2018

Climate Change Response

flex

Flextronics International - Climate Change 2018

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

We are the Sketch-to-Scale® solutions provider that designs and builds Intelligent Products for a Connected World®. With approximately 200,000 professionals across 30 countries, we provide innovative design, engineering, manufacturing, real-time supply chain insight, and logistics services to companies of all sizes in various industries and end-markets. Flex is a participant in the UN Global Compact, the world's largest sustainability initiative as well as a constituent of the FTSE4Good Index. The company's sustainability efforts have been recognized by Frost and Sullivan with the 2018 Manufacturing Leadership Award, and by the Institutional Shareholder Services Inc. (ISS) with the highest disclosure and transparency score in the governance, environmental and social categories. We believe that a sustainable approach to business is essential and forms a core part of the way we do business. Flex Sustainability identifies our commitment to sustainable development across five cornerstones: People, Community, Environment, Innovation, and Integrity. These cornerstones form the foundation of proactive solutions that continually impel us to improve our corporate citizenship and workplace performance. We believe in the power of technology to connect people, products and services to create a smarter, more sustainable future. It's not just good business, but it's good for the environment, for people and the communities in which we live and work. This belief forms the cornerstone of our sustainability commitments and actions. Through Flex Sustainability strategy, vision and mission, we promise to deliver sustainable impact throughout the global communities in which we live and work to become a trusted investment, employer, and partner of choice.

C0.2

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

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

C0.3

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

China
Malaysia
Mexico
United States of America
Other, please specify (Rest of the world)

C0.4

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

USD

C0.5

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

Operational control

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Board/Executive board	Ultimate responsibility for climate-related issues resides with our Board, based upon regular reviews with operating personnel. Those reviews typically take place twice yearly. Because the Board's Audit Committee is charged with oversight of the sustainability program in general, sustainability risks and opportunities are naturally surfaced to the Board as a whole. The Audit Committee may of course review matters in more detail prior to discussion within the full Board. At the operational level, our Green House Gas Emissions Inventory and Reduction Program is overseen by an Executive Sponsor Group comprised of the Chief Financial Officer, Chief Compliance Officer, General Counsel, the Business Segment Presidents, the Vice President of Quality, the Vice President of Security and Brand Protection, and the Vice President of Audit and Risk Management.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	We typically explore one or more of these aspects at these meetings, although we generally conduct an overall strategic review annually. We circulate scorecards evaluating indicators of progress that help assure that we discuss these subjects within other reviews.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Financial Officer (CFO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Other C-Suite Officer, please specify (Chief Compliance Officer)	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify (General Counsel)	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify (Business Segment Presidents) *Business Segment Presidents*	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify (Chief Human Resources Officer) *Chief Human Resources Officer*	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify (VP Security+Brand Protection) *Vice President of Security and Brand Protection*	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify (VP of Audit + Risk Management) *Vice President of Audit and Risk Management*	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify (VP Corp Social + Environ Resp) *VP of Corporate Social and Environmental Responsibility (CSER)*	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify (VP of Corporate Real Estate+Facilities) *VP of Corporate Real Estate and Facilities (CREF)*	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify (Executive Sponsor Group (ES)) *Executive Sponsor Group (ES)*	Both assessing and managing climate-related risks and opportunities *This group meets quarterly with the membership described above. The agenda is set by the Chief Compliance Officer is consultation with the other members. In addition to risk management issues, the ES Group conducts annual reviews of key areas, including sustainability and Environmental, Health and Safety (as a key subset of sustainability).*	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.

Ultimate responsibility for climate-related issues resides with our Board. Our Green House Gas (GHG) Emissions Inventory and reduction program is overseen by an Executive Sponsor Group (ESG) comprised of the Chief Financial Officer, Chief Compliance Officer, General Counsel, the Business Segment Presidents, the Vice President of Quality, the Vice President of Security and Brand Protection, and the Vice President of Audit and Risk Management. We have established 20 goals (referred to as “Flex 20 by 2020 goals”) aligned to the United Nations’ Sustainable Development Goals (SDG’s) that reflect our commitment to the highest sustainability standards across our operations and supply chain. The environmental goals include reducing CO2 emissions, increasing the utilization of renewable energy, the equivalent to powering 3.5 million homes with Flex Energy Solutions PV solar modules, and providing electricity to the grid at a cost 5% less than average fossil fuel sources through Flex Energy Solutions renewable energy systems. A Corporate Sustainability Leadership Committee (CSLC), led by the VP of Corporate Social and Environmental Responsibility (CSER), and the VP of Corporate Real Estate and Facilities (CREF), sets the overall carbon strategy and administers the carbon initiatives through our global operations. Progress towards our emissions reduction goal is reviewed regularly by the CSLC and ESG and periodically with the CFO as well as the entire Executive Committee. The Board conducts a strategic review in which climate-related risks and opportunities are highlighted and directional initiatives are approved, e.g. increases in our onsite solar power capacity and generation.

C1.3

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

Yes

C1.3a

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

Who is entitled to benefit from these incentives?
Energy manager

Types of incentives
Recognition (non-monetary)

Activity incentivized
Emissions reduction project

Comment
• Meeting emission reduction targets • Sustainability Best Initiatives – Environment Category (climate change efforts) • Energy savings/Cost reductions

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Who is entitled to benefit from these incentives?
Facilities manager

Types of incentives
Recognition (non-monetary)

Activity incentivized
Energy reduction project

Comment
• Meeting emission reduction targets • Sustainability Best Initiatives – Environment Category (climate change efforts) • Energy savings/Cost reductions

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Who is entitled to benefit from these incentives?
All employees

Types of incentives
Recognition (non-monetary)

Activity incentivized
Other, please specify (Best Practices Recognition)

Comment
• Meeting emission reduction targets • Sustainability Best Initiatives – Environment Category (climate change efforts) • Energy savings/Cost reductions

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Who is entitled to benefit from these incentives?
Other, please specify (Project Lead + team–Earth Day Challenge)

Types of incentives
Recognition (non-monetary)

Activity incentivized
Other, please specify (Earth Day Challenge Recognition)

Comment
•Contribution to Flex 20 by 2020 Goals and SDGs •Recognition kit (Flex branded items) to winners (1 per region)

Who is entitled to benefit from these incentives?
Other C-Suite Officer

Types of incentives
Monetary reward

Activity incentivized
Energy reduction target

Comment
Energy and GHG management fall under the Chief Human Resource Officer (CHRO) organization. Annual performance reviews measure and assess accomplishments in global related programs, projects, and targets. Annual merit process is done based on annual performance review.

C2. Risks and opportunities

C2.1

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

	From (years)	To (years)	Comment
Short-term	3	5	Our goals to date have primarily been short-term goals. This is also a time horizon used in our company strategy.
Medium-term	5	10	Some of our partnerships with customers extend out into this horizon. In addition, space and human resources planning are increasingly extending into this time horizon.
Long-term	10	25	We review this horizon from a research and projection standpoint but it is more difficult to incorporate into our strategy.

C2.2

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

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

C2.2a

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

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	Our Regulations Market Intelligence (RMI) lead, and in-house legal counsel use web-based and in-person methods to identify, analyze, and act on relevant climate risks and opportunities. Our customer-facing (CF) lead monitors risks/opportunities starting with the quoting and new product introduction phases and manages climate-related requirements from existing accounts. CSER regional leads (RL) focus on risks/opportunities of each region's regulatory activity. Our operations are required to monitor potential risks/opportunities through our site-level social and environmental management system (Flex Pledge) on a continual basis. Results from RMI, CF, RL, and operational assessments are reported quarterly to the Corporate Sustainability Leadership Committee (including site-level representatives). We hold an annual process involving enterprise risk management and functional risk leads (including CSER VP) where top risks are reported to the Executive Sponsor Group (ESG).

