Lockheed Martin Corporation - Climate Change 2020



C0. Introduction

C_{0.1}

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

Lockheed Martin is a publicly traded global security and aerospace company principally engaged in research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. We also provide a broad range of management, engineering, technical, scientific, logistics, system integration, and cybersecurity services. Our mission is to solve complex challenges, advance scientific discovery and deliver innovative solutions to help our customers keep people safe.

Our primary customers are United States (U.S.) and allied government agencies and commercial entities in various sectors, for whom we provide products and services that have defense, civil, and commercial applications. In 2019, we employed approximately 110,000 people worldwide and generated net sales of \$59.8 billion. We are headquartered in Bethesda, Maryland, U.S., and own or lease building spaces (including offices, manufacturing plants, warehouses, service centers, laboratories, and other facilities) at over 375 locations primarily in the U.S. Additionally, we manage or occupy approximately 15 government-owned facilities under lease and other arrangements. Lockheed Martin's operating units are organized into four business areas dedicated to specific products and services: Aeronautics, Missiles and Fire Control, Rotary and Mission Systems, and Space Systems. Lockheed Martin's operations include over 590 facilities in 50 states throughout the U.S., and business locations in over 52 nations and territories internationally. Our employees also work with Lockheed Martin International, which supports products, technologies and services to meet global customers' national security and citizen services needs; and Enterprise Operations, comprised of headquarters personnel, business function personnel and enterprise-wide shared services centers.

Aeronautics \$23.7B, 40% of net sales: Research, design, development, manufacture, integration, sustainment, support and upgrade of advanced military aircraft, including combat and air mobility aircraft, unmanned air vehicles and related technologies.

Missiles and Fire Control \$10.1B, 17% of net sales: Design and development of air and missile defense systems; tactical missiles and air-to-ground precision strike weapon systems; logistics; fire control systems; mission operations support, readiness, engineering support and integration services; manned and unmanned ground vehicles; and energy management solutions.

Rotary and Mission Systems \$15.1B, 25% of net sales: Design, manufacture, service and support for various military and commercial helicopters, ship and submarine mission and combat systems, mission systems and sensors for rotary and fixed-wing aircraft, sea- and land-based missile defense systems, radar systems, the Littoral Combat Ship (LCS), simulation and training services and unmanned systems and technologies; supports the needs of government customers in cybersecurity and delivers communications and command and control capabilities through complex mission solutions for defense applications.

Space \$10.9B, 18% of net sales: Research, design, development, engineering and production of satellites, space transportation systems, and strategic, advanced strike, and defensive systems. Space provides network-enabled situational awareness and integrates complex space and ground global systems to help our customers gather, analyse and securely distribute critical intelligence data. Space is also responsible for various classified systems and services in support of vital national security systems.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	November 1 2018	October 31 2019	No	<not applicable=""></not>

C0.3

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

Australia

Canada Mexico

Poland

United Kingdom of Great Britain and Northern Ireland

United States of America

C0.4

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

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-TO0.7/C-TS0.7

(C-T00.7/C-TS0.7) For which transport modes will you be providing data?

Aviation

C1. Governance

C1.1

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

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s

Please explain

Board-level committee

Our Board of Directors (BoD) monitors the Corporation's adherence to our Code of Ethics and Business Conduct, with oversight of corporate responsibility, employee safety and health, environmental stewardship, ethical business practices and diversity and inclusion. The BoD is involved in ongoing strategic planning and review. Executive management provides updates on risks managed at the Corporate level. Business segment management provides updates on risks respective to their objectives. The BoD has oversight of risk drivers and mitigation unless delegated to a committee. The Nominating and Corporate Governance Committee (NCG)'s mission includes assisting the BoD in fulfilling oversight of ethical conduct, sustainability, environmental stewardship, or corporate culture and employee health and safety. Oversight of sustainability and environmental stewardship topics includes climate-related issues and metrics. This oversight includes assessing twice a year corporate performance on climate metrics, such as greenhouse gas emissions that are aligned with a science-based target methodology. The NCG committee members are best suited to oversee climate matters due to their combined skills, qualifications, and core competencies, which cover environmental, safety, sustainability, and risk management experience.

