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 2016 CDP report contains emissions information for all of its production / factory locations, where the vast amount of our emissions occur. 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
Thu 01 Jan 2015 - Thu 31 Dec 2015

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, and the General Counsel).

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 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	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.

Further Information

Page: CC2. Strategy

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	United States, Philippines, China, India	3 to 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.

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 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

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 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 currently 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 and have resulted in significant cost reduction, emissions reduction, all the while improving out positioning with customers who are highly focused on corporate social responsibility (CSR) as a part of their strategies with their retail consumer base. In relation to operational practices, Kanban / 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 an annual energy reduction goal both cumulatively and for each of our facilities and these goals on our public 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 centers 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 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 of 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 of 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

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 and industry standards organizations, for education, support, and recommendations in matters regarding the energy efficiency of power supplies (no-load, standby, and active-on)	Members of our sales, marketing and engineering teams serve on committees within the organization and play an active role in achievement of 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

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?
		with, as a primary goal, the establishment of a single global standard for energy efficiency.	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.	Through PMBus, 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,
System Management Interface Forum (SMIF)	Consistent	About the System Management Interface Forum (SMIF), Inc. 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.	

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 Code of Conduct and actively participate 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 publically on our website. It is through this process of executive adoption and communication that we maintian 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?

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

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%	Metric tonnes CO2e per unit hour worked	2014	.000003	2015	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.

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
Int2	Scope 2 (location-based)	100%	2%	Metric tonnes CO2e per unit hour worked	2014	.0022	2015	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	2.29	No change	0	2015 is our 1st year of estimation for Scope 3. As our target is a Scope 1 emission intensity target, here we have also provided a Scope 1 absolute emissions change estimation, rather than Scope 1 + Scope 2.
Int2	Decrease	2.29	No change	0	

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

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
Int1	100%	100%	We have met and exceeded intensity target 1.
Int2	100%	0%	Intensity target 2 was not met.

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 head 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	4	1259
To be implemented*	6	1183
Implementation commenced*	1	229
Implemented*	12	4494
Not to be implemented	0	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	Production line upgrade for productivity improvement -- Enhancement of facilities & layout of existing embedded power production floors (6K , 3S & 4N).	771	Scope 2 (location-based)	Voluntary	542000	96000	<1 year	3-5 years	AR#462-065-2015, Total yearly saving is 542K which include 133K in Electricity and 409 K in Productivity.Implemented
Energy efficiency: Building services	Shop floor consolidation -- (6K to 4S, 4K to 4J , 3K to 4N) and Upgrade Manual Bondply Assembly Line	272	Scope 2 (location-based)	Voluntary	537000	250000	<1 year	3-5 years	AR#462-101-2015 & 462-006-2015,Total yearly saving is 537K which include 47K in Electricity and 490 K in labour implemented
Energy efficiency: Building services	Office consolidation to free up P1 & P2 building then reducing energy consumption in Air Conditioning & lighting	86	Scope 2 (location-based)	Voluntary	15000	20000	1-3 years	3-5 years	AR#462-014-2015, It is part of project Lean Improvement in Material Handling & Storage and Offices (462-014-2015). Saving in Electricity for Air Conditioning & Lighting is 15 K .Implemented*
Low carbon energy installation	Upgrading lighting from Fluorescent Tube to LED Tube of production floors 1J/1H/2F	93	Scope 2 (location-based)	Voluntary	16000	10794	<1 year	3-5 years	AR#462-109-2013 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: Building services	Upgrading to Central Chilled Water FCUs of Air Conditioning System of Office Floor 4C	11	Scope 2 (location-based)	Voluntary	2000	1524	<1 year	6-10 years	AR#462-014-2015 Implemented
Energy efficiency: Processes	Consolidation of SMT material centers from 1K & 1J to 1J to reduce space area and Consumptions of Air Conditioning & Lighting	93	Scope 2 (location-based)	Voluntary	15938	20000	1-3 years	6-10 years	AR#462-101-2015 Implemented
Energy efficiency: Building services	Upgrade the fresh air system for the air conditon on the production floor of 2HJ and 3HJ.	50	Scope 2 (location-based)	Voluntary	8610	11516	1-3 years	6-10 years	AR#462-050-2014 Implemented
Behavioral change	Install energy meter for monitoring the cooling water consumption for all section. And adjust the chiller running with the best mode.	18	Scope 2 (location-based)	Voluntary	3216	4524	1-3 years	6-10 years	AR#462-050-2014 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	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.	229	Scope 2 (location-based)	Voluntary	39524	476191	1-3 years	6-10 years	Implementation commenced
Energy efficiency: Building services	Plant switched from old 22kw air compressor to new small 2.2kw air compressor.	54	Scope 2 (location-based)	Voluntary	7500	250	<1 year	1-2 years	
Energy efficiency: Building services	Moved 150HP air compressor from one plant to another (shut down old, low efficiency air conditioner)	300	Scope 2 (location-based)	Voluntary	41600	10000	<1 year	Ongoing	
Energy efficiency: Building services	Reduced leakage of compressed air from air tube.	96	Scope 2 (location-based)	Voluntary	13000	500	<1 year	Ongoing	
Energy efficiency:	Replaced drinking fountains with	294	Scope 2 (location-	Voluntary	40000	20000	<1 year	Ongoing	

