

0.1

Introduction

Please give a general description and introduction to your organization

AT&T Inc. (NYSE:T) is a premier communications holding company and one of the most honored companies in the world. Its subsidiaries and affiliates – AT&T operating companies – are the providers of AT&T services in the United States and internationally. With a powerful array of network resources that includes the nation's largest 4G network, AT&T is a leading provider of wireless, Wi-Fi, high speed Internet, voice and cloud-based services. A leader in mobile Internet, AT&T also offers the best wireless coverage worldwide of any U.S. carrier, offering the most wireless phones that work in the most countries. It also offers advanced TV services under the AT&T U-verse® and AT&T | DIRECTV brands. The company's suite of IP-based business communications services is one of the most advanced in the world.

Additional information about AT&T Inc. and the products and services provided by AT&T subsidiaries and affiliates is available at <http://www.att.com/aboutus> or follow our news on Twitter at @ATT, on Facebook at <http://www.facebook.com/att> and YouTube at <http://www.youtube.com/att>.

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0.2

Reporting Year

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.
Please enter dates in following format: day (DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed
Sat 01 Jan 2012 - Sun 01 Jan 2013

0.3

Country list configuration

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response

Select country
United States of America
Rest of world

0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD(\$)

0.5

Please select if you wish to complete a shorter information request

0.6

Modules

As part of the Investor CDP information request, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors and companies in the oil and gas industry should complete supplementary questions in addition to the main questionnaire.

If you are in these sectors (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will be marked as default options to your information request. If you want to query your classification, please email respond@cdproject.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

Module: Management [Investor]

Page: 1. Governance

1.1

Where is the highest level of direct responsibility for climate change within your company?

INDIVIDUAL/SUB-SET OF THE BOARD OR OTHER COMMITTEE APPOINTED BY THE BOARD
SENIOR MANAGER/OFFICER
OTHER MANAGER/OFFICER
NO INDIVIDUAL OR COMMITTEE WITH OVERALL RESPONSIBILITY FOR CLIMATE CHANGE

1.1a

Please identify the position of the individual or name of the committee with this responsibility

Charlene Lake, Chief Sustainability Officer, reports to the Public Policy and Corporate Reputation Committee of the AT&T Board of Directors four times a year on sustainability matters.

1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

YES
NO

1.2a

Please complete the table

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator
BOARD CHAIRMAN BOARD/EXECUTIVE BOARD DIRECTOR ON BOARD CORPORATE EXECUTIVE TEAM CEO COO EXECUTIVE OFFICER MANAGEMENT GROUP BU MANAGER ENERGY MANAGERS ENVIRONMENTAL/SUSTAINABILITY	MONTARY RECOGNITION (NON-MONETARY) OTHER NON- MONETARY REWARD Recognition (non- monetary)	To promote accountability and drive results, we use an Energy Scorecard to benchmark the energy performance at each of our 1,000 largest energy-consuming facilities and in 1,000 of our retail stores. An Energy Champion – either real estate or network managers – receives a grade based on their energy management performance. This grade is factored into the individual's annual review. This system helped the company realize \$65 million in annualized savings in 2012 from implementing 5,659 projects. Energy is one of AT&T's biggest sources of GHG emissions. Reducing energy use reduces GHG emissions.

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator
MANAGERS FACILITY MANAGERS PUBLIC AFFAIRS MANAGERS RISK MANAGERS ALL EMPLOYEES OTHER		
Environment/sustainability managers	Recognition (non-monetary)	We have a dedicated team that manages sustainability initiatives at AT&T, including environmental issues related to climate. A member of the team is dedicated, for example, to working with the energy team on GHG emissions management. Another member of the team is dedicated to the Business Solutions team to work with them to promote more products and services that enable emissions reductions. Another works with the devise team for consumer products. For many of the dedicated team members, their annual reviews are tied to their ability to accomplish specific goals, including goals related to reducing GHG emissions.

2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

A specific climate change risk management process

Integrated into multi-disciplinary company-wide risk management processes

There are no documented processes for assessing and managing risks and opportunities from climate change

2.1a

Please provide further details (see guidance)

a) **Scope of Process:** We rely on a formal sustainability strategic assessment to identify key risks and opportunities for our company. We examine 44 sustainability-related issues and assess their importance to our business and stakeholders. Greenhouse gas emissions, company energy use and products and services that enable environment and social benefit were determined to be key risks and opportunities for us.

- b) **How risks and opportunities are assessed at a company level:** To assess risks at the company and asset level we examined each issue from two lenses – importance to stakeholders and importance to business success. To understand the importance to stakeholders, we called on several groups to provide insight, including: Business for Social Responsibility (BSR), World Wildlife Fund (WWF), Saatchi and Saatchi S, the Carbon Disclosure Project (CDP), World Resources Institute (WRI), the Pacific Institute, and the Environmental Defense Fund (EDF), as well as multiple consumer and interest groups who provide insight from national and local perspective. Where necessary, we also relied on secondary research to understand key trends and issues. To understand these issues from a business perspective we interviewed individuals from across the company. These people gave us insight into risks and opportunities present on both a company and asset level.
- c) **How risks and opportunities are assessed at an asset level:** At an asset level, our corporate real estate, risk management and business continuity teams all play a role in assessing these risks. They monitor legislation that might impact energy prices, for example. They also track energy use in a centralized database in real time, which illuminates areas with potential risks and/or opportunity. Topics such as energy use and natural disasters are two of the most significant risks and opportunities for us on an asset level. To further mitigate risk at an asset level, a cross-functional team from the corporate real estate, network, IT and other related organizations uses a proprietary site selection methodology that includes characteristics such as exposure to natural disasters (flood and drought zones) and expected electricity and water availability and costs to determine site locations.
- d) **Frequency of monitoring:** The full strategic assessment occurs every two years; however our internal team is constantly monitoring updates in these topics that might impact our assessment and four times a year the chief sustainability officer reports to the Board with issues that present new risks and/or opportunities to the company. On the asset level, the real estate, risk management, business continuity or internal sustainability team(s) usually work(s) directly with the relevant business unit to address the issue, and when needed alerts the relevant officer.
- e) **Criteria for materiality/priorities:** Those issues that impact our financial position and our ability to do business rise to the top. Also critical are issues related to compliance with regulation. We also consider how to meet demands from stakeholders and reputation. On the full assessment, we rank each issue as Low, medium or high – worth 1, 2, or 3 points. With feedback from hundreds of sources and individuals, we chart the issues on a four grid quadrant based on the score they receive. The quadrant posts external sources on the vertical axis and internal sources on the horizontal access. The issues with the most points are placed at the top of the grid.
- f) **To whom the results are reported:** The results of the full assessment are reported to the AT&T Board of Directors.

2.2

Is climate change integrated into your business strategy?

YES
NO

2.2a

Please describe the process and outcomes (see guidance)

a) **The Process by which strategy is influenced:** There are several inputs into the strategy and several ways that issues associated with climate discussions are integrated into our business strategy. Starting at the top, the Public Policy Committee (now Public Policy and Corporate Reputation Committee) of the Board of Directors has oversight over all Citizenship & Sustainability issues, including environmental sustainability and the management of company greenhouse gas

emissions. The Chief Sustainability Officer reports to the Board committee four times a year to provide updates and receive input on the direction of the sustainability work within AT&T. Her report includes the results of the bi-annual strategic assessment of sustainability-related risks and opportunities described below, and more frequent informal updates to that review. More specifically, progress with respect to understanding and managing the Company's carbon footprint is reviewed. Separately, our Citizenship & Sustainability Steering Committee comprises senior executives and officers from across the company with responsibility for the business areas most linked to our current sustainability priorities, including the management of our company greenhouse gas emissions. The committee meets quarterly to identify priorities, align resources and help further integrate these issues into our business operations. It is headed by the Chief Sustainability Officer, who works with the chairman's office, AT&T's board of directors and the company's executive management team to further integrate sustainable business practices across the company and its supply chain. In addition, we operate a number of expert teams that are organized around each sustainability issue that is important to our company, including the management of GHG emissions. The calculation of our company's GHG emissions is managed in our Energy management group, and we have a cross-functional expert team responsible for strategy and communication. These teams flow into the Energy Council to work on managing our emissions. The council is overseen by our Energy Director, who manages efforts across all business units, driving comprehensive programs to reduce energy consumption and directing AT&T's energy purchasing strategies.

b) What aspects of climate change have influenced the strategy:

Energy and fuel related GHG emissions

One of the most important issues we have identified is electricity use, and we have set a goal to reduce the electricity consumption of our company relative to data growth on our network by 60 percent by 2014 (baseline of 2008). Fuel is the next most significant component of emissions for us and we have set a goal to reduce our Scope 1 emissions 20 percent by 2020, using a 2008 Scope 1 baseline of 1,172,476 mtons CO₂-e. We have implemented an energy management program to address our energy related emissions and are investing in alternative fuel vehicles to address our fuel related emissions. We've also incorporated energy efficiency considerations into our supply chain procurement process.

Disaster response

Two other related issues that rose to the top quadrant of our assessment were network reliability and disaster response. If disruptions occur to the network, due to extreme weather or otherwise, this fundamentally disrupts our business. In 2012, we invested more than \$20 billion in capital expenditures and spectrum purchases to expand and upgrade our network capabilities, and, in November of 2012, we announced Project Velocity IP (VIP), a three-year 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. AT&T also has a strong Network Disaster Recovery (NDR) program and we have invested more than \$600 million in our NDR program.

Products and Services that Enable emissions reductions

We know that telepresence and cloud computing are two technologies that have the potential to enable others – individuals and businesses – to reduce their GHG emissions. A position in our Advanced Business Solutions department is dedicated to sustainability and seeking out related market opportunities.

c) **Short-term strategy changes:** We have set an absolute Scope 1 GHG emissions reduction goal to reduce our emissions by 20% by 2020, using a 2008 Scope 1 baseline of 1,172,476. We have also set a goal to reduce the electricity consumption of our company relative to data growth on our network by 60 percent by 2014 (baseline of 2008). Over the short term (next five years) we are also integrating sustainability considerations further into our business units, which we believe will help us with climate related challenges and opportunities. For example, we have a dedicated sustainability position in our Business Marketing and Global Strategy group who helps advance market opportunities related to enabling others to operate more sustainably. In our mobility team, we also have people dedicated to considering how to promote mobile phones that have a lower environmental footprint. In addition, we are working with our top suppliers to evaluate their sustainability practices and specifically their emissions. We are working with the CDP Supply Chain Program and EcoDesk to engage our suppliers on their emissions. We also engage suppliers directly through our own Supplier Sustainability Survey where they can disclose their GHG emissions. In addition, we have included a sustainability clause in our supplier contracts that explains AT&T's expectations related to sustainability. We set a goal that by the end of 2015, majority of spend with strategic suppliers will be with those who track greenhouse gas (GHG) emissions and have specific GHG goals.

d) **Long-term strategy changes:** We have not implemented any specific long term strategies. We believe that the short-term changes we are making now will position us well for the long term. At AT&T we are always innovating new technologies. One focus for our efforts involves considerations of environmental impact -- including greenhouse gas emissions -- of our own activities, as well as our products and services. The technologies we are creating today will help us address the challenges that we experience in 20+ years.

e) **Strategy advantage:** Attaining a competitive advantage is a driver of our sustainability efforts. By reducing our energy use -- which is our primary source of

emissions – we are able to reduce costs associated with it, which ultimately benefits our bottom line. Being more resilient to natural disasters and ensuring continuity of operations makes our service more attractive to our customers and potential customers. Communicating with and educating consumers about how our products and services enable them to operate more sustainably, offers us a competitive advantage. Through market research, we have found that when two products are priced evenly, consumers can find environmental sustainability as a distinguishing feature.

f) **Substantial business decisions:** As mentioned above, we are increasing our focus in the areas of energy, enterprise business services, mobility and supply chain. Business resources are being dedicated in all of these areas to address challenges and opportunities related to GHG emissions reduction, and to take advantage of both opportunities and mitigate risks. We have also set an absolute Scope 1 GHG emissions reduction goal and investing in alternative fuel vehicles, an important step in meeting this goal. We also have a strong energy management program.

2.2b

Please explain why not

2.3

Do you engage with policy makers to encourage further action on mitigation and/or adaptation?

Yes

Direct engagement

Trade associations

Funding research organizations

Other

No

2.3a

On what issues have you been engaging directly?

Please complete the table (For corporate position, choose: Support with minor exceptions, Support with major exceptions, Neutral, Oppose, or Undecided)

Focus of legislation	Corporate Position	engagement	Details of	Proposed Solutions
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Focus of legislation	Corporate Position	engagement	Details of	Proposed Solutions
MANDATORY CARBON REPORTING				
CAP AND TRADE				
CARBON TAX				
ENERGY EFFICIENCY				
CLEAN ENERGY GENERATION				
ADAPTATION RESILIENCY	SUPPORT SUPPORT WITH MINOR EXCEPTIONS SUPPPORT WITH MAJOR EXCEPTIONS NEUTRAL OPPOSE UNDECIDED		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. (Smart2020 United States Report Addendum, GeSI, 2008). 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 stand 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.
CLIMATE FINANCE				

Comment [VOX1]: Switched these two

Focus of legislation	Corporate Position	engagement	Details of	Proposed Solutions
OTHER				

2.3b Are you on the Board of any trade associations or provide funding beyond membership?

