

ARTESYN EMBEDDED TECHNOLOGIES - Climate Change 2018



C0. Introduction

C0.1

(C0.1) 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 2018 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.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	January 1 2017	December 31 2017	No	<Not Applicable>
Row 2	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 3	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 4	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

C0.3

(C0.3) Select the countries/regions for which you will be supplying data.

China
Philippines

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	Our Chief Executive Officer, as a member of the working board of our company, has ultimate responsibility for climate-related issues and ensuring that business decisions are both aligned with profitability goals as well as with Artesyn's goals of minimizing the environmental footprint of its operations. Our CEO is also the public face of our company and has the responsibility of ensuring that our Board / OCE-level business strategy is aligned with our public position statements on climate change. Artesyn's board is also known internally as our OCE (Office of the Chief Executive).
Chief Financial Officer (CFO)	Artesyn's Chief Financial Officer sits on the Board of Directors of multiple Artesyn legal entities and is responsible for accuracy in financial and accounting matters, budgeting, and for issues related to climate that affect the corporation as a member of the SER (Social & Environmental Responsibility) Committee, further described below. The Artesyn Social and Environmental Responsibility is responsible for corporate sustainability targets and strategy related to climate change.

C1.1b

(C1.1b) Provide further details on the board’s oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	Each Quarter our business conducts its Quarterly Business Review with our company leadership. Social and Environmental Responsibility is one of the established and recurring sessions at each of these business reviews. The purpose of these quarterly meetings is to review and guide the proposed strategy as well as any major action plans, approve any SER-related policies that need to be adopted, set performance objectives for the various SER programs, monitor performance against those objectives, approve any major capital expenditures , and receive reporting on performance against any targets or goals set by the Board / OCE (Office of the Chief Executive).
Sporadic - as important matters arise	Reviewing and guiding major plans of action	Company leadership also meets regularly outside of quarterly business reviews on a weekly or bi-weekly basis. Occasionally it is necessary to include SER topics during these meetings, particularly if there is a major plan of action that needs reviewing / adoption. For instance, when the business needed to set its carbon reduction goals in 2017, rather than waiting for the quarterly meeting, a special meeting was held during the weekly review to specifically review and adopt carbon emission reduction goals.

C1.2

(C1.2) Below board-level, provide the highest-level management position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities <i>The CEO, as described in 1.1a, has ultimate responsibility for company strategy related to climate change. The CEO also leads the Office of the Chief Executive ("OCE"). The OCE is comprised of many of the company's officers and serves as the company's highest leadership body. The Social & Environmental Responsibility Committee is comprised of members of the OCE in addition to the Chief Procurement Officer. Other department heads may attend Committee meetings depending on the specific agenda.</i>	Quarterly
Chief Financial Officer (CFO)	Both assessing and managing climate-related risks and opportunities <i>The Chief Financial Officer sits on the Committee for Social & Environmental Responsibility which is a subcommittee of the Office of the Chief Executive. As the head of finance, the CFO is charged with budget management and any cost benefit analyses needed for assessment of climate-related strategic proposals. It is the CFO who is responsible for the accuracy of the financial and accounting data upon which climate change decisions will be based.</i>	Quarterly
Chief Operating Officer (COO)	Both assessing and managing climate-related risks and opportunities <i>The Chief Operating Officer is both a member of the OCE and a member of the Social & Environmental Responsibility Committee. The COO is responsible for implementing climate-related strategies within our operations at our manufacturing facilities. The COO is also responsible for the validity of the data regarding carbon emissions that come out of operations.</i>	Quarterly
Chief Procurement Officer (CPO)	Both assessing and managing climate-related risks and opportunities <i>The Chief Procurement Officer, although not a member of the OCE, is a member of the Social & Environmental Responsibility Committee and is responsible for implementing any climate related programs within our supply chain as well as for gathering information from our suppliers that may be needed for Scope 3 emissions analysis.</i>	Quarterly
Other C-Suite Officer, please specify (General Counsel)	Both assessing and managing climate-related risks and opportunities <i>The General Counsel is the head of the Artesyn Law Department and also sits on the Committee for Social & Environmental Responsibility. As the head legal officer, the GC is responsible for advising the company on any legal issues implicated by climate strategies adopted by the company as well as for negotiating and advising on any contractual arrangements entered into in relation to our carbon emissions strategy.</i>	Quarterly
President	Both assessing and managing climate-related risks and opportunities <i>Artesyn's President reports directly to the CEO and is a member of the Social & Environmental Responsibility Committee. The President may act as the CEO's surrogate if the CEO were to be unavailable and is responsible for providing business context and approval for climate-related proposals brought before the SER Committee.</i>	Quarterly
Corporate responsibility committee <i>This Committee is also known as the SER (Social & Environmental Responsibility) Committee.</i>	Both assessing and managing climate-related risks and opportunities <i>The Committee for Social and Environmental Responsibility is made up of the members of the OCE (CEO, President, CFO, COO, CPO, Head of Sales, Heads of HR, Head of Marketing, General Counsel, and Head of Compliance & Ethics). as well as some additional members such as the CPO. The Committee is where climate-related proposals are considered, goals are set and tracked, and decisions are ultimately made about where to take the company's CSR initiatives.</i>	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored.

The Office of the Chief Executive (OCE) acts as the leadership of the corporation and sets out the business strategy of the company. The OCE is made up of the CEO, President, CFO, COO, Head of Sales, Head of Marketing & Engineering, Head of Business Transformation, Asia Financial Controller, and General Counsel. The CEO acts as the head of the OCE.

Each Quarter our business conducts its Quarterly Business Review with our company leadership. These meetings are attended by all members of the OCE as well as all department heads. During the QBR, sessions are reserved for review of the company's corporate social and environmental responsibility initiatives by the Committee for Social and Environmental Responsibility. The SER Committee is made up of all the members of the OCE as well as the Chief Procurement Officer, the Heads of Human Resources, and the Senior Director of Compliance and Ethics. This Committee has responsibility for management of the Compliance & Ethics programs of the company, including assessing and managing climate change risks and opportunities, goal-setting around carbon emission reduction, and tracking to those goals as well as any other key performance indicators regularly reviewed by the Committee. For example, during the reporting year, the SER Committee set a goal of achieving greater than 50% of its supplier spend under SER audit. This KPI was tracked by SER Committee staff and reviewed at each QBR.

The SER Committee determines goal setting for carbon emissions reductions and determines climate-related key performance indicators in a number of ways. Artesyn's annual CDP report and customer preference is a significant driver of carbon-setting goals. Artesyn customers score Artesyn's performance as a supplier using many metrics and the CDP report is one of the commonly-used metrics in terms of environmental performance used by Artesyn's largest customers. Carbon emission goals are set by the SER Committee to align with CDP expectations which is in line with customer expectation in terms of carbon management.

Responsibility for assessment of climate-related risks lies with the Environment, Health & Safety (EHS) department. Risks that have been revealed through the Business Impact Assessment Risk Analysis that are considered significant would be reported to the OCE as part of the QBR session on Operations, presented by the Chief Operating Officer. A significant risk would be one that would require a greater than \$500k USD investment in preventative measures or one that was not adequately remediable and would need to be accounted for as part of the financial planning process. An example of a climate-related risk goal set by our Operations department and managed by EHS, which is part of Operations, would be achievement of a B or higher on the Risk Factor Assessment portion of our Risk Engineering Report created annually by our insurer. This enables Artesyn to both reduce insurance premiums and exposures as well as manage and monitor climate-related risks.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

Yes

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.

Who is entitled to benefit from these incentives?

Board Chair

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

Our CEO, has a compensation component 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 CEO and President is able to drive cost reductions in energy consumption, they improve their likelihood on increased bonus payouts. Environmental criteria are contained in our purchasing specifications.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Monetary reward

Activity incentivized

Energy reduction project

Comment

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.

Who is entitled to benefit from these incentives?

Management group

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction target

Comment

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 of increased bonuses and meeting profitability targets. Environmental criteria are contained in our purchasing specifications.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short-term	0	2	Our short term goals set by the Office of the Chief Executive (our leadership team consisting of our CEO, President, COO, CPO, CFO, GC, CHRO, and Head of Marketing) have a horizon of one to two years subsequent to the base year.
Medium-term	2	5	Our medium-term goals, as set by the Office of the Chief Executive, are forward looking from 2 to 5 years from the base year.
Long-term	5	50	Our long-term goals, also set by the Office of the Chief Executive are forward looking out to 2035, nearly 20 years out from the base year of 2015 when the initial long-term goals were set (other medium term and long term goals have also been set using 2014 as a base year).