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	high efficiency fountains.		based)						
Energy efficiency: Processes	Consolidation of plant office space (Consolidate B4-3F office to B1-1F)	157	Scope 2 (location-based)	Voluntary	22000	0	<1 year	1-2 years	
Energy efficiency: Building services	Factory-wide conversions to LED lighting (Philippines factories)	938	Scope 2 (location-based)	Voluntary	280983	274000	1-3 years	3-5 years	
Energy efficiency: Building services	Oil fouling treatment on air conditioning units (Philippines factories)	802	Scope 2 (location-based)	Voluntary	218913	275891	1-3 years	3-5 years	
Energy efficiency: Processes	One time curing: U Bond and Conductive Epoxy	221	Scope 2 (location-based)	Voluntary	70537	0	<1 year	6-10 years	
Energy efficiency: Processes	UV LED Curing: Short stream flow line	6	Scope 2 (location-based)	Voluntary	1881	11382	1-3 years	6-10 years	
Behavioral change	Turning off lights during lunch break (Philippines factories)	2	Scope 2 (location-based)	Voluntary	637	0	<1 year	Ongoing	

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
Behavioral change	Earth Hour (Philippines factories)	1	Scope 2 (location-based)	Voluntary	43	0	<1 year	Ongoing	Lights are turned off for 1 hour on Earth Hour day, March 25th
Transportation: fleet	Implement fuel efficiency as a metric in choosing new fleet vehicles in procurement process.		Scope 1	Voluntary	0	0	<1 year	Ongoing	Year over year vehicles purchased for company fleet must be increasingly fuel efficient / energy efficient. We do not currently have a method for tracking energy savings due to this activity, but will be improving our tracking so that reporting a specific emissions reduction number will be possible in the future.

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, both in the U.S. and in other countries where similar regulations apply.

Method	Comment
Dedicated budget for energy efficiency	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.
Financial optimization calculations	For each Appropriations Request, the submitter must check a box whether that A/R is "energy saving." This goes into the return on investment and net present value 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.

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	Section: Environment, Page 1	https://www.cdp.net/sites/2016/69/52169/Supply Chain 2016/Shared Documents/Attachments/CC4.1/Environment CSR Webpage 2015.JPG	We publish information on our energy-saving performance in multiple locations on our website.

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 corporations to reduce their emissions and the impact their company has on climate change. The risk here is that there will be costs associated with reducing our emissions and those costs could drive product price higher and drive certain customers away. However, Artesyn believes that international climate change agreements present both risks and opportunities for our business.	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, R&D expenses for bringing more efficient products to market, costs for purchasing more efficient HVAC systems at non-production facilities, costs for purchasing newer fleet vehicles that consume less fuel, the costs of finding suppliers that contribute as few emissions as possible to our supply chain, and the costs of purchasing carbon credits if that option were pursued. Estimated current cost of	To manage this risk, Artesyn continues to investment 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 heat. For a data center with 3120 cores, or 7 racks and 7 switches, MaxCore would reduce that to 1 rack and 1 switch. It would reduce server chassis from 130 to 13 and reduce	Research and development costs, administrative burden, increased production efficiency costs (i.e. purchase of low energy consuming machinery, test equipment, etc.).