Yes

2.3c Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to influence the position?	
	Please select... <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>	

Digital Energy and Sustainability Solutions Campaign (DESSC)	CONSISTENT	As a member of DESSC – a coalition of technology companies and environmental non-governmental organizations (NGOs) working to educate policymakers about the role of information and communications technology (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 CISCO, Dell, Hewlett-Packard, Infineon, Intel and Texas Instruments. DESSC also works with organizations such as The Climate Group, the World Wildlife Fund and the Alliance to Save Energy.	We agree with the position of DESSC that information and communications technology (ICT) is critical in the shift to a low-carbon economy.
Global e-Sustainability Initiative (GeSI)	CONSISTENT	<p>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.</p> <p>Through the GeSI organization, AT&T is represented in projects and activities centered in the three primary focus of GeSI. Those focus areas are Climate Change (i.e., energy efficiency, SMART 2020, ICT KPIs), Supply Chain (i.e., conflict minerals), and Human Rights.</p> <p>In 2012, AT&T helped support the SMARTer</p>	We support the group's position that communications technology (ICT) industry can enable a low-carbon society and help respond to the climate challenge.

		<p>2020 study. The study was conducted by the Boston Consulting Group on behalf of the Global e-Sustainability Initiative (GeSI). The report showed that the information and communications technology (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.</p>	
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2.3d Do you publically disclose a list of all the research organizations that you fund?

2.3e Do you fund any research organizations to produce public work on climate change?

2.3f Please describe the work and how it aligns with your own strategy on climate change
 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.

Through the GeSI organization, AT&T is represented in projects and activities centered in the three primary focus of GeSI. 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 the Global e-Sustainability Initiative (GeSI). The report showed that the information and

communications technology (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.

2.3h What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Representatives from AT&T's Public Policy team who oversee issues related to climate sit on AT&T's Sustainability Core team.'

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2.3h

What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Page: 3. Targets and Initiatives

3.1

Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year?

ABSOLUTE TARGET

INTENSITY TARGET

ABSOLUTE AND INTENSITY TARGETS

NO

3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
ATT1	Scope 1	11%	20%	2008	1172476	2020	

3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions	Target year	Comment

3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comments

3.1d

Please provide details on your progress against this target made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
ATT2	33	100	<p>In 2011, we realized that improvements made in the calculation methodology and underlying source data for three of our emission sources – refrigerants, engines and portable generators – partially inflated reductions over our baseline year. In an effort to both accurately report our current year GHG emissions inventory and to measure Scope 1 goal progress made through our emissions reductions activities, we decided to provide both a current year GHG emissions inventory that includes all sources with the latest values and a separate baseline for performance against our goal that holds the 2011 values for refrigerants, engines, and portable generators as constants for the duration of the goal period (2008-2020). This allows us to better track changes in emissions due to our activities rather than those attributable to reporting or data quality improvements. This separate baseline result was 937,917 mtons of Scope 1 emissions for 2012 which equates to a 20% reduction as compared to our 2008 baseline of 1,172,476. The primary contributor to this significant reduction in emissions is the progress we have made in the increasing efficiency of our fleet operations. The reduction occurred faster than we anticipated because our use of natural gas was substantially lower than we expected because of a warm winter and a slower ramp-up of natural gas used for our Bloom Box fuel cells. We plan to keep our Scope 1 goal in place because we expect to see an increase in our use of clean natural gas as we bring more Bloom Box fuel cells online in coming years.</p>

3.1e

Please explain (i) why not; and (ii) forecast how your emissions will change over the next five years

3.2

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

YES
NO

3.2a

Please provide details (see guidance)

Telepresence

a) How emissions were avoided: AT&T Telepresence Solution® is a high-definition videoconferencing service that gives the user a virtual, face-to-face meeting experience without the expense and productivity drains of travel. It can replace travel and therefore travel-related emissions. **b) Estimation of Avoided emissions:** In 2012, AT&T 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. An AT&T-sponsored study by the Carbon Disclosure Project 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. *Source: <http://etech.it.att.com/conferencing/Telepresence/Reports/TelepresenceTravelAvoidance.pdf> **c) Methodology:** AT&T carbon calculations were derived by Cisco's Internet Business Solutions Group, which uses the TRX Airline Carbon Emissions Calculator (<http://carbon.trx.com/Home.asp>) 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. The CDP/Verdantix research used a new, independently researched model to quantify the expected benefits of telepresence technology – from a financial and carbon reduction perspective on firm and economy-wide levels. Based on data culled from the in-depth interviews with executives at 15 Global 500 firms and projected telepresence adoption, Verdantix developed a new model to forecast potential business benefits and carbon emissions reductions due to telepresence adoption at firms with > \$1 billion revenue in the U.S. and U.K. It also provides an expected time frame for a return on investment and year one emissions reductions for a typical company with \$1 billion or greater in revenue. The methodology was developed in accordance with The GHG Protocol: Corporate Standard, utilizing emission factors from EPA guidance and Global Warming Potentials (GWP) published in the IPCC Second Assessment Report. For flight operations, the emission factor of 21.32 lb CO2e per gallon of jet fuel was used (EPA Climate Leaders Direct Emissions from Mobile Combustion Sources EPA430K-08-004 May 2008 Table B-2 CO2; Table A-6 N2O & CH4. For electricity, the emission factor of 1,288.88 lb CO2-e/MWH was used (USEPA's eGRID 2010 v1.1 with 2007 data for aggregated US emissions). For ground transportation, the emission factor of 0.364 kg CO2/vehicle-mile was used EPA Climate Leaders EPA430-R-08-006 May 2008). The following GWPs were used: CO2=1, Methane = 21, Nitrous Oxide = 310 :**d) Considering originating credits:** Does not include.

CLOUD COMPUTING a) How emissions were avoided: Cloud computing concentrates computing and storage capacity in a centralized location where efficiency is optimized. Instead of customers running independent servers, cloud computing centralizes that function in a very efficient environment, reducing electricity use and its associated GHG emissions. **b) Estimation of Avoided emissions:** In 2011, AT&T worked again with the CDP to release a study 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, or enough to power 5.7 million cars for one year. **c) Methodology:** The estimates represent 2,653 firms generating revenues of more than \$1 billion in the U.S. The equivalencies calculations are 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. The methodology was developed in accordance with The GHG Protocol: Corporate Standard, utilizing emission factors from EPA guidance and Global Warming Potentials published in the IPCC Second Assessment Report. **Considering originating credits:** Does not include

TELECOMMUTING a) How emissions were avoided: Telecommuting is enabled by IP VPN Remote Access Service (RAS), as well as utilizing other Conferencing services. **b) Estimation of Avoided emissions:** The AT&T telecommuting program is also delivering reductions in travel based GHG emissions. The AT&T telecommuter population avoids 237 million commute miles per year, with annual fuel savings of approximately 11.8 million gallons and a net reduction of 104,000 metric tons of CO2-equivalents (CO2e) emissions per year. **c) Methodology:** When calculating these numbers, we used detailed survey data from our telecommuters, including such variables as commute distance, commute type (single rider, carpool, vanpool, etc.) and vehicle type/vintage. We also accounted for the "rebound effect," which means taking into account trips (e.g., errands, transporting kids to and from school, etc.) that would otherwise be included in the daily commute. The methodology was developed in accordance with The GHG Protocol: Corporate Standard, utilizing emission factors from EPA guidance and Global Warming Potentials published in the IPCC Second Assessment Report. **FLEET MANAGEMENT:** Fleet management solutions from AT&T

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enable increased vehicle efficiency. Increased efficiency can lead to reduced GHG emissions. **SMART GRID:** Smart grids depend on two-way communications between devices producing, distributing, and consuming electricity. At EOY12, AT&T provided the communications for 19 million smart meters.

3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)

YES
NO

3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings (only for rows marked *)
Under investigation	3330	
To be implemented*	1816	78754
Implementation commenced*	1650	139884
Implemented*	5659	308545
Not to be implemented	2879	

3.3b

For those initiatives implemented in the reporting year, please provide details in the table below You are requested to respond to this question in the table provided in the ORS, reproduced below. Note that this question only applies to initiatives that were implemented in the reporting year. Initiatives that were implemented in a previous reporting year should not be reported here.

Activity type	Description of activity	Estimated annual CO2e savings	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
Transportation: fleet	I and iv) Expected lifetime and Nature of activity: In 2009, we made a commitment to invest up to \$565 million to deploy approximately 15,000 alternative-fuel vehicles (AFVs) over a 10-year period through 2018. This initiative will help us address our Scope 1 emissions, for which we have an absolute goal: 20% reductions by 2020 (2008 baseline). By the end of 2012, AT&T had deployed 7,061 AFVs, including 5,226 CNG vehicles and 1,806 hybrid electric vehicles. AT&T has also deployed three all-electric vehicles (AEVs) and 26 extended range electric vehicles (EREVs). The 7,061 alternative-fuel vehicles in service at EOY12 will allow AT&T to avoid the purchase of more than 4 million gallons of unleaded gasoline in 2013 and each subsequent year they are in use. The number of gallons of unleaded gasoline avoided will continue to grow with every AFV deployment. ii) Scope: This is helping us to reduce Scope 1 emissions. iii) Mandatory/voluntary: We undertook these initiatives voluntarily.	22225		565000000	>3 years
Energy efficiency: building services	i) Nature of activity: Lighting retro fits – We conducted several lighting retro fits programs in 2012. Examples include: 1) Motion Sensor Replacement in Central Office space - \$10.7M annual savings 2) In 2012 we launched a program to replace T12 bulbs and ballasts throughout our buildings. Thus far we have completed replacements in over 300 buildings for an annualized savings of \$3.3M. 3) At cell sites, we replaced tower light controllers and incandescent bulbs with LEDs at 1,181 sites in 2011 and in 2012, we completed replacements at 1,045 additional sites. For 2013, we plan to complete another 450 sites. Our average annualized energy savings from these projects is 763 kWh (per site). ii) Scope: These will help address our Scope 2 emissions. iii) Voluntary/mandatory: We undertook these initiatives voluntarily. iv) Expected lifetime - Unknown	97402	14100000	22000000	1-3 years
Energy efficiency: building services	i) Nature of activity: Retro Commissioning – Retro-Commissioning is the quality-focused process to ensure that for existing facilities, building equipment and systems are operating at peak efficiency. Projects included retrofitting of existing equipment with variable frequency drives (VFD's), and other similar enhancements to use existing equipment in a more efficient manner. ii) Scope: These will help address our Scope 2 emissions. iii) Voluntary/mandatory: We undertook these initiatives voluntarily. iv) Expected lifetime - Unknown	28367	3900000	6000000	1-3 years
Energy efficiency: building services	i) Nature of activity: Cooling and heating – 1) Chiller efficiency projects –projects to replace inefficient chillers, 2) Projects to add improved controllers and install other efficiency components such as VFD with HVAC systems ii) Scope: These will help address our Scope 2 emissions. iii) Voluntary/mandatory: We undertook these	144005	19400000		

Activity type	Description of activity	Estimated annual CO2e savings	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
	initiatives voluntarily. iv) Expected lifetime – Unknown				
Low carbon energy installation	<p>i) Nature of activity: Fuel Cells – In 2012 we achieved 3.5 MW in total solar installations and in collaboration with Bloom Energy Corporation, we announced the installation of an additional 8.3 MW of clean, onsite fuel cell power. When fully operational these new Bloom fuel cell installations will provide a combined 17.1 MW helping to power 28 AT&T sites in California and Connecticut. ii) Scope: Bloom boxes will help address our Scope 2 emissions. iii) Mandatory/voluntary: We undertook this initiative voluntarily. iv) Expected lifetime: This new wave of Bloom Box installations will provide a combined 17.1 MW of clean, reliable, affordable onsite power that reduces CO2 emissions by approximately 50% compared to the grid and virtually eliminates all SOx, NOx, and other harmful smog forming particulate emissions.</p> <p>Once fully operational these Bloom Boxes are expected to produce 149 million kilowatt-hours (kWh) of energy annually—enough to power approximately 13,680 homes per year.</p>	113398			
Behavioral change	<p>i) Nature of activity: To promote accountability and drive results, we use an Energy Scorecard to benchmark the energy performance at each of our 1,000 largest energy-consuming facilities and 1,000 retail stores. The Scorecard reports energy management at each of these facilities, and we use this information to set benchmarks and goals for each facility. In addition, Scorecards report on projects and initiatives undertaken by the Energy Champions. The Scorecards are published monthly to all Energy Champions to enable them to see clearly how their energy use is trending. Quarterly, the Energy Team — headed by the Energy Director — reviews performances and gives each real estate manager a score for her or his efforts; determined by not only by savings results, but also by the types of initiatives attempted and training undertaken. The results have been incorporated into the annual performance objectives for real estate managers. ii) Scope type: The scorecard addresses primarily our Scope 2 emissions. iii) Voluntary/mandatory: We voluntarily implemented the scorecard iv) Expected lifetime: The Scorecard process was implemented in 2009 and will continue in coming years.</p>				<1 year
Energy efficiency: building fabric	<p>i) Nature of activity: Building and envelope and management systems: 1) Over 400 projects including Windows and Glazing, Power Factor Improvements, Set back thermostats and Shell upgrades.</p>	308,545	5080000	9700000	1-3 years

3.3c

What methods do you use to drive investment in emissions reduction activities?