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	We have a number of business processes that identify and assess climate risks, chiefly our Business Continuity Plan, Disaster Recovery Plans, insurance underwriting reviews, and ISO14001 procedures. For example, sea rise in the Philippines, 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 which could have an effect on 2 Artesyn production facilities in the region.

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

At a company level, Artesyn has developed thorough Disaster Recovery and Business Continuity Plans. As part of these plans, Artesyn conducts a Risk Assessment that assists the company in identifying and assessing any climate-related risks. This is a part of our Business Impact Assessment or BIA. In assessing these risks, studies are done to assess the potential size, scope, and potential for business disruption of each risk. In defining risk our company uses ISO 22301:2012(E) definitions. A BIA Template is used to score each risk in the categories of : loss of operations (in terms of days), loss of revenue per day, safety (on a scale of minor inconvenience to death /widespread injury or sickness), customer satisfaction (from no impact to lost revenue / canceled orders), facility availability (in terms of percent of square footage of the facility available for use), and regulatory obligations (from submission of incident report to a cease and desist order). In addition to identifying and assessing climate-related risks these plans also take into account IT Disaster Recovery, Supply Chain Continuity, Pandemic Response Plan, and Emergency Response Procedure.

Another tool that Artesyn uses to identify and measure climate-related risk is the company's annual underwriting process with our insurers. This assessment 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 using recognized insurance standards (i.e. COPE, detailed further in subsequent sections of this report). Where Artesyn is able to proactively mitigate that risk, we take steps to do so. 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 and plan for alternate locations where production could resume should the facility experience business interruption. 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.

As an example of a specific risk identified and assessed during our annual Risk Engineering review conducted by our insurer, for each climate-related natural hazard, our insurer provides an estimated maximum (EML) and probably maximum loss (PML) analysis which includes property damage plus business interruption. These are then benchmarked against others similarly situated to arrive at a Risk Grading Overall Score which equates to Good, Fair and Poor risks. Risks that are in the fair or poor scored risk category would be deemed substantial risks to Artesyn and would then necessarily be tied to risk improvement actions. These risks are deemed substantive if they result in above average year over year increases in insurance costs.

Risks are then 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 or our ability to take advantage of an opportunity. Risk that are deemed to have a high likelihood of 'substantive financial impact' or high likelihood of imminence (within the subsequent 12 month period) would be addressed first. Whether an emerging risk is said to have 'substantive financial impact' is a both a quantitative and qualitative analysis that is situation-dependent. For instance, impact to our reputation would almost always be considered to be a risk of substantive financial impact. As members of our customer's supply chain, our reputation impacts their reputation and thus is of paramount concern to both ourselves and our large customers that have a public-facing retail presence in the market. Any risk that affects multiple business units, multiple product lines, or multiple regions would be deemed substantive and brought to the attention of the Office of the Chief Executive (OCE).

C2.2c

(C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Current regulations are a part of any compliance-related assessment performed and specifically part of our Business Impact Assessment (BIA) and our ISO 14001 certification process. As an example, Artesyn is currently undergoing a risk assessment in regards to changing environmental laws in China related to our Zhongshan facility. China's 13th Five-Year Plan has set climate and energy targets by 2020 of a reduction of energy intensity by 15 % compared with 2015 levels, reduction of carbon intensity by 18 % compared with 2015, energy consumption cap of 5 billion tons of standard coal equivalent, and 15% share of non-fossil energy in primary energy consumption. Specifically in the Guangdong province where one of our facilities is located, a 16.6% power reduction is requested by 2020 viz 3.8% reduction per year. If our facilities located in China are not able to meet these regulatory goals, we could be subject to fines as well as other penalties up to and including site closures.

	Relevance & inclusion	Please explain
Emerging regulation	Relevant, always included	Emerging regulations represent risk to our organization due to the inherent uncertainty surrounding their application. Reviewing emerging regulatory risks is part of our ISO 22301:2012 (E) certification process. As part of that process we review current and pending statutory and regulatory requirements during Section 4 (context of the organization). As an example, recently the U.S. Department of Energy's Office of Efficiency and Renewable Energy issued new guidelines addressing the energy efficiency standards for external power supplies (EPS). All of our external AC-DC power adapters had the potential to be impacted by this new regulation unless an exemption was achieved. The new standards were not entirely clear and legal advice was sought to ensure compliance with the regulations so that we could continue to access one of our largest markets, the United States. 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 USD depending on the length of engagement and any necessary interaction with regulators.
Technology	Relevant, sometimes included	Technology is a significant consideration during our climate-change related risk assessments and is related to our Market analysis detailed below. As a manufacturer of AC-DC and DC-DC power conversion products, as well as embedded computing devices, technological advances in the area of energy efficiency and the move to a low carbon economy have the ability to greatly affect 100% of our product lines. The growth of data centers and cloud computing represents both a technology risk and opportunity for Artesyn. Both our embedded power and embedded computing product lines serve this rapidly evolving market. Specifically, shifting technology demands that our products provide greater efficiency at a lower cost, all while dissipating less heat. These climate change risks from emerging technology are monitored by reviewing market reports from research firm Technology Business Research (TBR). For example, a recent TBR report noted that "hyperconverged platforms" are being leveraged by an estimated 84% of customers for private or hybrid cloud installations. This analysis of shifting customer demand and technology allow us to ameliorate the risk of failing to evolve with climate-adapting technology.
Legal	Relevant, sometimes included	Unlike certain sectors, such as oil and gas, that have seen climate-related litigation claims directly levied against them, the electronics sector has to date not had similar litigation. However, climate-related litigation claims are included in our insurance risk assessment for insuring our product while in transit to vendor-managed inventory (VMI) locations, warehouses, ocean freight, and air carriers. Due to climate change risk of loss or damage to products from natural hazards such as acute or chronic physical risks has increased. Artesyn embedded power products destined for the North American market typically travel by ocean container ships. The risk to these ships from extreme hurricane events has increased as a result of climate change. Insurance for ocean freight is now taking into account these risks as part of the underwriting risk assessment process as legal claims against carriers for losses due to climate induced loss or damage to products may need to be pursued. Additionally, legal considerations, along with regulatory requirements, are considered as part of our BIA risk assessment. As they specifically relate to climate change, we must ensure that any risk mitigation plan or disaster recovery plan complies with applicable laws. It is for this purpose that the Artesyn Business Impact Assessment template that is used by every production site has a column for assessing the regulatory obligations of a climate-related incident. For instance, one of our factories is located in the Philippine Economic Zone Authority, otherwise known as PEZA. If we were required to relocate that facility due to climate-induced flooding, we would need to ensure we complied with legal requirements of the PEZA in which the factory is located. All assets must be moved in and out of the zone according to PEZA protocol to avoid payment of unnecessary duties and taxes and comply with legal requirements of the FTZ.
Market	Relevant, sometimes included	As a corporation, Artesyn evaluates the market in which we operate in assessing climate risks. We use market research reports that indicate changes / risks and opportunities within the markets we either are currently operating in or hope to operate in in the future. For instance, reports from our market research firm in the server and storage space indicate that there is and will continue to be a shift from enterprise systems to cloud-based storage, also known as hyperscale. This shift represents both a risk and opportunity for technology advancements in Artesyn products. Specifically, Artesyn's embedded computing MC1600 series of Extreme Edge servers were created due continual review of risks and opportunities in the market and are designed to provide high performance compute capability in remote cabinet environments. The platform features low power processors and the architecture insures that the compute power can be reallocated to any load required by the network operator.
Reputation	Relevant, always included	Our reputation as a company able to address and mitigate climate change risks and maintain supply chain continuity is important to our customers. We measure this as an element of our Business Impact Assessment (BIA) in a category called CSAT or Customer Satisfaction. CSAT attempts to gauge what impact various events, including those resulting from climate change, would have on our customers' satisfaction with our business. For example, we have looked at the potential impact that a typhoon could have on our factory in Laguna, Philippines. As part of that analysis, each scenario was ranked on a CSAT scale of No Impact, No to Little Impact, Incidental Cost to be charged to Artesyn, Incidental Cost to be charged to Artesyn (with show cause letter), to Loss of revenue (order cancellation). Each of these are given a numeric value that feeds into the overall score for that risk. The overall tornado risk assessment, including risk to reputation and CSAT, received a risk score of 32%. Although climate-related extreme weather events such as hurricanes / tornadoes have the ability to greatly affect Artesyn's reputation, the risk score for that particular site and risk were low given the mitigation plans in place. In addition to reputation risk vis-a-vis physical climate change management, there is also a risk to reputation if Artesyn is unable to create low emission products to satisfy customer needs. This type of risk to reputation is assessed similarly to market risks as described above in that market research reports are analyzed to determine industry direction and identify any shifts in customer demand that may be on the horizon.
Acute physical	Relevant, always included	Acute physical risks to our operations and our manufacturing plants are explicitly addressed in our business continuity plans and insurance underwriting process. For instance, tropical storms, more frequent and intense due to climate change, have been an acute physical risk for our facilities in the Philippines. This risk was given a 61% or high rating on a recent BIA Risk Assessment. Mitigation activities are being undertaken using a Scenario Mapping process to reduce this risk further by implementing additional controls such as improvements to Artesyn's infotext and EHS alert system .
Chronic physical	Relevant, sometimes included	Chronic physical risks to our operations and our manufacturing plants are potentially large direct climate-driven risks related to our company. These are explicitly addressed in our business continuity plans and insurance underwriting process. For instance, flooding and high winds are ongoing, chronic physical climate-related risks facing our Philippines sites. High winds were reviewed in our recent Risk Engineering review with our insurer. The risk assessment identified the wind benchmark percentile as 90%, indicating that the assessed risk is among the 90% best risks of the indicated benchmark. This equated to a score of 133 or Fair, for this particular chronic physical risk.

