ARTESYN EMBEDDED TECHNOLOGIES - Climate Change 2020

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 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 power conversion solutions.

Artesyn's 2020 CDP report contains emissions information for all of its production / factory locations. These production facilities build 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.

Artesyn Embedded Technologies was acquired by Advanced Energy Industries, Inc. on September 10, 2019. Responses in Governance section relate to activities prior to the acquisition. Integration of the company's reporting structure does not affect any responses on our Scope emissions.

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
Reporting year	January 1 2019	December 31 2019	Yes	3 years

C0.3

(C0.3) Select the countries/areas 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 chosen approach for consolidating your GHG 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) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	Artesyn's CEO, as a member of the working board of the 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 Office of the Chief Executive (OCE).
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 SER Committee 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	Scope of board-level oversight	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	<Not Applicable>	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 /Office of the Chief Executive (OCE).
Sporadic - as important matters arise	Reviewing and guiding major plans of action	<Not Applicable>	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 2018, 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) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Chief Financial Officer (CFO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Chief Operating Officer (COO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Chief Procurement Officer (CPO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Other C-Suite Officer, please specify (General Counsel)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
President	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Corporate responsibility committee	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	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 (do not include the names of individuals).

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 SER 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 Site Business Continuity Management Committee (BCMC) . 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 teams, 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?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Board Chair	Monetary reward	Please select	Artesyn's 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.
All employees	Monetary reward	Please select	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 China 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 Guandong 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.
Management group	Monetary reward	Please select	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) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time 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	3	5	Our medium-term goals, as set by the Office of the Chief Executive, are forward looking from 3 to 5 years from the base year.
Long-term	6	50	Our long-term goals, also set by the Office of the Chief Executive are forward looking out to 2030, 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).

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Artesyn's factories are using Business Impact Analysis of ISO22301:2019 to define their substantive financial or strategic impact to the business. There are five levels of impact are defined: Very Low; Low; Moderate; High and Catastrophic. Each level of impact with criteria of Loss of Operations, Revenue Loss, Safety, CSAT, Facility Availability and Regulatory Obligations.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
Annually

Time horizon(s) covered
Medium-term

Description of process
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, typhoon 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. Ten typhoons with five having the potential to be destructive ones. The Philippines is "the most exposed country in the world to tropical storms" according to a Time Magazine article in 2013. It could have an impact on 2 Artesyn production facilities in the region.

C2.2a

(C2.2a) Which 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. For example, the PM2.5 level impact Artesyn's business in China operation. If PM2.5 level is higher than the national standard, almost all factories must be shut down until the PM2.5 level dropping to normal. Artesyn's Legal and Site Compliance teams closely monitor and manage Artesyn's compliance with such regulation.
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 22301:2019 (E) certification process. As part of that process we review current and pending statutory and regulatory requirements during Section 4 (context of the organization). Artesyn is able to assess emerging regulation risks, as well as to influence company's policy positions. An example of emerging regulation is a carbon tax in China that may cause impact to our production cost.
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 embedded power conversion products, 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. Dedicated R&D team to enable technologies that keep ahead of the market's power density and efficiency requirements (efficiency increased from 80% in 2002 to over 97% currently). For example, our iHP 12kW Module can replace four individual modules at significantly lower cost with higher energy efficient.
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's ISO14001 EMS 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. For example, the demand for low-carbon products drove our engineers to apply Design for Environment principles in the product design. Artesyn had an annual worldwide shipment of over 1M platinum efficiency power supplies to power data centers efficiently.
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 Analysis (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 an affect 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. With customer preferences shifting towards environmentally friendly products, our reputation may be negatively impacted if we are unable to address that shift in preferences. We define that there is in a high risk if sustained, negative reputation impacts lasting more than 1 year.
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 FAIR level on a recent BIA Risk Assessment.
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.

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 & Primary climate-related risk driver

Please select

Primary potential financial impact

Please select

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

An increase in the temperature could impact Artesyn's business, especially in areas of the world where temperatures are already in the high to medium-high zones where Artesyn operate their factories to produce its embedded power products. 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
Please select

Likelihood
Virtually certain

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
781892

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
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 $781,892 USD represents the additional cost in a year in which mean temperatures have risen by 1 degree Farenheit. 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.