Please respond to this question by completing the table in the ORS, reproduced below. It is intended to gather information on the ways in which capital is directed towards emissions reduction activities within the company, rather than the drivers for doing so, or the way in which activities are identified. If you utilize the copy from last year facility, please review your response to ensure that it is still appropriate to the reporting year and add any additional methods that you have employed.

Method	Comment
Dedicated budget for other emission reduction activities	In 2009, we made a commitment to invest up to \$565 million to deploy approximately 15,000 alternative-fuel vehicles (AFVs) over a 10-year period through 2018. By the end of 2012, AT&T had deployed 7,061 AFVs, including 5,226 CNG vehicles and 1,806 hybrid electric vehicles. AT&T has also deployed three all-electric vehicles (AEVs) and 26 extended range electric vehicles (EREVs). This will play role in attaining our Scope 1 reduction goal,
Dedicated budget for energy efficiency	AT&T has a dedicated Energy Director and team with a dedicated budget to implement energy efficiency projects. In 2012, we invested \$64 million in energy efficiency projects. We implemented 5,659 projects that totaled an annualized savings of \$65 million. We estimate that these projects will result in approximately 437 million kWh annualized energy savings.
Dedicated budget for low carbon project R&D	
Employee engagement	Employee engagement is important to our success and there are several ways we engage our employees on environmental issues – and energy savings in particular. Do One Thing (DOT) is a DOT is a voluntary company-wide effort that encourages employees to commit to regular, measurable actions (DOTs) that are good for themselves, their communities and/or the company. One category that they can and do focus on is environmental initiatives – which could include emissions savings efforts. We also communicate with employees about efforts underway at our company through our daily internal newsletter, AT&T Insider. We have seen this information inspire some employees to take further action in a wide range of areas, including, for example, by writing in to our Sustainability Inbox with recommendations and being more diligent about turning off their electronics at night.
Internal incentives/recognition programs	To promote accountability and drive results, we use an Energy Scorecard to benchmark the energy performance at our top 1,000 energy-consuming facilities and 1,000 retail locations. The Scorecard reports energy management at each of these facilities, and we use this information to set benchmarks and goals for each facility. In addition, Scorecards report on projects and initiatives undertaken by the Energy Champions. The Scorecards are published monthly to all Energy Champions for them to see clearly how their energy use is trending. Quarterly, the Energy Team — headed by the Energy Director — reviews performances and gives each real estate manager a score for her or his efforts; determined by not only by savings results, but also by the types of initiatives attempted and training undertaken. The results have been incorporated into the annual performance objectives for real estate managers.
Financial Optimization Calculations	

Method	Comment
Internal price of carbon	
Internal finance mechanisms	
Lower return on investment (ROI) specification	
Marginal abatement cost curve	
Partnering with governments on technology developments	
Other	<p>We collaborate with others in the industry to develop more efficient products. We are involved in the Green Grid, a global consortium dedicated to advancing energy efficiency in data centers and business computing ecosystems. We are also a member and Chairman of the Board of Directors of the Alliance for Telecommunication Industry Solutions (ATIS), the North American telecommunications standards development organization and we also initiated and now chair the Telecommunications Energy Efficiency (TEE) committee, which developed a methodology for measuring and reporting the energy efficiency of telecommunications equipment.</p> <p><u>AT&T participates in the ENERGY STAR program for set-top boxes, in connection with its U-verse pay-TV offering. This voluntary program sets and periodically updates best-in-class efficiency standards, encouraging participants to continually increase the efficiency of their equipment. All of AT&T's U-verse set-top boxes have met ENERGY STAR standards since the program went into effect. AT&T is a member of the ENERGY STAR Set Top Box working group. The working group helps promote energy efficiency standards of set-top boxes.</u></p> <p>In December 2012, AT&T was one of 15 industry-leading multichannel video providers and device manufacturers that deliver service to more than 90 million American households who launched an unprecedented Set-Top Box Energy Conservation Agreement that will result in annual residential electricity savings of \$1.5 billion or more as the commitment is fully realized. The Consumer Electronics Association (CEA) and National Cable & Telecommunications Association (NCTA) are industry groups involved in the initiative. As of year-end 2012, all of the new set-top boxes that AT&T installs are 100% compliant with the latest ENERGY STAR standard.</p>

3.3d

If you do not have any emissions reduction initiatives, please explain why not

Page: 4. Communication

4.1

Have you published information about your company's response to climate change and GHG emissions performance for this reporting year in other places than in your CDP response? If so, please attach the publication(s)

UPDATE ATTACHMENTS

Publication	Page/Section Reference	Identify the attachment
In voluntary communications (complete)	Issue Brief (2012Sustainability Report)	XX
In voluntary communications (complete)	www.att.com/csr	XX

Attachments

ATTACH IN MODULE

Module: Risks and Opportunities [Investor]

Page: 2012-Investor-Risks&Opps-ClimateChangeRisks

5.1

Have you identified any climate change risks (current or future) that have potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

5.1a

Please describe your risks driven by changes in regulation

You are asked to complete your response in the table provided in the ORS. The table is reproduced below and guidance on completing the columns follows. If you are using the copy from last year functionality please ensure that you review the data to ensure that it remains appropriate. You can make multiple entries into the table, using the “Add row” button to the bottom right.

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
ATT3	Fuel/energy taxes and regulations	AT&T operates one of the largest corporate fleets in the nation. Therefore, we are impacted by fuel prices. We also demand energy to power the network and our operations. While we are making improvements in the efficiency of our operations and fleet, fuel/energy taxes and regulations could impact our company.	Increased operational cost	1-5 years	Direct	More likely than not	Medium
ATT4	Carbon taxes	AT&T participates in the UK’s Carbon Reduction Commitment (CRC). The CRC Energy Efficiency Scheme is a mandatory emissions trading scheme targeting carbon emissions from large business and public sector organizations. AT&T is therefore required to participate and must purchase sufficient allowances to cover our emissions in the UK.	Increased operational cost	Current	Direct	Certain	Low
ATT4	Carbon taxes	AT&T participates in the European Union Emissions Trading System (EU ETS) for Aviation Operators. The EU emissions trading system (EU ETS) is a cornerstone of the European Union’s policy to combat climate change and its key tool for reducing industrial greenhouse gas emissions. Beginning in	Increased operational cost	Current	Direct	Certain	Low

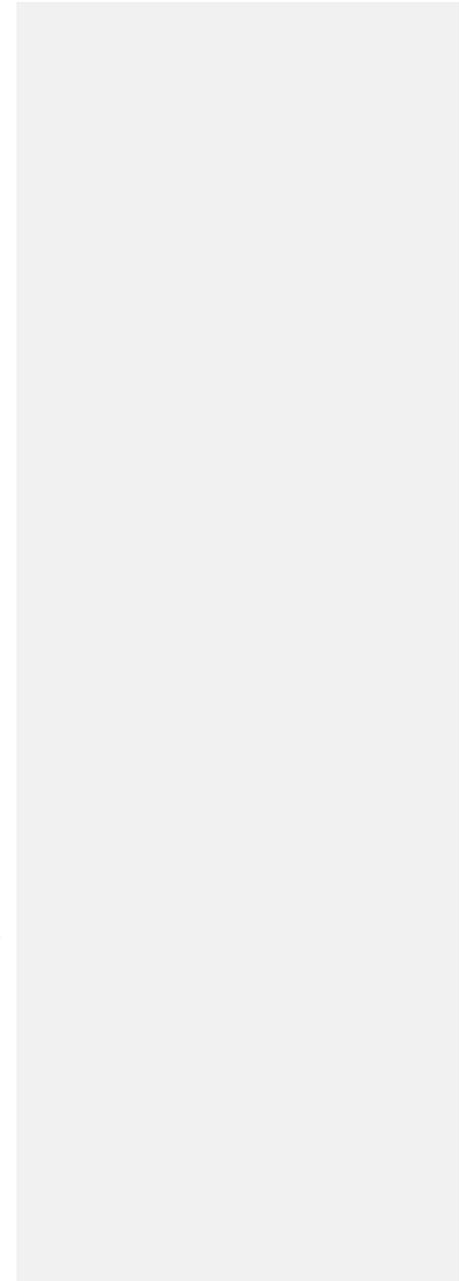
ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		2012, emissions from international aviation are included. AT&T is therefore required to participate and must purchase sufficient allowances to cover our flight operations emissions in the EU.					
ATT5	General environmental regulations, including planning	AT&T owns a substantial real estate portfolio in California. Projects to retrofit these buildings are significantly impacted in terms of cost and schedule by the energy efficiency standards set forth in the Title 24 California Building Code. Planned regulation in California will make these standards increasingly more stringent.	Increased operational cost	Current	Direct	Very likely	Low-medium
	International agreements						
	Air pollution limits						
	Cap and trade schemes						
	Emission reporting obligations						
	Product efficiency regulations and standards						
	Product labeling regulations and standards						
	Voluntary						

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
	agreements						
	General environmental regulations, including planning						
	Renewable energy regulation						
	Uncertainty surrounding new regulation						
	Lack of regulation						
	Other regulatory drivers						

5.1b

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

- i) Potential financial implications of the risk before taking action**



FUEL/ENERGY TAXES & REGULATIONS: We are working to insulate ourselves from increasing energy and fuel price increases, but if we were not taking these actions, taxes on energy and fuel would likely caused cost increases, which would impact our bottom line more than if we had not taken action. It is not possible to calculate the exact implications at this time without knowing the specifics about regulations. We do know that if we had not taken steps to manage our energy consumption and the price of electricity were increased by 1% in 2012, we would have incurred an additional \$78 million \$0.05/kWh in 2012, we would have incurred an additional \$64 million in annual energy costs.

CARBON TAXES: The cost of not complying with the EU ETS would be up to \$205k for each year of non-compliance. The cost of not complying with the CRC would be up to \$700k for each year of non-compliance.

GENERAL ENVIRONMENTAL REGULATIONS, INCLUDING PLANNING: It's difficult to calculate the exact costs, but the costs of non-compliance could easily exceed \$1 million.

ii) **Methods to manage risk**

FUEL/ENERGY TAXES & REGULATIONS: We have a strong energy management program and fleet initiative to address risks related to rising energy and fuel prices caused by regulation.

Energy

Dedicated full-time to energy management, AT&T has an energy director who oversees AT&T's company-wide efforts across all business units. He leads AT&T's Energy Council as well as a dedicated eleven-member Energy Team who also works full-time to oversee thousands of energy projects, analyze and collect data, and track progress and goals. Working with the Energy Team are 13 regional energy leads who work with 229 Energy Champions. These Champions are largely real estate managers and network operators that are on the ground and implementing energy management efforts. They are also held accountable for their performance and expected to achieve progress. To do that the Energy Team has implemented an Energy Scorecard to benchmark the energy performance at each of our 2,000 largest energy-consuming facilities. The Scorecard reports energy management at each of these facilities, and we use this information to set benchmarks and goals for each facility. In addition, Scorecards report on projects and initiatives undertaken by the Energy Champions. The Scorecards are published monthly to all Energy Champions for them to see clearly how their energy use is trending. Quarterly, the Energy Team — headed by the Energy Director — reviews performances and gives each real estate manager a score for her or his efforts; determined by not only by savings results, but also by the types of initiatives attempted and training undertaken. The results have been incorporated into the annual performance objectives for real estate managers. In 2012, we implemented 5,659 projects that totaled an annualized savings of \$65 million. Our efforts include:

- Cooling & Heating: 212,222,672 kWh
- Lighting: 169,525,150 kWh
- Building & Envelope & Management Systems: 55,636,336 kWh

Fuel

AT&T operates more than 71,000 vehicles, one of the largest corporate fleets in the nation. Promoting efficiency for our fleet is a challenge, and we're taking steps to manage it. In 2009, we made a commitment to invest up to \$565 million to deploy approximately 15,000 alternative-fuel vehicles (AFVs) over a 10-year period through 2018. As of year-end 2012, AT&T had deployed a cumulative total of 7,061 alternative fuel vehicles (AFVs), with more than 5,200 CNG vehicles, and over 2,600 of those vehicles in California.

[ATT4] **CARBON TAXES:** AT&T participates in the UK's Carbon Reduction Commitment and the European Union's Emissions Trading System.

[ATT5] **GENERAL ENVIRONMENTAL REGULATIONS, INCLUDING PLANNING:** We are working to be in compliance with new regulations.

iii) **COSTS**

[ATT3] **FUEL/ENERGY TAXES & REGULATIONS:**

Energy

We invested \$64 million in energy efficiency projects in 2012. From our efforts we saved \$65 million in annualized energy savings.

Fuel

From 2009 through 2018 we expect to invest \$565 million in alternative fuel vehicles. As part of that investment, AT&T expects to spend an estimated \$350

million to purchase up to 8,000 CNG vehicles and approximately \$215 million over a 10-year period through 2018 to replace gas-powered passenger cars with alternative fuel models. According to a 2009 study conducted by the Center for Automotive Research in Ann Arbor, MI, as planned we would avoid the purchase of about 49 million gallons of gasoline over the life of the commitment.

