

Industry & Government Problem Solving



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

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

We work with industries, governments, non-profits and academia on goals such as expanding access to technology — particularly educational technology — for low-income populations, upgrading to a more energy-efficiency power supply and achieving sustainability through information communications technology solutions.

Collaborating to Expand Access to Technology

One Economy

One Economy is a global nonprofit that works with low-income people around the world so they can access the power of technology. One Economy has been able to accomplish this goal by offering affordable wireless hardware and wireless network installations, giving jobs to youth to teach community members about technology, and offering these communities information and resources to further access technology. We were proud to continue our work with them in 2011.

AT&T's work with One Economy and low-income housing providers brings technology packages (including broadband Internet access) to 50,000 low-income families. Since 2006, AT&T and the AT&T Foundation have pledged more than **\$37 million** in grants and contributions to One Economy to help bring broadband to low-income communities. This is one of the largest philanthropically-funded broadband access initiatives in the country.

AccessAll is our signature initiative with One Economy. AccessAll provides a comprehensive set of technology solutions to low-income households across the nation. It aims not only to provide broadband solutions to low-income communities, but also to spur a culture of use where individuals and communities leverage technology to improve socioeconomic outcomes.

We are also proud to support innovative programs like Wireless Digital Connectors, which educates young people to develop and disseminate mobile content while raising awareness of the relevance of wireless broadband technologies and services among low-income communities.

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.

We support a consensus-based approach to developing smart grid standards. Standards for smart grid equipment and devices should be based on an open network-layer standard in order to build economies of scale, promote interoperability (when diverse systems function together) and reduce the risk of technology becoming outdated. These measures will help

ensure that different types of network technologies can be employed efficiently, while also making the benefits of smart grid technology widely available.

In 2011, we continued working to accelerate smart grid deployment and help put the U.S. on a path toward a more energy-efficient economy. We engaged with various standards bodies and working groups to address interoperability standards for smart meters — a crucial component of the smart grid — so that they can communicate with in-home devices using unlicensed radio spectrum. For example, we worked with ZigBee Smart Energy groups, various Smart Grid Interoperability Program Priority Action Plans and working groups during 2011.

We also engaged with several different state public utility commissions on issues relating to the privacy and security of consumer smart-grid data. 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. We are committed to supporting consumer smart grid privacy and have been working with state commissions to identify effective, common-sense strategies to accomplish it. We have also been working with a group of other stakeholders in the smart grid arena to create a self-regulatory regime that will protect consumers' smart grid privacy on a nationwide basis.

¹ *Smart2020: United States Report Addendum, Global e-Sustainability Initiative, 2008.*

The Green Grid

We continued our work with The Green Grid, 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 serve as vice chair of the Data Center Design Guide subcommittee. 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 the Alliance for Telecommunication Industry Solutions (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 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 2011, we have already achieved an energy intensity reduction of almost 47%.

Pursuing Sustainability Through ICT Solutions

AT&T Sustainability Advisory Council

In 2009, AT&T announced the establishment of 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.

In 2011, the AT&T Business Advisory Council held our twice annual meetings via Telepresence®. It delivered a white paper published with the Carbon Disclosure Project that explored the environmental and economic benefits of cloud computing. We also rolled out the AT&T Carbon Emissions Calculator tool. This tool helps businesses calculate the greenhouse gas emission savings, financial cost savings and productivity and collaboration gains from using travel substitution technology.

By arming companies with this information, the Council aims to help businesses make smarter sustainability choices and investments and better prepare for potential environmental regulation.

Reducing the Need for Business Travel

Reducing the need for business travel can have beneficial effects on quality of life, financial bottom-lines and the environment. We provide our customers with a variety of technology solutions to help reduce travel and improve the potential for their employees to work virtually anywhere and anytime. One of our travel-substitution technology customers is the General Services Administration (GSA). The GSA awarded us a contract in late 2010, which led to fifteen Telepresence® locations being activated during 2011. One room is located in each of the 11 regional GSA locations. Four others were activated in Washington, DC. In combination, the 15 rooms provide capacity for more than 100 participants.² These facilities have the potential to increase the efficiency and reduce the travel-related carbon footprint of GSA, as well as other federal agencies that have the opportunity to use them.

Telepresence® continues to see customer acceptance and continued growth from 1,281 meeting rooms in 2009 to more than 3,000 meeting rooms at the end of 2011. Our users held over 18 million minutes of meetings on immersive Telepresence® systems in 2011. 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 through 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 targeted the installation of more than 50 internal Telepresence® rooms in 2011, growing internal deployment to more than 190 rooms spanning more than 20 countries. In 2011, our company collectively logged more than 2.9 million minutes of Telepresence® meeting hours. Over that same period, we realized more than \$13.8 million in travel dollars saved and more than 8,200 metric tons of CO2 emissions averted.

Learn more about our telecommuting solutions.

² GSA Telepresence® Locations, General Services Administration, 2012.

Global e-Sustainability Initiative (GeSI)

We actively participate in the Global e-Sustainability Initiative (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 committed to achieving sustainability objectives through innovative technology.

In 2011, the Energy Efficiency Inter-Operator Collaboration Group (EE-IOCG) became a part of GeSI as the Energy Efficiency Working group (EEWG). We participated in the EEWG, a group of telecommunications companies that coordinate various organizations that are working to set efficiency standards for the industry.

Digital Energy Solutions Campaign (DESC)

As a member of DESC — a coalition of technology companies and environmental non-governmental organizations (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.

DESC members include CISCO, Dell, Hewlett-Packard, Infineon, Intel and Texas Instruments. DESC also works with organizations such as The Climate Group, the World Wildlife Fund 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 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.