

**Module: Introduction**

**Page: Introduction Supply Chain**

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**Climate change**

**Please tick the box below to complete the introduction questions for Climate Change**

true

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**CC0.1**

**Introduction**

Please give a general description and introduction to your organization.

ADTRAN, Inc. is a leading global provider of networking and communications equipment, with a portfolio of intelligent solutions deployed by some of the world's largest service providers, distributed enterprises and small and medium-sized businesses. ADTRAN solutions enable voice, data, video and Internet communications across copper, fiber and wireless network infrastructures. Headquartered in Huntsville, Alabama, with sales offices strategically located throughout the United States and around the world, ADTRAN's mission is to be a trusted provider of global communications solutions, to develop innovative technologies used to create products and services that make communications simpler and more affordable for people everywhere, and to foster an entrepreneurial environment supported by enthusiastic employees who exhibit an unwavering commitment to personal integrity and support our customers beyond their expectations

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**CC0.2**

**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 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/month/year (in full i.e. 2001).

Enter Periods that will be disclosed
Fri 01 Jan 2016 - Sat 31 Dec 2016

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**CC0.3****Country list configuration**

Please select the countries for which you will be supplying data.

Select country
United States of America
Germany
India

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**CC0.4****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(\$)

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CC0.5

Please select if you wish to complete a shorter information request.

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Water

Please tick the box below to complete the introduction questions for Water

false

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Further Information

**Module: Management**

**Page: CC1. Governance**

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CC1.1

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

Board or individual/sub-set of the Board or other committee appointed by the Board

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CC1.1a

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

Kevin Heering, SVP Global Quality and Administration

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**CC1.2**

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

No

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**CC1.2a**

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment

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**Further Information**

**Page: CC2. Strategy**

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**CC2.1**

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

Integrated into multi-disciplinary companywide risk management processes

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**CC2.1a**

**Please provide further details on your risk management procedures with regard to climate change risks and opportunities**

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Other committee	US, Germany, India	3 to 6 years	Sustainability & Environmental objectives and targets established and monitored and reported as KPIs (key process indicators) under the control of the ADTRAN Management System (ISO 9001, TL 9000, ISO 14001, ISO 26000 and ISO 27001)

### CC2.1b

**Please describe how your risk and opportunity identification processes are applied at both company and asset level**

Risks identified via review of key climate-impacting indicators, such as energy consumption, are addressed by aforementioned teams & OPS/Quality management teams.

Extensive product testing capabilities are maintained internally, allowing ADTRAN to conduct perpetual product testing relative to reliability in extreme environmental conditions. Any risks are identified and addressed by Quality and Engineering teams.

### CC2.1c

**How do you prioritize the risks and opportunities identified?**

ADTRAN has developed and implemented an 'Evaluation of Risk Analysis Tool' for assessing the risk of each identified issue. Discussions regarding significant aspects are recorded in the analysis tool, and may be further discussed at Green Team meetings. These aspects are reviewed at least semi-annually by the Green Team or when there is a new or changed process or activity at the facility. The Environmental Coordinator maintains Green Team minutes and other records on the ADTRAN network.

### CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process	Do you plan to introduce a process?	Comment
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**CC2.2**

**Is climate change integrated into your business strategy?**

Yes

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**CC2.2a**

**Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process**

Climate change is indirectly addressed via ADTRAN's Management System (AMS) and its Policy.  
 Consideration of the Electronics Industry Code of Conduct EICC is a standard requirement for ADTRAN's product development.

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**CC2.2b**

**Please explain why climate change is not integrated into your business strategy**

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**CC2.2c**

**Does your company use an internal price on carbon?**

No, and we currently don't anticipate doing so in the next 2 years

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CC2.2d

Please provide details and examples of how your company uses an internal price on carbon

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CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

- Direct engagement with policymakers
  - Trade associations
  - Other
- 

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Energy efficiency	Support	ADTRAN partners with TVA (Tennessee Valley Authority) to manage energy programs	(none)
Energy efficiency	Support	Climate Protection Alliance Greifswald 2020; specific to EU operations	(none)

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CC2.3b

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

Yes

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CC2.3c

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?
ATIS	Consistent	STEP - Sustainability in Telecom; focused upon reducing technologies' environmental impact as well as operators' energy costs; addresses industry power and protection issues by delivering industry-developed solutions	ADTRAN is engaged in solution development and standards establishment
QUEST Forum	Consistent	Elevated Sustainability to the Executive Board Level; The primary goal of the Sustainability Initiative is to create a TL9000 measurement class that sets the industry standard for the effectiveness and maturity of a company's sustainability program.	ADTRAN is actively engaged in QUEST Forum activities; ADTRAN delivered keynote on Sustainability at Service Providers Summit and Work Groups (9/16)

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

CC2.3e

Please provide details of the other engagement activities that you undertake

Active engagement in local/regional CSR activities; Created Team ADTRAN engaged in community outreach.