[ATT4] **CARBON TAXES:** The cost of allowances for the CRC was approximately \$200k.

[ATT5] **GENERAL ENVIRONMENTAL REGULATIONS, INCLUDING PLANNING:** It is difficult to calculate the exact costs, but they could easily exceed \$1 million.

5.1c

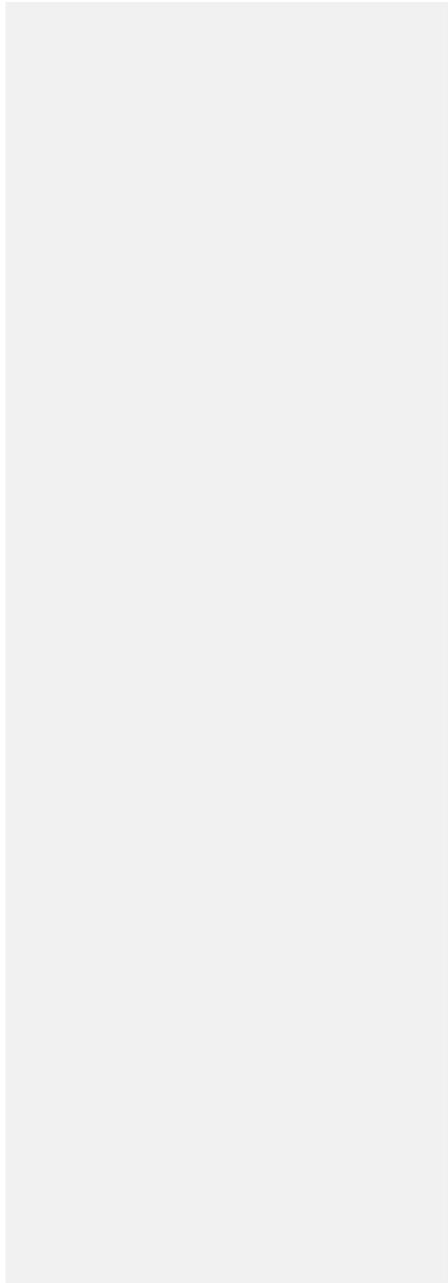
Please describe your risks that are driven by change in physical climate parameters

You are asked to complete your response in the table provided in the ORS. The table is reproduced below and guidance on completing the columns follows. If you are using the copy from last year functionality please ensure that you review the data to ensure that it remains appropriate.

You can make multiple entries into the table, using the “Add row” button to the bottom right.

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
ATT6	Change in temperature extremes	Changes in temperature extremes have an impact on our energy use. Every time AT&T ramps up cooling or heating systems quickly, it takes more energy than if the systems remained steady or increased/decreased incrementally. In addition, temperature extremes cause increased stress on the electricity grid, which forces AT&T to run its engines more, releasing more GHG emissions.	Increased operational cost	Current	Direct	About as likely as not	Low-medium
ATT7	Change in mean (average) temperature	Fluctuations in temperatures make it difficult to predict energy needs for the year. In addition, this sometimes causes increased stress on the electricity grid, which forces AT&T to run its engines more, releasing more GHG emissions.	Increased operational cost	Current	Direct	About as likely as not	Low-medium
ATT8	Uncertainty of physical risks	We're in the business of providing communications services to customers. Climate related natural disasters – such as extreme snow/ice, hurricanes and flooding – can impact infrastructure, disrupting service to customers. Unpredictability of climate-related natural disasters presents challenges, but our NDR group is trained to deal with these types of issues.	Inability to do business	Current	Direct	About as likely as not	Medium
	Change in mean (average) precipitation						

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
	Change in precipitation pattern						
	Change in precipitation extremes and droughts	In 2012, we used 3.3 billion gallons of water in our operations. A good percentage of our water use is in our facility cooling systems to cool our technology-intensive facilities – like data centers. Extreme drought that leads to water shortages could compromise our ability to effectively cool our facilities and push us to use more energy, which will drive up our costs and emissions.	Increased operational cost	Current	Direct	About as likely as not	Low-medium
	Snow and ice						
	Sea level rise						
	Tropical cyclones (hurricanes)						
	Induced changes in natural resources						
	Uncertainty of physical risks						
	Other physical						



ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
	climate drivers						

5.1d

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

- i) **Potential financial implications of the risk before taking action**
 [ATT6] **CHANGES IN TEMPERATURE EXTREMES:** We have a strong energy management program, but when temperatures are extreme, our need for energy to cool and heat our facilities increases, which makes our energy costs rise, impacting our bottom line. Also, when the grid is strained we sometimes help by using our engines and generators to power our own operations, thereby lowering the demands on the utility providers. This helps reduce electricity costs for consumers by helping to minimize the need for power companies to make incremental investments in new power plants, which could adversely impact pricing. The exact financial implications vary depending on the degree to which the temperatures change so it's not possible to state.
 [ATT8] **CHANGES IN MEAN (AVE) TEMPERATURES:** Changes in average temperatures could make energy predictions more variable. This can throw off our energy use patterns and potentially increase costs if we're not adequately prepared to handle it. If there is an increase or decrease in the average temperature over the long run, this could also impact our energy costs by requiring more energy to heat and cool. The exact financial implications of temperature increases are difficult to calculate but if we assume that Cooling Degree Days (CDD) increased an average of 5 percent, and we further assumed that there was a resulting increase of 5 percent in demand for electricity, this would equate to an increased annual energy cost of over \$66 million.
 [ATT9] **UNCERTAINTY OF PHYSICAL RISKS:** We're in the business of providing communications services to customers. Climate related natural disasters – such as extreme snow/ice, hurricanes and flooding – can impact infrastructure, disrupting service to customers. Unpredictability of climate-related natural disasters presents challenges, but our NDR group is trained to deal with these types of issues. It's difficult to calculate the financial implications of this risk because it is uncertain.
CHANGE IN PRECIPITATION EXTREMES AND DROUGHTS: If we had to change 50% of our top water sites from water cooled chillers to air cooled chillers, the increased energy costs would be over \$17 million a year.

- ii) **Methods to mitigate risk**
 [ATT7] AND [ATT8] **CHANGES IN TEMPERATURE EXTREMES and CHANGES IN MEAN (AVE) TEMPERATURES:** To mitigate risks associated with energy we have a strong energy management program. Dedicated full-time to energy management, AT&T has an energy director who oversees AT&T's company-wide efforts across all business units. He leads AT&T's Energy Council as well as a dedicated twelve -member Energy Team who also works full-time to oversee thousands of energy projects, analyze and collect data, and track progress and goals. Working with the Energy Team are 13 regional energy leads who work with 229 Energy Champions. These Champions are largely real estate managers and network operators that are on the ground and implementing energy management efforts. They are also held accountable for their performance and expected to achieve progress. To do that the Energy Team has implemented an Energy Scorecard to benchmark the energy performance at each of our 2,000 largest energy-consuming facilities. The Scorecard reports energy management at each of these facilities, and we use this information to set benchmarks and goals for each facility. In addition, Scorecards report on projects and initiatives

undertaken by the Energy Champions. The Scorecards are published monthly to all Energy Champions for them to see clearly how their energy use is trending. Quarterly, the Energy Team — headed by the Energy Director — reviews performances and gives each real estate manager a score for her or his efforts; determined by not only by savings results, but also by the types of initiatives attempted and training undertaken. In 2012, we implemented 5,659 projects that totaled an annualized savings of \$65 million. Projects and savings included in this effort are as follows:

- Cooling & Heating: 212,222,672 kWh
- Lighting: 169,525,150 kWh
- Building & Envelope & Management Systems: 55,636,336 kWh

[ATT9] UNCERTAINTY OF PHYSICAL RISKS: To manage network reliability, in 2012, we invested more than \$20 billion in capital expenditures and spectrum purchases to expand and upgrade our network capabilities, and, in November of 2012, we announced Project Velocity IP (VIP), a three-year 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. A critical element of our efforts to maximize network reliability is our ability to swiftly respond when disaster strikes. Through our NDR organization, we bring unmatched resources to help ensure the flow of both wireless and wired communications during times of need, all backed by centralized command and control designed to ensure maximum effectiveness and efficiency. We have invested more than \$600 million in our NDR program, which includes specially trained managers, engineers, and technicians from across the United States, as well as a fleet of more than 320 self-contained equipment trailers and support vehicles that house the same equipment and components as our data-routing or voice-switching centers. We monitor and maintain our networks 24/7 and conduct several readiness drills throughout the year to help ensure that our networks and personnel are prepared to respond quickly. When disaster strikes, our technicians and employees work around the clock to keep the network up and running. Employees have spent a cumulative of 125,000 working hours on Network Disaster Recovery.

CHANGE IN PRECIPITATION EXTREMES AND DROUGHTS: From a company-wide water audit we know that top 125 water-consumer facilities constitute almost 50 percent of our overall water consumption. At these facilities we have instituted a water scorecard to track our water use. From the scorecard we know that cooling systems account for the biggest percentage of our water use. Therefore, in 2012 we teamed up with the Environmental Defense Fund to undergo a project of reducing water use in cooling systems – specifically cooling towers. Well into 2013, the project is still underway but shows promising results that can be deployed not only across the company, but across commercial facilities nation-wide.

ii) **Costs associated with managing risks:**

[ATT7] AND [ATT8] CHANGES IN TEMPERATURE EXTREMES and CHANGES IN MEAN (AVE) TEMPERATURES: To implement energy efficiency projects that help mitigate exposure to spikes in energy costs, we invested \$64 million in energy efficiency projects in 2012. From our efforts we saved \$65 million in annualized energy savings.

[ATT9] UNCERTAINTY OF PHYSICAL RISKS: To prepare to respond to natural disasters and help mitigate associated risks, we have invested more than \$600 million in our NDR program.

CHANGE IN PRECIPITATION EXTREMES AND DROUGHTS: To date the costs associated with managing our water use have primarily been people-hours. However, from our work with EDF we're finding that implementation of new technologies could increase our efficiency and use of different chemicals. To deploy these technologies in our most drought-prone regions will cost between \$1.5 and \$5 million.

5.1e

Please describe your risks that are driven by changes in other climate-related developments

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
ATT10	Reputation	Our stakeholders, including business customers, investors, advocacy organizations and analysts, are asking about the company's ability to manage climate related issues such as energy and GHG emissions. We communicate our sustainability efforts through a wide-range of outlets, such as an annual sustainability report, a sustainability website, the media, conferences and events and in direct communications. We also reply to several surveys from investors, analysts and our customers.	Other: Competitive disadvantage	Current	Direct	More likely than not	Low-medium
ATT11	Other drivers	Volatile cost of fuel and energy, caused by market fluctuations outside of regulation could impact our business.	Increased operational cost	Current	Direct	More likely than not	Low-medium
	Changing consumer behavior						
	Induced changes in human and cultural environment						
	Fluctuating socio-economic conditions						
	Increasing humanitarian demands						

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
	Uncertainty in social drivers						
	Uncertainty in market signals						

5.1f

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; (iii) the costs associated with these actions

i) **Financial implications before taking action**

[ATT10] **REPUTATION:** If we did not take action to build and communicate our sustainability story – particularly as it relates to climate related issues such as the management of GHG emissions - this could put us at a competitive disadvantage. We believe the risk of financial impact is low, but this risk could impact our profitability in the long term. It's not possible to precisely quantify the amounts.

[ATT11] **OTHER DRIVERS:** If we did not take steps to manage our energy consumption, we could be further impacted financially by volatility in the price of energy and fuel. We do know that if we had not taken steps to manage our energy consumption and the price of electricity were increased by **1% in 2012, we would have incurred an additional \$78 million** ~~by \$0.05/kWh in 2012, we would have incurred an additional \$64 million~~ in annual energy costs.

ii) **Methods to manage risk**

[ATT10] **REPUTATION:** We take sustainability and corporate responsibility very seriously and communicate our efforts through a wide-range of outlets, such as an annual sustainability report, a sustainability website, surveys, the media, conferences and events and in direct communications.

[ATT11] **OTHER DRIVERS:** To mitigate risks associated to energy use, we have a strong energy program. Dedicated full-time to energy management, AT&T has an energy director who oversees AT&T's company-wide efforts across all business units. He leads AT&T's Energy Council as well as a dedicated twelve -member Energy Team who also works full-time to oversee thousands of energy projects, analyze and collect data, and track progress and goals. Working with the Energy Team are 13 regional energy leads who work with 229 Energy Champions. These Champions are largely real estate managers and network operators that are on the ground and implementing energy management efforts. They are also held accountable for their performance and expected to achieve progress. To do that the Energy Team has implemented an Energy Scorecard to benchmark the energy performance at each of our 2,000 largest energy-consuming facilities. The Scorecard reports energy management at each of these facilities, and we use this information

to set benchmarks and goals for each facility. In addition, Scorecards report on projects and initiatives undertaken by the Energy Champions. The Scorecards are published monthly to all Energy Champions for them to see clearly how their energy use is trending. Quarterly, the Energy Team — headed by the Energy Director — reviews performances and gives each real estate manager a score for her or his efforts; determined by not only by savings results, but also by the types of initiatives attempted and training undertaken. The results have been incorporated into the annual performance objectives for real estate managers. In 2012 we implemented 5,659 projects that totaled an annualized savings of \$65 million

iii) Costs associated with these actions

[ATT10] **REPUTATION:** Sustainability and corporate responsibility are part of our business strategy, so there is zero additional cost.

[ATT11] **OTHER DRIVERS:** In 2012 we invested \$64 million to implement 5,659 energy efficiency projects that totaled an annualized energy savings of \$65 million.

5.1g

Please explain why you do not consider your company to be exposed to risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

5.1h

Please explain why you do not consider your company to be exposed to risks driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

5.1i

Please explain why you do not consider your company to be exposed to risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

6.1

Have you identified any climate change opportunities (current or future) that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

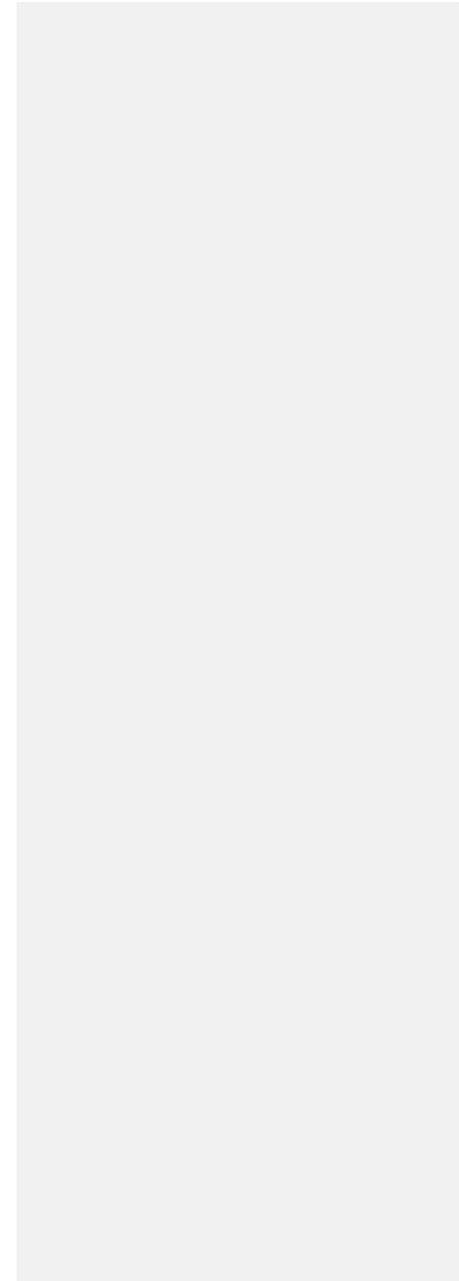
- Opportunities driven by changes in regulation
- Opportunities driven by changes in physical climate parameters
- Opportunities driven by changes in other climate-related developments

6.1a

Please describe your opportunities that are driven by changes in regulation

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
ATT12	Fuel/energy taxes and regulations	Information and Communication Technology (ICT) solutions — comprising hardware, software, and broadband technologies such as those provided by AT&T — have the ability to enable people and businesses to make more energy-efficient choices and reduce environmental impact and costs should regulations push up energy or fuel prices. This could drive up demand for AT&T's products and services. Examples of AT&T products include cloud computing, telepresence, fleet management technology, and VPN technology.	Increased demand for existing products/services	1-5 years	Direct	About as likely as not	Low-medium
	International agreements						
	Air pollution limits						
	Carbon taxes						

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
	Cap and trade schemes						
	Emission reporting obligations						
	Product efficiency regulations and standards						
	Product labeling regulations and standards						
	Voluntary agreements						
	General environmental regulations, including planning						
	Renewable energy regulation						
	Other regulatory						



ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
	drivers						

6.1b

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

i) Potential Financial Implications of opportunity

[ATT12] **FUEL/ENERGY TAXES & REGULATIONS:** If we are able to capture the opportunity related to increased demands for products and services that enable others to reduce their emissions, it could mean increased revenue for us. For strategic business services, which include the next-generation networking capabilities that lead AT&T's most advanced communications solutions for business customers including VPNs, Ethernet, hosting, IP conferencing, VoIP, MIS over Ethernet, U-verse and security services, [we realized almost \\$7.4B in revenue in 2012](#). It is impossible to predict potential revenue for unknown taxes or regulations, but if we assume that such regulation were to drive a 2 percent increase in the sales of these strategic business services, we could estimate that annual revenue could increase by almost \$150 million.

ii) Methods used to manage opportunity

[ATT12] **FUEL/ENERGY TAXES & REGULATIONS:** In order to promote our products as enabling emissions reduction we first need to calculate and communicate what those are. We have appointed an individual to be specifically in charge of sustainability on our Business Marketing and Global Strategy team. She and the team are working to quantify and promote the potential benefits of AT&T technology. We have taken several steps toward this goal.

Carbon Impact Assessment Tool

AT&T has 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. AT&T is the first communications provider to offer such a tool for businesses.

AT&T Business Sustainability Advisory Council

The AT&T Business Sustainability Advisory Council – established in 2009 – aims to better quantify the carbon benefits of our products and services and to help businesses make smarter sustainability investments. The Council advises AT&T on identifying the best measurement tools, methodologies, and technology-use that business customers can call on to better quantify the impact of ICT-enabled solutions for greenhouse gas reduction. 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.

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 (EEIOCG), Alliance for Telecommunication Industry Solutions (ATIS), and others).

Research

In 2011, we worked with the Carbon Disclosure Project (CDP) to quantify the economic and environmental benefits of broadband and cloud computing. We

sponsored, and Verdantix conducted, the CDP's study, "Cloud Computing: The IT Solution for the 21st Century." It found that large U.S. companies that use cloud computing can achieve annual economy-wide energy savings of \$12.3 billion and annual carbon reductions equivalent to 200 million barrels of oil, or enough to power 5.7 million cars for one year.

In 2011, we also continued efforts to quantify the benefits of travel substitution technologies. The previous year, we had sponsored a study by CDP and Verdantix, "The Telepresence Revolution" that found that large U.S. firms with revenues of more than \$1 billion could 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. In 2011, rolled out the AT&T Carbon Emissions Calculator tool, which helps businesses calculate the GHG emission savings, the financial cost savings, and productivity and collaboration gains from using travel substitution technology.

iii) Costs associated with the actions

[ATT12] **FUEL/ENERGY TAXES & REGULATIONS:** The costs associated with pursuing this opportunity are part of our business plan and have zero additional cost.

6.1c

Please describe the opportunities that are driven by changes in physical climate parameters

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
ATT13	CHANGE IN MEAN (AVE) TEMPERATURES CHANGE IN TEMPERATURES CHANGE IN MEAN (AVE) PRECIPITATION CHANGE IN PARTICIPATION PATTERN CHANGE IN PARTICIPATION EXTREMES AND DROUGHTS SNOW AND ICE INDUCED CHANGES IN NATURAL RESOURCES OTHER PHYSICAL	Physical risks – associated with weather, a pandemic, or otherwise – often require collaboration in state and local government sectors. Collaboration allows agencies to maintain the understanding of local, state and national news and events. AT&T offers products and services that can assist this collaboration across geographies. AT&T Telepresence Solution®, for example, connects individuals physically separated across a building, city, state or nation serving as the medium for planning, response and recovery actions. Supporting public safety efforts such as disaster and pandemic response or carrying out essential training and events, telepresence allows individuals to still see eye-to-eye when physical face-to-face communication is not possible.	Increased demand for existing products/services	Current	Direct	About as likely as not	Low

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
	OPPORTUNITIES						

6.1d

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

i) Potential financial implications of opportunity

[ATT13] **OTHER CLIMATE CHANGE DRIVERS:** If extreme weather events increased demand for our products and services that can assist with connectivity during times of disaster, this could increase our revenue. For strategic business services, which include the next-generation networking capabilities that lead AT&T's most advanced communications solutions for business customers including VPNs, Ethernet, hosting, IP conferencing, VoIP, MIS over Ethernet, U-verse and security services, [we realized almost \\$7.4B in revenue in 2012](#). It is impossible to predict potential revenue for unknown severe weather or disaster, but if we assume that such weather or disaster events were to drive a 2% increase in the sales of these strategic business services, we could estimate that annual revenue could increase by almost \$150M.

ii) Methods used to manage opportunity

[ATT13] **OTHER CLIMATE CHANGE DRIVERS:** In order to take advantage of this opportunity, we actively communicate with government agencies and other groups that might need services during times of disaster. They are aware of our products offerings should they need them. AT&T outlines our State and Local Government Solutions online at www.corp.att.com/stateandlocal/unified_communications.html. AT&T also has compiled a telepresence solution Handbook, "When Time Matters Most: A State and Local Government Guide to Staying Connected in Times of Crisis." It outlines various scenarios related to crisis situations and recommends ways that AT&T can help.

iii) Costs associated with actions

[ATT13] **OTHER CLIMATE DRIVERS:** There are zero additional costs associated with this opportunity, as promoting products and services are part of our business operations.

6.1e

Please describe the opportunities that are driven by changes in other climate-related developments

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
ATT14	Changing consumer behavior	(Note: while consumers generally mean the general public, we also mean business customers in our response.) As consumers' expectations increase for companies to operate sustainably, they are also looking for companies to provide products and services that enable them to operate responsibly, such as products that can help them reduce their GHG emissions. AT&T offers products and services that can do this – such as technologies that enable people to work remotely. If we can take advantage of increased demand for these products and services, we believe this poses an opportunity for us to differentiate ourselves and establish a competitive advantage.	Increased demand for existing products/services	Current	Direct	About as likely as not	Low
	Reputation						
	Induced changes in human and cultural environments						
	Fluctuating socio-economic conditions						
	Increasing humanitarian demands						
	Other drivers						

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

i) Potential financial implications of this opportunity

[ATT14] **CHANGING CONSUMER BEHAVIOR:** Taking advantage of the increasing demand for products and services that enable others to reduce their emissions could open up additional areas of revenue for us. For strategic business services, which include the next-generation networking capabilities that lead AT&T's most advanced communications solutions for business customers including VPNs, Ethernet, hosting, IP conferencing, VoIP, MIS over Ethernet, U-verse and security services, [we realized almost \\$7.4B in revenue in 2012](#). It is impossible to predict potential revenue opportunity if consumers demand for products that promote sustainability, but if we assume that such demand were to drive a 2 percent increase in the sales of these strategic business services, we could estimate that annual revenue could increase by almost \$150 million.

ii) Methods to manage risk

[ATT14] **CHANGING CONSUMER BEHAVIOR:** We are working to quantify potential environmental benefits enabled by our technology. We have appointed people in the marketing team and mobility teams to focus on sustainability.

We have appointed an individual to be specifically in charge of sustainability on our Business Marketing and Global Strategy team. She and the team are working to quantify and promote the potential benefits of AT&T technology. We have taken several steps toward this goal.

Carbon Impact Assessment Tool

AT&T has a 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. AT&T is the first communications provider to offer such a tool for businesses.

AT&T Business Sustainability Advisory Council

The AT&T Business Sustainability Advisory Council – established in 2009 – aims to better quantify the carbon benefits of our products and services and to help businesses make smarter sustainability investments. The Council advises AT&T on identifying the best measurement tools, methodologies, and technology-use that business customers can call on to better quantify the impact of ICT-enabled solutions for greenhouse gas reduction. 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.

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 (EEIOCG), Alliance for Telecommunication Industry Solutions (ATIS), and others).

Research

In 2011, we worked with the Carbon Disclosure Project (CDP) to quantify the economic and environmental benefits of broadband and cloud computing. We sponsored, and Verdantix conducted, the CDP's study, "Cloud Computing: The IT Solution for the 21st Century." It found that large U.S. companies that use cloud computing can achieve annual economy-wide energy savings of \$12.3 billion and annual carbon reductions equivalent to 200 million barrels of oil, or enough to power 5.7 million cars for one year.

In 2011, we also continued efforts to quantify the benefits of travel substitution technologies. The previous year, we had sponsored a study by CDP and Verdantix, "The Telepresence Revolution" that found that large U.S. firms with revenues of more than \$1 billion could 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. In 2011, rolled out the AT&T Carbon Emissions Calculator tool, which helps businesses calculate the GHG gas emission savings, the financial cost savings, and productivity and collaboration gains from using travel substitution technology.

AT&T Consulting Services

AT&T Consulting provides a spectrum of business and infrastructure services which help build competitive advantage, meet compliance requirements, and optimize IT performance. Many of their services have direct or indirect sustainability benefits through the reduction of energy and carbon emissions. This provides ongoing and global business opportunities for us, as companies seek to address risks and embrace opportunities posed by environmental risk.

iii) Costs associated with these actions

[ATT14] CHANGING CONSUMER BEHAVIOR: Addressing increased demands related to products and services that enable emissions reductions is part of our business model, so there is zero additional cost.