C2.2b

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

Our company-wide risk management process encompasses the following: new regulatory requirements; new customer requirements; escalating operating costs such as diminished or interrupted supply of electricity and other essential resources; brand/reputation risks; and potential business interruption risks, including those from frequent and/or extreme weather events that may be triggered as climate change worsens. Our RMI lead monitors worldwide climate change regulatory activity. Our CF lead is responsible for identifying customer environmental requirements and works with RMI to analyze the impact of such requirements and agreements for us. The RMI and CF leads, along with the VP of CSER, regularly engage in dialogue with industry workgroups, trade associations, and other forums as part of our risk and opportunity identification process. The Corporate Responsibility team actively collaborates with the Corporate Real Estate and Facilities (CREF) team to identify issues, interpret the requirements, assess the potential impacts, and insure necessary resources are in place to sustain the requirement.

Risks and opportunities are also assessed at a site level in all locations where we operate. Assessments include evaluation of regulatory and/or customer requirements, and specific energy/climate change requirements at the regional and local level. The assessment process begins at the site level, through our social and environmental management system, called "Flex Pledge", defined as the mechanism to systematically identify, address, mitigate, and control risks at the site level. All sites are required to adopt/implement the Flex Pledge program and all sites worldwide are audited against a robust Flex Pledge audit protocol, including climate-related controls.

Our criteria for materiality/priorities are defined in our Environmental Strategy in this order: Compliance to Laws/Regulations; Fulfillment of Customer Requirements/Specifications; Liability and Cost Protection and; Business Opportunities.

The Flex Sustainability Vision and Roadmap demonstrates how we move from risk avoidance to value creation. Our primary objective is to ensure we are in compliance and fulfill all of our customers' requirements and specifications. Our goal is to avoid all compliance risks to our business partners and internal operations. We then look to create value internally, but particularly externally for all stakeholders (customers, investors, etc.). Once we cover the compliance portion (risk avoidance), we focus on a second aspect that influences the strategy: cost reduction opportunities resulting from energy savings that contribute to minimizing the impact of climate change.

We are increasingly focused on identifying and capitalizing on opportunities related to climate change solutions. Our business already includes a wide variety of products related to renewable energy (assembly of solar modules, single-axis trackers, solar power inverters), energy efficiency ("smart" meters and actuators, high efficiency LED lighting solutions), and efficient power conversion and storage (high-density batteries and power supplies, wireless charging). We seek growth opportunities in several areas that have the potential to mitigate climate change, including renewable energy, connected home, autonomous vehicles, smart agriculture, and supply chain optimization. For further information please visit flex.com.

While we have not formally defined a dollar amount that constitutes a "substantive financial impact," the revenues from our energy-related climate change solutions were sizeable in the last fiscal year. We cannot be more precise as our segment reporting does not break that figure out of the Industrial and Emerging Industries (IEI) segment of the business. We can also state that Flex is continuing to pursue additional business in this sector with industrial customers, public and private utilities, energy developers and others. In some cases, we have a significant market share, e.g. for single-axis trackers utilized in utility-scale solar instillations. In addition, a similar statement can be made regarding the financial impact of climate-related losses, i.e. that sizeable losses were incurred because of severe weather events (e.g. a typhoon earlier in the year in Southern China) that impacted our factories. Those losses included business interruption (both shipments and supplies) as well as physical damage to facilities. While sizeable, those losses were not material to our overall results and were therefore not described in our 10-K or other reporting. That event has usefully informed our business continuity planning.

C2.2c

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Compliance is a fundamental element of our sustainability management system. While regulations related to carbon and climate change may have direct and indirect impacts on our business, we do not find these regulatory risks to be material. For example, we track carbon trading regimes in the major geographies where we operate, but as of this date we have not been required to participate in any of those schemes.
Emerging regulation	Relevant, always included	While regulations related to carbon and climate change may have direct and indirect impacts on our business, we do not find these regulatory risks to be material. Our business is not energy intensive and nearly all of our facilities fall below threshold requirements for current regulations limiting emissions, cap and trade programs, and providing for mandatory reporting of greenhouse gas emissions. As per above, we are following carbon emissions trading, carbon taxes, renewable tariffs, and similar proposals.
Technology	Relevant, sometimes included	As a technology company, we see many new technologies and often use our facilities as a test bed. At the moment, we have deployed technology that helps reduce energy losses in facility cabling and conduits (a process referred to as line conditioning). In some instances, we have seen net facility-level reductions of 5% or more with an attractive return on our investment.
Legal	Relevant, sometimes included	We have not received any climate-related litigation claims to date and are not aware of any potential climate-related compliance issues nor any exposure to date.
Market	Relevant, sometimes included	As our business grows and the geographic mix changes, we have to consider the emissions factors in each region as well as the relative ability to procure greener energy. For example, India and China are still challenging geographies for commercial enterprises in terms of procurement. We recently installed a solar power plant at our Chennai, India factory, and it took some time to obtain authorization to turn on the system.
Reputation	Relevant, always included	This is a key element of risk management as we are an extension of our customers' businesses. Customer interest in certain facilities has prompted us to evaluate additional onsite systems and/or procurement opportunities. In addition, we have customers (e.g. HPE) who are asking key suppliers to set a science-based target as part of their supply chain initiatives. Consequently, we are gathering additional data and hope to make such a commitment in the next few years.
Acute physical	Relevant, sometimes included	Given that our footprint is primarily in urban settings, we are looking to identify and mitigate acute risks. Extreme weather events in Asia have become a bigger part of our business continuity planning. As described in the prior response (2.2a), we have incurred sizeable losses during such events, e.g. typhoons in Southern China, extreme flooding in India. This type of event and analysis have also factored into our planning for water-stressed areas (as described elsewhere in our CD responses). While most of our facilities are in urba n and suburban areas with well-established infrastructure, including, without limitation, storm sewers, that infrastructure is subject to impairment in extreme events. We will continue to evaluate the magnitude and likelihood of these risks relative to our business.
Chronic physical	Not relevant, included	This has not been deemed a significant risk to date.
Upstream	Relevant, sometimes included	Our supply chain is extensive and quite complex, so a concerted effort is made to identify risks and opportunities upstream. Our Scope 3 assessment work is still underway and upon completion we will undertake analysis, internal strategic discussion, and consideration of supplier engagement on the subject. We are already exposed to best practices via our own customers.
Downstream	Relevant, sometimes included	Downstream risks are typically managed by our customers, but we have an opportunity to provide support in the form of intelligence and services, e.g. to offer customers climate-change solutions as well as supply-chain solutions that help mitigate risk, e.g. Elementum https://www.elementum.com/.

C2.2d

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

Our company-wide risk management process encompasses the following: new regulatory requirements; new customer requirements; escalating operating costs such as diminished or interrupted supply of electricity and other essential resources; brand/reputation risks; and potential business interruption risks, including those from frequent and/or extreme weather events that may be triggered as climate change worsens. Our RMI lead monitors worldwide climate change regulatory activity. Our CF lead is responsible for identifying customer environmental requirements and working with RMI to analyze the impact of such requirements and agreements for us. The RMI and CF leads, along with the VP of Sustainability, regularly engage in dialog with industry workgroups, trade associations, and other forums as part of our risk and opportunity identification process. The CSER team actively collaborates with the corporate real estate and facilities (CREF) team to identify issues, interpret the requirements, assess the potential impacts, and insure necessary resources are in place to sustain the requirement. We also assess risks and opportunities at a site level in all locations where we operate. The bases for assessment are the respective regulatory requirements and/or customer requirements, and specific energy/climate change requirements at the regional and local level. The assessment process begins at the site level, through our social and environmental management system, called “Flex Pledge”. Our sites use the Flex Pledge, the mechanism to systematically identify, address, mitigate, and control risks at the site level. All sites are required to adopt/implement the Flex Pledge program and all sites worldwide are audited against a robust Flex Pledge audit protocol, including climate-related controls. Our criteria for materiality/priorities are defined in our Environmental Strategy in this order: Compliance with Laws/Regulations; Fulfillment of Customer Requirements/Specifications; Liability and Cost Protection, and Business Opportunities.