	Relevance & inclusion	Please explain
Upstream	Relevant, always included	Risks to our supply chain are of significant concern during any risk assessment due to the nature of our business as a manufacturer of electronics and electronic components. Our factories are strategically located in close proximity to key suppliers. Our business continuity plans assess what moving a facility would mean for the facility in terms of its ability to source components quickly and efficiently in order to resume production with as minimal a disruption as possible to our customers. Due to the risk of climate change events impacting our upstream suppliers, we have in-housed some competencies. For example, our Business Continuity - Site Recovery Plan requires that all jigs and fixtures are designed internally to make sure jigs and fixtures for any line can be recreated within 3 weeks in the event of a climate-related business interruption.
Downstream	Relevant, always included	Our customers are a primary consideration in any climate-related risk assessment. Risk mitigation plans take into account how those plans would impact our ability to supply our customers without impacting their supply chains. We plan for climate-related risks through our ISO22301 Business Continuity Management Plan , Corporate Crisis Management Plan and Pandemic Response Plan. By policy, certain processes must be restored in certain amounts of time following a climate-related incident in order to minimize downstream impact. For example, pursuant to our Corporate Crisis Management Plan, the crisis Team Leader assigns members of the Corporate Crisis Management Team to serve as "champions" for key stakeholders, with each champion ensuring that their stakeholder group is appropriately informed of developments and their perspective taken into account during the crisis. One key stakeholder position that would be appointed is that of Key Customer Representative. We also assess downstream risk by having the site complete a Situation Assessment Form for any Crisis Scenario as defined in our Corporate Crisis Management Plan that asks what the estimated impact to our customer would be. By using the aforementioned variety of mechanism, we are able to evaluate downstream climate change risks.

C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

Artesyn has 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 (CSR) group undergoes to manage climate-related risks and opportunities is driven by customer requests and audit results. Comprised of members from departments across the organization and led by the Senior Director of Environment, Health & Safety, the CSR group undergoes regular annual and semi-annual audits at each production site, such as ISO14001 and the Responsible Business Alliance (RBA) Validated Audit Process 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 to take advantage of the opportunity to become key CSR partners in our customers' supply chains. For example, Artesyn's 2016 RBA audit indicated that Artesyn had effective processes in place to manage carbon emissions. These audit results are then shared with our customers. High-scoring audits allow Artesyn to manage the opportunity of shifts in customer demands (market shifts) and the opportunity to reinforce our reputation as a climate-change partner with our customers.

A part of the process of managing climate-related risks and opportunities is to continuously improve our climate-related programs.

Where audits find deficiencies, we implement corrective action plans. For example, the results of our CDP report are publicly reported and we expect year over year improvement in our CDP score. Our audits, ISO certification, and CDP reporting processes all aid Artesyn identifying and then managing, through corrective action plans, both physical and transitional risks and opportunities.

For example, Artesyn has an annual, ongoing process of identifying energy-saving, cost-reducing initiatives in our factories, from upgrading inefficient equipment to reorganizing the production floor in alignment with Kaizen and lean manufacturing principles.

These initiatives assist Artesyn in managing risks and opportunities related to Artesyn's reputation as customer partner in the goal of carbon footprint reduction. The process of identifying energy-saving opportunities also allows Artesyn to manage the climate-related chronic physical risk of rising mean temperatures.

In addition to the energy-saving initiatives process, managed by the factory EHS teams, the Artesyn appropriations request process aids us in managing climate-related risks and opportunities. The process requires that every Artesyn appropriations request (AR) form must identify whether the purchase is "energy saving." If this box is checked on the AR template, the financial analysis will take into account how those energy savings will reduce the payback period. This process of identifying purchases that result in energy savings allows Artesyn to quantify avoided carbon emissions and take advantage of opportunities related to Artesyn's reputation as a company dedicated to greenhouse gas reductions. For example, an AR in the reporting period requested \$16,000 USD to replace 10 burn-in ovens that are used in testing Artesyn's embedded power products. The investment in the new burn in ovens allowed the machines to energy recycle 80% recycle of electricity while the previous resistor load equipment could not. A financial analysis was conducted and the payback period for this project was 3 years, with a return on investment of 371%.

This process of making energy-savings a key point for review on every appropriations request, allows Artesyn to manage the transitional climate-related risk of regulatory changes as well as the chronic risk of rising mean temperatures. By reducing consumption, Artesyn is able to meet the changing carbon emission requirements set out in China's 5 year plan and reduce energy costs due to rising temperatures.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Rising mean temperatures

Type of financial impact driver

Increased operating costs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants)

Company- specific description

Artesyn produces its embedded power conversion AC-DC and DC-DC products in areas of the world where temperatures are already in the high to medium-high zones. Heatwaves in Laguna, Philippines, where Artesyn has production facilities, can reach deadly levels and according to some estimates the country may see year-long heatwaves by the year 2050. Philippines is one of several countries that could experience average daily temperatures in the high 30's on the Celsius scale—the same or hotter than normal body temperature—for hundreds of days at a time. This will add costs to our operations, not only in terms of cooling costs for our facilities, but in terms of product and facility design. For example, Artesyn utilizes outdoor areas and / or non-conditioned areas for shipping and receiving, recyclables storage, and as breezeways between buildings. All of these spaces will likely need to be either converted into air conditioned space, shaded, or otherwise cooled in order to ameliorate the affects of increasing mean temperatures in the Philippine factory areas.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium

Potential financial impact

738057

Explanation of financial impact

As our production facilities consume 5-10% of their energy for heating and cooling purposes, a change in average temperature, would increase HVAC costs, impacting the cost of operations. We estimate that for every degree Fahrenheit of increased mean temperature, our HVAC costs would rise by 6-8% monthly on average. The potential financial impact of \$738,057 USD represents the additional cost in a year in which mean temperatures have risen by 1 degree Fahrenheit. This amount takes into account estimated decreased energy needs for heating and 3% loss of productivity due to decreased productivity of workers and the effect increased temperatures have on manufacturing equipment.

Management method

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 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. We manage expected increase in temperature extremes in a similar way to managing changing mean temperatures, by proactively reducing our greenhouse gas emissions, reducing our energy spend, and lessening our impact upon global warming. For example, we recently upgraded an HVAC system from a traditional model to a solar-assisted model in one of our factory locations in China. This should result in an annual electrical power consumption savings of approximately 10,000 kWh, a savings of \$6,591 USD annually.

