computer or U-verse TV. Families can customize their mapping experience by assigning a name and photo to each device within their account, and can also label places they visit frequently, such as “Home” or “Soccer Field.”

Users can also set alerts for FamilyMap to automatically locate a family member’s mobile phone at specific times of day, to make sure their child arrived home from school. The service is also an ideal way to check on a young driver’s location without distracting them with a phone call or text message.

In keeping with AT&T’s industry-leading stance on privacy, AT&T FamilyMap includes tools that give the primary account owner control in managing privacy preferences, with functions such as alerting users when their phone becomes locatable, periodic reminders of their locatable status and the option of notifying a phone every time location information is requested. Additionally, an account owner receives notification when location information for a phone not already being tracked is requested through the application, and he or she can then choose whether to allow the request. The service is compatible with AT&T postpaid mobile phones.
WORKING WITH OTHER ORGANIZATIONS TO EDUCATE AND EMPOWER CONSUMERS

Supporting industry initiatives and user education programs is a critical component of AT&T’s overall efforts to improve digital literacy to educate our customers about online safety. Our goal is to provide consumers with the information they need before they make their technology choices, as well as during and after the sales process.

AT&T Mobile Safety

AT&T worked in partnership with School Family Media to host wireless safety fairs at 10 schools (K-12) across the country. Safety fair activities include the Texting While Driving simulator, Texting While Driving pledge, wireless safety product demonstrations and more. School Family Media also published a 10-page mobile safety brochure with information on wireless safety issues like texting while driving, bullying and digital responsibility. These brochures were distributed to school leaders and parenting groups affiliated with School Family Media.

Find out more at www.att.com/familysafety.

Alliances for Online Safety Education and Awareness

AT&T works with several organizations that promote online safety education and awareness, including the Family Online Safety Institute, Common Sense Media, Enough is Enough, iKeepSafe, ConnectSafely and the National Cyber Security Alliance. Through these alliances, AT&T supports myriad programs that raise the profile of online safety issues and provide resources and tools to consumers who seek more information. We also participate in and host community summits, panels and educational events that help consumers of all ages learn how to safely and efficiently manage technology.

Reaching Older Adults

AT&T also provides programs targeted at senior consumers. Following a launch in the fall of 2011, the AT&T Reconnect Tour took off in 2012. The tour is produced in alliance with Senior TechRally™ and was hosted by AARP in some locations. The tour visited Continuing Care Retirement Communities, 55+ Communities and Senior Centers in over a dozen states, providing older adults with training on how to get more out of their mobile devices. The program is a continuation of AT&T’s long commitment to training older Americans to use wireless devices, an effort which can be traced back to a “coaching” program that was developed by OASIS, one of the senior organizations that AT&T supports and spreads throughout the country.

LAW ENFORCEMENT

AT&T is committed to working cooperatively with local, state, and federal law enforcement in their efforts to protect children online. AT&T supports law enforcement in its pursuit of child predators and online child pornography and has been an active partner of the National Center for Missing and Exploited Children.
Protecting Privacy

Materiality Assessment Topic: Customer privacy and data security

Issue Summary
The privacy and protection of customers’ personal information is a critical and sensitive issue.

Our Position
We take customer privacy very seriously. Our privacy commitments are fundamental to the way we do business every day.

Our Action
The following applies to everyone who has a relationship with AT&T—including customers and website visitors:

- We will protect your privacy and keep your personal information safe. We use powerful encryption and other security safeguards to protect customer data.
- We will not sell your personal information to anyone, for any purpose. Period.
- We will fully disclose our privacy policy in plain language and make our policies easily accessible to you.
- We will notify you of revisions to our privacy policy, in advance. No surprises.

• You have choices about how AT&T uses your information for marketing purposes. Customers are in control.
• We’re listening. You can send us questions or feedback on our privacy policies.

The Ponemon Institute has named AT&T as one of the 20 most trusted companies on privacy for 2012.

