

Module: Introduction

Page: Introduction Supply Chain

Climate change

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

true

CC0.1

Introduction

Please give a general description and introduction to your organization.

Artesyn Embedded Technologies is a global leader in the design and manufacture of highly reliable power conversion and embedded computing solutions for a wide range of industries including communications, computing, health care, military, aerospace, and industrial automation. For more than 40 years, customers have trusted Artesyn to help them accelerate time-to-market and reduce risk with cost-effective advanced network computing and power conversion solutions.

Artesyn's 2017 CDP report contains emissions information for all of its production / factory locations. These production facilities build computing and power conversion products in China and the Philippines. This report covers our Scope 1 and 2 emissions, and our Scope 3 emissions to the extent they were measurable.

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

CC0.3

Country list configuration

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

Select country
China
Philippines

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(\$)

CC0.5

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

Water

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

false

Further Information

Module: Management

Page: CC1. Governance

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

CC1.1a

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

Office of the Chief Executive. Each Quarter our business conducts its Quarterly Business Review. Corporate Social Responsibility is one of the established and recurring sessions at each of these business reviews. Carbon emissions, greenhouse gases, CDP, energy efficiency projects, "green" initiatives, etc. are all topics

that are covered during that session. The audience for the CSR meeting are the members of the Office of the Chief Executive (CEO, President, CFO, COO, CCEO, Head of Sales, Head of HR, Head of Marketing, General Counsel, and Head of Compliance & Ethics).

CC1.2

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

Yes

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
All employees	Monetary reward	Energy reduction project Efficiency project Other: Behaviour change related indicator	Each of our production locations incentives employees to submit suggestions for energy saving projects which can come in a variety of forms, from increasing the efficiency of our production lines, to decreasing component count on our products, to changing employee behavior so as to save energy. These are in keeping with many of the kanban activities being implemented at the factories as well as our Environmental, Health & Safety initiatives. Some locations offer prizes while others offer monetary awards. All sites post the name of employee, their suggestion, and the award they received on bulletin boards in the facilities in addition to having formal presentation ceremonies and celebrations.
Management group	Monetary reward	Energy reduction project Efficiency project Environmental criteria included in purchases	Most of our managers and up have a component of their compensation tied to a variable plan that is primarily based upon profitability targets. These targets can be achieved not only through increased product sales, but also cost-cutting initiatives, some of which take the form of energy savings. To the extent that our managers are able to drive cost reductions in energy consumption they improve their likelihood on increased bonus payouts. Environmental criteria are contained in our purchasing specifications.

Further Information

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 company wide risk management processes

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
Annually	Board or individual/sub-set of the Board or committee appointed by the Board	Philippines, China	> 6 years	Sea rise in the Philippines, for example, is a risk that must be assessed both near and long term. Near-term impacts to business continuity may be minor and mostly seasonal, but between 2016-2050, sea levels are anticipated to rise 7.6-10.2cm every decade in the Manila area where we currently have 2 production facilities.

CC2.1b

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

- (i) At a company level, Artesyn has developed thorough Disaster Recovery and Business Continuity Plans reflecting the steps to be taken to return manufacturing to normal operation following climate-driven significant events. These plans require that we take into account IT Disaster Recovery, Supply Chain Continuity, Pandemic Response Plan, and Emergency Response Procedure. In addition, the underwriting process with our insurers begins at the company level then proceeds to the asset level. Our underwriters assist us in identifying risks relevant to our business and provide suggestions on how to mitigate those risks. Where we are able to proactively mitigate that risk, we take steps to do so.
- (ii) At an asset level, all production sites and engineering locations are required to provide local input and specific planning for risk factors unique to each site. Additionally, each site assesses the equipment contained on site and proposes ways to reduce the risk of that equipment being compromised by a natural disaster

or alternate locations where production could resume. Each of the sites is responsible for instituting mitigation plans and ensuring compliance with the Business Continuity Plans, which occurred as a result of successful implementation of risk identification process carried forward from the company to asset level.

CC2.1c**How do you prioritize the risks and opportunities identified?**

Risks and opportunities are prioritized based on a number of factors: likelihood of the risk or opportunity occurring, magnitude of that risk or opportunity, our ability to take preventive action to minimize or prevent a risk from occurring our ability to take advantage of an opportunity. Opportunities are assessed using a return on investment (ROI) financial model. Those that we have the engineering resources to support and that are within our strategic plan and marketing target models will be categorized based on highest ROI / greatest net present value.

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

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 integrated into our business strategy both in terms of how we operate as a company and the products we provide to clients. We see environmental and energy-saving initiatives as ways to reduce cost to not only ourselves, but also our customer, which increases our market share, makes us a stronger supplier to our customers, and provides a strategic advantage over our competitors.

In an effort to proactively adjust for climate change and position Artesyn with strategic industry advantage, we have developed a variety of internal processes for assessing, analyzing, developing, and implementing plans regarding climate change and sustainability practices that influence our strategy and individual business unit operational practices.

The process our Corporate Social Responsibility group undergoes is driven by customer requests and audit results. Comprised of members from departments across the organization, the CSR group undergoes regular annual and semi-annual audits, such as ISO14001 and the Electronics Industry Citizenship Coalition Validated Audit Process audits to measure how we are doing when it comes to social and environmental practices and the effectiveness of our environmental management system. This group reports audit results to our customers as part of our strategy to become key CSR partners and where deficiencies are found in our CSR program, we implement corrective action plans and drive continuous improvement. For example, the results of our CDP report are publicly reported and we expect year over year improvement in our CDP score.

By focusing on strategically positioning the company in relation to climate change, we have developed a series of cost-reduction initiatives that have been put in place to gather and report on energy-saving initiatives company-wide. These figures are then reported as part of our financial reviews and during the Corporate Social Responsibility committee meeting during our Quarterly Business Reviews.

The aspect of climate change that is most related to our business strategy is the effect of carbon emissions on global warming and the corresponding desire by ourselves and our customers to decrease those emissions. This is an area that we have identified as part of our environmental management reviews as an area where we have opportunities for conservation and energy savings.

Our strategy and processes related to climate change can be separated into short-term, long-term and current year components:

1. Short-Term Strategy

The most important components of the short-term strategy that have been influenced by climate change have been those impacting our operational practices, business continuity, and disaster recovery plans. As the predominant user of energy company wide, our factories have undergone many energy reduction initiatives that have resulted in significant cost reduction, emissions reduction, all the while improving our positioning with customers who are highly focused on corporate social responsibility (CSR) as a part of their strategies with their end customer base. In relation to operational practices, Kaison / lean / just-in-time manufacturing is an essential element of our production strategy and essential to success as part of our customers' just in time supply chain strategy. Kanban, increase in production efficiency, and reduction in emissions, are put into place through an extensive Kanban plan. Our business continuity and disaster recovery plans have increasingly needed to take into account the effects of climate change such as flooding, sea level rise, and increased tropical storms.

As part of our short-term strategy, Artesyn has put a process in place to reduce energy consumption by setting short and long-term energy reduction goal both cumulatively and for each of our facilities and publishing these goals publicly on our company website. These benchmarks are measured by taking the total annual kilowatt hours used at each production site and dividing those by the number of production employee hours worked. In order to meet those reduction goals, each site is responsible for instituting other energy saving projects from turning off test equipment when not in use, to installing LED lights company-wide, to educating employees about ways in which they can reduce consumption to re-designing our high-consumption production processes (Kanban), all of which help drive bottom line growth.