Cost of management

108210

Comment

Cost of management above is the estimated climate-related improvements to our equipment for the cooling of Laguna, Philippines facility where Artesyn manufactures embedded power products. The cost of management estimate assumes a year in which temperatures have risen an average of 1 degree Fahrenheit and in which there were no construction projects related to climate change (such as transforming formerly outdoor areas into air conditioned space). The estimate was based on site historic data related to energy expenditures.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact driver

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

Artesyn's current production facilities in the Philippines are located in areas that are susceptible to typhoons with climate change increasing the severity of these weather events. Additionally, many Artesyn employees working at these production facilities also reside in locations that are susceptible to typhoons. These risks have the potential to negatively impact employee ability to reach work locations, production line capacity, business operations, and the physical property structures of the company if not appropriately planned for and managed.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Potential financial impact

22318155

Explanation of financial impact

Where typhoons occur there could be production downtime, specifically for two of our production facilities in the Philippines. Should such downtime be customer-impacting, orders could be canceled due to an inability to meet delivery dates. Insurance cost increases, facility remediation, potential equipment damage, and potential damage to IT infrastructure would all be financial impacts to the company. The above potential financial impact was provided by our insurer during their most recent underwriting review of one production location in the Philippines and includes both property damage and potential loss of revenue due to downtime (business interruption).

Management method

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, and business continuity plans are continuously reviewed and improved upon. For example, based on the insurance review of our Guangdong, China facility in the reporting period, it was noted that an electrical room had unsealed penetrations in the firewall that separates the transformer and the main switch room. Risk reviewer also noted that this facility is in a Zone 3 tropical cyclone risk area and any unsealed penetrations would risk damage to equipment and property. This risk was managed by properly sealing the area.

Cost of management

1800000

Comment

Business Continuity Plans and Disaster Recovery Plans require extensive 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 / typhoons, that roofing could be improved with additional flashing and screws to decrease risk of structural damage. Such improvements are estimated in cost of management above using historical data on building improvement costs and costs of insurance premiums. Cost of management is for one Guangdong factory location where Artesyn's embedded power products are produced and time period covered is one year.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact driver

Policy and legal: Increased costs and/or reduced demand for products and services resulting from fines and judgments

Company- specific description

Changing legal regulations related to climate change, such as those noted in 2.2c, directly affect Artesyn's embedded power products. For example, the external power supply (EPS) energy efficiency standards put out by the Department of Energy require that EPSs now have certain minimum average efficiencies in active mode (the specific efficiency levels vary by power supply wattage). These standards affect all Artesyn embedded power locations in the Philippines and China as all produce EPSs and have U.S. customers. These regulations are a risk in that if Artesyn's EPS products are not able to meet the new efficiency standards, those products will no longer be able to be sold to U.S. customers.

Time horizon

Current

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

1400000

Explanation of financial impact

The above estimate used as a case study a single Artesyn power supply model sold into the U.S. market . Administrative costs, manufacturing costs, testing and certification and R&D costs to discontinue that model and bring its new, more efficiency replacement model to market were included in the analysis. Given that there was a sufficient replacement available, it was assumed that there were no lost customer orders.

Management method

Artesyn's Technical Marketing and Product Safety & Compliance groups are responsible for staying abreast of DOE efficiency standards. For example, when in April, 2014 the Final Rulemaking on updated EPS standards was put into effect, Technical Marketing noted that the date by which compliance would need to be fully achieved was February 10, 2016. Technical Marketing, members of which sit on power supply industry groups that have been actively monitoring this Rulemaking from proposal to implementation, informed Quality of the Final Rulemaking. All customers purchasing the models that would eventually go end of life due to the updated standards were informed and offered a last time buy opportunity. Legal was consulted to determine whether the compliance date referred to the date stamp of the product or date of importation / placement on U.S. market. Legal also worked with customers who had exemptions to document compliance. Given the lead time, and based upon Artesyn's already highly efficient EPSs, Quality brought all affected products into conformance 8 months in advance of the implementation date.

Cost of management

1150000

Comment

As an estimate for cost of management a customer custom design win during the reporting period was used as a sample. For that design win, 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 and comply with legal and policy requirements of the project. This design required both lower power consumption using only conduction cooling, thereby reducing cost and carbon-

creating aspects of the product. These costs allowed Artesyn to manage the risk of non-compliance with the regulatory aspects of the renewable energy installation.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Type of financial impact driver

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

Company- specific description

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 and strategic investments in R&D. All Artesyn embedded power and embedded computing products can be best positioned in the marketplace by using less energy and thereby reducing cost and carbon footprint for our customers' supply chains.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium-high

Potential financial impact

0.15

Explanation of financial impact

Energy efficient power conversion and embedded computing products allow us to position the company to take a larger segment of market share away from our competitors. Typically our customers allocate purchasing shares between two to three suppliers so as to ensure continuity of supply. However, if our product were to be more efficient than a competitor, a customer might choose to sole source or design in our components to the exclusion of others, putting us in a favorable financial position for the life of that design or to, even if dual sourced, increase Artesyn share. Artesyn estimates that, assuming other growth factors are excluded, Artesyn could increase its revenue by up to 15% by outpacing its competitors in the achievement of more energy efficient power supplies and embedded computers. This estimate assumes competitors will achieve the same energy efficiency within 12-18 months.

Strategy to realize opportunity

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. We also use other forecasting tools such as our CRM Oracle system that provides data on what customer projects are anticipated and which actually come to fruition

(known as the funnel). Artesyn's embedded computing business also uses Microsoft Power BI, a business analytics tool, to note trends in shifting customer requirements.

Cost to realize opportunity

0.6

Comment

There are costs associated with market analysis and consulting projects to analyze those opportunities, along with R&D costs to create product to meet consumer needs. Artesyn estimates that approximately 60% of its R&D spend for its embedded computing line of products is in some way related to product efficiency or decreased heat production. 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 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 opportunity to capitalize on shifting customer preferences for low carbon products.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Other

Type of financial impact driver

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

Company- specific description

Reputation and reputation 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 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 and CDP scoring.

Time horizon

Current

Likelihood

Very likely

Magnitude of impact

Medium-high

Potential financial impact

0.1

Explanation of financial impact

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 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 10-15% over suppliers that have not achieved preferred supplier status.

Strategy to realize opportunity

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 Senior Director of Compliance and Ethics 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 one of our paramount values. We continuously invest in next generation products in order to maintain our preferred supplier status.

Cost to realize opportunity

1000000

Comment

There is a cost to maintaining a reputation for best in class, low carbon products and associated R&D investments. These costs include complying with regulations and other industry-led standards, such as the Responsible Business Alliance (RBA) Code of Conduct. Artesyn views costs that enhance Artesyn's reputation as an opportunity to beat out competitors who may not have 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 per facility each site has full time personnel dedicated to environmental compliance as well as product quality and product efficiency design. The cost to realize opportunity estimation was arrived at by taking the percentage of the R&D budget dedicated to high efficiency product lines in our embedded power line of business.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resilience

Primary climate-related opportunity driver

Participation in renewable energy programs and adoption of energy-efficiency measures

Type of financial impact driver

Increased reliability of supply chain and ability to operate under various conditions

Company- specific description

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 production facilities in the Philippines have been affected by tropical storms and high winds 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 Artesyn to rapidly move to increasingly automated production, thereby reducing labor and other associated costs

Time horizon

Current

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

0.1

Explanation of financial impact

Increasingly extreme weather events can create an opportunity for companies that are able maintain locations in best in cost locations despite these changes. On average, 5-10% of Artesyn's embedded power product price is comprised of labor costs. By keeping this percentage low, Artesyn has been able to become a global leader in the manufacture of power conversion products. Specifically in the areas of our business that are commoditized, through cost-effective manufacturing, Artesyn has become the leading power supplier to our customer. If Artesyn moved its Philippine manufacturing footprint to a less climate-affected part of the world such as Eastern Europe or Mexico, we estimate product prices would need to be 10-15% higher to accommodate for increased labor costs. This estimation excludes relocation costs.

Strategy to realize opportunity

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 continue to operate in these low cost areas where we have a long history of manufacturing expertise.

Cost to realize opportunity

250000

Comment

Each risk that our Business Continuity Plan exposes typically requires capital in order to remediate that risk. A similar process is conducted with Artesyn insurance carriers and we insure against many climate-related risks, with cost increasing in proportion to risk. We estimate that the cost to realize the opportunity to remain in low cost manufacturing sites, is on average a quarter million USD. This figure was arrived at by taking Artesyn's annual insurance premiums that could be attributed to climate change risks, and adding the annual costs of climate-related Risk Assessments, dedicated personnel and implementing the action plans that come out of Risk Assessments and insurance location reviews. For example, during the reporting period, 1/3 of Artesyn's stock throughput insurance premium could be attributed to climate-related risks. This amount was included in the cost to realize opportunity as well as estimated building / site improvements needed to guard against these risks.