For more information about the AT&T privacy policy, and to hear employees explaining various aspects of our approach to privacy, visit www.att.com/privacy.
Tackling Environmental and Social Challenges with Technology

Materiality Assessment Topic: Products that enable social & environmental benefit

Issue Summary

Companies today operate in an increasingly complex economic, social and technological environment. 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 impact and costs by:

- Moving work to people rather than people to work
- Connecting rather than traveling
- Managing business remotely and in real time
- Improving transportation and distribution systems

Our Position

The power of the network has never been more important to help companies adapt to these new conditions, optimizing ICT solutions, processes and people across the entire value chain. By using ICT solutions to establish and improve collaboration platforms — regardless of location, application or device — a connected business will make its workforce smarter and more productive, dramatically improving its underlying network of functional communities and fundamentally redefining and enhancing its internal, customer and partner relationships. ICT can help improve business performance, making companies leaner, more flexible, more adaptive and more sustainable.

ICT solutions have great potential to enable others to operate more sustainably. As a provider of these products and services, AT&T is committed to not only deploying them but also to educating businesses and consumers about the potential savings — both financial and environmental — that they could achieve.

According to the Global e-Sustainability Initiative (GeSI) SMARTer 2020 report, the ICT industry has the potential to create emissions abatement of 9.1 Gigatons of CO₂-e (carbon dioxide equivalents) by 2020.¹ This is equivalent to the emissions from the electricity use of over 1.3 billion houses in a year, more than seven times the emissions associated with ICT operations.² The report also calculates that the savings could amount to over $1.9 trillion in gross energy and fuel savings by year 2020.

² EPA emissions calculator: http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results
### Data Highlights

<table>
<thead>
<tr>
<th>2012 Goal</th>
<th>Progress Toward Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify connection opportunities that drive efficiency and sustainability for customers in the healthcare, tracking transportation and home energy sectors.</td>
<td>We announced several new technology solutions to increase the efficiency and sustainability of our customers, including tools related to electric vehicles, patient health records and enabling the next generation of smart homes.</td>
</tr>
</tbody>
</table>

### 2013 Goals

- Drive awareness and market adoption of ICT solutions for both enterprise and state/local government entities by defining the increased efficiencies, performance and competitive advantage these products create.
- Launch a platform that will empower our customers to understand and manage their home security and energy usage remotely.
Our Action

SUMMARY

Our products and services can enable customers to operate more sustainably and save money. We continue to work with credible third parties to quantify those benefits.

### Overview

<table>
<thead>
<tr>
<th>We worked with...</th>
<th>To analyze the environmental impact of...</th>
<th>And identified potential environmental savings by 2020...</th>
<th>And potential financial impacts by 2020 of...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global e-Sustainability Initiative (GeSI)</strong></td>
<td>The ICT industry</td>
<td>9.1 gigatons of CO₂-e</td>
<td>$1.9 trillion</td>
</tr>
<tr>
<td><strong>CDP &amp; Verdantix</strong></td>
<td>Cloud computing</td>
<td>85.7 million tons of CO₂-e annually³</td>
<td>$12.3 billion in energy savings alone⁴</td>
</tr>
<tr>
<td><strong>CDP &amp; Verdantix</strong></td>
<td>Telepresence (in place of some travel)</td>
<td>5.5 million metric tons of CO₂-e⁵</td>
<td>$19 billion⁶</td>
</tr>
<tr>
<td><strong>Carbon War Room</strong></td>
<td>Machine-to-machine technology (M2M)</td>
<td>9.1 gigatons of CO₂-e⁷</td>
<td>Almost $1 trillion⁸</td>
</tr>
</tbody>
</table>

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³ Based on U.S. businesses with annual revenues of more than $1 billion spending 69 percent of infrastructure, platform and software budgets on cloud services.
⁴ Based on U.S. businesses with annual revenues of more than $1 billion spending 69 percent of infrastructure, platform and software budgets on cloud services.
⁵ U.S. and U.K. businesses with annual revenues of more than $1 billion deploying a total of almost 10,000 Telepresence units. Savings start accruing in 2010.
⁶ U.S. and U.K. businesses with annual revenues of more than $1 billion deploying a total of almost 10,000 Telepresence units. Savings start accruing in 2010.
⁷ Savings estimated for all ICT technology.
⁸ Savings just for M2M technology.
We are also working directly with other technology and service providers to create innovative solutions for our customers. Some examples follow:

<table>
<thead>
<tr>
<th>Transportation</th>
<th>Company</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ford</td>
<td>Ford engages AT&amp;T to connect its vehicles to routing information, battery charge status and nearest charging station information.</td>
</tr>
<tr>
<td></td>
<td>SoBi</td>
<td>Social Bicycles uses AT&amp;T services to provide interactive and dynamic bicycle sharing.</td>
</tr>
<tr>
<td></td>
<td>Zonar</td>
<td>Trucking fleet technology uses AT&amp;T connectivity to monitor truck maintenance needs and increase fuel efficiency.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tracking</th>
<th>Devices</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amber Alert GPS and Numera Libris</td>
<td>Tracking devices that monitor the location of kids, medically-at-risk or the elderly. Devices, equipped with fall detection capability, allow for easy connection directly to call centers in the event of an emergency.</td>
</tr>
</tbody>
</table>

**ICT SOLUTIONS**

**Telepresence**

AT&T Telepresence Solution® is a high-definition videoconferencing service that gives provides a virtual, face-to-face meeting experience without the expense and productivity drains of travel. Telepresence allows users to meet with people across the globe as if everyone were in the same room.

Since introducing AT&T Telepresence Solution® in 2008, AT&T has hosted customer forums, accelerated marketing campaigns, streamlined meeting processes and reduced travel through the use of video collaboration. This has resulted in meaningful financial and environmental impacts for AT&T:

<table>
<thead>
<tr>
<th></th>
<th>Travel Expense Avoided</th>
<th>CO₂-equivalent emissions avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$19.8M</td>
<td>11,600 metric tons</td>
</tr>
<tr>
<td>2011</td>
<td>$13.9M</td>
<td>8,300 metric tons</td>
</tr>
<tr>
<td>2010</td>
<td>4.1M</td>
<td>2,500 metric tons</td>
</tr>
<tr>
<td>Total</td>
<td>$37.8M</td>
<td>22,400 metric tons</td>
</tr>
</tbody>
</table>

This experience is beginning to validate research into the benefits of Telepresence®. An AT&T-sponsored study by CDP and Verdantix found that by 2020, U.S. businesses with revenues of more than $1 billion can collectively achieve financial benefits of almost $15 billion by substituting telepresence for some business travel and can cut nearly 4.6 million metric tons of CO₂.⁹

**Cloud Computing**

At its simplest, cloud computing is remotely accessible computing power where customers can keep data or applications. Using the cloud removes the need to store anything on hardware devices. AT&T worked again with CDP to release a study, Cloud Computing: The IT Solution for the

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⁹ Carbon calculations were derived by Cisco’s IBSG, which uses the TRX Airline Carbon Emissions Calculator for impact of air travel avoidance, along with a standard calculation for the impact of ground transportation avoided to and from the meeting and airport, less the impact of energy usage for the Telepresence® application and carbon start up and disposal. Note: Ground transportation to and from the Telepresence® location and airport were assumed equivalent to participants’ normal daily commutes, and thus, offset each other.
21st Century, conducted by independent analyst research firm, Verdantix. It found that by 2020, large U.S. companies that use cloud computing can achieve annual energy savings of $12.3 billion and annual carbon reductions equivalent to 200 million barrels of oil.\(^\text{10}\) That's enough to power 5.7 million cars for one year.\(^\text{11}\)

AT&T provides a range of utility- and cloud-based solutions that give businesses greater flexibility, speed and control over their IT infrastructure and enables them to better match capacity with application demand. With end-to-end services — including AT&T Synaptic Hosting, AT&T Platform as a Service, AT&T Synaptic Storage as a Service and AT&T Synaptic Compute as a Service — AT&T Hosting and Cloud Services help companies operate more efficiently and respond to fluctuating or hard-to-predict needs.

Learn more about utility and cloud services.

**Fleet Management**

Smarter transportation tackles inefficiencies by reducing fuel consumption through automated route planning and increased vehicle efficiency through the reduction of idle time, better managing miles driven, adhering to speed rules, monitoring of vehicle acceleration and other strategies. The resulting efficiency gains can deliver fleet-wide performance improvements that can lead to reduced energy waste and greenhouse gas (GHG) emissions. AT&T is one of the largest U.S. wireless providers of fleet management solutions for commercial truck and van fleets.

Learn more about transportation management offerings.