CC2.3f

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?

ADTRAN's Management System Policy provides over-arching guidelines to how we do business. We actively monitor key climate-impacting metrics, such as energy and water consumption, and monitor progress to reductions targets. Note also that process development across the enterprise must be in accord with ISO14001 compliance.

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CC2.3g

Please explain why you do not engage with policy makers

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**Further Information**

**Page: CC3. Targets and Initiatives**

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CC3.1

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

No

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CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
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CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
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CC3.1c

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	Comment
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CC3.1d

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
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**CC3.1e**

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment

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**CC3.1f**

**Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years**

At ADTRAN there are several emission reduction initiatives in place. Currently these initiatives are monitored only, without concrete targets.

Initiatives:

- Electrical Energy Consumption at different Locations
- Electrical Energy Consumptions of Products
- Energy Mix
- Fuel/Gasoline/Diesel/Oil Consumption
- Traveling by Train
- Traveling by Plane

In 2017 we have the target to systematically set up the reporting structure for CDP.  
Emission data for the future base year 2016 are provided in sections CC7 ff.

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**CC3.2**

**Do you classify any of your existing goods and/or services as low carbon products or do they enable a third party to avoid GHG emissions?**

No

CC3.2a

Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment

CC3.3

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

CC3.3a

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

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*		
Implementation commenced*		
Implemented*		

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Not to be implemented		

**CC3.3b**

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment

**CC3.3c**

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

Method	Comment

**CC3.3d**

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

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**Further Information**

**Page: CC4. Communication**

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**CC4.1**

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

Publication	Status	Page/Section reference	Attach the document	Comment
No				

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**Further Information**

**Module: Risks and Opportunities**

**Page: CC5. Climate Change Risks**

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**CC5.1**

Have you identified any inherent climate change risks that have the 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

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
International agreements	As a global provider of electronic communication equipment, ADTRAN is cognizant of potential changes in regulations specific to product/ supplychain that could result in expanded processes/increased material costs. ADTRAN remains diligent in maintaining an awareness of such factors in all regions.	Increased operational cost	3 to 6 years	Indirect (Supply chain)	About as likely as not	Medium			

CC5.1b

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Tropical cyclones (hurricanes)	ADTRAN engages in supplychain activities in multiple global regions. We are	Reduction/disruption in production capacity		Indirect (Supply chain)	Unlikely	Low-medium			

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
and typhoons)	cognizant of the potential impact of environmental changes / storm events to those operations. ADTRAN has a comprehensive Business Continuity process to mitigate these risks, but we monitor climate changes to ensure we appropriately establish risk ratings by region.								

CC5.1c

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management

CC5.1d

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

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CC5.1e

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

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CC5.1f

Please explain why you do not consider your company to be exposed to inherent 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

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Further Information

**Page: CC6. Climate Change Opportunities**

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CC6.1

Have you identified any inherent climate change opportunities 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

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Emission reporting obligations	As noted, ADTRAN will resume annual emissions calculations (both as an improved metric to monitor effectiveness of aforementioned impacting initiatives and in advance of potential reporting obligations). There will be some minor process additions to allow proper data collection / review / calculation.	Other:	1 to 3 years	Direct	Likely	Low			

CC6.1b

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management

CC6.1c

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
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CC6.1d

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

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CC6.1e

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

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CC6.1f

**Please explain why you do not consider your company to be exposed to inherent 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**

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**Further Information**

**Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading**

**Page: CC7. Emissions Methodology**

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**CC7.1**

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

<b>Scope</b>	<b>Base year</b>	<b>Base year emissions (metric tonnes CO2e)</b>
Scope 1	Fri 01 Jan 2016 - Sat 31 Dec 2016	13
Scope 2 (location-based)	Fri 01 Jan 2016 - Sat 31 Dec 2016	24501
Scope 2 (market-based)		