2. Long-Term Strategy

The most critical components of our long-term strategy relate to the development and incorporation of new technologies and adaptation to regulatory changes. We have made significant research and development investments in both our embedded power and embedded computing engineering to increase product efficiency. For example, between 2004 and 2014, we have been able to increase the efficiency of our embedded power conversion products from 83-88.6% and that number continues to increase. Many of our products have efficiencies in excess of 90 percent, which is a key component of our business strategy. Reducing cost for the customer and the consumer and reducing emissions gives us increased stickiness with our customers and in some cases is required as part of the bid process. Our engineering and trade compliance groups regularly review communications from various government agencies in the markets in which we sell our products, such as the U.S. Department of Energy, that require us to meet certain energy efficiency guidelines. We collect this information and disseminate the information not only to

affected departments within our organization, but also to our customers so that we can design our products to meet or exceed these standards well in advance of regulatory effective dates.

3. Current-Year Strategy

Throughout the year, business decisions are made that have been influenced by climate change driven aspects of the strategy. There have been significant investment in operational efficiency from reorganization of plant production areas, replacement of HVAC systems throughout our operations, and our burn-in reduction program that significantly decreases the energy consumed during the testing of our embedded power products.

Addressing climate change, both through operations and product development with our customers has given us a strategic advantage over our competitors. Our customers are increasingly asking us for information related the greenhouse gas emissions and our environmental initiatives. As we have been able to provide this information, thereby improving the Corporate Social Responsibility (CSR) portions of our Supplier Scorecards, we have been able to achieve more market share as our customers have moved away from suppliers that have not embraced CSR and climate change adaptation.

CC2.2b

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

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

CC2.2d

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

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)

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
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CC2.3b

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

Yes

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?
Power Sources Manufacturers' Association	Consistent	The PSMA has an Alternative Energy Committee, an Energy Efficiency Committee, and Energy Harvesting Committee. The goals of the Energy Efficiency committee are to serve the needs of manufacturers, government policy making agencies	Members of our marketing team currently serve as Board Members of PSMA of the Power Technology Roadmap Committee. This year the Committee has been focused on energy usage and energy efficiency. We play an active role

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?
		and industry standards organizations, for education, support, and recommendations in matters regarding the energy efficiency of power supplies (no-load, standby, and active-on) with, as a primary goal, the establishment of a single global standard for energy efficiency.	in the trade associations goals of establishing global energy efficiency standards and ensuring its members know how to comply with such standards. Committees do things such as draft guidance documents or partner with universities to conduct research into areas such as, for example, Dc-dc Converters: Novel soft-switching hybrid topologies to achieve high power-density and high efficiency.
PMBus	Consistent	The Power Management Bus (PMBus) is an open-standard digital power management protocol that enables communication between components of a power system: CPUs, power supplies, power converters, and more. PMBus standard adoption will make the world more energy efficient, one power supply at a time.	As PMBus Board Members, our marketing and engineering groups are able to assist in writing and revising the PMBus specifications. For example, that allow for higher speed communication among devices to decrease latencies, and increase efficiency.
System Management Interface Forum (SMIF)	Consistent	The System Management Interface Forum (SMIF), Inc., supports the rapid advancement of an efficient and compatible technology base that promotes power management and systems technology implementations. The group's activities include: promoting global development of communications protocols; identification of appropriate applications; providing global educational services; promoting worldwide compatibility and interoperability; and identifying, selecting, augmenting as appropriate, and publishing specifications. The SMIF provides a membership path for any company or individual to be active participants in any or all of the various working groups established by the implementers forums.	As SMIF Board Members, we are able to advance the Forum's interests in efficient technology.
Open Compute Project	Consistent	The Open Compute Project is committed to minimizing the environmental impact of infrastructure technology and energy consumption through continued evolution in energy and material efficiency. While traditional data center design often occurs in siloed components — a building, servers, and software — the Open Compute Project evaluates the influence of all components within the data center ecosystem, leading to optimized energy and material use as well as reduced environmental impact. The Open Compute server's vanity-free	As members of Open Compute Project, we are able to further the organization's environmental goals around decreased energy consumption on the part of data centers.

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?
		<p>design eliminates nearly 6 pounds of material per server, reducing the amount of materials that need to be produced, transported, assembled, and eventually, disassembled. "Designing out," or excluding, all non-essential features and non-relevant elements from the Open Compute servers allows for a custom chassis that minimizes the overall part count, accelerates assembly, and removes elements like a front panel, paint, and logos. Additionally, Open Compute servers can operate in a higher-temperature environment, reducing the overall cooling load required in a data center.</p>	

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

Artesyn has adopted the Electronics Industry Citizenship Coalition's (EICC) Code of Conduct and actively participates in EICC activities; from engaging in annual validated process audits and self-assessment questionnaires to attending conferences and other educational opportunities offered by the EICC. The EICC regularly engages in dialogue and collaborations with workers, governments, civil society, investors and academia to gather the necessary range of perspectives and expertise to support and drive its members toward achieving the EICC mission and values of a responsible global electronics supply chain and as adopters and supporters of this organization, we contribute to that dialogue as well.

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?

As with all corporate activities, the process of maintaining consistency begins by setting organizational goals at the executive level and then communicating those goals / guidelines throughout the company. In regards to climate change, we have a corporate social responsibility statement from our CEO on our website and in every facility, stating our intention when it comes to increasing product efficiency and reducing emissions. Artesyn has also adopted the Electronics Industry Citizenship Coalition Code of Conduct as its own, which explicitly states that "[e]nergy consumption and greenhouse gas emissions are to be tracked and documented, at the facility and/or corporate level. Artesyn is to look for cost- effective methods to improve energy efficiency and to minimize their energy consumption and greenhouse gas emissions." This Code is also posted publicly on our website. It is through this process of executive adoption and communication that we maintain consistent positions throughout the organization.

For all groups that we are engaged with, we stay abreast of that group's activities through direct engagement, board participation, committee leadership, newsletters, etc. Were these groups to move in a direction that is not consistent with our vision on climate change, we would need to assess whether involvement with that organization would continue. As energy efficiency and reducing greenhouse gas emissions is so important to both ourselves and our customers, there, we would not align well with an organization that was not also promoting those kinds of efforts.

CC2.3g

Please explain why you do not engage with policy makers

Further Information

Page: CC3. Targets and Initiatives

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?

Absolute target
Intensity target

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
Abs1	Scope 2 (location-based)	100%	2.5%	2015	100	2020	No, but we anticipate setting one in the next 2 years	

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
Int1	Scope 1	100%	2.5%	Metric tonnes CO2e per unit hour worked	2015		2020	No, but we anticipate setting one in the next 2 years	Artesyn sets an annual year over year intensity target for its operations and aims to decrease energy consumption by 2% each year.
Int2	Scope 2 (location-based)	100%	3%	Metric tonnes CO2e per unit hour worked	2015		2035	No, but we anticipate setting one in the next 2 years	Artesyn sets an annual year over year intensity target for its operations and aims to decrease energy consumption by 2% each year.

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
Int1	Decrease	2.5	Decrease	5	As we continue to gather data regarding Scope 3 emissions, Scope 3 emissions may increase due to improved data collection.

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
Abs1	100%	100%	

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

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?