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	While there are costs associated with moving to high 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.						carbon credits would be $336,000 USD annually using emissions factors calculated by number of employees with the average sqft needed per employees, 225 sqft (based on industry assumptions that a typical office will require between 175 – 250 sq ft per employee). We then calculate the total sqft by average emissions for office buildings by sqft (Source: Energy Star). Then we multiply the energy needed for the total space by state based emissions factors.	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 imposed in the future.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
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. Were we required to calculate downstream emissions with increased certainty, we would likely incur costs due to labor and consulting required to accomplish this goal.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Medium	Artesyn already reports its emissions for greater than 75% of its emissions production. However, Artesyn aims to increase emissions reporting to 100% of its emissions and facilities. The estimated financial implications of additional reporting will likely result from customer driven requirements that we reduce the amount of emissions each year, either as an absolute or intensity target. Artesyn has already taken advantage of many emissions reducing opportunities. Future	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.	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
							opportunities will likely require significant investment.		
Product efficiency regulations and standards	The U.S. Department of Energy's Office of Efficiency and Renewable Energy publishes guidelines 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 over 50% of our research and development budget can be attributed to increasing product efficiency in some manner, 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. As product efficiency gains in importance in comparision to	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	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
							other engineering requirements, an increased percentage of the R&D budget would need to be allocated to these tasks.	on February 10, 2016 increased the required efficiencies for power supplies, we had already designed compliant product and moved our customers to these more efficient models in advance of the regulation's effective date.	
Product labelling regulations and standards	Our products currently require certain energy efficiency marks and we anticipate future marks to be required in the future.	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 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	We manage marking requirements similarly to complying with product energy efficiency regulations. In addition to that management method, we also have specific personnel, equipment, software, 3rd party agents and departments dedicated to managing our	In addition to the costs of management in ensuring regulatory requirements are met, marking 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. For customer-driven

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							in where we could sell those products and given that the largest markets have marking requirements, this has the potential to have significant financial impact on our company.	marking requirements and needs. For example, in Europe, the CE Mark indicates that the product complies with all applicable European Union Directives. For power supplies,	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.
Uncertainty surrounding new regulation	Whenever new regulations are introduced, there are always questions as to implementation that are not addressed in the regulation or in governmental guidance, if available.	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	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 a disinterested third party law firm. We also manage regulatory grey area risk by	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
							sales of a certain product until the issue is resolved at the governmental level.	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 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. Were the average temperature to increase, there would be additional costs nearly company-wide.	Increased operational cost	3 to 6 years	Direct	Virtually certain	Medium	As our production facilities consume nearly 20% of their energy for heating and cooling purposes, a change in average temperature, would likely increase HVAC costs, making a significant impact on the energy consumption required for us to produce product.	Artesyn is proactively reducing its greenhouse gas emissions and lessening its impact upon global warming. We have also replaced HVAC equipment company-wide 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.	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 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	Increased capital cost	3 to 6 years	Direct	Virtually certain	Medium	Just as a change in mean	We manage expected increase in	Costs will be primarily related to the cooling of our