The Flex Sustainability Vision and Roadmap demonstrates how we move from risk avoidance to value creation. Our prime objective is to ensure we are in compliance and we fulfill all of our customers’ requirements and specifications. Our goal is to avoid all compliance risks to our business partners and internal operations. We then look to create value internally, but particularly externally for all our stakeholders (customers, investors, etc.). Once we cover the compliance portion (risk avoidance), we focus on a second aspect that influences the strategy: cost reduction opportunities resulting from energy savings that contribute to minimizing the impact of climate change. Increasingly, we are focused on identifying and capitalizing on opportunities related to climate change solutions. Our business already includes a wide variety of products related to renewable energy (assembly of solar modules, single-axis trackers, solar power inverters), energy efficiency (“smart” meters and actuators, high efficiency LED lighting solutions), and efficient power conversion and storage (high-density batteries and power supplies, wireless charging). We seek growth opportunities in several areas that have the potential to mitigate climate change, including renewable energy, connected home, autonomous vehicles, smart agriculture, and supply chain optimization. For further information please visit flex.com. For example, on the operations side, we are working with our 3PLs to understand our logistics footprint and to identify opportunities for reductions. Due to the complexity of our business, our analysis is usually in a hybrid form, i.e. vendor-supplied specific data combined with EIO (economic input-output) calculations. This approach allows us to apply our major levers, such as modal shifts from air freight to maritime, to the most significant corridors and commodities, taking into account mileage, weight, etc. We will continue more of this work as our data becomes richer and more accessible.

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

Transition risk

Primary climate-related risk driver

Policy and legal: Other

Type of financial impact driver

Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description
While regulations related to carbon and climate change may have direct and indirect impacts on our business, we do not find these regulatory risks to be material. There are scenarios that merit watching closely, e.g. increases in China air pollution standards, municipal orders to shut down factories, etc. Impact: Direct + Indirect (impacts occurring in our extended supply chain)

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
Low

Potential financial impact

Explanation of financial impact
We have not formally defined a dollar amount that constitutes a “substantive financial impact” in terms of climate related risks. We can state that sizeable losses were incurred because of severe weather events (e.g. a typhoon earlier in the year in Southern China) that impacted our factories. Those losses included business interruption (both shipments and supplies) as well as physical damage to facilities. While sizeable, those losses were not material to our overall results and were therefore not described in our 10-K or other reporting. That event has usefully informed our business continuity planning.

Management method
Capital and expense planning are parts of our normal budgetary cycle. As we adjust our strategy based upon the analysis described in this response, we naturally incorporate those strategies into our spending, e.g. adding features to new facilities, upgrading current facilities, repairs, disaster planning, etc. Business development expenses are based upon a wide variety of factors, including the Total Available Market (TAM) and the strength of our offerings. Energy business, including climate-related solutions, has been growing.

Cost of management
0

Comment
Zero, meaning no costs over and above the normal costs of management and operation. Risk management and business development are parts of the jobs of several existing organizations.

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type
Transition risk

Primary climate-related risk driver
Policy and legal: Other

Type of financial impact driver
Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description
Increase in worldwide fuel/energy taxes/regulations. While we are not an energy-intensive business per se, our energy spending is sizeable and we are naturally aiming to minimize unnecessary expense through conservation and smart procurement. Impact: direct + indirect (supply chain)

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium

Potential financial impact

Explanation of financial impact

While we have not formally defined a dollar amount that constitutes a “substantive financial impact,” our climate-related losses have been sizeable and we are exposed to similar climate change risks in some locations.

Management method
Risk2 is being managed through efficiency exercises and water conservation techniques.

Cost of management
0

Comment
No significant cost expenditures at this time. The management of monitoring this development will not increase because existing teams will work on this issue.

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type
Physical risk

Primary climate-related risk driver
Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact driver
Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description
Several sites operate in cyclone risk areas, e.g. China, India, Malaysia. We have experienced impacts in recent events, both to shipments as well as physical facilities. Impact: direct and indirect (facilities, supply chain, customers)

Time horizon
Long-term

Likelihood
More likely than not

Magnitude of impact
Medium

Potential financial impact

Explanation of financial impact
While we have not formally defined a dollar amount that constitutes a “substantive financial impact,” our climate-related losses have been sizeable and we are exposed to similar climate change risks in some locations.

Management method
Risk 3 is being managed through insuring that high-risk locations have suitable backup capability in other lower-risk areas.

Cost of management
0

Comment
No significant cost expenditures at this time. The management of monitoring this development will not increase because existing teams will work on this issue.

C2.4

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

C2.4a

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

Identifier
Opp1

Where in the value chain does the opportunity occur?
Customer

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Type of financial impact driver
Increased revenue through demand for lower emissions products and services

Company- specific description
We are increasingly focused on identifying and capitalizing on opportunities related to climate change solutions. Our business already includes a wide variety of products related to renewable energy (assembly of solar modules and solar power inverters), energy efficiency ("smart" meters and actuators, high efficiency LED lighting solutions) and efficient power conversion and storage (high-density batteries and power supplies, wireless charging). The effects of climate change have the potential to impact consumer behavior, resulting in higher demand for energy-efficient products and services. This increased demand will result in new opportunities for us to partner with existing and new customers to deliver design and manufacturing services for more energy-efficient products.

Time horizon
Current

Likelihood
Very likely

Magnitude of impact
Medium

Potential financial impact

Explanation of financial impact

Strategy to realize opportunity
Our account management teams will work with our existing customers and new customers to identify opportunities to design and build more energy-efficient products. Our design engineers will work towards more energy-efficient product designs. We have aggregated our innovation efforts under a single organization – Innovation and New Ventures – to provide manufacturing and engineering expertise to both start-ups and established enterprises working on a wide variety of smart technologies, cloud-based technologies, and automation.

Cost to realize opportunity
0

Comment
Zero cost to realize opportunity, meaning no costs over and above the normal costs of management and operation. Risk management and business development are parts of the jobs of several existing organizations.

Identifier
Opp2

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

Type of financial impact driver
Reduced operating costs (e.g., through efficiency gains and cost reductions)

Company- specific description
Key customers are setting supply chain targets, creating an expectation that we will utilize more renewables in powering our facilities.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium

Potential financial impact

Explanation of financial impact

Strategy to realize opportunity
Our account management teams will work with our existing customers and new customers to identify opportunities to design and build more energy-efficient products. Our design engineers will work towards more energy efficient product designs. We have aggregated our innovation efforts under a single organization – Innovation and New Ventures – to provide manufacturing and engineering expertise to both start-ups and established enterprises working on a wide variety of smart technologies, cloud-based technologies, and automation.

Cost to realize opportunity
0

Comment
Zero cost to realize opportunity, meaning no costs over and above the normal costs of management and operation. Risk management and business development are parts of the jobs of several existing organizations.

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver
Use of lower-emission sources of energy

Type of financial impact driver
Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon

Company- specific description
We are looking for opportunities in all of the locations where our footprint is substantial. In some foreign locations the green energy market is less developed, but we expect that to change rapidly over the next several years.