C1.1b

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

with which climate- related issues are a scheduled agenda	Governance mechanisms into which climate- related issues are integrated	Scope of board- level oversight	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<not Applicabl e></not 	Lockheed Martin's Sustainability Governance Structure manages our Sustainability Management Plan (SMP). Its constituents include our: 1) Board of Directors; 2) Executive Leadership Team; 3) Sustainability Champions Network; and 4) Sustainability Working Group (SWG). The SWG is chaired by the Senior Vice President (SVP) of Ethics and Enterprise Assurance, who heads Lockheed Martin's Corporate Sustainability Office and acts as the Chief Sustainability Officer, the highest-level management position with responsibility for illuminating and Corporate Governance (NCC) Committee as described above; persponsible for assisting the Board of Directors in fulfilling its oversight responsibilities relating to the Corporation's ethical conduct, sustainability, environmental stewardship, corporate culture and employee health and safety. The NCG Committee reviews performance against the Sustainability Management Plan (SMP) as et of to objective associated with our five core sustainability issues that include climate-related issues and corresponding goals addressing Total Cost of Ownership and Energy and Carbon Management as described in our 2019 Sustainability Peport. The NCG Committee also approves the Corporations annual Sustainability Report in addition, the Audit Committee is responsible for assisting the Board in fulfilling its oversight responsibilities including relating to the financial condition of the Corporation annual Sustainability Report. The NCG Committee also approves the Corporations annual Sustainability Report. The NCG Committee also approves the Corporations annual Sustainability and the integrity of the Corporation's financial statements. Within item 1A of our Form 10-K, an identified risk factor is 'Environmental costs could affect our future earnings as well as the affordability of our products and services." It is noted that we could be affected by future regulations imposed or claims asserted in response to concerns over climate change, other aspects of the environment of the environment of the environ

C1.2

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

Name of the position(s) and/or committee(s)	Reporting line			Frequency of reporting to the board on climate-related issues
Chief Sustainability Officer (CSO)		Both assessing and managing climate-related risks and opportunities	<not applicable=""></not>	More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Lockheed Martin's Sustainability Governance Structure manages our Sustainability Management Plan (SMP). Its constituents include our 1) Board of Directors; 2) Executive Leadership Team; 3) Sustainability Champions Network; 4) Sustainability Working Group (SWG). The SWG is chaired by the SVP, Ethics and Enterprise Assurance (EEA), who heads Lockheed Martin's Corporate Sustainability Office and acts as the Chief Sustainability Officer, the highest-level management position with responsibility for climate-related issues.

As chair of the SWG and head of the Corporate Sustainability Office, the SVP of EEA (which includes enterprise risk; environment, safety, and health; internal audit; ethics; and sustainability) reports directly to Lockheed Martin's President and Chief Executive Officer (CEO) and updates the Nominating and Corporate Governance Committee of the Board of Directors. The Corporate Sustainability Office coordinates with the Office of the General Counsel, the SVP of Corporate Enterprise Business Transformation, and the Chief Financial Officer. Certain climate-related risks to facilities are also monitored by the Treasury Risk Management and Business Continuity functions.

The SWG includes key functional executive leaders such as the vice president of Corporate Environment, Safety and Health (ESH) who leads the implementation of Lockheed Martin's environmental programs, including our Go Green 2020 strategy to achieve a 35% reduction in carbon emissions and a 25% reduction in energy usage by 2020, from a 2010 baseline. Lockheed Martin's Go Green 2020 strategy is included as part of our broader SMP goals. The vice president of Corporate ESH also chairs the ESH Leadership Council, which sets policies and direction for ESH-related issues. The ESH Leadership Council is comprised of ESH Directors from all business segments as well as functional representation from Enterprise Risk & Sustainability, Global Supply Chain Operations, Corporate Engineering & Technology, Internal Audit, Finance, Business Operations, Human Resources, Government Affairs, Health and Wellness, and Legal. This organizational structure allows high leadership visibility into all environmental issues, including climate-related issues, while enabling cross-functional partnerships and action plans. The ESH Leadership Council maintains a functional scorecard that measures performance.