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	areas of the world where temperatures are already in the high to medium-high zones. Were the average temperature to increase, there would be additional costs nearly company-wide.						temperatures would mean an increase in corollary costs, so would an increase in temperature 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.	temperature extremes in a similar way to managing changing mean temperatures, by proactively reducing its greenhouse gas emissions and lessening its impact upon global warming. We have also replaced HVAC equipment company-wide 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	facilities and capital outlay for additional HVAC equipment and additional cooling methods. 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 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.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								need for air conditioning	
Change in precipitation pattern	Artesyn's current production locations and some of its corporate offices are located in areas that are susceptible to seasonal flooding and flash flooding. These risks, although not large, have the potential to impact the company if not appropriately planned for and managed.	Reduction/disruption in production capacity	1 to 3 years	Direct	Likely	Low-medium	Where flooding occurs there could be production downtime, an increase in insurance costs, facility remediation, potential equipment damage, and potential damage to IT infrastructure.	Where possible, investments are made in upgrading facility infrastructure, electrical, test and production equipment are kept in safe locations, moisture sensors are installed, building and city codes are complied with.	As we lease many of our facilities, when leasors upgrade their infrastructure, especially if they are doing so at lessee request, those costs are passed on Artesyn in the form of special assessments or an increase in lease costs. Business Continuity Plans and Disaster Recovery Plans require extensive time and effort as do the recommendations that come out of those assessment 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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
									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	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.	Reduced demand for goods/services	Up to 1 year	Indirect (Supply chain)	Virtually certain	High	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	Maintaining a positive reputation amongst our customers and the public is an ongoing, daily process of responding to customer request promptly, proactively takindg steps we believe our customers would want, interfacing	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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	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.						disrupt business irreparably and potentially fatally. An estimated 90% of our revenue could be directly impacted by negative reputational risk.	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 Corporate Compliance Program led by its Chief Compliance and Ethics Officer that overseas all of the company's compliance activities, identifies areas of risk, and implements training where necessary to mitigate those	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 complance program and a high reputation of ethical behavior is maintained.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								risks. By being compliant with the law and behaving in an ethical mannerl, Artesyn decreases the risk that its reputaiton will be affected by bad actors.	
Changing consumer behaviour	Changing consumer behavior directly drives Artesyn's customer purchasing and thereby is impactful to Artesyn's business. Decreased consumption by consumers would impact Artesyn sales in a negative manner.	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 affecting company sales. For example, should consumers reduce their consumption of electronic devices or choose to keep their devices longer before upgrading to a new model, that would reduce demand for	Leadership and marketing are continously assessing consumer behavior and conducting market research in order to bring 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	Taking one recent customer custom design as an example, Artesyn invested 3 years, a dedicated full-time program manager and $250k USD in 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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							certain Artesyn product lines.	consumer behavior / customer demand indicate is necessary.	conduction cooling, thereby reducing cost and carbon-creating aspects of the product.

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 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	Power Supply energy efficiency regulatory requirements provide potential for increased business for our existing products and	Increased demand for existing products/services	1 to 3 years	Direct	Virtually certain	High	Product efficiency regulations and standards have the opportunity to increase business such as increased lighting efficiency standards	To keep ahead of product efficiency regulations and standards, we actively improve the efficiency of our products through research and	In order to take advantage of opportunities brought about by changing regulations it is necessary to invest significantly in research and development

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	could provide us a competitive advantage if we are able to meet the standards prior to others in the industry.						driving additional business to LED technologies. Regulations requiring increased efficiency could result in competitive advantage if Artesyn's R&D teams are able to meet the standards prior to competitors or at a cost advantage. R&D is a significant investment as a percent of sales for our embedded power products.	development. For example, in our embedded computing MaxCore product we have taken a rack of 42 rackmount servers and collapsed that 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.	across all product lines and continue to drive innovation in the area of energy efficiency. R&D dollars are spent on attracting and maintaining engineering talent, designing product innovations, testing, and ultimately marketing to the customer base.
International agreements	Similar to product energy efficiency regulations, international	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,	We have proactively put in place many energy reduction initiatives, as	Each of the initiatives we have implemented has associated cost. To take a

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	agreements that require governments, in partnership with business, to reduce emissions, will result in opportunities for those businesses that are able to rise to the challenge, increase reputation among customers, potentially provide carbon offsets, and reduce customers' supply chain carbon footprint.						that improves our reputation with our customer and, as part of our customers' supply chain, helps them improve theirs position with their customer as well by meeting or exceeding environmental standards.	detailed in section 3.3, so that we are able to meet energy conservation standards brought about by international agreements.	small example, one of our plants recently switched from an old 22kw air compressor to new small 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 create opportunities as responsible supply chain

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
									partners for our customers.