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**CC7.2**

**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)

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**CC7.2a**

**If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions**

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**CC7.3**

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

Gas	Reference
CO2	Other: Electricity contracts

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**CC7.4**

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

Fuel/Material/Energy	Emission Factor	Unit	Reference
Electricity	0.703	metric tonnes CO2 per MWh	Huntsville: Greenhouse Gases Equivalencies Calculator - Calculations and References. Link: <a href="https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references">https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references</a>
Electricity	0.501	metric tonnes CO2 per MWh	Greifswald: Electricity Bill
Electricity	0.289	metric tonnes CO2 per MWh	Berlin: Electricity Bill
Electricity	0.259	metric tonnes CO2 per MWh	Munich: Electricity Bill
Electricity	0.327	metric tonnes CO2 per MWh	Bruchsal: Electricity Bill
Electricity	0.289	metric tonnes CO2 per MWh	Leipzig: Electricity Bill
Electricity	0.820	metric tonnes CO2 per MWh	Hyderabad: CO2 Baseline Database for the Indian Power Sector. Link: <a href="http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver11.pdf">http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver11.pdf</a>

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**Further Information**

**Page: CC8. Emissions Data - (1 Jan 2016 - 31 Dec 2016)**

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**CC8.1**

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

Operational control

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CC8.2

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

12.70

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CC8.3

Please describe your approach to reporting Scope 2 emissions

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2, location-based figure	We have operations where we are able to access electricity supplier emissions factors or residual emissions factors, but are unable to report a Scope 2, market-based figure	We considered purchased electricity only.

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CC8.3a

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

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
24501		We considered purchased electricity only

**CC8.4**

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

No

**CC8.4a**

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded

**CC8.5**

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

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Assumptions	Exact CO2 emission factors of emergency power supplies not known. Universal figures assumed.
Scope 2 (location-based)	More than 5% but less than or equal to 10%	Assumptions Extrapolation	Electrical Energy Consumption at location Hyderabad has been extrapolated from comparable consumption at location Berlin.
Scope 2 (market-based)			

#### CC8.6

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

No third party verification or assurance

#### CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)

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**CC8.6b**

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emission Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission
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**CC8.7**

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

No emissions data provided

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**CC8.7a**

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
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**CC8.8**

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
No additional data verified	

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**CC8.9**

**Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?**

No

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**CC8.9a**

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

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**Further Information**

**Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)**

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**CC9.1**

**Do you have Scope 1 emissions sources in more than one country?**

Yes

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**CC9.1a**

**Please break down your total gross global Scope 1 emissions by country/region**

Country/Region	Scope 1 metric tonnes CO2e
United States of America	12.36
Germany	0.34

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**CC9.2**

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

By facility

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**CC9.2a**

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

Business division	Scope 1 emissions (metric tonnes CO2e)
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**CC9.2b**

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Huntsville	12.36	34.725991	86.679864
Greifswald	0.34	54.080901	13.378329

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CC9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)
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CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
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Further Information

Only emergency power supplies considered as scope 1 emission sources.

**Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)**

**CC10.1**

**Do you have Scope 2 emissions sources in more than one country?**

Yes

**CC10.1a**

**Please break down your total gross global Scope 2 emissions and energy consumption by country/region**

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
United States of America	21898	0	31149	0
Germany	1531	0	3378	0
India	1072	0	1308	0

**CC10.2**

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

By facility

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**CC10.2a**

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

Business division	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
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**CC10.2b**

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

Facility	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Huntsville	21898	0
Greifswald	1328	0
Berlin	126	0
Munich	68	0
Bruchsal	5	0
Leipzig	4	0
Hyderabad	1072	0

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**CC10.2c**

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

Activity	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
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**Further Information**

Figures comprise electricity only.

**Page: CC11. Energy**

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**CC11.1**

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

More than 0% but less than or equal to 5%

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**CC11.2**

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

Energy type	MWh
Heat	0
Steam	0
Cooling	0

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**CC11.3**

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

44.66

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**CC11.3a**

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

Fuels	MWh
Diesel/Gas oil	44.66

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**CC11.4**

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
Contract with suppliers or utilities, supported by energy attribute certificates	107	0	Contract Munich (M-Ökostrom)

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**CC11.5**

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
35835	35835	44.66	0	0	Electricity produced is from emergency power supplies.