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Impacted	Artesyn's ability to supply its customers with energy-efficient products directly impacts Artesyn's ability to sell its products and services. For example, 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 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. Were we not able to meet these standards, we would be unable to sell our product in many areas of the world. For example, external power supplies (EPS) are subject to European Union ecodesign regulations that require manufacturers to reduce EPS efficiency loss by nearly 1/3 by 2020. Some of our AC-DC EPS products have versions that are designed entirely for the EU market. If we were unable to comply with EU ecodesign requirements, the magnitude would be 100% loss of revenue from those products. These products make up approximately 10% of Artesyn total annual revenue.
Supply chain and/or value chain	Impacted	In order to achieve product efficiency, in addition to our own engineering expertise, we rely on our suppliers to also supply us with the most efficient materials and components that allow us to improve our own product's energy efficiency. Not only does that allow us to decrease the carbon emissions and energy loss of our products, but that increases the value chain for our customers who are relying upon their suppliers to reduce emissions as part of their overall strategy to reduce their Scope 3 emissions.
Adaptation and mitigation activities	Impacted	As detailed in section C4.3:a Emissions Management, Artesyn conducted 24 adaptation and mitigation activities to address climate change risks within our operations at a total cost of 1,417,099 USD.
Investment in R&D	Impacted	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 80% of our R&D budget goes to product efficiency. As such our company is able to take advantage of opportunities to expand our market share by driving increased efficiencies in part caused by climate change risks influencing customer demand.
Operations	Impacted	Climate change risks have directly affected our operations. Many of the recommendations that come out of our various audits and changes that we make to increase efficiencies apply directly to the factories and production floors. We estimate that changes to our production floors have resulted in \$255k USD of savings in 2017.
Other, please specify	Please select	

C2.6

(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

	Relevance	Description
Revenues	Impacted	Artesyn's financial planning process has taken into account how various climate change risks and opportunities may affect future revenues. Due to potential downtimes due to climate change related events, such as those discussed in C2.3a, financial plans have needed to take into account these potential impacts to revenue. Changing consumer behavior and the impact on revenue is also taken into account through our Oracle CRM system that takes potential sale opportunities and tracks the percentage of those that result in actual sales and / or design wins. We then make financial predictions based upon that data.
Operating costs	Impacted	Artesyn's financial planning process has taken into account how various climate change risks and opportunities may affect operating costs. For example, recent regulatory changes related to climate change have impacted our China factories. In the Zhongshan, China area, the local government is requiring a 16.6% power reduction by 2020. In order to meet these goals, we invested \$45,000 to optimize our exhaust system, reduce exhaust emissions, and reduce exhaust fan electrical consumption.
Capital expenditures / capital allocation	Impacted	Artesyn's financial planning process has taken into account how various climate change risks and opportunities may affect capital expenditures and capital allocation. For example, one of our customers has recently requested an upgrade to our production equipment (fixed assets) in order to increase energy efficiency and decrease related cost. We have allocated over \$10M USD of capital in our financial planning process to achieve these requested modifications. Artesyn has also allocated capital each year to fund our Business Continuity and Risk Assessment process.
Acquisitions and divestments	Not impacted	The financial planning process for acquisitions or divestitures are not performed by Artesyn, but by its parent company, Platinum Equity.
Access to capital	Not impacted	Artesyn's access to capital is through its parent company, Platinum Equity. Artesyn does not have visibility to Platinum Equity's financial planning process.
Assets	Impacted	Artesyn's financial planning process has taken into account how various climate change risks and opportunities may affect Artesyn assets (primarily production-related equipment, facilities, and IT equipment). As noted in Capital Allocation above, one of our customers has recently requested an upgrade to our production equipment (fixed assets) in order to increase energy efficiency and decrease related cost. We have allocated over \$10M USD of capital in our financial planning process to achieve these requested modifications. Artesyn has also allocated capital each year to fund our Business Continuity and Risk Assessment process.
Liabilities	Impacted	Pursuant to contracts that Artesyn enters into with our customers, Artesyn carries title and risk of loss for its products until they are delivered the customer or the customer's system integrator. Extreme weather events have resulted in loss of product while at carriers / logistics providers and warehouse locations. Artesyn's financial plans account for the need to purchase insurance based upon these prior losses.
Other	Please select	

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?

Yes, qualitative and quantitative

C3.1c

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

Climate change is integrated into our business strategy both in terms of how we operate as a company and the products we provide to our customers. We see environmental and energy-saving initiatives as ways to reduce cost to not only ourselves, but also to our customer, which increases our market share, makes us a stronger supplier chain partner, 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 projects company-wide. These figures are then reported as part of our financial reviews and during the Corporate Social Responsibility / SER 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 and emissions reductions, 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, Kaizen / 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. Kaizen, increase in production efficiency, and reduction in emissions, are put into place through an extensive Kaizen and Kanban plans. 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 2017, we have been able to increase the efficiency of our embedded power conversion products from 83-96% and that number continues to increase.

Specifically, our NPS4--M AC-DC has full load efficiency of 87% and a no-load power consumption of less than 300 mW. Increasing product efficiency 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. Additionally, our audits reveal areas in which we could improve our resiliency to climate change and part of our short term strategy is to immediately implement those corrective action plans.

Addressing climate change in our operations and product development, gives Artesyn strategic advantage over our competitors. Our customers are increasingly asking us for information related to GHSs and our environmental initiatives. We have been able to show our progress on these issues, thereby improving the climate-related aspects of our Supplier Scorecards and therefore have been able to achieve more market share as our customers have moved away from suppliers that have not embraced climate change adaptation.

(C3.1d) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios	Details
Other, please specify (Insurance Climate-Related Scenarios)	<p>Artesyn conducts climate-related scenario analysis related to extreme weather events such as high wind, rain, flooding, typhoons, and the associated potential damages. These scenarios are analyzed by our 3rd party insurer as part of their site-specific risk assessments. Inputs include all elements of the COPE standards of risk assessment and scenario analysis (Construction, Occupancy, Protection and Exposure). Inputs related to Construction include site's construction materials, rated 1-6 for all major structural features. Occupancy input includes specifics of manufacturing activities of the site. For example, the Laguna, Philippine location is involved in the manufacturing of custom embedded power products. Product line maximum utilization limit at the site is 85%. These figures go into the Business Interruption portion of the scenario analysis. Another input is that of how site risks are managed (Occupancy portion of COPE standard), the protection aspects of the site, and the site's exposure to climate-related natural disasters. One of the assumptions of the analysis is an assumed 300 days of production annually and a consistent product mix from historically-provided data with similar revenue and margin opportunities. Analytical methods include comparing the MPL (maximum possible loss) to the PML (probably maximum loss) which results in a risk ratio used for risk gauging. Time horizon is generally in increments of 5, up to 100 years, with the risk of the particular climate-related hazard occurring increasing over that period. The areas considered are each manufacturing site and their respective climate-related risks. The results of the scenarios are captured in the Risk Engineering Report's recommendations for improvement for each site. Additionally, the report will give an overall grade for both property damage and business interruption to the site. For example, a Laguna scenario analysis in the reporting period graded the site as "good" in relation to probably property damage resulting from climate-related natural hazards. These results inform our business strategy by going to the short-term aspects described in 3.1c and our climate resiliency corrective action plans. A case study example would be for the Laguna site, a climate-related scenario was conducted around wind and typhoons. The scenario reviewed all the COPE elements and concluded that in the event of a major typhoon, roof damage would be likely with an ingress of wind and rain water and would cause damage to contents and stocks. Overall property damage was estimated at 29% of total values with business interruption estimated at 100% for the 1st month and 50% for the next 3 months. These are estimated maximum losses (EML), not probably maximum losses (PML).</p>

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Both absolute and intensity targets

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Scope

Scope 2 (location-based)

% emissions in Scope

100

% reduction from base year

2.5

Base year

2014

Start year

2014

Base year emissions covered by target (metric tons CO2e)

100

Target year

2020

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

% achieved (emissions)

100

Target status

Underway

Please explain

Artesyn has set a goal to reduce its Scope 2, location-based emissions by 2.5% from the base year of 2014 in terms of absolute CO2 and CO2 equivalent greenhouse gas emissions. Artesyn has achieved and is on track to exceed this goal. In order to reach the 2.5% reduction, absolute Scope 2 CO2e emissions needed to be reduced by 1,807 metric tonnes. From 2014 to 2015 there was an increase of 26,901 metric tonnes, however, between 2015 and 2017, there was a cumulative reduction of 38,700, resulting in a 26.6% absolute reduction from the base year.