CC6.1b

Please describe the 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, those 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. To the extent that Artesyn is able to remain in these	Increased demand for existing products/services	>6 years	Direct	Likely	Medium	Maintaining our facilities in best in cost locations has significant financial implications for our product cost, marketability, and ultimately revenue to the company. Being able to maintain our factories in these locations rather than relocate due to changes in weather patterns means maintaining that	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 oversight gives us the opportunity to	Each risk that our Business Continuity Plan exposes typically requires capital in order to remediate that risk.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	low cost locations, and provide product at a competitive cost, that can be an opportunity for the company.						competitive advantage.	continue to operate in these low cost areas where we have a long history of manufacturing expertise.	

CC6.1c

Please describe the 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 corporations	Increased demand for existing products/services	1 to 3 years	Indirect (Client)	Virtually certain	High	In order to grow our business, Artesyn is looking to grow its relationships and opportunities with current customers. The financial growth potential is substantial.	Having a strong compliance program is fundamental to minimizing reputation risk to our customers. The compliance program is led by the Chief Compliance and Ethics Officer and reports quarterly directly to the Office of the Chief Executive.	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 effective

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	whose businesses and stock prices can be affected by so-called "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.							This program effects every level and every department in the company. 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 honesty and integrity are one of our paramount values.	compliance programs or other methods to minimize reputation risk.
Changing consumer behaviour	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	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	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.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	needs of our customers through energy efficiency innovations.							use consumer behavior to model their future growth opportunities and work with engineering to design product to meet that anticipated need.	

CC6.1d

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

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by 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	Wed 01 Jan 2014 - Wed 31 Dec 2014	925
Scope 2 (location-based)	Wed 01 Jan 2014 - Wed 31 Dec 2014	72273
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
The Climate Registry: General Reporting Protocol

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)
CO2	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	502	kg CO2 per MWh	The Climate Registry Emission Factors - released April 2015. Philippines & China country location.
Motor gasoline	8.6	Other: kg C02e per gallon	WRI Greenhouse Gas Protocol, Emission Factors from Cross-Sector Tools, April 2014, Table 10
Diesel/Gas oil	10.13	Other: kg C02e per gallon	WRI Greenhouse Gas Protocol, Emission Factors from Cross-Sector Tools, April 2014, Table 10
Distillate fuel oil No 1	2.48	kg CO2e per liter	WRI Greenhouse Gas Protocol, Emission Factors from Cross-Sector Tools, April 2014, Table 10
Distillate fuel oil No 1	0.00033	Other: kgs CH4 per liter	WRI Greenhouse Gas Protocol, Emission Factors from Cross-Sector Tools, April 2014, Table 10
Distillate fuel oil No 1	0.00002	Other: kgs N20 per liter	WRI Greenhouse Gas Protocol, Emission Factors from Cross-Sector Tools, April 2014, Table 10
Natural gas	0.95	Other: grams per mmbtu for N20 and CH4	The Climate Registry, Table 12.8
Liquefied petroleum gas (LPG)	4.01	Other: grams per mmbtu for N20	The Climate Registry, Table 12.8
Liquefied petroleum gas (LPG)	.9	Other: grams per mmbtu for CH4	The Climate Registry, Table 12.8

Further Information

Page: CC8. Emissions Data - (1 Jan 2015 - 31 Dec 2015)

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

608

CC8.3

Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?

No

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
99174	0	

CC8.4

Are there are 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?

Yes

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
Engineering centers, sales offices, & administrative / corporate offices	No emissions from this source	Emissions are not relevant	Emissions are not evaluated	No scope 1 emissions from these excluded sources (i.e. engineering centers, administrative / sales offices). As these locations represent less than 20% of our electricity consumption, they are not evaluated as they are considered not relevant.

CC8.5

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

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 5% but less than or equal to 10%	Data Gaps	Artesyn's Scope 1 emissions primarily come from company vehicles traveling among our Asia locations. However, other business travel, such as airfare, taxis, rental vehicles, etc. are not included in our emissions.
Scope 2 (location-based)	More than 10% but less than or equal to 20%	Data Gaps	Inventory reported is exclusively facilities producing product , so only emissions from our manufacturing facilities are included. Some offices and research centers exist with relatively low energy consumption estimated 2 percent of inventory. As a result, such offices and research centers are not expected to have a material impact on the inventory assuming a 5 percent threshold for materiality.
Scope 2 (market-based)			

CC8.6

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

No third party verification or assurance

CC8.6a

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

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

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions 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

No third party verification or assurance

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 (%)

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
Year on year change in emissions (Scope 1 and 2)	We have engaged third party First Carbon Solutions in calculating our emissions and comparing those year over year.