One of the scorecard's focus areas is our Go Green 2020 strategy, which includes performance objectives and tactics to achieve carbon and energy reductions. The Energy Integrated Project Team in collaboration with the ESH Leadership Council maintains direct responsibility for achieving these goals as the Corporate ESH function holds primary responsibility for the execution of Corporate-wide energy and carbon-related programs. The vice president of Corporate ESH reports to the Board of Directors on outcomes of the ESH Leadership Council and relevant ESH-related issues.

Lockheed Martin views sustainability as complementing how we manage risks and opportunities based on long-term outcomes. In 2017, we placed Sustainability and Enterprise Risk Management (ERM) under one department to align their business relevancy and broaden each program's impact. In 2018, we realigned the ESH department to be placed under the oversight of our SVP of EEA. This change has allowed both teams to benefit from their combined experience and optimize our efforts to comply with regulations and reduce our environmental footprint.

As a result of this strategic alignment under the SVP of EEA, our risk assessment process explicitly examines sustainability factors (including climate), the tracking of our sustainability goals informs risk mitigation plans more efficiently, and our overall reporting is better able to address relevant Environmental, Social and Governance (ESG) topics. Our risk assessments and sustainability performance inform scenario planning exercises, including climate-specific ones, for management teams, enhance business strategy elements such as human capital and manufacturing, and bolster our comprehensive risk controls, such as Corporate policies and internal audits. Additionally, our Corporate Internal Audit function periodically audits our sites and/or programs for conformance to our ESH-related internal standards and for compliance with legal requirements. These audits provide a check-and balance approach to risk mitigation across the enterprise. ERM reports to the Board of Directors throughout the year. The audit process and audit results are reported to the Audit Committee on a quarterly basis.

C1.3

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

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

C1.3a

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

Entitled to incentive	1	Activity inventivized	Comment
reward reduction receive financial in target and include perform tender to the financial in target and include perform reduction on sustainability in the financial in target and include perform the financial in target and include perform the financial in target and include performancial in target and include performa		reduction target Energy reduction	Lockheed Martin's executive team and various business leaders who are responsible for achieving climate change and environmental sustainability targets may receive financial incentives as part of their variable compensation based on performance commitments. These commitments are measured on an annual basis and include performance towards our Sustainability Management Plan and Go Green goals which include GHG emissions and energy reductions. Incentive compensation for Lockheed Martin executives is linked to goals that were established for our strategic and operational commitments. This includes executing on sustainability initiatives, such as achievement of pre-established measures and targets related to sustainability factors that we measure and report, including on topics such as energy and carbon reduction. See our 2020 Proxy Statement for details.
Environment/Sustainability manager	Monetary reward	Emissions reduction target Energy reduction target	Lockheed Martin's environmental/sustainability managers and various business leaders who are responsible for achieving climate change and environmental sustainability targets receive financial incentives based on performance commitments. These commitments are measured on an annual basis and include performance towards our Go Green goals which include GHG emissions and energy reductions.
Facilities manager	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction target	Lockheed Martin's facility managers who are responsible for achieving climate change and environmental sustainability targets receive financial incentives based on performance commitments. These commitments are measured on an annual basis and include performance towards our Go Green goals which include GHG emissions and energy reductions. Lockheed Martin's facility managers also receive recognition for energy efficiency or reduction projects by implementing projects such as improvements in HVAC systems, building control systems, lighting, building envelopes, etc. Effective management leading to reductions in energy and carbon are recognized through our Facilities Excellence Awards and Environmental, Safety and Health (ESH) Excellence Awards.
All employees	Monetary reward	Behavior change related indicator	All employees are eligible for Spot Award and Special Recognition Awards (SRAs) at management's discretion, recognizing excellent performance. Furthermore, Lockheed Martin presented its annual 2019 Environment, Safety and Health (ESH) Excellence Awards to recognize individuals and teams who have made significant contributions through their dedication to improving business operations and performance. Employees are selected for the ESH Excellence Awards based on qualities such as superiority in customer satisfaction, leadership, application of technology, tools/processes that improve efficiency and productivity, benchmarking, best practices, and affordability. Lockheed Martin has also partnered with SunPower Corporation since 2008 to provide employees a way to reduce their homes' carbon footprint using renewable energy generated from solar power. This special program, designed specifically for Lockheed Martin employees, enables savings on electricity bills and provides eligibility to receive rebates worth \$1,000 each for the purchase or lease of a SunPower System for employees' homes.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities? Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short- term	1		The short term time horizon is associated with the long range plan (LRP) for achieving certain sales and orders milestones over a three to four year time period. The LRP is updated annually to reflect changes in the assumptions and business environment. This time horizon represents how Lockheed Martin assesses short-term climate risks and opportunities.
Medium- term	4		The medium term time horizon is associated with the duration measured by metrics and goals within the Sustainability Management Plan (SMP). The SMP tracks our sustainability performance ranging from 2 years to 10 years at inception. This time horizon represents how Lockheed Martin assesses medium-term climate risks and opportunities.
Long- term	10		The long term time horizon is associated with climate risks and opportunities that extend beyond the short and medium term. At Lockheed Martin there is no defined upper boundary because climate change has no such boundary.