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Scope

Scope 2 (location-based)

% emissions in Scope

100

% reduction from baseline year

3

Metric

Metric tons CO2e per unit of production

Base year

2015

Start year

2016

Normalized baseline year emissions covered by target (metric tons CO2e)

72273

Target year

2035

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

% achieved (emissions)

26.5

Target status

Underway

Please explain

Artesyn has set a goal to reduce its Scope 2 CO2e emissions by 3% intensity as measured per unit of production from a base year of 2015 to a target year of 2035.

% change anticipated in absolute Scope 1+2 emissions

10

% change anticipated in absolute Scope 3 emissions

5

Target reference number

Int 2

Scope

Scope 1

% emissions in Scope

100

% reduction from baseline year

2.5

Metric

Metric tons CO2e per unit of production

Base year

2015

Start year

2016

Normalized baseline year emissions covered by target (metric tons CO2e)

608

Target year

2035

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

% achieved (emissions)

0

Target status

Underway

Please explain

Artesyn has set a goal to reduce its Scope 1 CO2e emissions by 3% intensity as measured per unit of production from a base year of 2015 to a target year of 2035

% change anticipated in absolute Scope 1+2 emissions

2.5

% change anticipated in absolute Scope 3 emissions

5

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	1	18
Implementation commenced*	3	412
Implemented*	24	3031.77
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Activity type

Energy efficiency: Building services

Description of activity

Building controls

3G PSG Floor Consolidation to 5E PSG floor (ZS)

Estimated annual CO2e savings (metric tonnes CO2e)

126

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

18000

Investment required (unit currency – as specified in CC0.4)

15000

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Implemented

Activity type

Energy efficiency: Building services

Description of activity

Building controls

2N SMT Floor Consolidation to 2S SMT floor (ZS)

Estimated annual CO2e savings (metric tonnes CO2e)

618

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

89000

Investment required (unit currency – as specified in CC0.4)

22000

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Implemented

Activity type

Energy efficiency: Building services

Description of activity

Building controls

Block M office Consolidation to 3C office (ZS)

Estimated annual CO2e savings (metric tonnes CO2e)

10

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

1500

Investment required (unit currency – as specified in CC0.4)

1600

Payback period

1-3 years

Estimated lifetime of the initiative

3-5 years

Comment

Implemented

Activity type

Energy efficiency: Building services

Description of activity

Building controls

Optimize canteen services time and services location, reduce air condition and lighting electrical consumption.(ZS)

Estimated annual CO2e savings (metric tonnes CO2e)

15

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

2000

Investment required (unit currency – as specified in CC0.4)

200

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Implemented

Activity type

Energy efficiency: Building services

Description of activity

HVAC

Upgrade air conditioner from old & low efficiency packaged type air conditioner to newer & higher efficiency center chiller water type air conditioners on 2E tooling workshop (ZS)

Estimated annual CO2e savings (metric tonnes CO2e)

50

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

7200

Investment required (unit currency – as specified in CC0.4)

15000

Payback period

1-3 years

Estimated lifetime of the initiative

3-5 years

Comment

Implemented

Activity type

Energy efficiency: Building services

Description of activity

HVAC

Optimize exhaust system, reduce exhaust outlet Qty.(From 25 to 14) and reduce exhaust fan electrical consumption.(ZS)

Estimated annual CO2e savings (metric tonnes CO2e)

322

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

47000

Investment required (unit currency – as specified in CC0.4)

13000

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Implemented

Activity type

Energy efficiency: Building services

Description of activity

Building controls

5E PSG Floor Consolidation to TLA production floor (ZS)

Estimated annual CO2e savings (metric tonnes CO2e)

131

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

19000

Investment required (unit currency – as specified in CC0.4)

14000

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Implemented

Activity type

Energy efficiency: Building services

Description of activity

Building controls

4J TLA Floor Consolidation to 2HJ&3HJ TLA production floor (ZS)

Estimated annual CO2e savings (metric tonnes CO2e)

351

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

51000

Investment required (unit currency – as specified in CC0.4)

15000

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Implemented

Activity type

Energy efficiency: Building services

Description of activity

Building controls

4E Burn-in workshop Consolidation to 2E engineering workshop (ZS)

Estimated annual CO2e savings (metric tonnes CO2e)

60

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

8700

Investment required (unit currency – as specified in CC0.4)

4800

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Implemented

Activity type

Energy efficiency: Building services

Description of activity

Building controls

1G cable workshop Consolidation to 2E engineering workshop (ZS)

Estimated annual CO2e savings (metric tonnes CO2e)

83

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

12000

Investment required (unit currency – as specified in CC0.4)

1600

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Implemented

Activity type

Energy efficiency: Building services

Description of activity

Lighting

Use LED tube(1B3F &4B3F&5B3F) replace T8 tube (LD)

Estimated annual CO2e savings (metric tonnes CO2e)

61.38

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

6324

Investment required (unit currency – as specified in CC0.4)

8752

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Implemented

Activity type

Energy efficiency: Processes

Description of activity

Machine replacement

Energy saving water tower (LD)

Estimated annual CO2e savings (metric tonnes CO2e)

503.65

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

51893

Investment required (unit currency – as specified in CC0.4)

110769

Payback period

1-3 years

Estimated lifetime of the initiative

11-15 years

Comment

Implemented

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Upgrade and reform Burn in -#6 (LD)

Estimated annual CO2e savings (metric tonnes CO2e)

16.09

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

1658

Investment required (unit currency – as specified in CC0.4)

42646

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

Implemented

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Upgrade and reform Burn in -#N31

Estimated annual CO2e savings (metric tonnes CO2e)

54.47

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

5612

Investment required (unit currency – as specified in CC0.4)

126610

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Implemented

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Upgrade and reform Burn in -#N32 (LD)

Estimated annual CO2e savings (metric tonnes CO2e)

33.54

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

3456

Investment required (unit currency – as specified in CC0.4)

126610

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Implemented

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Upgrade and reform Burn in -#N33 (LD)

Estimated annual CO2e savings (metric tonnes CO2e)

59.05

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

6084

Investment required (unit currency – as specified in CC0.4)

126610

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Implemented

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Upgrade and reform Burn in -#N34 (LD)

Estimated annual CO2e savings (metric tonnes CO2e)

3.18

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

328

Investment required (unit currency – as specified in CC0.4)

159692

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Implemented

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Upgrade and reform Burn in -#N35 (LD)

Estimated annual CO2e savings (metric tonnes CO2e)

23.4

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

2411

Investment required (unit currency – as specified in CC0.4)

159692

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Implemented

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Upgrade and reform Burn in -#N36 (LD)

Estimated annual CO2e savings (metric tonnes CO2e)

13.79

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

1421

Investment required (unit currency – as specified in CC0.4)

159692

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Implemented

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Upgrade and reform Burn in -#N37 (LD)

Estimated annual CO2e savings (metric tonnes CO2e)

43.46

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

4478

Investment required (unit currency – as specified in CC0.4)

159692

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Implemented

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Conductive Epoxy Application - Reduction in IR oven size (PH)

Estimated annual CO2e savings (metric tonnes CO2e)

136

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

35942

Investment required (unit currency – as specified in CC0.4)

8100

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

Implemented

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

U bond Epoxy Curing process - Replacement of IR oven to batch-type (PH)

Estimated annual CO2e savings (metric tonnes CO2e)

211

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

55910

Investment required (unit currency – as specified in CC0.4)

22500

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

Implemented

Activity type

Energy efficiency: Building services

Description of activity

Lighting

Lighting Replacement - Use of LED lights (PH)

Estimated annual CO2e savings (metric tonnes CO2e)

97

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

10402

Investment required (unit currency – as specified in CC0.4)

52013

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

Implemented

Activity type

Energy efficiency: Building services

Description of activity

HVAC

*Airconditioning System - Solar Assisted Aircon (PH)***Estimated annual CO2e savings (metric tonnes CO2e)**

10

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

6591

Investment required (unit currency – as specified in CC0.4)

51519

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

Implemented

C4.3c**(C4.3c) 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.
Employee engagement	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. 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.
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. 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. 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
Dedicated budget for low-carbon product R&D	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. 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

C4.5

(C4.5) 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

C4.5a

(C4.5a) 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

Group of products

Description of product/Group of products

Embedded power, power conversion products (AC-DC, DC-DC)

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify (80plus and EnergyStar)

% revenue from low carbon product(s) in the reporting year

100

Comment

Our embedded power products must show energy efficiency improvement year over year to satisfy regulatory requirements, customer requirements, and internal goals.