Cost of response to risk
113848

Description of response and explanation of cost calculation
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 replaced of old & low efficient cabinet type air conditioner in one of our factory locations in China. This should result in an annual electrical power consumption savings of approximately $14K USD annually. Cost of management above is the estimated climate-related improvements to our equipment for the cooling of Philippines facilities 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).

Comment
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 & Primary climate-related risk driver
Please select

Primary potential financial impact
Please select

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

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

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
36841134

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
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 cancelled 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). The probable loss is based on risk assessment report by insurance carrier covering production facilities in Philippines.

Cost of response to risk
1800000

Description of response and explanation of cost calculation
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 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 2. Any unsealed penetrations would risk damage to equipment and property. This risk was managed by properly sealing the area. We implemented our BCPs and define the alternative sites to backup each other. As a result, we were able to prevent our site production capacity impact to reduce by 25% . 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.

Comment
Such improvements are estimated in cost of management above using historical data China 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?
Direct operations

Risk type & Primary climate-related risk driver
Please select

Primary potential financial impact
Please select

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Environmental and climate-related laws and regulations could impact Artesyn’s business by increasing Artesyn’s operational and compliance-related costs. For example, environmental legislation such as China's regulation on VOCs emission control, may increase our cost of production.

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
60000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The estimated financial implications of the risk before taking action include cost of noncompliance with treatment technology upgrade in China facilities.

Cost of response to risk
10000

Description of response and explanation of cost calculation
One of the methods we use to manage this risk is implementing robust treatment technology upgrade programs to help ensure compliance with related laws and regulations. For example, head of our Facility and Equipment lead the taskforce to review the existing treatment technologies and conduct sensibilities study so as to selecting the adequate technology we required. The cost of management includes the cost of feasibilities study, official expert review and managing of treatment unit installation.

Comment

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?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Use of more efficient production and distribution processes

Primary potential financial impact
Reduced indirect (operating) costs

Company-specific description
Artesyn continuously invest in technologies and solutions to reduce our environmental footprint at our facilities in both China and Philippines. By consolidation of office and production area and replacement of old & low efficient cabinet type air conditioner to reduce energy consumption in air conditioning and lighting.

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
624100

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The financial impact of this opportunity includes cost savings resulting from energy efficiency measures implemented at our production facilities worldwide. The potential financial impact figure represents the sum of actual and projected cost savings from a variety of energy efficiency measures implemented in 2019.

Cost to realize opportunity
721000

Strategy to realize opportunity and explanation of cost calculation
Artesyn's strategy to realize this opportunity includes maximizing energy efficiency and emission reductions in our production facilities. For example, we implemented a number of energy efficiency measures at our facilities in 2019, including replacement of old & low efficient central vacuum exhaust system, cabinet type air conditioner, Heat Pumps & hot water piping, consolidation of production & office areas to save energy from air conditioning & lighting.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Upstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of new products or services through R&D and innovation

Primary potential financial impact
Please select

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 customers. Our R&D team enable technologies that keep ahead of the market's power density and efficiency requirements.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
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.

Cost to realize opportunity
10000000

Strategy to realize opportunity and explanation of cost calculation
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 Sr. Director of Compliance & Ethics and reports quarterly directly to the OCE. 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. 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 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 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.

Comment
The cost to realize opportunity estimation was arrived at by taking the percentage of the R&D budged 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

Primary potential financial impact
Other, please specify (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
Short-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
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.

Cost to realize opportunity
250000

Strategy to realize opportunity and explanation of cost calculation
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.

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.

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

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

Yes, qualitative and quantitative

C3.1b

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

Climate-related scenarios and models applied	Details
Other, please specify (Insurance Climate-related Scenarios)	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).
Other, please specify	

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	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. If we were unable to comply with EU eco-design requirements, the magnitude of impact would be high and we would experience a 100% loss of revenue from those products.
Supply chain and/or value chain	Yes	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.
Investment in R&D	Yes	Each year approximately 26% of our research and development budget is directly dedicated to increasing product efficiency from 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	Yes	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 $721k USD of savings in 2019.

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Indirect costs Capital expenditures Capital allocation Assets Liabilities	Artesyn's financial planning process has taken into account how various climate change risks and opportunities may affect future revenues. Due to potential down times 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. For instance, Acute physical risks, such as the typhoon that occurred in Laguna of Philippines, impacted our ability to produce our embedded technologies products, thus negatively impacting our revenues by 28%. 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 China, 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. The impact is medium. 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. 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. 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.