Time horizon
Short-term

Likelihood
More likely than not

Magnitude of impact
Medium

Potential financial impact

Explanation of financial impact

Strategy to realize opportunity
Our account management teams will work with our existing customers and new customers to identify opportunities to design and build more energy-efficient products. Our design engineers will work towards more energy efficient product designs. We have aggregated our innovation efforts under a single organization – Innovation and New Ventures – to provide manufacturing and

engineering expertise to both start-ups and established enterprises working on a wide variety of smart technologies, cloud-based technologies, and automation.

Cost to realize opportunity

0

Comment

Zero cost to realize opportunity, meaning no costs over and above the normal costs of management and operation. Risk management and business development are parts of the jobs of several existing organizations.

C2.5

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

	Impact	Description
Products and services	Impacted for some suppliers, facilities, or product lines	While we have not formally defined a dollar amount that constitutes a “substantive financial impact,” the revenues from our energy-related climate change solutions were sizeable in the last fiscal year. We cannot be more precise as our segment reporting does not break that figure out of the Industrial and Emerging Industries (IEI) segment of the business. We can also state that Flex is continuing to pursue additional business in this sector with industrial customers, public and private utilities, energy developers and others. In some cases, we have a significant market share, e.g. for single-axis trackers utilized in utility-scale solar installations. A similar statement can be made regarding the financial impact of climate-related losses, i.e. that sizeable losses were incurred because of severe weather events (e.g. a typhoon earlier in the year in Southern China) that impacted our factories. Those losses included business interruption (both shipments and supplies) as well as physical damage to facilities. While sizeable, those losses were not material to our overall results and were therefore not described in our 10-K or other reporting. That event has usefully informed our business continuity planning. In terms of likelihood and magnitude, these product related risks and opportunities are medium and there is potential for the revenue opportunities to be material.
Supply chain and/or value chain	Not yet impacted	Risk from impending higher air pollution standards in China could impact our extended supply chain. This risk is being managed through monitoring and efficiency optimization to drive offshore factories to meet stringent Western pollution standards. Given the size and complexity of our supply chains, there is a medium risk here, but it is difficult for us to state the magnitude until further data gathering and engagement with suppliers takes place. Any disruptions we have seen in supplies during severe weather events have been short-term only.
Adaptation and mitigation activities	Impacted for some suppliers, facilities, or product lines	We are looking for growth opportunities in several areas that have the potential to mitigate climate change, including renewable energy, connected home, autonomous vehicles, smart agriculture, and supply chain optimization. For further information please visit flex.com. This opportunity is lower in likelihood only because it depends upon what our customers pursue from a strategic standpoint and the nature of the services we provide, e.g. design vs. assembly only. The magnitude could be high because of the demand for climate change solutions in all of the sectors mentioned above, but the timeframe is relatively long and thus the size of the opportunity is somewhat speculative.
Investment in R&D	Impacted for some suppliers, facilities, or product lines	We have new business development teams investigating market opportunities on a daily basis (Energy segment, New Ventures segment, Strategic Marketing Operations, etc.). Additionally, we have pioneered the Sketch-to-Scale® innovation model to enable start-up companies with new technologies that address these climate-related issues to grow their business from design to full production. Finally, our sustainability team is monitoring the development of climate change issues through our regulations and market intelligence function and will feed any insights back into our marketing strategy. Similar to the above answer, this opportunity is dependent upon customers and could be substantial over time.
Operations	Not yet impacted	Increasing or decreasing temperatures could impact site energy usage and increase operational costs or disrupt production capacity. This risk is being managed through improved efficiencies in usage and facilities climate control and through the addition of site power generation capabilities, where appropriate. No significant cost expenditures at this time. The management of monitoring this development will not increase because existing teams will work on this issue. This is a risk that has a high likelihood of occurrence, but it is low in terms of magnitude. While Flex has a large footprint, our business is not energy intensive. We are continuing to invest in LED lighting, onsite solar and are investigating procurement of green energy through local utilities, PPAs, etc.
Other, please specify	Please select	

C2.6

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

	Relevance	Description
Revenues	Impacted for some suppliers, facilities, or product lines	We have the potential to grow existing revenue through the higher consumer demand of energy-efficient products and services. While the revenue from these products is not broken out separately, a number of milestones have recently been reached, e.g. we introduced a branded Lighting Solutions Portfolio in 2013, and in 2014 announced the availability of two LED products designed for high efficiency in low-bay and high-bay warehousing locations.
Operating costs	Not yet impacted	We operate several sites in cyclone risk areas. In terms of the financial impact of climate related losses, sizeable losses were incurred because of severe weather events (e.g. a typhoon earlier in the year in Southern China) that impacted our factories. Those losses included business interruption (both shipments and supplies) as well as physical damage to facilities. While sizeable, those losses were not material to our overall results and were therefore not described in our 10-K or other reporting. That event has usefully informed our business continuity planning. This risk is being managed through insuring that high-risk locations have suitable backup capability in other lower-risk areas. The management and monitoring will not increase costs because existing teams will work on this issue.
Capital expenditures / capital allocation	Not yet impacted	Increases in product efficiency standards have the potential to increase capital costs. This is a hypothetical risk at this time. Quarterly risk analysis and monitoring is currently underway and does not add any material cost to Flex's overall operating costs. It is being managed by expanding regional test capabilities and negotiating global third-party contracts to maximize economy of scale pricing.
Acquisitions and divestments	Not evaluated	Our M+A has to date been similar in nature to our core business in terms of footprint and operational issues, but we are certainly more attuned to climate and water risk than in the past. As we explore new adjacent business opportunities in the future, we will look to incorporate climate-related due diligence as appropriate.
Access to capital	We have not identified any risks or opportunities	One trend we are monitoring is the issuance of green and social bonds for the use in suitable projects. We have no plans for such bonds at the moment, but the mechanism is a promising one.
Assets	Impacted for some suppliers, facilities, or product lines	As noted, some sever weather events have impacted our facilities in China and India, leading to temporary impairment of business as well as physical damage to structures and other facilities. The subsequent repairs included hardening of some assets and provision of backup power and other mitigation actions.
Liabilities	Not impacted	There have been no liabilities incurred to date as a result of climate change risks, e.g. Flex is not party to any climate related litigation.
Other	Please select	

C3. Business Strategy

C3.1

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

Yes

C3.1a

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

No, but we anticipate doing so in the next two years

C3.1c

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

Climate-related factors have influenced our business strategy in three basic ways:

1. With a growing energy business, there are new opportunities for us to work with customers to bring energy efficiency and generation products to the market.

2. In terms of drivers, our customers are placing greater emphasis on their Scope 3 footprints, which in many instances is our operational footprint.

3. With extreme weather events increasing in frequency and severity, and regulation in some jurisdictions being considered, our risk management process is affected. During our reviews in the past year, we resolved to increase the amount of onsite solar we have installed, and we have accelerated our Scope 3 analysis dramatically. Simultaneously, we are actively pursuing collaborations with customers in this area in order to increase our leverage.

Other examples of our product development and engagement include:

a) In collaboration with Renewable Energy Systems (RES) – a top battery energy storage integrator and renewable energy company in North America – we have successfully deployed the first energy storage solution for the U.S. (https://investors.flex.com/company-news/press-release-details/2017/Flex-Launches-Renewable-Energy-Storage-Solution/default.aspx)

b) We are joining forces with the UNGC to demonstrate our focus on integrating sustainability throughout our company. This initiative will also help customers, partners, and other businesses expand and increase their efforts to build a more sustainable future. (https://investors.flex.com/company-news/press-release-details/2018/Flex-Joins-United-Nations-Global-Compact-to-Affirm-Commitment-to-Responsible-Business-Practices/default.aspx)

c) We received recognition for the exceptional results we achieved during our 2017 Earth Day campaign, which engaged employees to reduce their environmental impact within their local communities. (https://investors.flex.com/company-news/press-release-details/2018/Flex-Wins-2018-Manufacturing-Leadership-Award-for-Sustainability/default.aspx)

Most important components of our short-term strategy that climate change has influenced (2012-2016): New Flex Operational practices (energy consumption reduction), which include identifying energy consumption reduction solutions of key manufacturing equipment and identifying energy-saving best practices with the corresponding global replication to reinforce our Environmental Management System (implemented in all sites).