Level of aggregation

Group of products

Description of product/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)

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify

% revenue from low carbon product(s) in the reporting year

100

Comment

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.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1 2015

Base year end

December 31 2015

Base year emissions (metric tons CO2e)

608

Comment

Scope 2 (location-based)

Base year start

January 1 2015

Base year end

December 31 2015

Base year emissions (metric tons CO2e)

99174

Comment

Scope 2 (market-based)

Base year start

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

72273

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

ISO 14064-1

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Row 1

Gross global Scope 1 emissions (metric tons CO2e)

1223.01

End-year of reporting period

<Not Applicable>

Comment

Artesyn's gross, global Scope 1 emissions, in metric tons of CO2 equivalent were 1,223.01. This is significantly lower than in the prior year. Although changes in production may be a partial contributor, we expect we may have grown more accurate in measuring our CO2e as our verification program has matured.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

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.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Row 1

Scope 2, location-based

53075.19

Scope 2, market-based (if applicable)

53075.19

End-year of reporting period

<Not Applicable>

Comment

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.

C6.4

(C6.4) 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

C6.5

(C6.5) Account for your organization's Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

45.12

Emissions calculation methodology

Number of purchased meals in 2017 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.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Explanation

Number of meals purchased in 2017 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

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Explanation

The capital goods that we use to produce our products would be already contained in our Scope 2 emissions data as our equipment and tools rely on electricity for operation.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

All of our fuel and energy-related activities, other than any 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

Evaluation status

Relevant, calculated

Metric tonnes CO2e

4179.6

Emissions calculation methodology

Using data from one of our larger suppliers, we calculated that of that supplier's downstream transportation and distribution (which would be Artesyn's upstream transportation and distribution) CO2e emitted in calendar year 2017, 4,179.6 metric tonnes CO2e would be attributed to Artesyn purchases of supplier's components for use in Artesyn's manufacturing or operations. The analysis was performed by taking supplier's reported downstream transportation and distribution CO2e emissions in metric tonnes and taking Artesyn's share of that which was calculated by taking as supplier's total revenue divided by Artesyn's spend with supplier. Not all current suppliers are providing the emissions and financial data necessary for Artesyn to perform this analysis and that is a gap in our data. Artesyn has set a goal of obtaining the carbon emission data from at least 50% of its supply spend by 2020.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Explanation

The transportation and distribution of raw materials upstream from our production facilities is relevant, but we currently do not have suppliers providing enough data to us to allow us to calculate the emissions from these activities attributable to our company.

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

338.39

Emissions calculation methodology

.54 emission factor taken from Waste Sector GHG Calculation Tool as a 15 country average. Landfill waste generated from operations was offset by 2082.10 metric tons avoided CO2 emissions from recycling of paper, pallets, plastic, PCB, metal, solder (mixed metals) and rubber.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Explanation

Artesyn weighs the amount of waste its operations generate and does not need to rely on 3rd parties for this information.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

815

Emissions calculation methodology

Emissions were calculated by 3rd party travel services provider Adelman.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Explanation

Company-wide air travel for 2017. Emissions data provided for short, medium, and long-haul flights through travel booking provider, Adelman.

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

3956.85

Emissions calculation methodology

Based on distance-traveled method. Employees were divided into 4 commute categories: shuttle (.0278 emissions factor), bus (.10259), motorcycle (.11662), and car (.17887). Each was multiplied by the average kms traveled daily, times the number of commute days per year (260) and then converted to metric tons CO₂e. Emission factors taken from DEFRA 2017.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Explanation

Data provided by Philippine factories. China factories to be included once data received.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

We do not have 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 production facilities.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

7.59

Emissions calculation methodology

Number of North America -destined containers shipped by container ship in 2017 multiplied by kilometers traveled multiplied by emissions factor for 5000–7999 TEU container ship of .01673 kgs of CO₂e / tonne kilometer, .00001 kgs CH₄, and .00014 N₂O, converted into metric tons of CO₂e.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Explanation

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

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Our products are not subject to processing downstream. They may be subject to end of life processing, but that would be included in End of Life Treatment of Sold Products below.

Use of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

13710

Emissions calculation methodology

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.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Explanation

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

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Our products may be treated as electronic waste, but collection and treatment would be managed by our customers or their end customers and thus we do not as of this time have visibility into this process.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Artesyn does not lease downstream assets.

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Artesyn has no franchise operations.

Investments

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Artesyn as a company does not invest.

Other (upstream)

Evaluation status

Not evaluated

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Other (downstream)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

61.75

Emissions calculation methodology

Warehousing of our products at our cross dock in Hong Kong uses on average 10,000 square feet of space. Warehouse average consumption of 6.175 kWh / square foot / year taken from EPA GHG Emissions Calculator 2017. Electricity emission factor taken from HK Electric emissions calculator (2017 emissions factors). Data for all warehouses has not yet been consolidated, so this emissions data represents only one warehousing location.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Explanation

Artesyn did not rely on data directly from the warehouse, but made its own calculations using average consumption data for relevant warehousing space and multiplying that by the square footage used by Artesyn within the warehouse on average during the reporting period.

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.0014

Metric numerator (Gross global combined Scope 1 and 2 emissions)

54298.2

Metric denominator

unit hour worked

Metric denominator: Unit total

37566000

Scope 2 figure used

Location-based

% change from previous year

12.5

Direction of change

Decreased

Reason for change

Emissions reduction activities such as, for example, SMT Floor Consolidation which saved an estimated 618 metric tonnes CO2e, were the primary reason for intensity figure decrease as other variables either remained the same or were substantially the same from 2016 calendar year to 2017 calendar year.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CH4	0	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	0	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	0.4	IPCC Fifth Assessment Report (AR5 – 100 year)
CO2	1222.61	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
China	426.04
Philippines	796.97

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Fuel for Power Generation	414.42
Fuel for company Vehicles	392.13
Refrigerant	416.46

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons 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	33731.5		63995	33196.7
Philippines	19343.68		32068	16451.1

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By activity

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Purchased electricity	53075.19	

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) 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.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption		<Not Applicable>		
Other emissions reduction activities	3031.77	Decreased	5.14	3031.77 metric tons of CO2 were saved in 2017 due to emissions reduction activities implemented across multiple production locations. In 2016 our Scope 2 emissions were 55810.44 metric tons of CO2. Our Scope 1 emissions were 3,098.97 metric tons CO2e. $(3031.77/55810.44 + 3908.97) * 100 = 5.4\%$ decrease due to emission reduction activities.
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output	41.86	Increased	0.71	The increase in purchased electricity from 95,344.64 MWh in 2016 to 96,063 MWh in 2017 was primarily due to changes in production and headcount across the facilities. $(1 - (96,063 / 95344.64)) * 100 = 0.71\%$
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

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

C8.2**(C8.2) Select which energy-related activities your organization has undertaken.**

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a**(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.**

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	1932.51	1932.51
Consumption of purchased or acquired electricity	<Not Applicable>	49647.79	96063	96063
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	49647.79	97995.45	97995.45

C8.2b**(C8.2b) Select the applications of your organization's consumption of fuel.**

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.****Fuels (excluding feedstocks)**

Diesel

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

243.58

MWh fuel consumed for the self-generation of electricity

243.58

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

974.82

MWh fuel consumed for the self-generation of electricity

974.82

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

714.11

MWh fuel consumed for the self-generation of electricity

714.11

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Diesel

Emission factor

0.00268

Unit

kg CO2e per m3

Emission factor source

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

Comment

Liquefied Petroleum Gas (LPG)

Emission factor

0.00298

Unit

kg CO2e per Mg

Emission factor source

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

Comment

Natural Gas

Emission factor

1.885

Unit

kg CO2 per m3

Emission factor source

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

Comment

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	1932.51	1932.51	0	0
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2f

(C8.2f) Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.