Yes

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
Group of products	Embedded power, power conversion products (AC-DC, DC-DC)	Avoided emissions	Other:	100%	More than 80% but less than or equal to 100%	Our embedded power products must show energy efficiency improvement year over year to satisfy regulatory requirements, customer requirements, and internal goals.
Group of products	Embedded computing products (advanced network computing solutions ranging from application-ready platforms, single board computers, enclosures, blades and modules to enabling software and professional services)	Avoided emissions	Other:	100%	More than 80% but less than or equal to 100%	Our embedded computing products must increase in efficiency and decrease resultant heat production in order to meet customer and market requirements in addition to internal corporate goals.

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	0	0
To be implemented*	5	389
Implementation commenced*	2	597
Implemented*	27	6416
Not to be implemented	1	0

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
Energy efficiency: Processes	2K SMT Floor Consolidation to 1K and 2S production floor	702.10	Scope 2 (location-based)	Voluntary	1368300	1955600	1-3 years	3-5 years	Total yearly saving is 1368K which include 64K in Electricity and 1304 K in Productivity. Implemented*
Energy efficiency: Building services	Enhance management and reduce lighting for plant common area and general area in production floors /	65.36	Scope 2 (location-based)	Voluntary	15180	0	<1 year	3-5 years	Implemented*

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
	workshops. And enhance local lighting at point of use and workstations to fulfill the illumination need and reduce general lighting at production floors								
Energy efficiency: Building services	Tighten control of operation of Air Conditioners in canteen area	71.69	Scope 2 (location-based)	Voluntary	16650	0	<1 year	3-5 years	Implemented*
Energy efficiency: Building services	Consolidate and shut down 3E workshop to reduce total production area then reduce consumption in Air conditioning & lighting	92.20	Scope 2 (location-based)	Voluntary	21410	0	<1 year	3-5 years	Implemented*
Energy efficiency: Processes	Additional 7 set Energy Recycle E-Load for Burn-in Set-up	88.55	Scope 2 (location-based)	Voluntary	20560	30000	1-3 years	3-5 years	Implemented*
Energy efficiency: Building services	Relocate higher efficiency & newer air conditioners from 2K to 1F&1J to replace old and low efficiency Air conditioners	18.98	Scope 2 (location-based)	Voluntary	4410	4000	<1 year	3-5 years	Implemented*
Energy efficiency: Processes	Consolidation & optimize layout of Production floor to reduce Total Quantity of high consumption machineries (i.e. Wave Soldering Machines, Bond-ply ovens) and to reduce total production area	158.13	Scope 2 (location-based)	Voluntary	39520	476190	1-3 years	6-10 years	Implementation commenced*

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
Energy efficiency: Processes	Consolidate 1K SMT workshop to 1J	176.58	Scope 2 (location-based)	Voluntary	41000	190	1-3 years	3-5 years	To be implemented*
Energy efficiency: Processes	Consolidation of 3G PSG to 5E to free up 3G and saving energy from Air Conditioning & Lighting	57.98	Scope 2 (location-based)	Voluntary	13460	30	1-3 years	3-5 years	To be implemented*
Energy efficiency: Building services	Upgrading low efficiency water pump motors	12.65	Scope 2 (location-based)	Voluntary	2940	5000	<1 year	3-5 years	To be implemented*
Energy efficiency: Processes	EC SMT line consolidate to 2S workshop	102.78	Scope 2 (location-based)	Voluntary	23870	22000	1-3 years	3-5 years	To be implemented*
Energy efficiency: Building services	Replace B3 ordinary fluorescent lamp by LED tube	94.04	Scope 2 (location-based)	Voluntary	18200	21000	1-3 years	3-5 years	Implementation commenced.
Energy efficiency: Building services	Parallel link air conditionings cooling towers for saving number of working towers.	36.18	Scope 2 (location-based)	Voluntary	34200	59000	1-3 years	3-5 years	To be implemented*
Energy efficiency: Processes	Replace the resistive load of aging cabinets with an Energy Recycle E-Load.	597.73	Scope 2 (location-based)	Voluntary	116000	119000	1-3 years	3-5 years	Implementation commenced.
Energy efficiency:	Burn-In Time Reduction	1743	Scope 2 (location-	Voluntary	173830	0		6-10 years	Implemented*

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
Building services			based)						
Energy efficiency: Processes	Functional Test Simplification Power	284	Scope 2 (location-based)	Voluntary	2590	0		6-10 years	Implemented*
Energy efficiency: Processes	Auto Double-Dipping Machine	10	Scope 2 (location-based)	Voluntary	5400	0		6-10 years	Implemented*
Behavioral change	Switching off lights during lunch break	4	Scope 2 (location-based)	Voluntary	630	0	<1 year	>30 years	Implemented*
Energy efficiency: Processes	Conversion from Standard IR to Mini IR and Batch-Type Oven	346	Scope 2 (location-based)	Voluntary	92	600		6-10 years	Implemented*
Other	Earth Hour	4	Scope 2 (location-based)	Voluntary	43	0	<1 year	>30 years	Implemented*
Process emissions reductions	Server virtualization - reduction of emissions through use of cloud rather than physical servers located onsite	18.9	Scope 2 (location-based)	Voluntary	16000	2700	<1 year	6-10 years	Implemented*
Energy efficiency: Processes	B6 2F/ B8 3F tow floor use LED tube replace T8 tube	110.71	Scope 2 (location-based)	Voluntary	21400	21000	<1 year	11-15 years	Implemented*

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
Energy efficiency: Processes	Check The Leakage Of Compressed Air From Air Tube	66.79	Scope 2 (location-based)	Voluntary	1300	500	<1 year	1-2 years	Implemented*
Energy efficiency: Processes	Replace high efficiency Drinking Water Machine	135.68	Scope 2 (location-based)	Voluntary	26700	13900	<1 year	11-15 years	Implemented*
Energy efficiency: Processes	Consolidate B4-3F office to B1-1F	75.46	Scope 2 (location-based)	Voluntary	15000	0	<1 year	<1 year	Implemented*
Energy efficiency: Processes	Change partly solder pot power from 0.65kw to 0.3kw	5.76	Scope 2 (location-based)	Voluntary	1100	3500	1-3 years	11-15 years	Implemented*
Energy efficiency: Processes	Hot air gun change to intermittent duty by add sensor	6.79	Scope 2 (location-based)	Voluntary	1300	600	<1 year	11-15 years	Implemented*
Energy efficiency: Processes	Replace the hot curing machine(30KW/H) with UV curing machine(3.6KW/H)	86.83	Scope 2 (location-based)	Voluntary	16800	4900	<1 year	11-15 years	Implemented*
Energy efficiency: Processes	B2-2F building use LED tube replace T8 tube	38.81	Scope 2 (location-based)	Voluntary	7500	7000	<1 year	11-15 years	Implemented*

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
Energy efficiency: Processes	Shut down the Exhaust fan system in Midday rest and During the rotation of the day shift and night shift.	167.74	Scope 2 (location-based)	Voluntary	32500	0	<1 year	11-15 years	Implemented*
Energy efficiency: Processes	Temperature control optimization for CN1 online BI chamber	94.32	Scope 2 (location-based)	Voluntary	18300	0	<1 year	11-15 years	Implemented*
Energy efficiency: Processes	Replace resistive load with Recycle E-Load for Base products in phase II BI Room.	0.78	Scope 2 (location-based)	Voluntary	1486	0	<1 year	3-5 years	Implemented*
Energy efficiency: Processes	Replace resistive load with Recycle E-Load for PSU/CP products	0.33	Scope 2 (location-based)	Voluntary	62	0	<1 year	3-5 years	Implemented*
Energy efficiency: Processes	The hot blast tank is changed from normally open to intermittent power supply	328.91	Scope 2 (location-based)	Voluntary	61400	0	<1 year	3-5 years	Implemented*