**Digital Life**

This year we announced Digital Life service, an end-to-end solution allowing customers to remotely monitor and control lighting and thermostat controls, smoke detectors and water sensors from multiple devices, including smartphones, tablets and laptops. In addition to giving customers the ability to make their homes and property safer and more secure, Digital Life enables our customers to operate more sustainably by helping homeowners better manage utilities — lowering environmental impact and costs.

Learn more about AT&T Digital Life.

**Data Center Efficiency**

The ICT sector is responsible for approximately 2 percent of global CO\(_2\) emissions, which is nearly the same as the airline industry, according to a 2012 study by The Green Grid Association. AT&T helps businesses build and operate their IT infrastructure more efficiently — helping them to lower the cost of doing IT business. Current trends toward the adoption of hosted services (e.g., outsourcing and cloud computing), server and storage virtualization and low-energy cooling as a means to replace less-efficient data centers and application services have great potential to increase IT and data center efficiency.

Learn more about Smarter Data Centers.

**Telecommuting**

Telecommuting, defined as working from home, is one of the most promising opportunities for businesses to cut carbon emissions and it offers a variety of benefits for both companies and employees. It can improve:

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\(^{10}\) Represents the 2,653 firms generating revenues of more than $1 billion in the U.S.

\(^{11}\) Based on Bureau of Transportation Statistics average mpg, Federal Highway Administration average annual mileage and the Energy Information Agency gallons of gasoline per barrel of oil.
• Job recruitment by improving a company’s attractiveness to prospective employees
• Access to non-traditional workers by eliminating distance and commuting as barriers to employment
• Job satisfaction
• Work/life balance
• Real estate efficiency

Related to telecommuting is teleworking, or the ability to work virtually from anywhere. Teleworking is a vital component in preparing our nation to respond to unexpected events that prevent workers from reaching their traditional office environment, such as natural disasters, outbreaks of disease or terrorist incidents.

We offer a variety of innovative solutions to facilitate flexible working, including remote access, and conferencing and collaborating solutions such as AT&T Connect®. These technologies can help reduce travel and increase productivity by enabling employees to communicate and collaborate virtually anywhere.

Learn more about how AT&T uses telecommuting in its own operations and how AT&T’s Unified Communications solutions can be used to establish telecommuting and teleworking programs.

Smart Utilities

Smart Utilities provide the potential for real-time access to utility data by customers and service providers. These grids allow for two-way communication between the utility provider and end points in the distribution system, including meters at the home or business.

Smart utilities help:
• Enable utilities to read meters remotely without sending technicians

• Provide utilities with the ability to remotely connect, disconnect and reconnect service for customers (e.g., moving homes or non-payment/reinstatement), thereby reducing emissions and saving time and money related to dispatching a truck
• Offer faster and easier outage identification and response, or to correct problems before they lead to outages
• Give customers real-time usage information and adjust their energy or water use accordingly, potentially saving customers money, allowing the grid to reduce usage during peak times and possibly reducing the number of new power plants that must be built
• Provide utilities with the ability to effectively integrate alternative and sustainable energy resources into their networks, potentially saving money and reducing carbon emissions and water use

AT&T connects people and data by providing broadband, wireless technology and security features. This technology will be critical to the modernization the nation’s utilities and at the end of 2012, AT&T was providing communication services for 19 million smart meters.

QUANTIFYING BENEFITS

Carbon Impact Assessment Tool

In addition to the research described above, AT&T has also created the AT&T Carbon Impact Assessment Tool, with which business customers can easily calculate the estimated GHG emissions and cost savings of using solutions that replace or reduce business travel and increase productivity and collaboration. The tool estimates the financial and environmental savings associated with several services, including AT&T Telepresence Solution®, AT&T Connect®, and AT&T Remote Access Service.
AT&T is the first communications provider to offer such a tool for businesses.

**Collaboration**
As an industry, we know we need to better measure the degree to which we can help others increase energy efficiency and reduce CO₂ emissions. This is something we are working to address with industry groups such as the Green Grid, Energy Efficiency Inter-Operator Collaboration Group, Alliance for Telecommunication Industry Solutions, CDP, Verdantix and Carbon War Room.

Read more about our [collaboration with industry groups](#).