6.1g

Please explain why you do not consider your company to be exposed to opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

6.1h

Please explain why you do not consider your company to be exposed to opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

6.1i

Please explain why you do not consider your company to be exposed to opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Tue 01 Jan 2008 - Thu 01 Jan 2009	1172476	7904886

7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Climate Leaders: Direct HFC and PFC Emissions from Use of Refrigeration and Air Conditioning Equipment ¹
US EPA Climate Leaders: Indirect Emissions from Purchases/ Sales of Electricity and Steam ¹
US EPA Climate Leaders: Direct Emissions from Stationary Combustion ¹

7.2a

If you have selected "Other", please provide details below

7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Second Assessment Report (SAR - 100 year)
CH4	IPCC Second Assessment Report (SAR - 100 year)
N2O	IPCC Second Assessment Report (SAR - 100 year)
HFCs	IPCC Second Assessment Report (SAR - 100 year)

7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data

Fuel/Material/Energy	Emission Factor	Unit	Reference
Other: Steam	195.19	lbs CO2e/MMBTU	US EIA Form EIA-1605, Appendix N. Emission Factors for Steam and Chilled/Hot Water
Natural gas	117.00	lb CO2e per million BTU	US EPA MRR Final Rule (40 CFR 98) – Tables C1 and C2
Propane	12.37	lb CO2e per gallon	US EPA MRR Final Rule (40 CFR 98) – Tables C1 and C2
Other: Fuel oil	22.58	lb CO2e per gallon	US EPA MRR Final Rule (40 CFR 98) – Tables C1 and C2
Other: Flight operations	21.57	lb CO2e per gallon	US EPA MRR Final Rule (40 CFR 98) – Tables C1 and C2
Electricity		lb CO2e per MWh	US EPA eGRID2012 (year 2009 version 1.0; emission factor values correspond to the eGRID subregion in which the facility operation resides. International emission factors: WRI/ WBCSD GHG Protocol. International Energy Agency Data Services. 2012 – Year 2010. "CO2 Emissions from Fuel Combustion"
Other: Fleet		lb CO2e per gallon	US EPA MRR Final Rule (40 CFR 98) – Tables C1 and C2

8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

8.2a

Please provide your gross global Scope 1 emissions figure in metric tonnes CO2e

948441

8.2b

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e - Part 1 breakdown

Boundary	Gross global Scope 1 emissions (metric tonnes CO2e)	Comment
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8.2c

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e - Part 1 Total

Gross global Scope 1 emissions (metric tonnes CO2e) – Part 1 Total	Comment
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8.2d

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e - Part 2

Boundary	Gross global Scope 1 emissions (metric tonnes CO2e)	Comment
----------	---	---------

8.3a

Please provide your gross global Scope 2 emissions figure in metric tonnes CO2e

7894626

8.3b

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 1 breakdown

Boundary	Gross global Scope 2 emissions (metric tonnes CO2e)	Comment
----------	---	---------

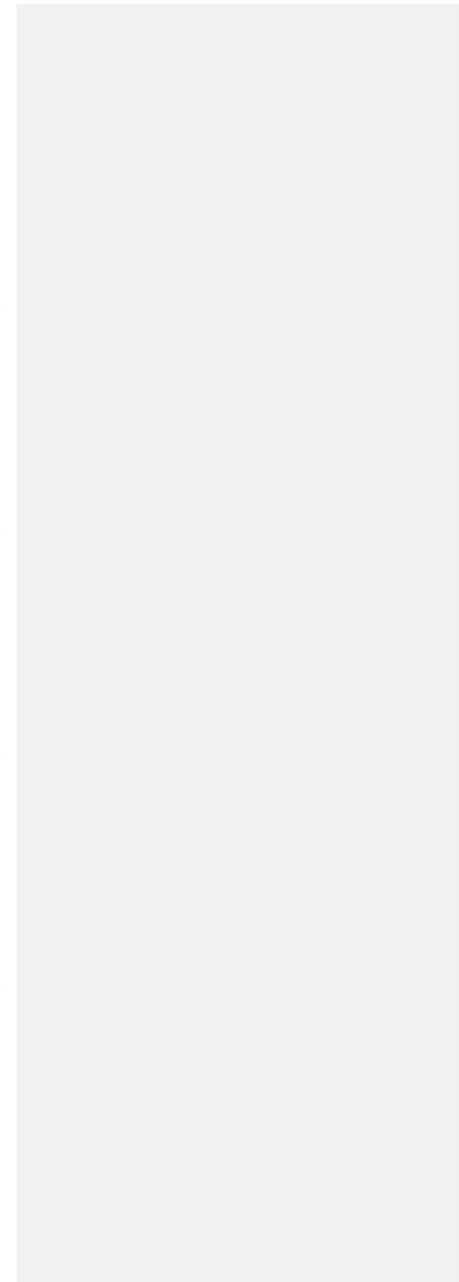
8.3c

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 1 Total

Gross global Scope 2 emissions (metric tonnes CO2e) - Total Part 1	Comment
--	---------

8.3d

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 2



Boundary	Gross global Scope 2 emissions (metric tonnes CO2e) - Other operationally controlled entities, activities or facilities	Comment
----------	---	---------

8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions which are not included in your disclosure?

8.4a

Please complete the table

Reporting Entity	Source	Scope	Explain why the source is excluded
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8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions which are not included in your disclosure?

Yes

8.4a

Please complete the table

Source	Scope	Explain why the source is excluded
Ground Equipment for Flight Operations	Scope 1	A very limited number of pieces of powered ground equipment are utilized in conjunction with our flight operations. The impact was deemed too small to measure given the overall scale of the carbon inventory.
Refrigerant for Mobility Operations	Scope 1	Sufficient data or information to develop an estimation of the Scope 1 greenhouse gas emissions produced from refrigerant usage within our mobility operations, specifically related to HVAC systems at cell sites, was not available and was not estimated. Processes are being put in place to include estimates for these operations in future reports.

8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and Scope 2 figures that you have supplied and specify the sources of uncertainty in your data gathering, handling, and calculations

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
Less than or equal to 2%	Extrapolation	Extrapolations from data samples were used for handheld propane, emergency generator runtimes, and refrigerants	Less than or equal to 2%	Metering/ Measurement Constraints	Consumption at leased facilities for which no utility or metering data is available are calculated via kWh/sq ft intensity factors

8.6

Please indicate the verification/assurance status that applies to your Scope 1 emissions

Verification or assurance complete

8.6a

Please indicate the proportion of your Scope 1 emissions that are verified/assured

More than 90% but less than or equal to 100%

8.6b

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Level of verification or assurance	Relevant verification standard	Relevant statement attached
Moderate assurance	AT101	ATT GHG Emissions Verification Letter EY 2012.pdf

8.7

Please indicate the verification/assurance status that applies to your Scope 2 emissions

Verification or assurance complete

8.7a

Please indicate the proportion of your Scope 2 emissions that are verified/assured

More than 90% but less than or equal to 100%

8.7b

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Level of verification or assurance	Relevant verification standard	Relevant statement attached
Moderate assurance	AT101	ATT GHG Emissions Verification Letter EY 2012.pdf

8.8

Are carbon dioxide emissions from the combustion of biologically sequestered carbon (i.e. carbon dioxide emissions from burning biomass/biofuels) relevant to your company?

No

8.8a

Please provide the emissions in metric tonnes CO2e

Further Information

Ernst & Young reviewed the total scope 1, scope 2, and corporate business travel scope 3 GHG emissions for the year ended December 31, 2012. Per the attached letter, nothing came to their attention that caused them to believe that the schedule of total scope 1, scope 2, and corporate business travel scope 3 GHG emissions of AT&T Inc. for the year ended December 31, 2012, is not presented, in all material respects, in conformity with the criteria based on The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard (Revised Edition), by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). For calculations specific to U.S.-based activities, the guidance outlined by the U.S. Environmental Protection Agency was also applied.

Attachments

WILL ATTACH 2012 LETTER FROM E&Y

Page: 9. Scope 1 Emissions Breakdown - (1 Jan 2011 - 1 Jan 2012)

9.1

Do you have Scope 1 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

Yes

9.1a

Please complete the table below

Country	Scope 1 metric tonnes CO2e
United States of America	945841
Rest of world	2600

9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

- By GHG type
- By activity

9.2a

Please break down your total gross global Scope 1 emissions by business division

Business Division	Scope 1 metric tonnes CO2e
-------------------	----------------------------

9.2b

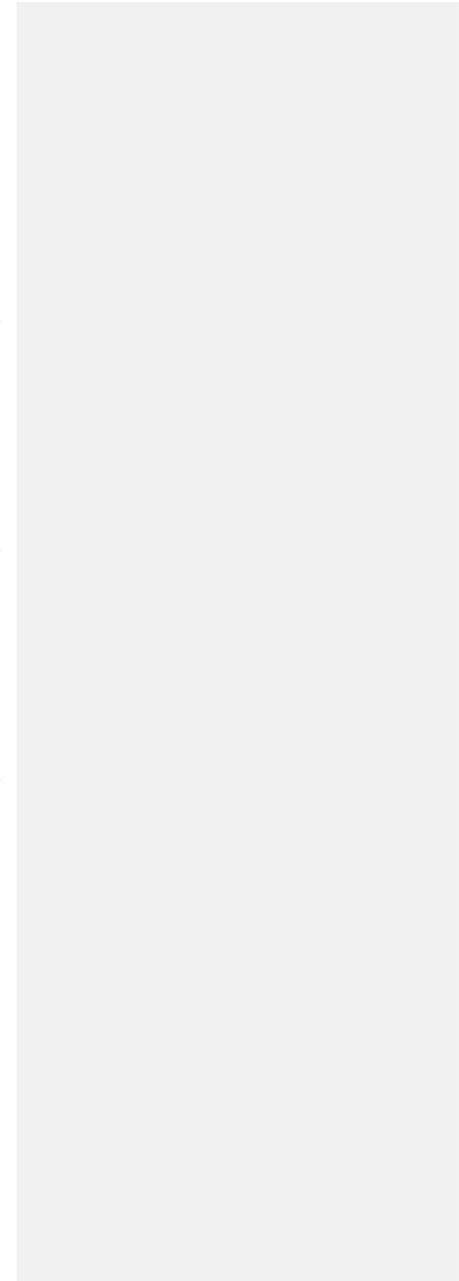
Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 metric tonnes CO2e
----------	----------------------------

9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 metric tonnes CO2e
CO2	811655
CH4	2558
N2O	15941
HFCs	118287



9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 metric tonnes CO2e
Ground Fleet	605962
Stationary Generators	99197
Natural Gas	96517
Refrigerant	118287
Flight Ops	12332
#2 Fuel Oil	4276
Portable Generators	7182
Propane	4688

Page: 10. Scope 2 Emissions Breakdown - (1 Jan 2011 - 1 Jan 2012)

10.1

Do you have Scope 2 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

Yes

10.1a

Please complete the table below

Country	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling
United States of America	7827238	14514977	0
Rest of world	67388	117362	0

10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By activity

10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 metric tonnes CO2e

10.2b

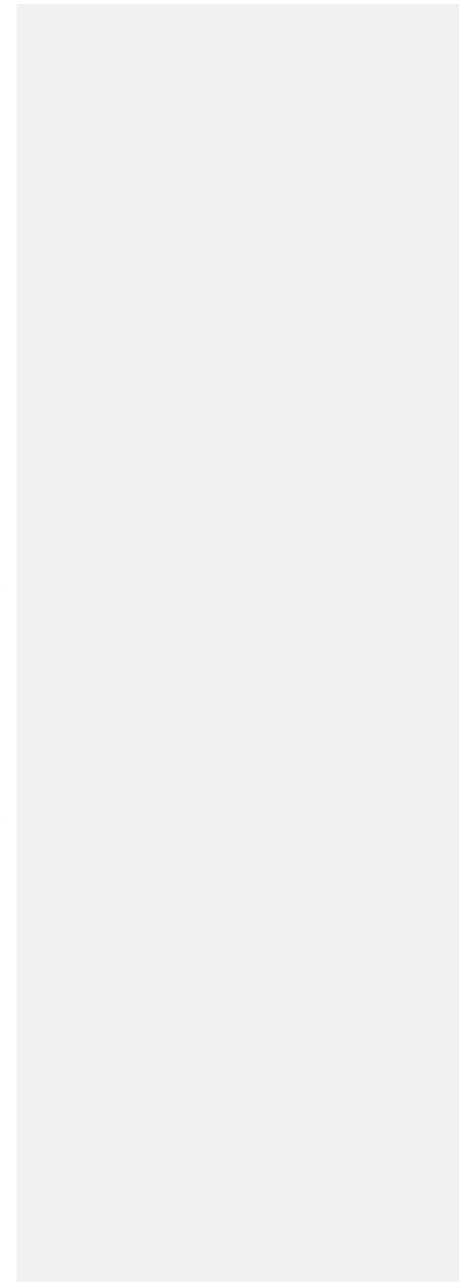
Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 metric tonnes CO2e

10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 metric tonnes CO2e
Electric Power	7882027
Steam	12599



11.1

What percentage of your total operational spend in the reporting year was on energy?