CC3.3c

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

Method	Comment
Compliance with regulatory requirements/standards	The U.S. Department of Energy through the Office of Energy Efficiency and Renewable Energy, publishes energy efficiency guidelines in the Federal Register for external power supplies (EPS). Our EPS products must meet or exceed these types of guidelines in order to be sold on the U.S. market.
Financial optimization calculations	For operations appropriation requests, the submitter must check a box whether that A/R is "energy saving." If energy saving, then those will be analyzed as part of the return on investment calculations and ultimately influences whether that A/R will receive approval.
Employee engagement	Our production sites send out a variety of notices in which energy-saving / waste reduction / water saving / pollution reduction / etc. tips are included. Some sites include this kind of information in their monthly and quarterly newsletters while others have decided email blasts on these topics. Many sites also combine this type of information distribution with bulletin board postings and reminder postings around the facility.
Internal incentives/recognition programs	Employees may recognized during awards presentation ceremonies for their contributions to saving energy and increasing productivity. These awards may be financial or in the form of gifts and plaques or certificates. Award recipients also have their award and picture noted on facility bulletin boards and facility communications.
Dedicated budget for low carbon product R&D	In addition to meeting regulatory requirements, both our embedded power and embedded computing product lines require energy consumption reductions in order to meet market demand

CC3.3d

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

Further Information

Page: CC4. Communication

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
In voluntary communications	Complete	https://www.artesyn.com/about-us/compliance-ethics/environment	https://www.cdp.net/sites/2017/69/52169/Supply Chain 2017/Shared Documents/Attachments/CC4.1/Artesyn Carbon Report for website 2016.pdf	We publish information related to environmental initiatives, along with our CDP report, on our publicly-available website.
In voluntary communications	Underway - this is our first year	https://www.artesyn.com/about-us/compliance-ethics/environment		We will be publishing our first Corporate Social Responsibility Report in July 2017. This will be publicly available on our website, distributed to our customers, and will be for the 2016 reporting year.

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

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
- Risks driven by changes in other climate-related developments

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	The result of international agreements such as the Paris Agreement on climate change will be (and has been) that our customers and governments in regions where we operate are asking us to reduce our emissions and the impact our company has on climate change. Both China and the Philippines, where our factories and bulk of emissions are located, are both signatories to the Paris Agreement. The risk here is that there will be costs associated with reducing our emissions and those costs could drive product price higher and thereby	Increased operational cost	1 to 3 years	Direct	Very likely	Medium-high	Financial implications are the costs related to purchasing more energy efficient equipment for our operations, bringing more efficient products to market, purchasing more efficient HVAC systems, purchasing newer fleet vehicles that consume less fuel, finding suppliers that contribute as few emissions as possible to our supply chain, purchasing carbon credits if that option were pursued. Estimated current cost of carbon credits would be \$781,340 USD	To manage this risk, Artesyn continues to invest in energy efficient products and energy efficient production methods. For example, Artesyn has designed and brought to market the MaxCore embedded computing product that replaces the traditional server with a microserver that uses 80% less power and creates less ambient heat. For a data center with 3120 cores, or 7 racks and 7 switches, MaxCore would reduce that to 1 rack and 1	Research and development costs, administrative burden, increased production efficiency costs (i.e. purchase of low energy consuming machinery, test equipment, etc.). Potentially purchase of carbon offsets (\$781k estimated annual cost).

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>drive certain customers away. For example, currently we have approximately 26% of our engineers working directly on energy efficiency tasks related to our products. Indirectly that number rises to nearly 90%. If we were to dedicate a higher percentage of direct engineers, that could potentially decrease the amount of R&D spend in other areas such as new product development, potentially decreasing access to new applications and markets, assuming the number of engineers and engineering spend remained constant.</p>						<p>annually using a \$14 price per ton CO2e (Source: Native Energy).</p>	<p>switch. It would reduce server chassis from 130 to 13 and reduce the need for 500+ cables down to only 26. This is just one example of how R&D investments in energy saving products increase Artesyn's ability to meet future regulatory requirements driven by international agreements.</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	However, Artesyn believes that while there are costs associated with moving to ever higher efficiency products and lower energy consumption facilities, ultimately the more energy efficient our products are and the lower the energy cost of creating our products, the better we will be able to compete in the marketplace.								
Emission reporting obligations	Emission reporting obligations are a risk given that determining our entire emissions footprint, especially when it comes to our Scope 3 emissions, is difficult to ascertain. As manufacturers of electronic components, we	Increased operational cost	Up to 1 year	Direct	Virtually certain	Medium	Currently Artesyn dedicates approximately 640 man hours to collecting our emissions data annually and drafting our disclosure report. This includes 3 individuals with primary drafting responsibility,	Artesyn envisions that in the near future 100% emissions reporting will be both the requirement and the standard and so we are moving in that direction in anticipation of this climate-change driven risk. Specifically,	Increasing our reporting will require additional employee time, potentially additional metering, and additional administrative requirements.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>are part of a lengthy supply chain with many upstream and downstream partners, both direct and indirect. Calculating downstream emissions with increased certainty, would incur costs due to labor, consulting, and validation required to accomplish this goal.</p>						<p>and approximately 30 employees tasked with gathering data related to their areas of expertise or reviewing and approving final submissions. Should reporting obligations increase, we estimate annual man hours would rise to a peak of around 800 and then level off in future years around 720 as data becomes easier to acquire. We would also need to expand the scope of data verified by our 3rd party verifier and potentially expand our use of consultants. These would all be increased operational costs.</p>	<p>we have implemented a system for every appropriations request (AR) that marks that request as either energy saving or not which is then considered as part of the AR analysis.</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Product efficiency regulations and standards	The efficiency of Artesyn products is governed in part by the U.S. Department of Energy's Office of Efficiency and Renewable Energy guidelines, published in the Federal Register, addressing the energy efficiency standards for external power supplies (EPS). Our EPS products must meet or exceed these standards in order to be sold on the U.S. market and in other areas of the world where similar regulations apply.	Increased capital cost	3 to 6 years	Direct	Virtually certain	High	Each year approximately 26% of our research and development budget is directly dedicated to increasing product efficiency, whether it be through decreased heat production by increasing embedded computing heat sink efficiency to increasing the power conversion efficiency of our embedded power products to reducing component count product wide. Indirectly nearly 90% of our R&D budget goes to product efficiency. Should product efficiency regulations increase, they	As energy efficiency regulations are generally phased in over a number of years, we are able to make long-term energy efficiency plans that involve phasing out less efficient products and moving our customers to more efficient models as well as investing in R&D that allows us to meet these regulatory requirements. For example, when the U.S. Department of Energy's Efficiency Guidelines for External Power Supplies that went into effect on February 10, 2016 increased the required efficiencies for power supplies, we had already	The cost of managing regulatory requirements from the beginning of our product life cycle to the end will require product end of life costs, research and development dollars, production equipment investments, and administrative costs of compliance.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							have the potential increase the amount of our R&D budget that goes toward product efficiency and decrease the amount spent on other engineering tasks, such as new product development. When we look at only one specific product as an example, we would stand to lose \$50-\$100M just in sales on that product if we were not able to meet energy efficiency regulatory requirements.	designed compliant product and moved our customers to these more efficient models in advance of the regulation's effective date.	
Product labeling regulations and standards	Our products currently require certain energy efficiency marks and we anticipate future marks to be required in the	Reduced demand for goods/services	1 to 3 years	Direct	Virtually certain	Medium-high	Artesyn must be able to show that its product meet certain energy efficiency standards in order to apply	We manage marking requirements similarly to complying with product energy efficiency	In addition to the costs of management in ensuring regulatory requirements are met, marking