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

The identified risks and opportunities do not impact Artesyn's Acquisitions and divestments, and Access to capital as this is managed by our parent company, Advanced Energy Industries.

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

Year target was set
2020

Target coverage
Site/facility

Scope(s) (or Scope 3 category)
Scope 2 (location-based)

Base year
2014

Covered emissions in base year (metric tons CO2e)
72273

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
100

Target year
2030

Targeted reduction from base year (%)
2.5

Covered emissions in target year (metric tons CO2e) [auto-calculated]
70466.175

Covered emissions in reporting year (metric tons CO2e)
33706.53

% of target achieved [auto-calculated]
2134.48839815699

Target status in reporting year
Achieved

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Please explain (including target coverage)
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 2019 there was a decrease of 38573 metric tonnes, resulting in a 47% 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

Year target was set
2016

Target coverage
Site/facility

Scope(s) (or Scope 3 category)
Scope 1+2 (location-based)

Intensity metric
Metric tons CO2e per unit hour worked

Base year
2015

Intensity figure in base year (metric tons CO2e per unit of activity)
0.00269

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure
100

Target year
2030

Targeted reduction from base year (%)
3

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
0.0026093

% change anticipated in absolute Scope 1+2 emissions
28.2

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year (metric tons CO2e per unit of activity)
0.00193

% of target achieved [auto-calculated]
941.75960346964

Target status in reporting year
Achieved

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Please explain (including target coverage)
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 2030.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
No other climate-related targets

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 initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*		
Implementation commenced*		
Implemented*	9	908.75
Not to be implemented		

C4.3b

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

Initiative category & Initiative type

Energy efficiency in buildings	Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)
70.6

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
18000

Investment required (unit currency – as specified in C0.4)
30000

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment
Implemented. Replace old and low efficiency cooling water tower of air condition system in phase I.

Initiative category & Initiative type

Energy efficiency in buildings	Motors and drives

Estimated annual CO2e savings (metric tonnes CO2e)
56.1

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
15000

Investment required (unit currency – as specified in C0.4)
23000

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment
Implemented. Replacement of old and low efficiency central vacuum exhaust system.

Initiative category & Initiative type

Energy efficiency in buildings	Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)
98

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
38000

Investment required (unit currency – as specified in C0.4)
70000

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment
Implemented. Replacement of old & low efficiency Packaged type air conditioners of air conditioning system of Phase I building.

Initiative category & Initiative type

Energy efficiency in buildings	Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)
162.3

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
28000

Investment required (unit currency – as specified in C0.4)
50000

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment
Implemented. Replacement & Enhancement ventilation & Fresh Air Supply Facilities of Burn-in Room.

Initiative category & Initiative type

Energy efficiency in buildings	Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)
72.2

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
14000

Investment required (unit currency – as specified in C0.4)
25000

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment
Implemented. Renovate & replacement old & low efficiency Heat Pumps & hot water piping of Staff Dormitory.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
3.3

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
19000

Investment required (unit currency – as specified in C0.4)
23000

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment
Implemented. Consolidation Burn-in room on 3/F of Block K to 2/F Block F Burn-in room.

Initiative category & Initiative type

Energy efficiency in production processes	Combined heat and power (cogeneration)

Estimated annual CO2e savings (metric tonnes CO2e)
326.8

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
60000

Investment required (unit currency – as specified in C0.4)
110000

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment
Implemented. Increase & keep high utilization of Existing Energy Recycle E-load in Burn-in Process.

Initiative category & Initiative type

Energy efficiency in buildings	Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)
0.2

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
100

Investment required (unit currency – as specified in C0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment
Implemented. Optimize Building B's lift operation program , change Air conditioner on/off control from manual control to auto schedule control.

Initiative category & Initiative type

Energy efficiency in production processes	Combined heat and power (cogeneration)

Estimated annual CO2e savings (metric tonnes CO2e)
189.85

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
450000

Investment required (unit currency – as specified in C0.4)
420000

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment
Implemented. Thermal Imaging Project (Alternative to Burn In).