Less than 2%

11.2

Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has consumed during the reporting year

Energy type	MWh
Fuel	3358851
Electricity	14590772
Heat	0
Steam	41567
Cooling	0

4211.3

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Natural gas	445814
Distillate	418002
Motor gasoline	2042552
Propane	42269
Diesel from Fleet	272552

Fuels	MWh
CNG from Fleet	91563
Jet kerosene	46098

11.4

Basis for applying a low carbon emissions factor	MWh associated with low carbon electricity, heat, steam or cooling	Comments
<ul style="list-style-type: none"> • No purchases or generation of low carbon electricity, heat, steam or cooling • Non-grid connected low carbon heat, steam or cooling, generation owned by company • Non-grid connected low carbon electricity generation owned by company, no instruments created • Non-grid connected low carbon electricity not owned by company, no instruments created • Grid connected low carbon electricity generation owned by company, no instruments created • Grid connected low carbon electricity generation owned by company, instruments created and retired by company • Tracking instruments, Guarantees of Origin • Tracking instruments, RECS (USA) • Power Purchase Agreements (PPA) not backed by instruments • Supplier specific, backed by instruments • Supplier specific, not backed by instruments • Other 	0	

12.1

How do your absolute emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Decreased

12.1a

Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reductions activities AND Changes in methodology	2.59	Decrease	The two primary factors contributing to the decrease are the new eGrid 2012 emissions factors and the increasing efficiency in our fleet operations.

12.2

Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for Change
------------------	------------------	--------------------	-----------------------------	--	-------------------

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for Change
71.24	metric tonnes CO2e	\$ M total revenue	0.56	Decrease	The two primary factors contributing to the decrease are the new eGrid 2012 emissions factors and the increasing efficiency in our fleet operations.

12.3

Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for Change
36.57	metric tonnes CO2e	FTE Employee	3.29	Increase	As our business changes — most notably shifting from wireline to a wireless focus — and economic pressures impact our company, we continue to adjust the size of our workforce. This remains an ongoing challenge for our company, as it does for many. As of the end of 2012, we had 241,810 employees. This is compared to 256,420 employees at the end of 2011.

12.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for Change
170.67	metric tonnes CO2e	Other: Petabyte	26.9	Decrease	A few factors contribute to the change. The denominator has gone up.. Wireless data traffic on AT&T's network has grown more than 36,000 percent between 2007 and 2012. This increased demand has driven the need for increased

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for Change
					investment in network infrastructure that consumes more electricity. Also, energy efficiency projects are causing the numerator to decrease. This leads to an overall decrease of the number.

Page: 14. Emissions Trading

13.1

Do you participate in any emission trading schemes?

Yes

13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
UK's Carbon Reduction Commitment (CRC)	UK's Carbon Reduction Commitment (CRC)	01 April 2011 - 31 Mar 2012 (Actual)	£128,592	£128,592	10,716
		01 April 2012 - 31 Mar 2013 (Estimate)	£112,800 (Estimate)	£nil	9,400

European Union Emissions Trading System (EU ETS)	01 Jan 2012 - 31 Dec 2012	34	34	790	AT&T Management Services, L.P.
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13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

We meet our legal obligations and comply fully as a participant in the UK CRC Scheme. As part of our global commitment to minimize our environmental impact we are targeting reductions in our energy consumption and CO2 Emissions year on year and look to minimize the cost of the allowance purchases and of administering the scheme. We are also looking at the opportunity to join an Industry/market sector for Data Centers and opt for a Climate Change Agreement (CCA). Our consumption in the UK is dominated by our Data Centre in Redditch and opting for a CCA should reduce our costs by 10-15% until 2023 as emissions that form part of a CCA are exempt from CRC charges. AT&T Management Services, L.P. complies with the European Union Emissions Trading System (EU-ETS) through a partnership with their international handler, Rockwell Collins. A monitoring plan is submitted annually to the EU-ETS along with flight information for international trips in and out of Europe. Annual carbon emissions are determined based on flight information provided and payment is made to the UK Environmental Protection Agency through trading allowances submitted via an online portal.

13.2

Has your company originated any project-based carbon credits or purchased any within the reporting period?

No

13.2a

Please complete the following table

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits retired	Purpose e.g. compliance
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Page: 2012-Investor-Scope 3 Emissions

14.1

Please provide data on sources of Scope 3 emissions that are relevant to your organization

Sources of Scope 3 emissions	Evaluation Status: (OPTIONS) <ul style="list-style-type: none"> Relevant, calculated Relevant, not yet calculated Not relevant, calculated Not relevant, explanation provided No evaluated 	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
Business travel	Relevant, calculated	69013	EPA Climate Leaders: Optional Emissions from Commuting, Business Travel, and Product Transport		
Purchased Goods and services	Relevant, not yet calculated				We are developing our processes in order to report on this category using economic allocation.
Capital goods	Relevant, not yet calculated				We are developing our processes in order to

Sources of Scope 3 emissions	Evaluation Status: (OPTIONS) <ul style="list-style-type: none"> Relevant, calculated Relevant, not yet calculated Not relevant, calculated Not relevant, explanation provided No evaluated 	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
					report on this category using economic allocation.
Fuel-and energy-related activities (not included in Scope 1 and 2)	Not a supplier emission. This would be a corporate decision.				
Upstream transportation and distribution	Relevant, not yet calculated				We are developing our processes and collecting data to determine the best method for reporting
Waste generated in operations	Relevant, not yet calculated				We are developing our processes and collecting data to determine the best method for reporting
Employee computing	Not a supplier emission. This would be a corporate decision.				
Upstream leased assets	Not a supplier emission. This would be a corporate decision				
Investments	Not a supplier emission. This would be a corporate decision				
Downstream transportation and	Relevant, not yet				We are developing our

Sources of Scope 3 emissions	Evaluation Status: (OPTIONS) <ul style="list-style-type: none"> • Relevant, calculated • Relevant, not yet calculated • Not relevant, calculated • Not relevant, explanation provided • No evaluated 	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation	
distribution	calculated				processes and collecting data to determine the best method for reporting	
Processing of sold products	Not a supplier emission. This would be a corporate decision.					
Use of sold products	Not a supplier emission. This would be a corporate decision.					
End of life treatment of sold products	Not a supplier emission. This would be a corporate decision.					
Downstream leased assets	Not a supplier emission. This would be a corporate decision.					
Franchises	Not a supplier emission. This would be a corporate decision.					
Other (upstream)						
Other (downstream)						

14.2

Please indicate the verification/assurance status that applies to your Scope 3 emissions

Verification or assurance complete

14.2a

Please indicate the proportion of your Scope 3 emissions that are verified/assured

More than 90% but less than or equal to 100%

14.2b

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Level of verification or assurance	Relevant verification standard	Relevant statement attached
Moderate assurance	AT101	WILL ATTACH IN MODULE

14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

14.3a

Please complete the table

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Business travel	Change in output	4.17	Increase	Increased business demand has resulted in increased business-related travel. We continue to try to reduce travel by using telepresence. Since introducing its AT&T Telepresence Solution® in 2008, The company has realized savings of more than \$19 million in travel dollars and more than 11,600 metric tons of CO2 equivalent emissions avoided in 2012.

14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

- Yes, our suppliers
- Yes, our customers
- Yes, other partners in the value chain
- No, we do not engage

14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

- Yes, our suppliers
- Yes, our customers
- Yes, other partners in the value chain
- No, we do not engage

14.4b To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Number of suppliers	% of total spend	Comment
Proprietary	80%	Suppliers that account for approximately 80% of our

		spend receive our annual Supplier Sustainability Survey as well as the CDP Supply Chain Survey, both of which specifically address GHG emissions.
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14.4c If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of data	Please give details
We do not have any data Use in supplier scorecards Identifying GHG sources to prioritize for reduction actions Managing physical risks in the supply chain Managing the impact of regulation in the supply chain Stimulating innovation of new products Other	

Attachments

[https://www.cdproject.net/Sites/2012/13/1113/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/15.Scope3Emissions/ATT GHG Emissions Verficiation Letter EY 2011.pdf](https://www.cdproject.net/Sites/2012/13/1113/Investor%20CDP%202012/Shared%20Documents/Attachments/InvestorCDP2012/15.Scope3Emissions/ATT%20GHG%20Emissions%20Verification%20Letter%20EY%202011.pdf)

Module: 2012-Investor-ICT

Page: 2012-Investor-ICT-ICT1.DataCenterActivities

ICT0.1a

Please identify whether "data centers" comprise a significant component of your business within your reporting boundary

Yes

ICT1.1

Please provide a description of the parts of your business that fall under "data centers"

- . Our technology centers are defined as either technical spaces (data centers) or transport spaces (circuit offices). We operate data centers for several uses:
- Enterprise Data Centers (EDCs) host computer equipment and technology for our core operations.
 - Internet Data Centers (IDCs) host data and Internet service for our customers.
 - Video Hub Offices (VHOs) host data and Internet service for our U-verse customers.
 - Voice Messaging Centers (VMCs) host voicemail and data services for internet and external customers.
 - National Technology Centers (NTCs) host data and Internet service for our wireless customers.

ICT1.2

Please provide your absolute Scope 1 and 2 emissions for the data centers component of your business

Business Activity	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)	Annual electricity consumption (MWh)	Electricity data collection method: (OPTIONS) <ul style="list-style-type: none">• Meter or submeter reading• Pro-rated share from landlord• Other, please specify
Data centers		665,588	1276262	Meter or submeter reading

ICT1.3

What percentage of your ICT population sits in data centers where PUE is measured on a regular basis?

Percentage	Comment

Please provide a Power Usage Effectiveness (PUE) value for your data center(s). You can provide this information as (a) an average, (b) a range or (c) by individual data center – please tick which you wish to provide (tick all that apply)

- Average
- Range
- Individual Data center

ICT1.4a

Please provide your average PUE across your data centers

Number of data centers	Average PUE	% change from previous year	Direction of change	Comment

ICT1.4b

Please provide the range of PUE values across your data centers

Number of data centers	PUE Minimum Value	% change from previous year	PUE Maximum Value	% change from previous year	Direction of change	Comment
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ICT1.4c

Please provide your PUE values of all your data centers

Data center reference	PUE value	Percent change from previous year	Direction of change	Comment
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ICT1.5

Please provide details of how you have calculated your PUE value

ICT1.6

Do you use any alternative intensity metrics to assess the energy or emissions performance of your data center?

- YES
- NO

ICT 1.6a Please provide details

ICT 1.7

Please identify the measures you have undertaken in the reporting year to increase the energy efficiency of your data center(s)

Status in Reporting Year (OPTIONS): <ul style="list-style-type: none"> • Planned • Implemented 	Energy efficiency measure	Comment
Implemented	Other	In 2012, we realized energy savings of 24 million kWh from projects that optimized facility operations at our data centers. This is the equivalent of the electricity use of 2,064 homes, according to the EPA Equivalencies Calculator. Common projects included replacement of older major air conditioning equipment (chillers and compressors) with newer, more efficient equipment. Other projects included retrofitting of existing equipment with variable frequency drives (VFDs), and other similar enhancements to use existing equipment in a more efficient manner. VFDs provide more efficient use of energy by automatically adjusting the rate of air flow to match the system demand, which means air is not blowing at full capacity unless necessary.
Implemented	Cooling Efficiencies	Kansas City, MO Data Center - We installed a water-side economizer for a total energy savings 1,250,000 kWh. We also installed six new 20 HP VFDs on computer room air handler units for a total savings of 352,888 kWh per year.
Implemented	Cooling Efficiencies	Mission, KS Super Head End Office (SHO) - We installed 40 horsepower variable frequency drives on two main air handler units. We also installed new output dampers and control system optimizations. These led to total savings of 261,400 kWh per year.
Implemented	Cooling Efficiencies	Lynwood, WA Data Center - We conducted a major retrofit that included the installation of an air-side economizer with cycle capability. This led to total energy savings of 1,388,183 kWh per year.
Implemented	Cooling Efficiencies	Fairfield, CA Data Center - We replaced an older end-of-life chiller with a newer, more energy efficient machine. This led to total energy savings of 613,234 kWh per year.

Status in Reporting Year (OPTIONS):	Energy efficiency measure	Comment
<ul style="list-style-type: none"> • Planned • Implemented 		
Implemented	Server Virtualization	We focus on compression and virtualization of our equipment. Efforts to move new and existing physical services to virtual machines yielded annualized energy savings of 55.2 million kWh in 2012, equal to the electricity use of 4,876 homes annually, according to the EPA Equivalencies Calculator.
Implemented	Power Management Efficiencies	Virtual Servers made up the bulk of server growth in 2012 with a 40 percent increase. The avoidance of power using virtual servers resulted in a demand increase of approximately 200 kW instead of 4-6 MW for uninterruptable power supply.
Implemented	Other	Sustainability has been added as one the variables we consider in the planning process for next generation data centers. This includes efforts to incorporate power sources such as solar and fuel cells. Additional considerations include sustainable design and LEED qualifying solutions that affect water, energy, and waste, i.e. economization, reduced impervious surfaces and natural low maintenance landscaping.

ICT1.7

Please describe the measures you are planning to implement to increase the energy efficiency of your data center(s)

	Energy efficiency measure	Comment
Planned	Other	In 2013, radical changes to platform solutions, greater adoption of virtualization and cloud services, along with new technology improvements in server cabinets, cooling methods and modular computing will enable even greater energy improvements.