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>future. The CSA and UL marks are marks applicable to our products which demonstrate compliance to energy efficiency regulations in markets in which we sell our products such as the U.S. and Canada. There are also new marks such as 80plus that do not demonstrate compliance to regulations, but instead are voluntary certification programs intended to promote efficient energy use in computer power supply units (PSUs). These are increasingly being requested by our customers.</p>						<p>the correct marks to its products that allow those products to be sold in international commerce. If we are unable to obtain any of those marks we would be limited in where we could sell those products given that the largest markets have marking requirements. Sales revenue could be affected upwards of 40% were we not able to acquire the necessary marks to sell our product in the many countries that require them.</p>	<p>regulations. In addition to that management method, we also have specific personnel, equipment, software, 3rd party agents and departments dedicated to managing our marking requirements and needs.</p>	<p>also requires the use of outside agencies, such as CE, UL, etc. as well as in-house testing labs and label printing equipment, software and personnel. In 2016, our embedded power group spend US\$83K for energy related mark application. For customer-driven marks (those that are not required by law, but preferred by customers), there is the cost of certification itself, which usually requires testing / audits. Engineering personnel are required to assist in this effort.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Uncertainty surrounding new regulation	Recently the U.S. Department of Energy's Office of Efficiency and Renewable Energy guidelines addressing the energy efficiency standards for external power supplies (EPS). The new standards were not entirely clear and legal advise was sought to ensure compliance with the regulations so that we could continue to access one of our largest markets, the United States.	Inability to do business	3 to 6 years	Direct	Virtually certain	Low-medium	Typically where guidance is not available regarding a particular regulation and regulators are either not able to answer questions or are unavailable, we seek out a legal opinion to demonstrate due diligence in compliance. Depending on the legal opinion, we may be forced to discontinue sales of a certain product until the issue is resolved at the governmental level. Outside legal advice on a single issue can range from \$2k to \$40k depending on the length of engagement and the necessary	Where there are grey areas, sales and marketing will approach the law department for guidance. Depending on the regulation in question, the law department may seek outside advice and a written legal opinion from an outside law firm. We also manage regulatory grey area risk by making conservative guesses as to how ambiguities will be resolved. For example, where there is ambiguity as to when the regulation will take effect or to which products that regulation applies, we would assume the regulation would take effect under the earlier	Modeling costs associated with pursuing multiple product plans, legal costs, potential lost opportunity costs.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							interaction with regulators.	scenario and affect the broader category of products.	

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
Change in mean (average) temperature	Artesyn produces its products in areas of the world where temperatures are already in the high to medium-high zones. Heatwaves in the Philippines, where Artesyn has production facilities, can reach deadly	Increased operational cost	3 to 6 years	Direct	Virtually certain	Medium	As our production facilities consume 5-10% of their energy for heating and cooling purposes, a change in average temperature, would increase HVAC costs, making a significant impact on the	Artesyn is proactively reducing its greenhouse gas emissions, lessening its impact on global warming and managing its HVAC costs as part of its management method. For example, one of our emission reduction	Costs will be primarily related to the cooling of our facilities. External areas which may have been utilized by employees (i.e. for eating lunch or moving from one location within the campus to another) may need to be made internal to the site through construction of additional indoor areas. Increase in

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	levels. Were the mean temperature to increase, there would be additional costs to our operations, not only in terms of cooling costs for our facilities, but in terms of product design and production.						cost of our operations. We estimate that for every degree Fahrenheit of increased mean temperature increases our HVAC costs by 5% monthly on average, which would be a significant financial impact.	activities has been to replace HVAC equipment throughout our operations in favor of more efficient systems and changed our consumption patterns to better utilize our conditioned spaces. We also aim to reduce the amount of heat generated by our production and test equipment which decreases our need for air conditioning.	mean temperatures could also result in work stoppages when the HVAC system is down, so our production facilities have installed or are installing back up systems for that occurrence.
Change in temperature extremes	Artesyn produces its products in areas of the world where temperatures are already in the high to medium-high zones. Were	Increased capital cost	3 to 6 years	Direct	Virtually certain	Medium	Just as a change in mean temperatures would mean an increase in corollary costs, so would an increase in temperature	We manage expected increase in temperature extremes in a similar way to managing changing mean temperatures, by proactively	Costs will be primarily related to the cooling of our facilities and capital outlay for more efficient equipment and additional cooling methods. External areas which may

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	the average temperature to increase, there would be additional costs nearly company-wide.						extremes, but unlike an increase in mean temperatures, an increase in extremes will likely require the purchase of additional equipment that can function in those extremes or control those temperature extremes. Additional insurance may need to be procured and production down times may last longer and become more severe as a result.	reducing its greenhouse gas emissions and lessening its impact upon global warming. For example, we recently upgraded a motor used in production in China to high-efficiency energy saving motor, reduce electric power consumption on air conditioning system. This should result in an annual electrical power consumption savings of approximately 50,000 kwh, a savings of \$4k USD annually.	have been utilized by employees (i.e. for eating lunch or moving from one location within the campus to another) may need to be made internal to the site through construction of additional indoor areas. Increase in mean temperatures could also result in work stoppages when the HVAC system is down, so our production facilities have installed or are installing back up systems for that occurrence. Insurance costs may increase.
Change in precipitation pattern	Artesyn's current production facilities in the Philippines are	Reduction/disruption in production capacity	1 to 3 years	Direct	Likely	Low-medium	Where flooding occurs there could be production downtime, an	Where possible, investments are made in upgrading	Business Continuity Plans and Disaster Recovery Plans require extensive

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	located in areas that are susceptible to flooding and sea rise. These risks have the potential to negatively impact the company if not appropriately planned for and managed.						increase in insurance costs, facility remediation, potential equipment damage, and potential damage to IT infrastructure.	facility infrastructure, electrical, test and production equipment are kept in safe locations, moisture sensors are installed, building and city codes are complied with, and business continuity plans are continuously reviewed and improved upon.	time and effort as do the recommendations that come out of those assessments, as well as risk assessments by our insurers. For example, a recent assessment at one of our factories concluded that due to precipitation and potential high winds / tropical storms, that roofing should be improved with additional flashing and screws to decrease risk of structural damage.