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 be 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 in facility communications. In addition to meeting regulatory requirements our embedded power product lines require energy consumption reductions in order to meet market demand.
Dedicated budget for low-carbon product R&D	Employees may be 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 in facility communications. In addition to meeting regulatory requirements our embedded power 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

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
1526.02

Start date
January 1 2019

End date
December 31 2019

Comment
Artesyn's gross, global Scope 1 emissions, in metric tons of CO2 equivalent were 1,526.02. This is a >14% lower than in the prior year.

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)
1784.01

Start date
January 1 2018

End date
December 31 2018

Comment

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)
1101.96

Start date
January 1 2017

End date
December 31 2017

Comment

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)
2662.47

Start date
January 1 2016

End date
December 31 2016

Comment

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?

Reporting year

Scope 2, location-based
33706.53

Scope 2, market-based (if applicable)
33706.53

Start date
January 1 2019

End date
December 31 2019

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.

Past year 1

Scope 2, location-based
37636.6

Scope 2, market-based (if applicable)
37636.6

Start date
January 1 2018

End date
December 31 2018

Comment

Past year 2

Scope 2, location-based
35762.67

Scope 2, market-based (if applicable)
35762.67

Start date
January 1 2017

End date
December 31 2017

Comment

Past year 3

Scope 2, location-based
38309.81

Scope 2, market-based (if applicable)
38309.81

Start date
January 1 2016

End date
December 31 2016

Comment

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 gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Metric tonnes CO2e
303701428.92

Emissions calculation methodology
The emissions from Artesyn's purchased goods and services can be calculated by WRI Scope 3 Evaluator with annual BOM spend.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
91.88

Please explain

Capital goods

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
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
Relevant, calculated

Metric tonnes CO2e
7122811

Emissions calculation methodology
The emissions from Artesyn's Fuel-and-energy-related activities (not included in Scope 1 or 2) is calculated by WRI Scope 3 Evaluator.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
2.15

Please explain

Upstream transportation and distribution

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
0

Emissions calculation methodology
The emissions from Artesyn's Upstream transportation and distribution is calculated by WRI Scope 3 Evaluator.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Waste generated in operations

Evaluation status
Relevant, calculated

Metric tonnes CO2e
130853.03

Emissions calculation methodology
The emissions from Artesyn's Waste generated in operations is calculated by WRI Scope 3 Evaluator.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0.04

Please explain

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
720331

Emissions calculation methodology
The emissions from Artesyn's Business travel is calculated by WRI Scope 3 Evaluator using the data provided by travel booking provider.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0.22

Please explain
Company-wide air travel for 2019. Emissions data provided for short, medium, and long-haul flights through travel booking provider, BCD Travel.

Employee commuting

Evaluation status
Relevant, calculated

Metric tonnes CO2e
12750000

Emissions calculation methodology
The emissions from Artesyn's Employee commuting is calculated by WRI Scope 3 Evaluator.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
3.86

Please explain

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
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
0

Emissions calculation methodology
The emissions from Artesyn's Downstream transportation and distribution is calculated by WRI screening tool.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Processing of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
0

Emissions calculation methodology
The emissions from Artesyn's Processing of sold products is calculated by WRI Scope 3 Evaluator.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Use of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
0

Emissions calculation methodology
The emissions from Artesyn's Use of sold products is calculated by WRI Scope 3 Evaluator.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

End of life treatment of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
6123620

Emissions calculation methodology
The emissions from Artesyn's End of life treatment of sold products is calculated by WRI Scope 3 Evaluator.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
1.85

Please explain
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
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Artesyn does not lease downstream assets.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Artesyn has no franchise operations.

Investments

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Artesyn as a company does not invest.

Other (upstream)

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

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. We use same facilities in 2019 continuously.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
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. Data for all warehouses has not yet been consolidated, so this emissions data represents only one warehousing location.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic 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
0.00193

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
37251.55

Metric denominator
unit hour worked

Metric denominator: Unit total
19321389

Scope 2 figure used
Location-based

% change from previous year
16

Direction of change
Increased

Reason for change
The reason for the increase of electricity consumption are due to additional Production equipment and Automation and the increase of production volume.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
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	1.51	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	1.1	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	1031.44	IPCC Fifth Assessment Report (AR5 – 100 year)
CO2	693.88	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	386.12
Philippines	1139.9

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	489.14
Fuel for company Vehicles	207.34
Refrigerant	829.54

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 for in Scope 2 market-based approach (MWh)
China	7265.83		29345015	14877.92
Philippines	26440.7		37125388	9504.09

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 (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Purchased electricity	33706.53	

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?