Most-important components of the long-term strategy that climate change has influenced (2010-2020): Incorporation of new technologies (new equipment that consumes less energy) and the development of manufacturing solutions in an effort to reduce our energy consumption. This includes innovative solutions pioneered by our Advanced Engineering Group. In addition to engineering solutions, we incorporated the Energy Market Segment into the business portfolio; our Energy group is delivering solutions for the clean technology industry, including renewable energy, energy monitoring and smart grid technology, energy-efficient lighting, and green transportation. Our Energy group actively monitors regulatory developments that affect international markets (e.g. tariffs, solar incentive programs, local content legislation).

Strategic advantage: Our climate-change strategy allows us to offer value-creating electronic manufacturing services that increase customer competitiveness.

Our business strategy is linked to an energy reduction target: we are committed to reduce CO2 emissions by at least 10% normalized to revenue (base year 2016). As of the end of 2017 calendar year, our emissions declined in intensity by 9.6% year over year.

Local governments where we operate have recognized our actions to mitigate climate change impact. For example, the local government in Zhuhai, China gave us the "Zhuhai Excellent Enterprise Energy Saving Award," while our facility in Guadalajara, Mexico received an Energy Conservation Award.

Examples of our most substantial climate-related business decisions:

a) Our plan to install solar panels at five sites (renewable energy)

b) Between 2013 and 2017 we replaced and installed approximately 110,000 LED light fixtures manufactured by Flex in 13 countries (Brazil, Canada, China, Hungary, India, Italy, Malaysia, Mexico, Poland, Romania, Switzerland, Ukraine and US). This resulted in savings of 75,000,000 KWh/year, which could power the equivalent of around 7,000 homes for one year.

C3.1g

(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?

Our strategy process incorporates all enterprise-wide risks and climate has not been considered one of the top risks of that sort. So while climate has certainly been factored into the analysis, a scenario approach has not been used. As noted in C3.1a, we anticipate using the technique over the next two years. It should be a good way to test our assumptions regarding enterprise risk and may be revealing. A productive exercise may be to construct a supply chain scenario, as that part of our business is quite complex and climate-related risk is harder to assess. There may be an opportunity to work with Elementum (a supply chain company spun out of Flex) to do some of the necessary mapping.

C4. Targets and performance

C4.1

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

Intensity target

C4.1b

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

Target reference number
Int 1

Scope
Scope 1+2 (location-based)

% emissions in Scope
100

% reduction from baseline year
10

Metric
Metric tons CO2e per unit revenue

Base year
2016

Start year
2016

Normalized baseline year emissions covered by target (metric tons CO2e)
0.0000485

Target year
2020

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

% achieved (emissions)
96

Target status
Underway

Please explain
We have committed to reducing location-based GHG emissions per revenue by 10% by 2020 by implementing energy efficiency initiatives.

% change anticipated in absolute Scope 1+2 emissions
9

% change anticipated in absolute Scope 3 emissions
0

C4.2

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

C4.3

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

C4.3a

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

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	10	1560
To be implemented*	19	5043
Implementation commenced*	5	1455
Implemented*	247	43112
Not to be implemented	0	0

C4.3b

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

Activity type
Energy efficiency: Building fabric

Description of activity
Other, please specify (Building services: HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)
267

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
42822

Investment required (unit currency – as specified in CC0.4)
94973

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment

Activity type
Energy efficiency: Building fabric

Description of activity
Other, please specify (Building services: Lighting)

Estimated annual CO2e savings (metric tonnes CO2e)
108

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Mandatory

Annual monetary savings (unit currency – as specified in CC0.4)
62056

Investment required (unit currency – as specified in CC0.4)
123600

Payback period

<1 year

Estimated lifetime of the initiative
16-20 years

Comment

Activity type
Energy efficiency: Building fabric

Description of activity
Other, please specify (Building services: Lighting)

Estimated annual CO2e savings (metric tonnes CO2e)
172

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
46910

Investment required (unit currency – as specified in CC0.4)
90527

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment

Activity type
Energy efficiency: Building fabric

Description of activity
Other, please specify (Change of heating system)

Estimated annual CO2e savings (metric tonnes CO2e)
3

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
822

Investment required (unit currency – as specified in CC0.4)
2071

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment

Activity type
Energy efficiency: Building fabric

Description of activity
Other, please specify (Compressed air)

Estimated annual CO2e savings (metric tonnes CO2e)
163

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
104105

Investment required (unit currency – as specified in CC0.4)
73723

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment

Activity type
Energy efficiency: Building fabric

Description of activity
Other, please specify (Process Optimization)

Estimated annual CO2e savings (metric tonnes CO2e)
5

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
1178

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
Ongoing

Comment

Activity type
Energy efficiency: Building services

Description of activity
Other, please specify (Maintenance program)

Estimated annual CO2e savings (metric tonnes CO2e)
4

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
5192

Investment required (unit currency – as specified in CC0.4)
4400

Payback period
<1 year

Estimated lifetime of the initiative
Ongoing

Comment

Activity type
Energy efficiency: Building services

Description of activity
Building controls

Estimated annual CO2e savings (metric tonnes CO2e)
1044

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
345754

Investment required (unit currency – as specified in CC0.4)
618960

Payback period
<1 year

Estimated lifetime of the initiative
Ongoing

Comment

Activity type
Energy efficiency: Building services

Description of activity
Building controls

Estimated annual CO2e savings (metric tonnes CO2e)
38

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
6156

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
Ongoing

Comment

Activity type

Energy efficiency: Building services

Description of activity
Combined heat and power

Estimated annual CO2e savings (metric tonnes CO2e)
1683

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
122306

Investment required (unit currency – as specified in CC0.4)
2143331

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment

Activity type
Energy efficiency: Building services

Description of activity
HVAC

Estimated annual CO2e savings (metric tonnes CO2e)
6944

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
1005028

Investment required (unit currency – as specified in CC0.4)
675139

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment

Activity type
Energy efficiency: Building services

Description of activity
HVAC

Estimated annual CO2e savings (metric tonnes CO2e)
7

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
280

Investment required (unit currency – as specified in CC0.4)
80

Payback period
<1 year

Estimated lifetime of the initiative
1-2 years

Comment

Activity type
Energy efficiency: Building services

Description of activity
Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
8519

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
1548231

Investment required (unit currency – as specified in CC0.4)
3068116

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment

Activity type
Energy efficiency: Building services

Description of activity
Motors and drives

Estimated annual CO2e savings (metric tonnes CO2e)
1805

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
378576

Investment required (unit currency – as specified in CC0.4)
477567

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment

Activity type
Energy efficiency: Building services

Description of activity
Other, please specify (Compressed air)

Estimated annual CO2e savings (metric tonnes CO2e)
1413

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
224134

Investment required (unit currency – as specified in CC0.4)
270711

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment

Activity type
Energy efficiency: Building services

Description of activity
Other, please specify (Process optimization)

Estimated annual CO2e savings (metric tonnes CO2e)
1422

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
307433

Investment required (unit currency – as specified in CC0.4)
337062

Payback period
<1 year

Estimated lifetime of the initiative
Ongoing

Comment

Activity type
Energy efficiency: Building services

Description of activity
Other, please specify (Process optimization)

Estimated annual CO2e savings (metric tonnes CO2e)
71

Scope

Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
15960

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
Ongoing

Comment

Activity type
Energy efficiency: Building services

Description of activity
Other, please specify (Optimize Wave mc)