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
Reputation	<p>Artesyn is sensitive to the reputational risks due to climate change and other corporate social responsibility factors. Our reputation on all aspects of environmental and social responsibility directly impacts our ability to sell our products. During quarterly reviews with our customers, our CSR performance is reviewed and scored. Negative findings impact our ability to secure future projects with our customer. Many of our customers ask that we make our Carbon Disclosure Report publicly available and improve the reporting score year over year. Additionally, some are now</p>	Reduced demand for goods/services	Up to 1 year	Indirect (Supply chain)	Virtually certain	High	<p>Reputation as a responsible corporation is important to all of Artesyn's customers. Damage to that reputation, or to our customers' reputation with the consumer, has the potential to reduce demand for goods to a level that could disrupt business irreparably and potentially fatally. An estimated 90% of our revenue, which is a significant impact, could be directly impacted by negative reputation risk.</p>	<p>Maintaining a positive reputation amongst our customers is an ongoing, daily process of responding to customer requests promptly, proactively taking steps we believe our customers would want, interfacing with customers regularly to gauge customer satisfaction, maintaining a robust corporate compliance program, managing our corporation in a financially sound manner, and treating our employees well, among many other measures of good business management. To take one example, Artesyn maintains a</p>	<p>Currently the cost of Artesyn's compliance program is spread across the organization. To take a piece of that as an example of the cost of management, we can look at the compliance department under the Chief Compliance and Ethics Officer that has 8 full time compliance oversight personnel and 1 administrative vacancy. On the whole this cost is seen as a net gain in that regulatory fines and penalties are avoided through an effective compliance program and a high reputation of ethical behavior is maintained.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	requesting our emissions attributable to their purchases and it is important to maintain our reputation as a partner in reducing emissions in order to maintain that positive relationship with our customer.							Corporate Compliance Program led by its Chief Compliance and Ethics Officer that oversees all of the company's compliance activities, identifies areas of risk, and implements training where necessary to mitigate those risks. By being compliant with the law and behaving in an ethical manner, Artesyn decreases the risk that its reputation will be affected by bad actors.	
Changing consumer behavior	Changing consumer behavior directly drives Artesyn's customer purchasing and thereby is impactful to Artesyn's	Increased operational cost	1 to 3 years	Indirect (Supply chain)	Virtually certain	High	The financial implications of changing consumer behavior, such as a reduction in consumption patterns, risks negatively	Leadership and marketing are continuously assessing consumer behavior and conducting market research in order to bring	Taking one recent customer custom design as an example, Artesyn invested 3 years, a dedicated full-time program manager and \$250k USD in

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>business. Decreased consumption by consumers would impact Artesyn sales in a negative manner.</p>						<p>affecting company sales. For example, should consumers, in an effort to reduce greenhouse gas emissions, reduce their consumption of electronic devices or choose to keep their devices longer before upgrading to a new model, that would reduce demand for certain Artesyn product lines. If consumers upgraded their smartphones every 4 years, versus every 2 years, for Artesyn products related to smart phones, that could mean up to a 30% reduction in revenue for that product line.</p>	<p>innovative products to market that meet consumer and customer needs. Market research is reported quarterly at each Quarterly Business Review and go to market strategy and engineering resources are adjusted where changes in consumer behavior / customer demand indicate is necessary.</p>	<p>designing a next generation industrial PC to operate aspects of a renewable energy installation for a customer. Indicative of changing customer demand, this design required both lower power consumption using only conduction cooling, thereby reducing cost and carbon-creating aspects of the product.</p>

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

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

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

Further Information

Page: CC6. Climate Change Opportunities

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

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
Product efficiency regulations and standards	Artesyn products are subject to power supply energy efficiency regulatory requirements in many of the markets where it sells its products, primarily the United States and the European Union. These regulations have the ability to provide potential for increased business for	Increased demand for existing products/services	1 to 3 years	Direct	Virtually certain	High	If Artesyn were able to meet certain energy efficiency regulations more quickly than its competitors Artesyn estimates that this could have a 2-8% increase to revenue for the relevant embedded power product for up to 4 quarters.	To take advantage of the opportunities created by product efficiency regulations and standards, we actively improve the efficiency of our products through engineering research and development. For example, our MaxCore products we take a rack of 42 rackmount	In order to take advantage of opportunities brought about by changing regulations it is necessary to invest significantly in research and development across all product lines and continue to drive innovation in the area of energy efficiency. R&D dollars are spent on attracting and

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	our existing products and could provide us a competitive advantage if we are able to meet the standards prior to others in the industry or exceed the product efficiency standards and provide a more efficient product.							servers and collapsed them into a much smaller and more energy-efficient box ("MaxCore") that improves space and energy efficiency to provide enhanced customer experience and providing an opportunity for future growth in sales.	maintaining engineering talent, designing product innovations, testing, and ultimately marketing to the customer base.
International agreements	Under the 2009 Copenhagen Accord, China pledged to reduce its emissions intensity by 40-45 percent from 2005 levels by 2020. As Artesyn has manufacturing locations in China, we	Increased demand for existing products/services	3 to 6 years	Direct	Very likely	Medium	To the extent that we can meet the goals set out in international agreements, that improves our reputation with our customer and, as part of our customers' supply chain, helps them improve their	We have proactively put in place many energy reduction initiatives, as detailed in section 3.3, so that we are able to meet energy conservation standards brought about by	Each of the initiatives we have implemented has associated cost. To take a small example, one of our plants recently switched from an old 22kw air compressor to new small

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>have the opportunity to rise to the challenge set out in the Copenhagen Accord, this would create opportunity with our customers who are also driving goals set out in international agreements.</p>						<p>position with their customer as well by meeting or exceeding environmental standards. We estimate that we currently have 20% market share in our computing and storage line of power conversion products. Helping our customers meet their science-based targets and selling an increasingly efficient product has the potential to increase market share 10-15% as our customers use Social and Environmental performance as a score multiplier on supplier</p>	<p>international agreements.</p>	<p>2.2kw air compressor at a cost of only \$250 USD, but this has an annual monetary savings of \$7500 USD and an annual carbon emissions savings of 54 tons Co2e per cubic meter. Small changes such as this, multiplied many times over throughout the organization result in many opportunities to improve our emissions and meet international agreement goals.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							scorecards which effects preferred supplier share.		

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
Change in mean (average) precipitation	Artesyn has chosen to locate its facilities in best in cost locations. However, some of these locations are also susceptible to various environmental conditions such as flooding and typhoons, some of which are likely to increase in frequency and intensity over the long term. For example, our	Increased production capacity	>6 years	Direct	Likely	Medium	Changes in (mean) average precipitation can create an opportunity for companies that are able maintain locations in best in cost locations despite changes in climate. On average, 10-15% of our embedded power product price is comprised of labor costs. However, if we were to set up a	Artesyn primarily manages weather-related climate change risks through its annual Business Continuity Plan where risks and potential impacts are assessed and action plans are made to address any risks that are found. This continuing process of risk assessment and good corporate governance and	Each risk that our Business Continuity Plan exposes typically requires capital in order to remediate that risk. We also go through a similar process with our insurance carriers and we insure against many climate-related risks. As those risks increase, insurance costs also increase. Re-locating a

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>production facilities in the Philippines have been affected by flooding in the past, but due to extensive business continuity and disaster recovery planning, we have been able to maintain our facilities in the Philippines with limited disruption to operations and production. To the extent that Artesyn is able to remain in these low cost locations, and provide product at a competitive cost, that can be an opportunity for the company. If the company were to greenfield factories in new locations that are less impacted by climate-driven weather impacts, that would be an opportunity for</p>						<p>new factory, increases in automation could reduce our labor costs to 5-10% of product price.</p>	<p>oversight gives us the opportunity to continue to operate in these low cost areas where we have a long history of manufacturing expertise.</p>	<p>manufacturing location to a location that has lower risks of climate-related weather events would also provide the opportunity to reduce insurance costs.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Artesyn to rapidly move to increasingly automated production, thereby reducing labor and other associated costs.								