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 2015 - 31 Dec 2015)

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	276
Philippines	332

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)

CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude

CC9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)

CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Transportation	504

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

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	83872		109780	
Philippines	15302		31102	

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 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)

CC10.2b

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

Facility	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)

CC10.2c

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

Activity	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)

Further Information

Page: CC11. Energy

CC11.1

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

More than 5% but less than or equal to 10%

CC11.2

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

Energy type	Energy purchased and consumed (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

15807

CC11.3a

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

Fuels	MWh
Natural gas	10108
Diesel/Gas oil	924
Distillate fuel oil No 1	380
Liquefied petroleum gas (LPG)	4395

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	Comment
No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor	0	

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
157356	157356	0	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?

Increased

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	Decrease	4494 metric tons of CO2 were saved in 2015 due to emission reduction activities implemented across multiple production locations. In 2014 our emissions were 73198 metric tons of CO2. 4494 / 73198*100 = 6% decrease due to emission reduction activities.
Divestment	0		
Acquisitions	0		
Mergers	0		
Change in output	4	Increase	The increase in purchased electricity from 98,573,000 kwh in 2014 to 102,565,667 kwh in 2015 was primarily due to changes in production and headcount across the facilities.
Change in methodology	0		
Change in boundary	0	No change	
Change in physical operating conditions	0	No change	
Unidentified	0		
Other	0		

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
	metric tonnes CO2e					

CC12.3

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

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
.00269	metric tonnes CO2e	unit hour worked	37067146	Location-based	19	Increase	Increase in headcount and hours worked between 2014 and 2015.

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 of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance

Further Information

Page: CC14. Scope 3 Emissions

CC14.1

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

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

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
Upstream transportation and distribution	Relevant, not yet calculated				
Waste generated in operations	Relevant, calculated	133.75	0.54 emissions factor taken from Waste Sector GHG Calculation Tool. v5 (2013) as a 15 country average. Landfill waste generated from operations was offset by 1683.5 avoided C02 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, not yet calculated				
Employee commuting	Relevant, not yet calculated				
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 this is on such a small scale as to be immaterial.
Downstream transportation and distribution	Relevant, not yet calculated				
Processing of sold products	Relevant, not yet calculated				In certain instances Artesyn sells through distribution or through contract manufacturers and those intermediaries may process our product or combine our product into a system and then sell it on to a mutual end customer.
Use of sold products	Relevant, not yet calculated				
End of life treatment of sold products	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
Downstream leased assets	Not relevant, explanation provided				Artesyn does not lease downstream assets apart from warehouse space and that would be included in our Scope 3 transportation and distribution calculations.
Franchises	Not relevant, explanation provided				Artesyn has no franchise operations.
Investments	Not relevant, explanation provided				Any investments would be internal to the company and would have already been reported in our Scope 1 or Scope 2 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 (%)

CC14.3

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

No, this is our first year of estimation

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

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 engagement and measures of success

Artesyn engages its suppliers to increase their productivity and efficiency of operations and reduce operating costs. We prioritize engagement with our suppliers based on spend, so we work with the 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.

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

Number of suppliers	% of total spend (direct and indirect)	Comment
25	50%	In 2015 Artesyn set a goal to have its top 20% of suppliers by spend undergo a 3rd party validated EICC audit. We engaged with the top 50% and were able to meet and exceed our goal.

CC14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
Use in supplier scorecards	We are currently gathering audit data from suppliers that make up our top 50% of spend. This data comes from 3rd-party validated audits to the EICC Code of Conduct. That information will then be used as part of our suppliers' overall scores in assessing their value as an Artesyn supplier. If our suppliers submit CDP reports, which many of our larger suppliers do, that will be part of the analysis as well.

CC14.4d

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 Compliance and Ethics Officer, Vice President & General Counsel	Board/Executive board