Estimated annual CO2e savings (metric tonnes CO2e)
44

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
4661

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment

Activity type
Energy efficiency: Processes

Description of activity
Other, please specify (Building Controls)

Estimated annual CO2e savings (metric tonnes CO2e)
2656

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
557702

Investment required (unit currency – as specified in CC0.4)
655550

Payback period
4 - 10 years

Estimated lifetime of the initiative
6-10 years

Comment

Activity type
Energy efficiency: Processes

Description of activity
Combined heat and power

Estimated annual CO2e savings (metric tonnes CO2e)
20

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
72967

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
Ongoing

Comment

Activity type
Energy efficiency: Processes

Description of activity
Other, please specify (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)
101

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
20853

Investment required (unit currency – as specified in CC0.4)
4134

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment

Activity type
Energy efficiency: Processes

Description of activity
Other, please specify (Lighting)

Estimated annual CO2e savings (metric tonnes CO2e)
1

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
1058

Investment required (unit currency – as specified in CC0.4)
800

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment

Activity type
Energy efficiency: Processes

Description of activity
Other, please specify (Lighting)

Estimated annual CO2e savings (metric tonnes CO2e)
0

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Mandatory

Annual monetary savings (unit currency – as specified in CC0.4)
427

Investment required (unit currency – as specified in CC0.4)
1043

Payback period
1-3 years

Estimated lifetime of the initiative
3-5 years

Comment

Activity type
Energy efficiency: Processes

Description of activity
Other, please specify (Motors and drives)

Estimated annual CO2e savings (metric tonnes CO2e)
67

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
17135

Investment required (unit currency – as specified in CC0.4)
2878

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment

Activity type
Energy efficiency: Processes

Description of activity
Other, please specify (Battery charging replacement)

Estimated annual CO2e savings (metric tonnes CO2e)
11

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
5650

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment

Activity type
Energy efficiency: Processes

Description of activity
Compressed air

Estimated annual CO2e savings (metric tonnes CO2e)
516

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
70249

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment

Activity type

Energy efficiency: Processes

Description of activity
Cooling technology

Estimated annual CO2e savings (metric tonnes CO2e)
13

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
6000

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
<1 year

Comment

Activity type
Energy efficiency: Processes

Description of activity
Machine replacement

Estimated annual CO2e savings (metric tonnes CO2e)
240

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
49022

Investment required (unit currency – as specified in CC0.4)
98768

Payback period
4 - 10 years

Estimated lifetime of the initiative
6-10 years

Comment

Activity type
Energy efficiency: Processes

Description of activity
Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
848

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
239778

Investment required (unit currency – as specified in CC0.4)
115760

Payback period
<1 year

Estimated lifetime of the initiative
Ongoing

Comment

Activity type
Energy efficiency: Processes

Description of activity
Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
2

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
30

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
Ongoing

Comment

Activity type
Energy efficiency: Processes

Description of activity
Other, please specify (Low-carbon energy installation: NG)

Estimated annual CO2e savings (metric tonnes CO2e)
1224

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
190433

Investment required (unit currency – as specified in CC0.4)
209113

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment

Activity type
Energy efficiency: Processes

Description of activity
Other, please specify (Daily audits of all areas to switch off)

Estimated annual CO2e savings (metric tonnes CO2e)
7

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
1401

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
1-2 years

Comment

Activity type
Low-carbon energy installation

Description of activity
Other, please specify (Cooling technology)

Estimated annual CO2e savings (metric tonnes CO2e)
7

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
4752

Investment required (unit currency – as specified in CC0.4)
9360

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment

Activity type
Low-carbon energy purchase

Description of activity
Hydro

Estimated annual CO2e savings (metric tonnes CO2e)
185

Scope

Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
134400

Investment required (unit currency – as specified in CC0.4)
4020

Payback period
<1 year

Estimated lifetime of the initiative
1-2 years

Comment

Activity type
Process emissions reductions

Description of activity
Changes in operations

Estimated annual CO2e savings (metric tonnes CO2e)
1124

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
220391

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
<1 year

Comment

Activity type
Process emissions reductions

Description of activity
Changes in operations

Estimated annual CO2e savings (metric tonnes CO2e)
12100

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
2707

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
<1 year

Comment

Activity type
Process emissions reductions

Description of activity
New equipment

Estimated annual CO2e savings (metric tonnes CO2e)
16

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
11916

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment

Activity type
Other, please specify (Power Factor Correction)

Description of activity
<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)
68

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
50760

Investment required (unit currency – as specified in CC0.4)
75000

Payback period
1-3 years

Estimated lifetime of the initiative
11-15 years

Comment

Activity type
Other, please specify (New equipment)

Description of activity
<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)
0

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
144

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment

Activity type
Other, please specify (Replaced vehicles)

Description of activity
<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)
70

Scope
Scope 3

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
26272

Investment required (unit currency – as specified in CC0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
Ongoing

Comment

Activity type
Other, please specify (Reduce Electricity Consumption 10%)

Description of activity
<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)
124

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
18295

Investment required (unit currency – as specified in CC0.4)
0

Payback period
1-3 years

Estimated lifetime of the initiative
1-2 years

Comment

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	We replaced refrigerant containing systems with more efficient ones. The Flex site in Tab, Hungary received an Energy Management System certificate in November 2016 for fulfilling ISO50001.
Dedicated budget for energy efficiency	We dedicate $10M USD/year to fund energy-efficient projects.
Employee engagement	We launched our Flex 20 by 2020 goals that outline ten actions that encourage employees to save energy. We developed an annual program, called “Earth Day Challenge,” where we invite all our facilities to organize environmental initiatives during two consecutive weeks. We encourage employee participation to increase awareness and support of local communities through volunteerism. This program contributes to our Flex 20 by 2020 environmental and community goals.
Lower return on investment (ROI) specification	Our goal is to achieve a two-year or lower payback in energy efficiency projects and up to six years in renewable generation.
Other	We established a dedicated revolving fund for energy efficiency projects.

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
Solar PV products including single axis trackers and high efficiency modules; LED lighting solutions for industrial applications.

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 (Solar PV products and LED lighting)

Other, please specify: The use of our solar PV products and LED lighting solutions allows other organizations to avoid Scope 2 emissions because electricity from solar panels has zero emissions, and LED lighting reduces the need for purchased electricity.

% revenue from low carbon product(s) in the reporting year
0

Comment
The use of our solar PV products and LED lighting solutions allows other organizations to avoid Scope 2 emissions because electricity from solar panels has zero emissions, and LED lighting reduces the need for purchased electricity. As these are relatively new businesses, we are not reporting % of revenue yet.

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 2016

Base year end
December 31 2016

Base year emissions (metric tons CO2e)
73840

Comment
Emissions were re-baselined in this year.

Scope 2 (location-based)

Base year start
January 1 2016

Base year end
December 31 2016

Base year emissions (metric tons CO2e)
1079391

Comment
Emissions were re-baselined in this year.

Scope 2 (market-based)

Base year start
January 1 2016

Base year end
December 31 2016

Base year emissions (metric tons CO2e)
1071566

Comment
Emissions were re-baselined in this year.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

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

Row 1

Gross global Scope 1 emissions (metric tons CO2e)
77504

End-year of reporting period
<Not Applicable>

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

C6.3

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

Row 1

Scope 2, location-based
1014295

Scope 2, market-based (if applicable)
1035710

End-year of reporting period
<Not Applicable>

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 Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
We are in the process of building our Scope 3 inventory. This category will be included in our future disclosure.

Capital goods

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
We are in the process of building our Scope 3 inventory. This category will be included in our future disclosure.