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**Further Information**

**Page: CC12. Emissions Performance**

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**CC12.1**

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

This is our first year of estimation

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**CC12.1a**

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation

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**CC12.1b**

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

**CC12.2**

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

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
	metric tonnes CO2e					

**CC12.3**

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
	metric tonnes CO2e						

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**Further Information****Page: CC13. Emissions Trading**

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**CC13.1**

**Do you participate in any emissions trading schemes?**

No, and we do not currently anticipate doing so in the next 2 years

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**CC13.1a**

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 CO <sub>2</sub> e	Details of ownership

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**CC13.1b**

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

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**CC13.2**

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

No

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance

Further Information

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Not evaluated				
Capital goods	Not evaluated				

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not evaluated				
Upstream transportation and distribution	Not evaluated				
Waste generated in operations	Not evaluated				
Business travel	Not evaluated				
Employee commuting	Not evaluated				
Upstream leased assets	Not evaluated				
Downstream transportation and distribution	Not evaluated				
Processing of sold products	Not evaluated				
Use of sold products	Relevant, calculated	6.15	For all products sold to these customers in 2016: Electrical Energy Consumption = Max. Power Consumption per Unit x Number of Units sold CO2e = Consumption x country-specific Emission Factor	0.00%	We used ADTRAN data only.
End of life treatment of sold products	Not evaluated				
Downstream leased assets	Not evaluated				
Franchises	Not evaluated				
Investments	Not evaluated				

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Other (upstream)	Not evaluated				
Other (downstream)	Not evaluated				

**CC14.2**

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

No third party verification or assurance

**CC14.2a**

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

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)

**CC14.3**

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

No, this is our first year of estimation

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CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
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CC14.4

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

No, we do not engage

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CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

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CC14.4b

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

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
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**CC14.4c**

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

Not yet done, since this is our first year of estimation.

**Further Information**

**Module: Sign Off**

**Page: CC15. Sign Off**

**CC15.1**

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
George Giles	Manager, Supplier Quality Engineering and Environmental	Environment/Sustainability manager

**Further Information**

**Module: SupplyChain**

**Page: SM0. Supply Chain Module - Introduction**

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**SM0.0**

**If you would like to do so, please take this opportunity to provide a separate introduction to this module**

In 2017 ADTRAN provided first consumption and emission data as of 2016.  
In subsequent years targets and achievements will be provided, too.

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**SM0.1**

**Please could you indicate your company's annual revenue for the stated reporting period?**

Annual Revenue	Currency
636781000	USD(\$)

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**SM0.2**

**Do you have an ISIN for your company that you would be willing to share with CDP?**

Yes

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**SM0.2a**

Please use the table below to share your ISIN

ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
US	00738A1060

#### Further Information

**Page: SM1. Supply Chain - Allocation A**

#### SM1.1

**Please allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period**

*Please note that this table ( for SM1.1) is designed so that only the customer that you select in column 1 ("Please select the requesting member(s)") will be able to see the data relevant to them. If you enter an answer without selecting a requesting member, your answer will not be viewable at all.*

Please select the requesting member(s)	Scope of emissions	Emissions in metric tonnes CO2e	Uncertainty (+/- %)	Major sources of emissions	Verified	Allocation method	Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Deutsche Telekom AG	Scope 3	1.94	20	Max. power consumption of products during operation.	No	Allocation not necessary due to type of primary data available	For all products sold to this customer in 2016: Electrical Energy Consumption = Max. Power Consumption per Unit x Number of Units sold. CO2e = Consumption x country-specific Emission Factor

Please select the requesting member(s)	Scope of emissions	Emissions in metric tonnes CO2e	Uncertainty (+/- %)	Major sources of emissions	Verified	Allocation method	Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
AT&T Inc.	Scope 3	4.21	20	Max. power consumption of products during operation.	No	Allocation not necessary due to type of primary data available	For all products sold to this customer in 2016: Electrical Energy Consumption = Max. Power Consumption per Unit x Number of Units sold. CO2e = Consumption x country-specific Emission Factor

**Further Information**

**Page: SM1. Supply Chain - Allocation B**

**SM1.2**

Where published information has been used in completing SM1.1, please provide a reference(s)

**SM1.3**

What are the challenges in allocating emissions to different customers and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome challenges
Customer base is too large and diverse to accurately track emissions to the customer level	Electric energy consumption of our products depend on various factors: 1. Have all products sold been installed or are they on stock? 2. Network configuration of our customers: Are all lines of our line cards connected and active? 3. Behaviour of their customers: Is there traffic on the lines? 4. etc.
Diversity of product lines makes accurately accounting for each product / product line cost ineffective	Current ERP system does not contain energy consumption figures, which means manual effort for data collection and calculations.