C2.1b

Lockheed Martin assesses the impacts of climate-related financial and strategic risks holistically and does not use a defined quantitative threshold. Financial and strategic impacts are evaluated qualitatively within the context of climate-related risk and the appropriate level of business. Quantitative figures are estimated for only select climate-related risks and opportunities.

An overview of our process begins with a qualitative risk assessment, where individual climate-related risks determined to be of concern are further assessed at the appropriate level of business. The magnitude of impact of each climate-related risk is a qualitative assessment made in relation to other climate-related physical and transitional risks to the Corporation and is not a measure of magnitude to the Corporation as a whole. This approach is designed to identify potential high impact climate-related risks and then to more quantitatively focus the level of impact of each risk across the enterprise. For example, we assess the potential impact of a carbon tax by calculating the relative increase in our total cost of energy procurement by location at varying carbon tax rates. The threshold for this risk is not publicly available, but it represents the percentage increase in total energy procurement cost that exceeds our risk tolerance. Those locations that exceed this threshold are then identified as key focus areas for decarbonization and energy efficiency.

At Lockheed Martin there are multiple time horizons used to note financial, strategic, and risk functions. The time horizons provided in C2.1a specifically consider climate related risks and opportunities, and are designed to incorporate existing, more specialized time horizons.

For the purposes of CDP, we define substantive impact as issues that have the potential to disrupt our business operations if not adequately mitigated. Our operations are subject to various environmental laws and regulations. The extent of our financial exposure stemming from these laws and regulations cannot be reasonably estimated in all cases. In addition to regulatory requirements, natural disasters (e.g., floods, fires, hurricanes) have the potential to cause substantive impact. However, our Business Continuity management system framework proactively and adequately responds to business disruptions, identifies potential impacts, and maintains continuity of operations.