ICT 1.8

Do you participate in any other data center efficiency schemes or have buildings that are sustainably certified or rated?

YES

NO

ICT1.8a If yes...

Scheme name:	Level/certification (or equivalent) achieved in reporting year	Percentage of overall facilities to which scheme applies
<p>(OPTIONS)</p> <p>EPA Energy Star EU Code of Conduct Uptime Institute The Green Grid Data Center Alliance 7x24 Exchange AFCOM Green Touch Blue Angel LEED Bureau of Energy Efficiency of India (BEE) Star Rating Green Rating for Integrated Habitat Assessment (GRIHA) Other, please specify</p>		
<p>The Green Grid</p>	<p>In 2012, 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</p>	

	<p>liaison subcommittees and supported the development and investigation of the Sustainable Site Selection Tools and Papers. The End User Advisory Council is chartered to:</p> <ul style="list-style-type: none"> • 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. 	
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ICT1.9

Do you measure the utilization rate of your data center(s)?

ICT1.8a

What methodology do you use to calculate this?

ICT1.10

Do you provide carbon emissions data to your clients?

No

ICT1.9a

How do you do this?

ICT1.11

Please describe any efforts you have made to incorporate renewable energy into the electricity supply to your data center(s) or to re-use waste heat

Fuel cell technology produces clean and reliable onsite power. In 2012, we worked with Bloom Energy to install 7.5 MW of Bloom Energy fuel cells at 11 of our facilities in California, including a data center. This will avoid emitting approximately 250 million pounds of carbon dioxide, equivalent to removing more than 3,700 cars from the road. They produce over 63 million kWh per year, equal to the electricity use of 6,662 homes annually, according to the EPA Equivalencies Calculator.

ICT0.1b

Please identify whether "provision of network/connectivity services" comprises a significant component of your business within your reporting boundary

Yes

ICT2.1

Please provide a description of the parts of your business that fall under "provision of network/connectivity services"

We include all Central Offices, remote network equipment such as Controlled Environment Vaults and Huts and wireless towers in our "provision of network/connectivity services" measurement.

We continue to invest in and enhance our network to drive service improvements. In 2012, we invested nearly \$20 billion in our wireline and wireless networks. Overall, they are performing very well. However, while we're doing everything we reasonably can to stay ahead of customer demand, rapid mobile Internet growth coupled with limited spectrum availability is a challenge facing the entire industry.

- In 2012, we invested nearly \$20 billion in our wireline and wireless networks and completed more than 160,000 wireless network improvements. We deployed 81,000 new antennas, installed 849 Distributed Antenna Systems (DAS) and added 766,000 square miles of mobile Internet coverage.
- We expanded 4G LTE – a more efficient mobile broadband technology that operates 30-40 percent more efficiently than HSPA+ –to cover 170 million people in 2012. We will expand 4G LTE to cover 300M people in the U.S. by year end 2014.
- We're providing alternate mobile broadband access points with our Wi-Fi network –the nation's largest with over 33,000 hotspots, including locations in all 50 states.

In 2013, we plan to invest in the range of \$21 billion in our networks with a focus on wireless, including more 4G LTE deployment. We will roll out distributed antenna systems in key venues across the United States and add even more AT&T Wi-Fi hotspots.

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.

ICT2.2

Please provide your absolute Scope 1 and 2 emissions for the provision of network/connectivity services component of your business

Business Activity	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)	Annual electricity consumption (MWh)	Electricity data collection method
Provision of network/connectivity services		6,215,203	11,498,452	Meter or submeter reading

ICT2.3

Please describe your gross combined Scope 1 and 2 emissions for the provision of network/connectivity services component of your business in metric tonnes per terabyte of network traffic

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
119.97	metric tonnes CO2e	petabyte of network traffic			

ICT2.4

Please describe your electricity use for the provision of network/connectivity services component of your business in MWh per terabyte of network traffic

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
220.21	MWh	petabyte of network traffic			

ICT2.5

Please explain how you calculated the intensity figures given in response to Question ICT2.3 and ICT2.4

[Page: 2012-Investor-ICT-ICT3.ManufactureOfHardware](#)

ICT0.1c

Please identify whether "manufacture of hardware" comprise a significant component of your business within your reporting boundary

No

ICT3.1

Please provide a description of the parts of your business that fall under "manufacture of hardware"

ICT3.2

Please provide your absolute Scope 1 and 2 emissions for the manufacture of hardware component of your business

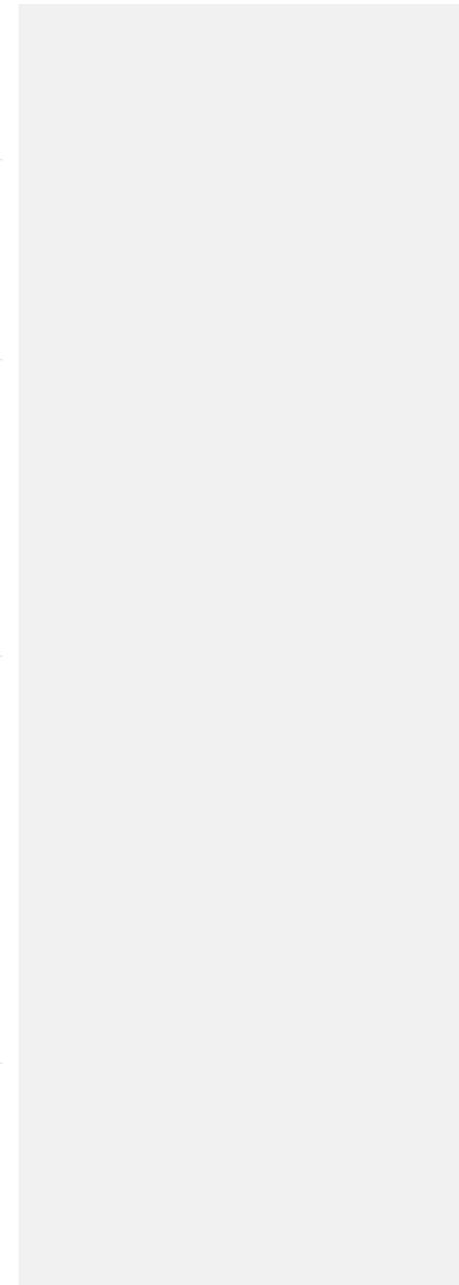
Business Activity	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)

ICT3.3

Please identify the percentage of your products meeting recognized energy efficiency standards/specifications by sales weighted volume (full product range)

Product type	Standard (sleep mode)	Percentage of products meeting the standard by sales volume (sleep mode)	Standard (standby mode)	Percentage of products meeting the standard by sales volume (standby mode)	Standard (in use mode)	Percentage of products meeting the standard by sales volume (in use mode)	Comment

ICT3.4



Of the new products released in the reporting year, please identify the percentage (as a percentage of all new products in that product type category) that meet recognized energy efficiency standards/specifications

Product type	Standard (sleep mode)	Percentage of new products meeting the standard (sleep mode)	Standard (standby mode)	Percentage of new products meeting the standard (standby mode)	Standard (in use mode)	Percentage of new products meeting the standard (in use mode)	Comment

ICT3.5

Please describe the efforts your organization has made to improve the energy efficiency of your products

[Page: 2012-Investor-ICT-ICT4.ManufactureOfSoftware](#)

ICT0.1d

Please identify whether "manufacture of software" comprise a significant component of your business within your reporting boundary

No

ICT4.1

Please provide a description of the parts of your business that fall under "manufacture of software"

ICT4.2

Please provide your absolute Scope 1 and 2 emissions for the software manufacture component of your business

Business activity	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)
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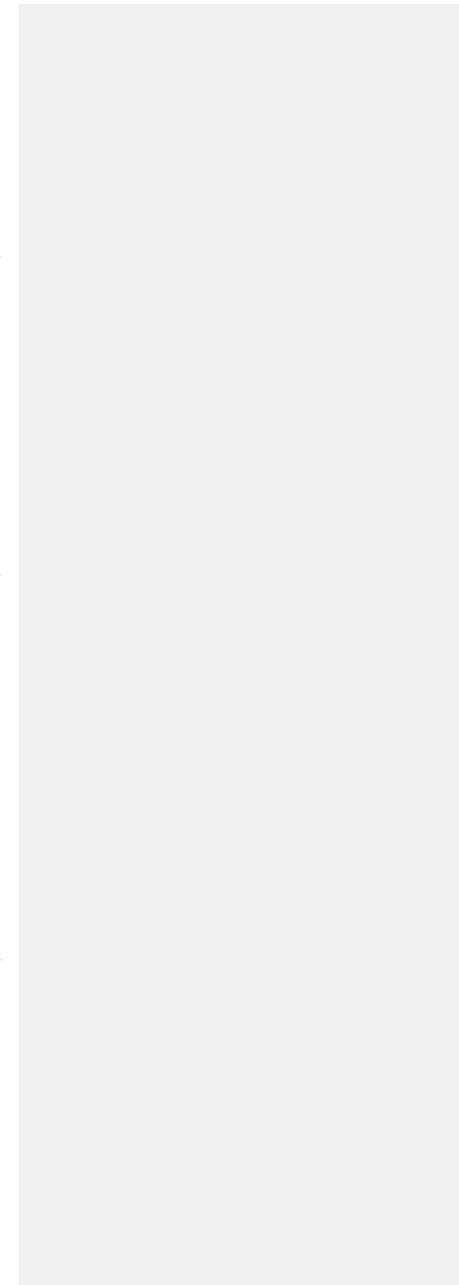
ICT4.3

Please describe your gross combined Scope 1 and 2 emissions for the software manufacture component of your business in metric tonnes per unit production

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
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ICT4.4

What percentage of your software sales (by volume) is in an electronic format?



ICT0.1e

Please identify whether "business services (office based activities)" comprise a significant component of your business within your reporting boundary

Yes

ICT5.1

Please provide a description of the parts of your business that fall under "business services (office based activities)"

For the "business services" measurement, we included all other facilities such as administrative facilities, parking, retail, warehouses and land.

ICT5.2

Please provide your absolute Scope 1 and 2 emissions for the business services (office based activities) component of your business

Business services	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)	Annual electricity consumption (MWh)	Electricity data collection method
Business services (office based activities)		1,001,236	1,816,057	Meter or submeter reading

ICT5.3

Please describe your gross combined Scope 1 and 2 emissions for the business services (office based activities) component of your business in metric tonnes per square meter

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
	metric tonnes CO2e	Square meter			

ICT5.4

Please describe your electricity use for the provision of business services (office based activities) component of your business in MWh per square meter

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
	MWh	Square meter			

ICT0.1f

Please identify whether "other activities" comprise a significant component of your business within your reporting boundary

No

ICT6.1

Please provide a description of the parts of your business that fall under "other"

ICT6.2

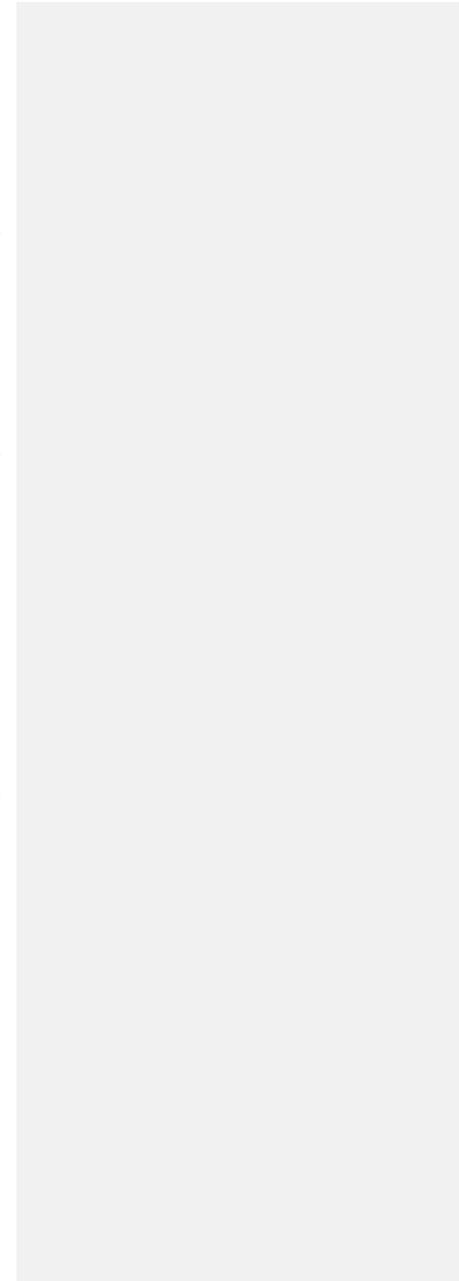
Please provide your absolute Scope 1 and 2 emissions for the identified other activity component of your business

Activity	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)
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ICT6.3

Please describe your gross combined Scope 1 and 2 emissions for your defined additional activity using an appropriate activity based intensity metric

Activity	Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
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ICT6.4

If appropriate, please describe your electricity use for your defined additional activity using an appropriate activity based intensity metric

Activity	Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
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Please enter the name of the individual that has signed off (approved) the response and their job title

John Schulz, Director, Sustainability Operations

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