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
Reputation	Reputation and reputational risk are highly important to Artesyn's customers. While Artesyn conducts its sales under a business to business model, our customers are public-facing, publicly-traded	Increased demand for existing products/services	1 to 3 years	Indirect (Client)	Virtually certain	High	Reputation in relation to climate change and corporate social responsibility makes up an estimated 5-10% of product price. This is a factor that is reviewed quarterly with all of our large, multi-national	Having a strong compliance program is fundamental to minimizing reputation risk to our customers and achieving a reputation for integrity. For example, the compliance program is led by the Chief	There is a cost to complying with regulations and other industry-led standards, such as the EICC Code of Conduct, however, there is also the opportunity to beat out competitors who may not have

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>corporations whose businesses and stock prices can be affected by "bad publicity." Where we can minimize this risk not only to ourselves, but to our customers, we can gain in market share and gain entry to future opportunities and partnerships. Specifically, we see the opportunity to gain market share with our large consumer product customers who are multi-sourced and can reallocate supplier share based on a supplier's scorecard, one measure of which is environmental performance</p>						<p>customers. Our reputation presents financial opportunity by gaining entry into our customers' list of preferred suppliers and allowing us to charge a price premium over less well-regarded, less preferred suppliers. On average preferred suppliers can charge up to 25% more over other suppliers.</p>	<p>Compliance and Ethics Officer and reports quarterly directly to the Office of the Chief Executive. This program affects every level and every department in the company as all departments are required to implement compliance programs, attest to corporate policies, and successfully complete relevant compliance audits. Through these programs we are able to demonstrate to our customers that we are able to comply with regulations around the world, including any energy efficiency regulations, and that integrity is</p>	<p>effective compliance programs or other methods to minimize reputation risk. For example, facility SER (social and environmental responsibility) audits, which include environmental measures such as carbon emissions, are \$10k USD on average. However, this allows us to communicate our commitment and progress to our customers and show our ability to be a partner to them in this area.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and CDP scoring.							one of our paramount values.	
Changing consumer behavior	Consumer-driven behavior, such as the desire to invest in companies that have smaller carbon footprints, or to purchase carbon-neutral products, provides Artesyn the opportunity to meet the future market needs of our customers through energy efficiency innovations.	New products/business services	1 to 3 years	Direct	Very likely	Medium-high	Energy efficient power conversion and embedded computing products allow us to position the company to take a larger segment of market share.	Artesyn has taken a proactive role in anticipating consumer behavior, proposing solutions to our customers, and growing its corporate social responsibility program. Both the sales and marketing groups use consumer behavior to model their future growth opportunities and work with engineering to design product to meet that anticipated need.	There are costs associated with market analysis and consulting projects to analyze those opportunities, along with engineering costs to create product to meet consumer needs.

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

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

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

Further Information

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

Page: CC7. Emissions Methodology

CC7.1

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

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Thu 01 Jan 2015 - Thu 31 Dec 2015	608
Scope 2 (location-based)	Thu 01 Jan 2015 - Thu 31 Dec 2015	99174
Scope 2 (market-based)		

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
ISO 14064-1

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

CC7.3

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

Gas	Reference
CH4	IPCC Fifth Assessment Report (AR5 - 100 year)
N2O	IPCC Fifth Assessment Report (AR5 - 100 year)
HFCs	IPCC Fifth Assessment Report (AR5 - 100 year)

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	603.2	kg CO2e per MWh	Department of Energy. National Grid Emission Factor. Luzon-Visayas Grid (2009-2011). https://www.doe.gov.ph/national-grid-emission-factor-ngef .
Electricity	527.1	kg CO2e per MWh	Emission Factors of Electrical Grid in China in 2011 & 2012 (2012). http://www.cec.org.cn/huanbao/xingyexinxi/qihoubianhua/2014-10-10/128455.html
Diesel/Gas oil	2.6765	kg CO2e per liter	Emission Factors from Cross Sector Tools March 2017. GHG Protocol. http://www.ghgprotocol.org/sites/default/files/ghgp/Emission_Factors_from_Cross_Sector_Tools_March_2017.xlsx

Fuel/Material/Energy	Emission Factor	Unit	Reference
Natural gas	1885	metric tonnes CO2 per liter	Emission Factors from Cross Sector Tools March 2017. GHG Protocol. http://www.ghgprotocol.org/sites/default/files/ghgp/Emission_Factors_from_Cross_Sector_Tools_March_2017.xlsx
Liquefied petroleum gas (LPG)	2.9846	Other: kg CO2e/kg	Emission Factors from Cross Sector Tools March 2017. GHG Protocol. http://www.ghgprotocol.org/sites/default/files/ghgp/Emission_Factors_from_Cross_Sector_Tools_March_2017.xlsx

Further Information

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

CC8.1

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

Operational control

CC8.2

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

3098.97

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 are reporting a Scope 2, market-based figure	For both location-based and market-based emissions, grid average emission factors are used, which makes the emissions identical. This is expected to be a short-term anomaly in the process of developing residual mixes.

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
52711.47	52711.47	For both location-based and market-based emissions, grid average emission factors are used, which makes the emissions identical. This is expected to be a short-term anomaly in the process of developing residual mixes.

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
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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	Less than or equal to 2%	Data Gaps	Artesyn believes it has captured 100% of its Scope 1 emissions. It is possible, although unlikely, that not all fuels used were actually documented. As Artesyn tracks its fuel consumption for equipment and vehicles, this should not be the case unless there was human error in the reporting.
Scope 2 (location-based)	Less than or equal to 2%	Assumptions	The accuracy of Artesyn's Scope 2 emissions data is dependent upon 3rd party electricity companies. It is assumed that the metering is correct and the amount of electricity consumed is accurate. As energy consumption and energy consumption costs are looked at closely, it is unlikely that we would have been given inaccurate metering information and not have noticed, but it is hypothetically possible.
Scope 2 (market-based)	Less than or equal to 2%	Metering/ Measurement Constraints	The accuracy of Artesyn's Scope 2 emissions data is dependent upon 3rd party electricity companies. It is assumed that the metering is correct and the amount of electricity consumed is accurate. As energy consumption and energy consumption costs are looked at closely, it is unlikely that we would have been given inaccurate metering information and not have noticed, but it is hypothetically possible.

CC8.6

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

Third party verification or assurance process in place

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 (%)
Annual process	First year it has taken place	Reasonable assurance	https://www.cdp.net/sites/2017/69/52169/Supply Chain 2017/Shared Documents/Attachments/CC8.6a/HKQAA Verification Report and Statement-public edited version.pdf	Page 1 of the statement	ISO14064-3	100

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

CC8.7

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

Third party verification or assurance process in place

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 (%)
Location-based	Annual process	First year it has taken place	Reasonable assurance	https://www.cdp.net/sites/2017/69/52169/Supply Chain 2017/Shared Documents/Attachments/CC8.7a/HKQAA Verification Report and Statement-public edited version.pdf	Page 1 of the statement	ISO14064-3	100

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	

CC8.9

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

No

CC8.9a

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

Further Information

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

CC9.1

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

Yes

CC9.1a

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

Country/Region	Scope 1 metric tonnes CO2e
China	923.89
Philippines	2175.08

CC9.2

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

By activity

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
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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)
Fuel for Power Generation	493.94
Fuel for company Vehicles	465.53
Refrigerant	2139.51

Further Information

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)
China	33249.71		63080.45	
Philippines	19461.76		32264.20	

CC10.2

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

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)
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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

Page: CC11. Energy

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%

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

CC11.3

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

959.47

CC11.3a

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

Fuels	MWh
Natural gas	135.62
Diesel/Gas oil	587.21
Liquefied petroleum gas (LPG)	236.64

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, with a supplier-specific emission rate, not backed by electricity attribute certificates	0	0	Southern China electricity is created 38.5% hydroelectric, 5% wind power, 4.4% nuclear power, and 1.5% solar power. Philippines electric grid is fed by 12% geothermal energy, 9% hydroelectric, 1% solar and 1% wind.