C2.2

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

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term Medium-term Long-term

Description of process

Our corporate risk assessment process includes a senior leadership survey, a subject-matter expert survey, internal audit risk evaluation, global benchmark data and strategic planning assumptions, and interviews with the Executive Leadership Team. Through this process, we identify and prioritize key risks, which are reported to the Audit Committee. Risks are prioritized based upon impact, likelihood, trends and the availability and effectiveness of controls and mitigating actions. Surveys of leaders provide an indication of concerns from a risk universe, including climate-related risks, with varying degrees of potential size and scope. Survey findings are analyzed with risk data from our Treasury function to determine overlapping strategic and operational elements that warrant consideration in the overall risk assessment. Climate-related risks in global benchmark data and strategic planning assumptions are monitored by the Corporate Sustainability Office and provide direct input to the risk assessment process. Our assessment includes assumptions about business, industry, and economic risk factors associated with physical and transitional climate-related risks. At the upstream, operational, and downstream levels, climate-related risks and opportunities are identified, tracked and managed through our Sustainability Management Plan. An example of a transitional opportunity to develop or expand low emission goods and services is addressed through our SMP. Specifically, Lockheed Martin has committed to achieve \$4 billion in product sales with direct, measurable benefits to energy and advanced infrastructure resiliency by 2020. As of 2019, product sales that benefit energy and infrastructure resiliency totalled \$4.5 billion toward that 2020 goal. Examples that consider physical risk beyond 10 years include ESH's facilitation of gated capital project funding, which results in long-term infrastructure energy and carbon reductions, as well as renewable energy procurement such as a 17-year power purchase agreement. Looking into the future, we are addressing long-term physical and transitional risks by undertaking an ambitious carbon emission reduction goal aligned with a science-based target methodology to reduce carbon emissions 70% from a 2015 baseline by 2030. This ambitious target will help to drive lean and efficient infrastructure, processes, and operations that support our continued leadership in a changing business and regulatory environment. Through our corporate insurance purchasing program, we study risk evaluations and assessments offered by insurance carriers, related to operational climate-related weather hazards. Such risk data affects capacity, availability and pricing of certain insurance classes for business operations. At the upstream, operational, and downstream levels, acute physical risks are managed by LM's Business Resiliency, Business Continuity, and Global Security and Crisis Management functions. Business Resiliency ensures that resiliency capabilities are addressed through Crisis Management, Business Continuity, information technology disaster recovery, and medical response to protect human life, safeguard assets and sustain critical operations. Business Continuity outlines the preparation needed in anticipation of significant incidents that may disrupt business operations. Crisis Management promotes preparedness and response with the goal of protecting employees against injury and minimizing damage to LM's assets. Our Crisis Management program establishes a strategic framework that directs prompt mobilization of responsibilities and operational practices to protect employees and Lockheed Martin assets prior to, during, and after an emergency. As an example, these functions were critical in restoring operations to our facilities impacted by natural disasters in 2017 and 2018, such as our sites in Orlando, Florida; Ocala, Florida; Aquadilla, Puerto Rico; and Goleta, California. At the operational level, Lockheed Martin's Corporate Environment, Safety and Health function (ESH) has developed and implemented the Environment, Safety and Health Management System (ESHMS) to ensure compliance for the Corporation, reduce operational ESH risks, and ensure continual improvement. The ESHMS goes beyond compliance by providing a risk-based, systematic framework to evaluate the management and performance of ESH processes, programs, and tasks against established standards. Through the ESHMS risk and self-assessment process, our business locations (sites) are first profiled to define ESH program categories or requirements applicable to their operations. The applicable ESH categories are then assigned a relative risk assessment of high, medium or low. Based on these risk assessments, sites are required to conduct self-assessments, provided with checklists to

evaluate compliance, and given mechanisms to track corrective actions. The ESHMS directs sites to complete corrective actions within a specified timeframe depending on the nature and severity of incidents and provides internal documentation tools that serve as the record of authority. Self-assessments are typically conducted biannually for high risks and at least every four years for other risks. The Corporate ESH function also implements a process to report incidents, ensure timely communication, assure that appropriate response processes are initiated, and prevent further incidents. If non-compliance is identified, systematic interim control, root cause, corrective, and preventive action processes must be applied and monitored to prevent future occurrence. Additionally, our Internal Audit function periodically audits our sites and/or programs for conformance to our ESH-related internal standards and for compliance with legal regulations. These audits provide a check-and-balance approach to risk mitigation enterprise-wide. An example of a transitional risk managed by ESH includes emissions reporting obligations, such as the U.S. GHG Mandatory Reporting Rule, pursuant to which four of our largest facilities are required to report. An example of a physical opportunity managed by Corporate ESH includes the implementation of energy and water-related efficiency projects. Since 2010, a team of subject-matter experts from facilities, engineering, and production operations have been conducting indepth analyses of energy and water systems across the Corporation to identify projects for implementation. In 2019, 11 team improvement sessions were held for business segments to identify projects based on energy use and infrastructure sub-system optimization opportunities. These projects focus on increased performance standards for our buildings and have resulted in significant operational cost avoidance. Since 2010 and through year end 2019, Lockheed Martin has avoided approximately \$32 million in energy and water costs thr

Value chain stage(s) covered

Direct operations

Upstream

Risk management process

A specific climate-related risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Medium-term Long-term