Decreased

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	908.75	Decreased	2.3	Through the reduction activities, a total of 908.75 metric tonnes of CO2e were avoided in the calendar year of 2019. This includes increased efficiencies of various HVAC appliances like chillers, boilers, air handling units, and more, as well as Eload changes in the facilities. The emissions value (percentage) is calculated by dividing 908.75 mt CO2e over last year's Scope 1 + 2 emissions value of 39,420.61 mt CO2e.
Divestment		<Not Applicable>		
Acquisitions	19561.5	Decreased	35.7	Advanced Energy Industries completed acquisition of Artesyn in 2019 resulting in the deletion of one factory in China in the report this year. The emissions value of the factory occupied 35.7% of overall emission last year.
Mergers		<Not Applicable>		
Change in output	2169.06	Decreased	0.27	The increase in purchased electricity from 66,651,44 MWh in 2018 to 66,470.40 MWh in 2019 was primarily due to changes in production and headcount across the facilities. (1-(66,470.40 /66,651,44))*100 =0.27%
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 undertook this energy-related activity in the reporting year
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 (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	Please select	0	2157	2157
Consumption of purchased or acquired electricity	<Not Applicable>	24382.02	42088.38	66470.4
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>		<Not Applicable>	
Total energy consumption	<Not Applicable>	24382.02	44245.38	68627.4

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 heat	No
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
699.54

MWh fuel consumed for self-generation of electricity
699.54

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>

Emission factor
0.00268

Unit
kg CO2e per m3

Emissions 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

Fuels (excluding feedstocks)
Liquefied Petroleum Gas (LPG)

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
845.48

MWh fuel consumed for self-generation of electricity
845.48

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>

Emission factor
0.00298

Unit
kg CO2e per Mg

Emissions 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

Fuels (excluding feedstocks)
Natural Gas

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
611.97

MWh fuel consumed for self-generation of electricity
611.97

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>

Emission factor
1.885

Unit
kg CO2 per m3

Emissions 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

C8.2d

(C8.2d) 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	2157	2157	0	0
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

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

Sourcing method
Power purchase agreement (PPA) with a grid-connected generator without energy attribute certificates

Low-carbon technology type
Hydropower

Country/region of consumption of low-carbon electricity, heat, steam or cooling
Asia Pacific (or JAPA)

MWh consumed accounted for at a zero emission factor
24382.02

Comment
Southern China electricity is created 37.04% hydroelectric, 9.51% nuclear power, and 4.15% wind and others power. Philippines electric grid is fed by 12% geothermal energy, 9% hydroelectric, 1% solar and 1% wind. Emission factors for China and Philippines are 0.2476 and 0.7122, respectively.

C9. Additional metrics

C9.1

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

Description
Waste

Metric value
2161

Metric numerator
Metric Tonnes

Metric denominator (intensity metric only)

% change from previous year
1

Direction of change
Increased

Please explain
Compare with last year, our waste is increased ~1% due to more business.

C10. Verification

C10.1

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

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

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 you are regulated by or anticipate being regulated by?

Artesyn's strategy for complying with the systems in which we anticipate participating in 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 may now need to participate in the ETS by purchasing permits beginning in the coming few years. 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, and we do not currently 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
18

% total procurement spend (direct and indirect)
50

% of supplier-related 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 on 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 be 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 energy 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 five 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 2013-2019, 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)

% of customers by number
20

% of customer - related Scope 3 emissions as reported in C6.5
0

Portfolio coverage (total or outstanding)
<Not Applicable>

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 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 influenced, or are you attempting to influence their 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 influenced, or are you attempting to influence their 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 implementer's forums.

How have you influenced, or are you attempting to influence their position?
As SMIF Board Members, we are able to advance the Forum's interests in efficient technology.