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**SM1.4**

**Do you plan to develop your capabilities to allocate emissions to your customers in the future?**

Yes

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**SM1.4a**

**Please describe how you plan to develop your capabilities**

Maybe in conjunction with this CDP Response we can work together with our Requesters in future.

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**SM1.4b**

**Please explain why you do not plan to develop capabilities to allocate emissions to your customers**

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**Further Information**

**Page: SM2. Supply Chain - Collaboration**

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**SM2.1**

**Please use the table below to communicate any proposals you would like to make to specific CDP supply chain members for the collaborative development of GHG emission reducing projects or products**

Please do NOT include details of existing commercial offerings of which your customer will already be aware. Use this as an opportunity to think about how you can work with your customer to reduce the emissions associated with the goods and services you provide to your customer.

*Please note that this table (for SM2.1) is designed so that only the customer that you select in column 1 ("Please select requesting member") will be able to see the data relevant to them. If you enter an answer without selecting a requesting member, your answer will not be viewable at all.*

Please select requesting member	Type of project	Emissions reduction project or product consists of	Estimated timeframe for carbon reductions to be realized	Estimated lifetime CO2e savings	Details of proposal
AT&T Inc.	New goods and services	Actions that would reduce our own supplychain emissions (our own scope 3)	1-3 years		Feedback from AT&T to ADTRAN concerning the use of our products.
Deutsche Telekom AG	New goods and services	Actions that would reduce our own supplychain emissions (our own scope 3)	1-3 years		Feedback from Deutsche Telekom to ADTRAN concerning the use of our products.

**SM2.2**

**Have requests or initiatives by CDP supply chain members prompted your organization to take organizational-level emissions reduction initiatives?**

No

**SM2.2a**

**Please select the requesting member(s) that have driven organizational-level emissions reduction initiatives?**

Please select the requesting member(s) that have driven a reduction	Initiative ID	Describe the reduction initiative	Give reduction for the reporting year in metric tonnes of CO2e	Did you identify this opportunity as part of the CDP Supply Chain Action Exchange?	Would you be happy for CDP supply chain members to highlight this work in their external communication?



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**Further Information****Page: SM3. Supply Chain - Product Lifecycle Stages**

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**SM3.2b**

Please complete the following table with data for lifecycle stages of your goods and/or services

Name of good/service	Please select the scope	Please select the lifecycle stage	Emissions (kg CO2e) per unit at the lifecycle stage	Is this stage under your ownership or control?	Type of data used	Data quality	If you are verifying/assuring this product emission data, please tell us how
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**Further Information****Page: SM3. Supply Chain - Product Emissions Reductions**

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**SM3.2c**

Please detail emission reduction initiatives completed or planned for this product

Name of good/service	Initiative ID	Description of initiative	Completed or planned	Emissions reductions in kg CO2e per unit
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**SM3.2d**

Have any of the initiatives described in SM3.2c been driven by requesting members?

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**SM3.2e**

Please explain which initiatives have been driven by requesting members

Requesting member(s)	Name of good/service	Initiative ID
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**Further Information**

**Page: SM4. Action Exchange**

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**SM4.1**

**Do you want to enroll in the 2017-2018 CDP Action Exchange initiative?**

No

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**SM4.1a**

Please identify which Member(s), if any, have motivated you to take part in Action Exchange this year

Please identify which Member(s), if any, have motivated you to take part in Action Exchange this year

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**SM4.1b**

Please select the types of emissions reduction activities that your company would like support in analyzing or implementing in the next reporting year

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**SM4.1c**

As part of Action Exchange, would you like facility level analysis?

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**SM4.2**

**Is your company a participating supplier in CDP's 2016-2017 Action Exchange initiative?**

No

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**SM4.2a**

Describe how your company actively considered emissions reduction projects as a result of Action Exchange. If you do not have any emissions reduction activities resulting from Action Exchange at any stage of implementation, please explain why not in the second column

Type of project	Details of proposal
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**Further Information**

**CDP**