Description of process

Climate-related risks and opportunities are assessed continually throughout the year as individual risks. These assessments are based on our qualitative enterprise level assessment detailed below, and focus on the quantification of individual risks at the most appropriate level of business (Enterprise, Business Area, Facility, etc.). In 2018, the Corporate Sustainability Office initiated a study of climate-related risk drivers to business operations in the short, medium, and long terms. Impacts for each driver were assessed (qualitatively) and scored (quantitatively) for supply chain, manufacturing operations, and business operations. The results provided a prioritized list of climaterelated risk drivers that are to be analyzed at greater depth. To date, each of our US-based facilities has been assessed for a variety of acute and chronic physical climate risks to understand the relative threats as a result of Lockheed Martin's geographic distribution of operations and supply chain. Although we are a global corporation, 93% of our workforce is based in the United States. In early 2020, the Corporate Sustainability Office refined our climate-related risk assessment process as part of a more integrated scenario planning and analysis exercise. The refined process is based on the same climate risk drivers suggested in the Task Force on Climate-related Financial Disclosures (TCFD) documentation for physical and transitional risks, with greater distinction given to individual manifestations of acute physical risks. More than 120 distinct risks, based on 22 distinct risk drivers, were assessed based on a set of scenario parameters limiting the rise in global temperatures to 2°C and another scenario that does not limit global temperature growth. Additionally, the level of risk was determined by qualitatively assessing the likelihood and impact of each risk driver on our facilities, production operations, supply chain and workforce. These calculated risk assessment results allow us to identify key risks or climate related threats that will be incorporated into quantitative scenario modeling to be completed later in 2020. Our latest risk assessment will be integrated into strategic planning at the functional level and individual physical risks are being considered in business continuity drills involving multiple facilities already in 2020. Our qualitative climate-scenario analysis is based on two possible futures at the facility, production operations, employee, and supply chain levels. One scenario restricts warming to no more than 2°C, aligning with Representative Concentration Pathway (RCP) 2.6, and the other scenario's temperature rise exceeds 2°C, aligning with RCP 8.5, globally. In considering the outcome of these two scenarios, there are multiple sub-strategies used to incorporate variability in key performance measures representing both physical and transitional risks. Shared Socio-economic Pathways (SSP) and Integrated Assessment Model data are being used to determine boundaries for impact trajectories in 2030 and 2100 for both scenarios. A quantitative model is being developed for application in future iterations of scenario modelling to expand on unique sensitivities and to stress test strategic planning. At Lockheed Martin, climate strategy will be impacted by a variety of variables, the least of which is mean global temperature. The SSP data were chosen for our climate scenario analysis based on the robust nature of variables modeled and the integration of multiple RCP aligned sub-strategies. SSP1 is a pathway best aligned to achieve limited warming of 1.5°C to 2°C and incorporates strong policy applications such as carbon pricing. SSP5 offers an approach best aligned with RCP 8.5 and a no new policy approach. These scenarios are fundamental to how Lockheed Martin is planning for physical and transitional risks related to climate change. Lockheed Martin assesses the impacts of climate-related financial and strategic risks holistically and does not use a defined quantitative threshold. Financial and strategic impacts are evaluated qualitatively within the context of climate-related risk and the appropriate level of business. Quantitative figures are estimated for only select climate-related risks and opportunities. An overview of our process begins with a qualitative risk assessment, where individual climate-related risks determined to be of potential concern are further assessed at the appropriate level of business. This approach is designed to identify potential high impact climate-related risks and then to more quantitatively focus the level of potential impact of each risk across the enterprise. We assess the potential impact of a carbon tax (transitional risk) by calculating the relative increase in our total cost of energy procurement by location at varying carbon tax rates. The magnitude of impact of a carbon tax is relative to other climate risks based on how much a potential carbon tax would exceed our internal threshold. The threshold for this risk is not publicly available but represents the percentage increase in total energy procurement cost that exceeds our risk tolerance. Those locations that exceed this threshold are then identified as key focus areas for decarbonization and energy efficiency. Chronic physical risk, such as sea level rise, is evaluated at a regional level based on proximity to each of our US-based sites. Those locations that show a high level of risk by type are evaluated directly as part of climate-related business continuity/emergency management drills at an appropriate level of business. In 2020, our Enterprise Operations business conducted the first of these drills based on data and analysis provided by the Corporate Sustainability Office.