Basis for applying a low-carbon emission factor

Contract with suppliers or utilities (e.g. green tariff), not supported by energy attribute certificates

Low-carbon technology type

- Solar PV
- Concentrated solar power (CSP)
- Wind
- Hydropower
- Nuclear
- Other low-carbon technology, please specify (Geothermal)

MWh consumed associated with low-carbon electricity, heat, steam or cooling

49647.79

Emission factor (in units of metric tons CO2e per MWh)

0.6032

Comment

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. Emission factors for China and Philippines are 0.6032 and 0.5271, respectively.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 and/or Scope 2 emissions and attach the relevant statements.

Scope

Scope 1

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Artesyn_ 2017 GHG Verification Assurance_Statement.pdf

Page/ section reference

Page 1

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Artesyn_ 2017 GHG Verification Assurance_Statement.pdf

Page/ section reference

Page 1

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
No, but we anticipate being regulated in the next three years

C11.1d

(C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?

Artesyn's strategy for complying with the systems in which we anticipate participating is to decrease consumption and increase efficiency of our operations, using mechanisms such as those listed in C4.3a. Artesyn anticipates that the additional requirements placed upon energy providers by China's Emissions Trading Scheme (ETS) will in the next 3 years result in increased energy costs for our China operations. Power companies such as those providing energy to our China factories will now need to participate in the ETS by purchasing permits beginning in 2020. While some may offset costs through increased efficiency of operations since the ETS is based on an intensity measurement, rather than an absolute one, we anticipate that the power sector will not be able to entirely absorb the cost and will necessarily pass costs on to companies and consumers. Initially Artesyn expects to offset these costs with more efficiently consuming and managing carbon consumption. However, over the medium-term Artesyn will be using an internal price of carbon to further enhance emissions reduction activities and in the long term may need to purchase carbon offsets should other management mechanisms fail.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
No

C11.3

(C11.3) Does your organization use an internal price on carbon?
No, but we anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
Yes, our customers

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Other, please specify (RBA VAP Audit Reports)

% of suppliers by number

5

% total procurement spend (direct and indirect)

50

% Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

Artesyn engages its suppliers to increase their productivity and efficiency of operations, reduce operating costs, and ensure supplier is engaged in socially and environmentally conscious business practices. We do this through our Supplier Quality Engineering (SQE) team. This team is responsible for auditing suppliers and visiting their sites to assess quality, compliance, and environmental aspects of their business. We also collect Responsible Business Alliance (RBA) Validated Audit (VAP) reports that indicate supplier performance in the areas of environment, labor, health and safety, ethics, and management systems. These audit reports are provided through an online system known as RBA-On and suppliers must work to close out any corrective actions needed to bring their practices in line with RBA standards. We prioritize engagement with suppliers that represent a larger / higher percentage of our procurement spend. We also flow down the RBA Code of Conduct, which Artesyn has adopted as its own Code of Conduct and as its Supplier Code of Conduct, which calls upon companies to reduce consumption across a number of environmental measures, nearly all of which would result in reduced greenhouse gas emissions. Specifically, in relation to greenhouse gases, the RBA Code requires that "[e]nergy consumption and all relevant Scopes 1 and 2 greenhouse gas emissions are to be tracked and documented, at the facility and/or corporate level. Supplier shall look for cost-effective methods to improve energy efficiency and to minimize their energy consumption and greenhouse gas emissions. Air emissions of volatile organic chemicals, aerosols, corrosives, particulates, ozone depleting chemicals and combustion by-products generated from operations are to be characterized, routinely monitored, controlled and treated as required prior to discharge. Supplier shall conduct routine monitoring of the performance of its air emission control systems." Artesyn considers having 50+% of supplier spend under audit as a measure of successful engagement. Suppliers in the bottom 50% of spend are numerous companies with which Artesyn has a small amount of spend and therefore less leverage when it comes to driving audits, corrective actions, and Code adoption.

Impact of engagement, including measures of success

Each year Artesyn sets 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. Achievement of 50+% of our supplier spend under audit would be considered a successful level of engagement. Since beginning this initiative four years ago, we have seen increased adoption of the Code by our suppliers and customers and increased willingness to engage in audits and in providing those audit reports to Artesyn. From 2013-2017, we have seen a 30% increase in supplier spend under 3rd party validated SER audits.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Education/information sharing

Details of engagement

Share information about your products and relevant certification schemes (i.e. Energy STAR)

Size of engagement

20

% Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

We report energy-saving aspects for all of our Embedded Power products, the majority of which are available to the public and all customers on our website. For example, our DP40-M AC-DC medically-approved power adapters meet Energy Star Efficiency Level V criteria, something that is marked on the product itself and in the datasheets on our website. Additionally, 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. Approximately 20% of our customers across both our Embedded Power and Embedded Computing businesses engage with us in using supplier scorecards to assess environmental performance and management.

Impact of engagement, including measures of success

Success in terms of customer engagement is measured by improving our supplier scorecard scores in the area of SER to a level at which we are meeting or exceeding customer expectations when it comes to GHG emissions management and climate change strategies. For example, at the beginning of 2017 we had a customer who had given Artesyn poor scores in the area of carbon emissions management. By the end of that year, we had moved our score from red to green and met the customer's expectation that Artesyn act as a partner in the customer's goals of reducing their scope 3 emissions. Each scorecard uses different metrics, specific to each customer's preference, and thus there is not a standard specific level of improvement or specific threshold. However, most do use a color coded system for each category of supplier performance from red to orange to yellow to green. Artesyn measures its success regarding the impact of the engagement through the percentage of these performance categories that are indicated in green. Success would be obtaining green ratings in all carbon emission categories.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Trade associations

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

Power Sources Manufacturers' Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

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) with, as a primary goal, the establishment of a single global standard for energy efficiency.

How have you, or are you attempting to, influence the position?

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 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.

Trade association

PMBus

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

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.

How have you, or are you attempting to, influence the position?

As PMBus Board Members, our marketing and engineering groups are able to assist in writing and revising the PMBus specifications. For example, Artesyn team members assist in writing and revising specifications that allow for higher speed communication among devices to decrease latencies, and increase efficiency.

Trade association

System Management Interface Forum

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

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.

How have you, or are you attempting to, influence the position?

As SMIF Board Members, we are able to advance the Forum's interests in efficient technology.

Trade association

Open Compute Project

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

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 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.

How have you, or are you attempting to, influence the position?

We influence the position by supporting it as members of the Open Compute Project.

C12.3f

(C12.3f) 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?

The process of maintaining consistency such that all Artesyn's direct and indirect activities that influence policy are consistent with the overall climate strategy of the company 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 Responsible Business Alliance (RBA) Code of Conduct that is publicly available on our website. Both the Code and the Artesyn Corporate Social Responsibility Statement are known to every employee throughout the company. In addition to being posted in our facilities and available online, the Statement and Code are also included in our annual Compliance and Ethics Training that is disseminated company wide. All employees must complete this training. It is through this process of executive adoption and communication that we maintain consistent positions throughout the organization. The Code is enforced internally through use of the RBA's 3rd party Validated Audit Process (VAP). VAP audits are conducted every other year, or more frequently if corrective action plans have not been completed within the allotted time period for completion, to ensure that the Code is being followed within our own company. For any group that an employee wishes to participate in that requires a fee, that vendor will need to complete the supplier onboarding process in order to be added into our ERP system (Oracle). That includes attesting to the RBA Code and its provisions on carbon emissions management.

For all groups that we engage with, we stay abreast of that group's activities through direct engagement, board participation, committee leadership, and newsletters. 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 highly important to both ourselves and our customers, Artesyn would not align well with an organization that was not also promoting those kinds of efforts. Artesyn also has processes in place for review and approval of any publication of white papers, position statements, as well as the taking of any other public position on issues. Not only must any such proposals receive Marketing Communications approval, they must also receive approval from the Vice President of Marketing, any relevant department head(s), and the General Counsel or Assistant General Counsel.

C12.4

(C12.4) 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

In voluntary communications

In addition to our carbon emission data being provided through CDP, Artesyn also publicly lists its carbon emissions data on its website at <https://www.artesyn.com/about-us/compliance-ethics/environment>

Status

Underway – previous year attached

Attach the document

Artesyn 2017 CDP report for website.pdf

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets