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

Evaluation status
Relevant, calculated

Metric tonnes CO2e
286548

Emissions calculation methodology
FERA emissions are calculated based on the amount of energy consumed per energy type (electricity, natural gas, etc.). Total consumption by each fuel type is multiplied by the appropriate emission factor. The upstream emission factor for purchased fuels is based on life-cycle analysis software. The emission factor for upstream emissions of purchased electricity is based on life cycle analysis for the United States and based on the UK DEFRA Guidelines for other countries. The transmission and distribution emission factors are location-based and taken from the EPA's eGRID database for the United States and based on UK DEFRA Guidelines for other countries. All GWPs are IPCC Fourth Assessment Report (AR4-100 year).

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation
We have made an improvement in Scope 3 inventory, and this year we are reporting.

Upstream transportation and distribution

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
We are in the process of building our Scope 3 inventory. This category will be included in our future disclosure.

Waste generated in operations

Evaluation status
Relevant, calculated

Metric tonnes CO2e
38392

Emissions calculation methodology
Emissions in this category include those that result from landfilling, incineration, recycling, and composting of waste from our facilities. We collect data regarding the amount, type, and disposal method of waste from facility managers. We calculate emissions from waste using methodologies and emission factors from the EPA's Waste Reduction Model (WARM). This model calculates emissions based on a life cycle analysis, including emissions from the long-term decomposition of waste in a landfill or from upstream sources/sinks. GWPs are IPCC Fourth Assessment Report (AR4 - 100 year).

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
38300

Emissions calculation methodology
Business travel emissions include air travel, rail travel, rental cars, and hotel stays. Air and rail travel, and hotel stay activity data include miles travelled and class of service and was obtained from our travel agency. Rental car activity data is provided directly from the rental car providers. Emissions are calculated based on the activity data and emission factors from the Guidelines to DEFRA / DECC's GHG Conversion Factor for Company Reporting, Climate Leaders Mobile Source Guidance, Climate Leaders Business Travel and Commuting Guidance, and EPA Emission Factor for Greenhouse Gas Inventories. All GWPs are IPCC Fourth Assessment Report (AR4-100 year).

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation

Employee commuting

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
We are in the process of building our Scope 3 inventory. This category will be included in our future disclosure.

Upstream leased assets

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
We are in the process of building our Scope 3 inventory. This category will be included in our future disclosure.

Downstream transportation and distribution

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
We are in the process of building our Scope 3 inventory. This category will be included in our future disclosure.

Processing of sold products

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
We are in the process of building our Scope 3 inventory. This category will be included in our future disclosure.

Use of sold products

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
We will be including this category in our inventory and will base our calculation off of the EPA Emission Factors for Greenhouse Gas Inventories tool/guidance.

End of life treatment of sold products

Evaluation status
Not evaluated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
We are determining if this category represents a significant-enough emissions source. If so, we will be utilizing the EPA Waste Reduction Model (WARM).

Downstream leased assets

Evaluation status
Not evaluated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
We are determining if this category represents a significant-enough emissions source. If so, we will be utilizing the EPA Emission Factors for Greenhouse Gas Inventories.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
We do not have franchises; therefore, emissions from franchises are not relevant for us and constitute 0% of our scope 3 emissions.

Investments

Evaluation status
Not evaluated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
This may or may not be relevant (as a significant-enough source of emissions). If it is, we will be utilizing the EPA emissions factors for GHG inventories based on our total investments that represent 1% or greater of our total revenues (significance of investment).

Other (upstream)

Evaluation status

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Other (downstream)

Evaluation status

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

C6.7

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

C6.7a

(C6.7a) Provide the emissions from biologically sequestered carbon relevant to your organization in metric tons CO2.
33

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
0.0000439

Metric numerator (Gross global combined Scope 1 and 2 emissions)
1091799

Metric denominator
unit total revenue

Metric denominator: Unit total
24892841000

Scope 2 figure used
Location-based

% change from previous year
9.6

Direction of change
Decreased

Reason for change
Scope 1 and 2 emissions decreased by 5%, mainly due to energy and emission reduction activities, including optimizing processes, updating building controls, and updating to more efficient lighting, and as well as the decrease in the grid intensity. The 5% increase in revenue and decrease in emissions together result in an overall 9.6% decrease in GHG intensity per dollar of revenue.

C7. Emissions breakdowns

C7.1

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

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	72266	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	42	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	135	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	5061	IPCC Fourth Assessment Report (AR4 - 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	7461
Malaysia	2741
Mexico	35843
United States of America	9492
Other, please specify (Rest of the world)	21967

C7.3

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

Please select

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
China	538554	538554	827090	9388
Mexico	106738	129357	231487	1
Malaysia	135670	135670	196765	0
United States of America	67673	54371	154142	16050
Other, please specify (Rest of the world)	165660	177758	435925	1116

C7.6

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

Please select

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	43112	Decreased	4	We implemented 247 energy reduction projects in 2017, resulting in an emissions savings of 43,112.82 MT CO2e, which is a decrease of 4% from re-baselined location-based Scope 1 and 2 2016 emissions (43,112/1,153,231)*100 = 3.7%.
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output		<Not Applicable>		
Change in methodology	18320	Decreased	1	The remaining emissions decrease of 18,319 MT CO2e is a result of electricity emission factors lowering with the release of eGRID 2016. This results in a decrease of 2% from re-baselined location-based Scope 1 and 2 2016 emissions (18,320/1,153,231)*100 = 1.6%.
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

C7.9b

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

Location-based

C8. Energy

C8.1

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

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

C8.2

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

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

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	139	382378	382517
Consumption of purchased or acquired electricity	<Not Applicable>	16050	1812464	1828515
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	6389	6389
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	10505	<Not Applicable>	10505
Total energy consumption	<Not Applicable>	26694	2201231	2227925

C8.2b

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

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

C8.2c

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

Fuels (excluding feedstocks)
Natural Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
325137

MWh fuel consumed for the self-generation of electricity
14000

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Fuels (excluding feedstocks)
Fuel Oil Number 2

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
10362

MWh fuel consumed for the self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Fuels (excluding feedstocks)
Liquefied Petroleum Gas (LPG)

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
18041

MWh fuel consumed for the self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Fuels (excluding feedstocks)
Bioethanol

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
139

MWh fuel consumed for the self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Fuels (excluding feedstocks)
Jet Kerosene

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
4132

MWh fuel consumed for the self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Fuels (excluding feedstocks)
Motor Gasoline

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
13136

MWh fuel consumed for the self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Fuels (excluding feedstocks)
Diesel

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
11570

MWh fuel consumed for the self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

C8.2d

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

Bioethanol

Emission factor
13

Unit
lb CO2 per gallon

Emission factor source
Center for Corporate Climate Leadership GHG Emission Factors Hub

Comment

Diesel

Emission factor
23

Unit
lb CO2 per gallon

Emission factor source
Center for Corporate Climate Leadership GHG Emission Factors Hub

Comment

Fuel Oil Number 2

Emission factor
164

Unit
lb CO2e per million Btu

Emission factor source
Center for Corporate Climate Leadership GHG Emission Factors Hub

Comment

Jet Kerosene

Emission factor
22

Unit
lb CO2e per gallon

Emission factor source
Center for Corporate Climate Leadership GHG Emission Factors Hub

Comment

Liquefied Petroleum Gas (LPG)

Emission factor
139

Unit
lb CO2e per million Btu

Emission factor source
Center for Corporate Climate Leadership GHG Emission Factors Hub

Comment

Motor Gasoline

Emission factor
19

Unit
lb CO2 per gallon

Emission factor source
Center for Corporate Climate Leadership GHG Emission Factors Hub

Comment

Natural Gas

Emission factor
117

Unit
lb CO2e per million Btu

Emission factor source
Center for Corporate Climate Leadership GHG Emission Factors Hub

Comment

C8.2e

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	18441	18441	10505	10505
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2f