Trade association
Responsible Business Alliance (RBA)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The manufacturing of embedded power products can have a significant impact on the environment. From the use of rare materials to energy and water demands of manufacturing processes, there is a clear need for embedded power companies to employ and promote environmentally responsible practices in the supply chain. The RBA has a vision of how companies should behave in the electronics industry. The RBA Code outlines industry standards to ensure that employees are treated with respect and dignity, employees are provided with a safe work environment, manufacturing processes are environmentally responsible and management systems are in place to support the RBA Code. The RBA has also taken the position that improved emissions reporting will drive awareness and reduction activities. The RBA encourages all of its members to annually report emissions and energy use to the RBA environmental survey, which includes a greenhouse gas (GHGs) reporting module, or by using the CDP Supply Chain Response. Data entered by all RBA members is summarized and tracked as a way to understand the impact of the electronics industry on GHGs emissions.

How have you influenced, or are you attempting to influence their position?
We influence the position by supporting it as members of the RBA.

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 on boarding 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

Status
Please select

Attach the document
Artesyn CDP Report 2019 for website.pdf

Page/Section reference
Artesyn CDP Report 2019 for website.pdf

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Trade and Environmental Compliance Manager	Other, please specify (Legal and Compliance)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

Artesyn is dedicated to improving and reporting on our environmental performance. We focus on optimizing operations, including our supply chain and our industry, to become more sustainable; and collaborating wherever possible to build a healthier social and business climate. Our key opportunity is to manage emissions and energy use within our manufacturing facilities. We believe we can be leveraged to support new, more efficient ways of living and working that will lead to a sustainable future. We also invite our suppliers to join RBA to pay more attention on climate change impacts.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?
No

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member
Cisco Systems, Inc.

Scope of emissions
Scope 2

Allocation level
Facility

Allocation level detail

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions
Electricity consumption in operations.

Verified
No

Allocation method
Allocation based on the volume of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We assume that the information provided to us by the electric utilities is accurate.

Requesting member
Hewlett Packard Enterprise Company

Scope of emissions
Scope 2

Allocation level
Facility

Allocation level detail

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions
Electricity consumption in operations.

Verified
Please select

Allocation method
Allocation based on the volume of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

We assume that the information provided to us by the electric utilities is accurate.

Requesting member
Juniper Networks, Inc.

Scope of emissions
Scope 2

Allocation level
Facility

Allocation level detail

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions
Electricity consumption in operations.

Verified
No

Allocation method
Allocation based on the volume of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We assume that the information provided to us by the electric utilities is accurate.

Requesting member
Nokia Group

Scope of emissions
Please select

Allocation level
Facility

Allocation level detail

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions
Electricity consumption in operations.

Verified
No

Allocation method
Allocation based on the volume of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We assume that the information provided to us by the electric utilities is accurate.

Requesting member
Koninklijke Philips NV

Scope of emissions
Scope 2

Allocation level
Facility

Allocation level detail

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions
Electricity consumption in operations.

Verified
No

Allocation method
Allocation based on the volume of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We assume that the information provided to us by the electric utilities is accurate.

Requesting member
Varian Medical Systems Inc

Scope of emissions
Scope 2

Allocation level

Facility

Allocation level detail

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions
Electricity consumption in operations.

Verified
No

Allocation method
Allocation based on the volume of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
We assume that the information provided to us by the electric utilities is accurate.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

TRUE Zero Waste Rating System - https://true.gbci.org/ -

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	Currently we are not able to allocate emissions by product. Conducting a study of each product and its associated total footprint would enable to us to provide allocations more accurately.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?
Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

We hope to conduct a pilot study of a product and attempt to assign a carbon footprint or carbon factor to that product. Once we have gone through the process with one product, we can expand to hopefully systematize the process.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

Requesting member
Cisco Systems, Inc.

Group type of project
Other, please specify (Waste Reduction)

Type of project
Other, please specify (Waste Reduction)

Emissions targeted
Actions that would reduce our own supply chain emissions (our own scope 3)

Estimated timeframe for carbon reductions to be realized
1-3 years

Estimated lifetime CO2e savings

Estimated payback
Other, please specify

Details of proposal
Cisco's Supply Chain Zero Waste Pilot Program is intended to improve the management of materials and waste, resulting in improved resource efficiency, cost savings, risk reduction, and demonstration of innovation in the circular economy.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?
No

SC3.1

(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative?
No

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative?
No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
No, I am not providing data

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Customers	Public	<Not Applicable>

Please confirm below
I have read and accept the applicable Terms