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
96304.11	95344.64	959.47	0	0	

Further Information

Page: CC12. Emissions Performance

CC12.1

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

Decreased

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
Emissions reduction activities	6.4	Decrease	6416 metric tons of CO2 were saved in 2016 due to emissions reduction activities implemented across multiple production locations. In 2015 our emissions were 99782 metric tons of CO2. $6416/99782*100 = 6.4\%$ decrease due to emission reduction activities.
Divestment			
Acquisitions			
Mergers			

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Change in output	32	Decrease	The decrease in purchased electricity from 140882 MWh in 2015 to 96304.113 MWh in 2016 was primarily due to changes in production and headcount across the facilities.
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other			

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?

Location-based

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
0	metric tonnes CO2e	0	Location-based			As a privately held company, our revenue numbers are not public. Please see 12.3 for an alternative intensity metric.

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
.0016	metric tonnes CO2e	unit hour worked	34742975	Location-based	43	Decrease	Emission reduction activities, decreased headcount, and hours worked between 2015 and 2016.

Further Information

Page: **CC13. Emissions Trading**

CC13.1

Do you participate in any emissions trading schemes?

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

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 CO2e	Details of ownership

CC13.1b

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

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
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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	Relevant, calculated	15.76	Number of purchased meals in 2016 were multiplied by an emissions factor of 9 kgs of CO2e per meal, then converted into metric tons. Emissions factor taken from 2013 study, The Carbon Emissions of Eating Out. Data may be under estimated as what may look like a single meal purchase may have been multiple meals purchased by a single person.	0.00%	Number of meals purchased in 2016 were taken from Artesyn’s expense booking system Concur. Meals are only one item of purchased goods and services and do not include canteen meals.
Capital goods	Relevant, not yet calculated				

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 relevant, explanation provided				All of our fuel and energy-related activities, other than those listed in the other Sources of Scope 3 emissions in this Section, are already accounted for in Scope 1 and Scope 2.
Upstream transportation and distribution	Relevant, not yet calculated				
Waste generated in operations	Relevant, calculated	145.44	.54 emission factor taken from Waste Sector GHG Calculation Tool as a 15 country average. Landfill waste generated from operations was offset by 2,132.57 metric tons avoided CO2 emissions from recycling of paper, pallets, plastic, PCB, metal, food, and rubber.	0.00%	Artesyn weighs the amount of waste its operations generate and does not need to rely on 3rd parties for this information.
Business travel	Relevant, calculated	1780	carbonfund.org, EPA emissions factors for short, medium, and long haul flights.	100.00%	Companywide air travel for 2016. Emissions data provided for short, medium, and long-haul flights through travel booking provider, Adelman.
Employee commuting	Relevant, calculated	8989.27	Based on distance-traveled method. Employees were divided into 4 commute categories: light rail (.06715 emissions factor), bus (.13552), motorcycle (.14238), and car (.24234). Each was multiplied by the average kms traveled daily, times the number of commute days per year. Emission factors taken from DEFRA 2012.	0.00%	Data provided by Philippine factories. China factories to be included once data received.
Upstream leased assets	Not relevant, explanation provided				We do not have any significant upstream leased assets. We may lease some tooling or minor equipment, but emissions from these items would already be included in our Scope 2 emissions as they are located on site at

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
					production facilities or they would be included in Scope 3 capital goods.
Downstream transportation and distribution	Relevant, calculated	11.7	Number of North America -destined containers shipped by container ship in 2016 multiplied by kilometers traveled multiplied by emissions factor for 20000 ton container ship of 11.5 grams of CO2e / tonne kilometer, converted into metric tons of CO2e.	100.00%	Artesyn's logistics carriers provided the data related to distance traveled, number of shipments, and weight of shipments. Limitations are that only U.S. destined container ships were accounted for. Other shipments were not included as this was a data gap.
Processing of sold products	Relevant, not yet calculated				
Use of sold products	Relevant, not yet calculated	13710	Carbonfund.org, on average, electricity sources emit 1.222 lbs. CO2 per kWh. Estimate 0.2277 metric tons CO2e per TLA 7001577-J000 per year. Total PSU Watts: 2450 W, Running Percent load: 30%, Loaded Watts: 735 W, Efficiency @ 30% load: 94%, Watts Dissipated: 46.9 W, kW Dissipated: 0.0469 kW. Hours in Day: 24 hrs. Days in Year: 365 days Hours per year: 8760 hrs.	100.00%	Limitations of this calculation are that only products where usage was estimable were considered. Information was provided by internal sources: engineering and sales.
End of life treatment of sold products	Relevant, not yet calculated				
Downstream leased assets	Not relevant, explanation provided				Artesyn does not lease downstream assets.
Franchises	Not relevant, explanation provided				Artesyn has no franchise operations.

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
Investments	Not relevant, explanation provided				Artesyn is not an investment, financial services company or development bank. Its investments would primarily be through its employee benefit plans such as 401k plans and pensions. This type of investment would not be included in Scope 3 emissions.
Other (upstream)					
Other (downstream)					

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 (%)
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CC14.3

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

Yes

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
Waste generated in operations	Change in output	8.7	Increase	Waste increased moderately due to consolidation of manufacturing areas and production changes resulted in increased waste generated in operations, as well as increased recycling of materials.

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)

Yes, our suppliers
Yes, our customers

CC14.4a

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

Artesyn engages its suppliers to increase their productivity and efficiency of operations and reduce operating costs. We prioritize engagement with suppliers that represent a larger / higher percentage of our procurement spend. We also flow down the Electronics Industry Citizenship Coalition's Code of Conduct which calls upon companies to be reduce consumption across a number of environmental measures, nearly all of which would result in reduced greenhouse gas emissions. Each year we set goals as to the percentage of suppliers that will need to be audited by a 3rd party to assess their compliance with the Code. Should a supplier have audit findings, they will engage in a corrective action plan process and resolve the finding. We measure our success by the percentage of suppliers we are able to have under audit and driving toward improvements of many CSR measures, environment and greenhouse gases included. We interact with our customers in a similar manner. Many of our larger customers ask us to report our carbon emissions to them, most in the form of a CDP report, and then to also allocate a percentage of our emissions to them / their supply chain. We also engage our customers directly, asking to meet with the leaders within their CSR / SER groups so we can understand their supplier priorities for the year and what is important to them about our emission reporting. Many of our customers are interested in certain aspects of the report over others. Customer engagements are prioritized primarily by the amount of customer spend with our company and how heavily that customer weighs our performance in our supplier scorecards. Success in terms of customer engagement is measured by improving our supplier scorecard scores in the area of SER, which includes our GHG emissions and climate change strategies.

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
Active engagement	25	50%	All Artesyn suppliers are provided with the EICC Code of Conduct and required to attest to the Code. We also push our suppliers to undergo a 3rd party validated audit to this Code. Artesyn currently has greater than 50% of its supplier spend under 3rd party verified CSR / EICC validated audit which includes environmental performance and management.

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

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
Brian Walsh	Chief Legal Officer	Other C-Suite Officer

Further Information