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

Basis for applying a low-carbon emission factor
Power Purchase Agreement (PPA) with energy attribute certificates

Low-carbon technology type
Wind

MWh consumed associated with low-carbon electricity, heat, steam or cooling
16050

Emission factor (in units of metric tons CO2e per MWh)
0

Comment

Basis for applying a low-carbon emission factor
Off-grid energy consumption from an on-site installation or through a direct line to an off-site generator owned by another company

Low-carbon technology type
Solar PV

MWh consumed associated with low-carbon electricity, heat, steam or cooling
10505

Emission factor (in units of metric tons CO2e per MWh)
0

Comment

C9. Additional metrics

C9.1

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

C10. Verification

C10.1

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

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

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

Scope
Scope 1

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Flex GHG and Water Withdrawn 2017- DNV Verification Statement.pdf

Page/ section reference
Page 1-3

Relevant standard
ISO14064-3

ISAE3000 ISO14064-3

Proportion of reported emissions verified (%)
100

Scope
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Flex GHG and Water Withdrawn 2017- DNV Verification Statement.pdf

Page/ section reference
Page 1-3

Relevant standard
ISO14064-3

ISAE3000 ISO14064-3

Proportion of reported emissions verified (%)
100

Scope
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Flex GHG and Water Withdrawn 2017- DNV Verification Statement.pdf

Page/ section reference
Page 1-3

Relevant standard
ISO14064-3

ISAE3000 ISO14064-3

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope
Scope 3- at least one applicable category

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Attach the statement
Flex GHG and Water Withdrawn 2017- DNV Verification Statement.pdf

Page/section reference
Page 1-3

Relevant standard
ISO14064-3

ISAE3000 ISO14064-3

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?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Other, please specify (Energy consumption)	ISO14064-3:2006 – Greenhouse Gases Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions.	The total energy consumption was verified. Flex GHG and Water Withdrawn 2017- DNV Verification Statement.pdf

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)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

Shenzhen pilot ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.

Shenzhen pilot ETS

% of Scope 1 emissions covered by the ETS

100

Period start date

January 1 2017

Period end date

January 6 2018

Allowances allocated

88216

Allowances purchased

0

Verified emissions in metric tons CO2e

71128

Details of ownership

Facilities we own and operate

Comment

- Shenzhen Gushu (104) with Balance (T) 15067 in 2017. -Shenzhen Gushu (112) with Balance (T) 941 in 2017. -Shenzhen Huangtian with Balance (T) 1304 in 2017. -Shenzhen Fuyong & Shiyan with Balance (T) -224 in 2017. But offset by historical accumulation without purchase from market.

C11.1d

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

Involved sites have:

· Replaced halogen lamps with LED lighting

· Upgraded air conditioner duct connection at workshop

· Replaced low-efficiency compressors

· Set up and improved fresh-air equipment in cleanrooms

· Installed cooling water pipe parallel connection for chiller systems

· Reduced quantity for W/S and reflow oven to meet electricity usage through optimizing the production process

· Used efficient motors and chiller unit instead of inefficient equipment to meet energy demand savings

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase
Credit purchase

Project type
Transport

Project identification
CDM Project 4744: BRT Zhengzhou, China

Verified to which standard
CDM (Clean Development Mechanism)

Number of credits (metric tonnes CO2e)
10667

Number of credits (metric tonnes CO2e): Risk adjusted volume
10667

Credits cancelled
Yes

Purpose, e.g. compliance
Voluntary Offsetting

Credit origination or credit purchase
Credit purchase

Project type
Hydro

Project identification
CDM Project 1326 : Jorethang Loop Hydroelectric Project, India

Verified to which standard
CDM (Clean Development Mechanism)

Number of credits (metric tonnes CO2e)
52632

Number of credits (metric tonnes CO2e): Risk adjusted volume
52632

Credits cancelled
Yes

Purpose, e.g. compliance
Voluntary Offsetting

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

Innovation & collaboration (changing markets)

Details of engagement

Other, please specify (Included in supplier selection)

Other: Included climate change in supplier selection / management mechanism

% of suppliers by number

97

% total procurement spend (direct and indirect)

52

% Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

Our worldwide supply chain embraces roughly 24,000 direct, indirect, and vertically integrated suppliers. Our customers control most of our suppliers; however, our commitment to maintaining the high standards of our sustainability supply chain program extends not only to those suppliers that our customers control, but also to those that we control. Working with all our suppliers, we were able to subsequently develop our Preferred Supplier Program (PSP).

Impact of engagement, including measures of success

In order to be included in our PSP, a supplier has to fulfill certain criteria established by top management of cross-functional areas of our company. We expect all our suppliers to implement appropriate and effective policies to ensure compliance with our Flex Supplier Code of Conduct, which also complies with the Responsible Business Alliance Code of Conduct (“RBA Code”). These requirements are also reflected in our internal supplier qualification process. Our supplier qualification process covers several key elements, including business, quality systems, operations, engineering/design, product/process environmental compliance, supply chain security, corporate social and environmental responsibilities, and lean concepts, which are represented in our self-assessment questionnaire (SAQ). The objective of the SAQ is to validate that all our suppliers are committed to supporting and respecting the standards of social, environmental and ethical issues in the supply chain. Some of our KPIs on this topic are: a) By 2017, we have assessed 97% of the 475 suppliers in the PSP. These assessments are conducted with our self-assessment questionnaire (SAQ). b) In 2017 our PSP accounted for 52% of our total spend with our controlled suppliers. c) In addition to our PSP, in 2017: • We assessed 361 Suppliers with our SAQ • We conducted 171 physical audits o 140 initial audits, and o 31 follow-up audits

Comment

We also provide on-site sustainability training for our suppliers (refer to Flex 20 by 2020 supply chain goal to learn more).

C12.1b

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

Type of engagement
Collaboration & innovation

Details of engagement
Run a campaign to encourage innovation to reduce climate change impacts

Size of engagement
5

% Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers and scope of engagement
This is an outgrowth of one-on-one discussions with major customers, typically part of quarterly business reviews. Although less than 5% of customers, these tend to be major customers with significant spend and corresponding energy demands. As a service business, we are focused on serving our customers' needs, so most of these efforts are initiated by customers as part of their Scope 3 work as opposed to originating with us.

Impact of engagement, including measures of success
Our measure of success is primarily net reduction in energy consumption and associated greenhouse gas emissions and secondarily cost savings. For example, we have collaborated with a major networking equipment company to optimize their burn-in and testing protocols to minimize energy loads.

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?
No

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?

Our VP of Corporate Social and Environmental Responsibility (CSER), our CSER Customer Facing and Product Compliance representative, and our CSER RMI lead representative actively participate in the Information Technology Industry Council's Environmental Leadership Committee (ELC). We are a member of the Silicon Valley Leadership Group's Sustainability and Energy Committee, which advocates for balanced, efficient, and effective policies and programs. In addition, our CSER in-house legal counsel support our Flex CSER team members. Through this active participation, we ensure our external engagements are consistent with our company strategy.

Our CSER Regional Leads and Corporate Real Estate and Facilities Regional Leads report any pertinent activity in their regions to the CSER and CREF Vice Presidents on a regular basis. The CSER and CREF RLs are the communication link between the sites and corporate, ensuring site-level activity is aligned to our corporate strategy. The CSER and CREF VPs provide leadership and the necessary resources to drive climate-related activities worldwide.

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
Underway – previous year attached

Attach the document
sustainable-living-2017-global-citizenship-executive-final-report-flex.pdf

Content elements
Emissions figures
Emission targets

Publication
In mainstream reports

Status
Complete

Attach the document
2018-AR-Flex.pdf

Content elements
Risks & opportunities

C14. 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.

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Group President, Global Operations	President