C2.2a

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

Relevance Please explain &

CDP Page 7 of 56

	Relevance	Please explain
	& inclusion	
Current regulation	Relevant, sometimes included	Local, regional, and national policies regulating climate related risks are monitored and assessed across multiple functions as our current course of business. Although these risks may vary over time, our current strategy enables an adequate level of mitigation and/or adaptation in order to minimize current impacts. At the Corporate level, regularly scheduled Executive Leadership Council meetings are held by all business elements. These serve as a forum for assessing the impacts of current regulation and our compliance. At an operational level, LM's Corporate Environment, Safety and Health (ESH) function has developed and implemented the Environment, Safety and Health Management System (ESHMS) to ensure compliance for the Corporation, reduce operational ESH risk, and ensure continual improvement. The ESHMS goes beyond compliance by providing a risk-based, systematic framework to evaluate the management and performance of ESH processes, programs, and tasks against established standards. Through the ESHMS risk and self-assessment, our business locations are first profiled to define ESH program categories or requirements applicable to their operations. Based on the risk assessments, sites are required to conduct self-assessments based on their respective risk assessment profiles, provided with checklists to evaluate compliance, and given mechanisms to track corrective actions. The ESHMS directs sites to complete corrective action within a specified timeframe depending on the nature and severity of incidents and provides internal documentation tools that serve as the record of authority. The Corporate ESH function also implements a process to report incidents, ensure timely communication, assure that appropriate response processes are initiated, and prevent further incidents. If non-compliance is identified, systematic interim control, root cause, corrective and preventive action processes must be applied and monitored to prevent future occurrence. Additionally, our Corporate Internal Audit function periodically au
Emerging regulation	Relevant, always included	At Lockheed Martin, we consider potential climate-related regulation as a risk. The likelihood of national GHG emission taxes, for example, is considered high and will only increase over time. This example is just one in which Lockheed Martin is considering the potential impact of climate-related regulation in our climate risk assessment and climate scenarios. Not all emerging regulations are known or can be speculated at this time so a general characterization of what should be considered is evolving and is subject to geographic variables. At the Corporate level, regularly scheduled Executive Leadership Council meetings are held by all business elements. Emerging regulations that are deemed to present an enterprise risk are identified through our risk assessment process and elevated as appropriate to senior executives and the Board. Furthermore, Lockheed Martin's Corporate ESH function tracks and provides analysis of impending new and revised ESH legal requirements and other standards that could have an impact on the Corporation's operations and products. We provide three monthly fora for our business elements to learn and discuss trending ESH advocacy topics including international, U.S. domestic, and California-specific events. Corporate ESH has also developed and implemented the Environment, Safety and Health Management System (ESHMS) to ensure compliance for the Corporation, reduce operational ESH risks, and ensure continual improvement. The ESHMS goes beyond compliance by providing a risk-based, systematic framework to evaluate the management and performance of ESH processes, programs and tasks against established standards. Through the ESHMS, our business locations (sites) are required to conduct self-assessments based on their respective risk assessment profiles, are provided with checklists to evaluate compliance, and are given mechanisms to track corrective actions. The ESHMS directs sites to complete corrective actions within a specified timeframe depending on the nature and severity of incidents and
Technology	Relevant, always included	At Lockheed Martin, we are first and foremost a technology company. Climate-related risks addressed by the adoption of technology are key to our long-term business strategy. From operational equipment upgrades to modernization of product design, Lockheed Martin considers decarbonization, energy efficiency and waste reduction as strong indicators for cost reduction and effectiveness. The long-term implementation of technology may not always be climate-related but is considered key to Lockheed Martin as a company. Additionally, our Business Continuity team manages Corporate-wide information technology disaster recovery, crisis management, and pandemic planning activities. They have established a strategic framework and operational practices to continuously improve Lockheed Martin's resilience to disruption or loss in supplying products and services. The Business Continuity function is also responsible for developing and managing responses to some aspects of physical climate-related risks that pose a threat to business operations. As an example, this organization was one of many functions that played a critical role in reestablishing telecommunications infrastructure at our Aguadilla, Puerto Rico facility, which was impacted by Hurricane Maria. Lockheed Martin has developed a Technology Roadmap Initiative that aims to identify alternative products that will be needed in a long-term climate change scenario. We also have working groups exploring new opportunities for space instruments, rotary aircraft, and other products that may emerge as a result of climate-related developments. In November 2019, for example, LM Energy divested our Energy Management services segment to focus on energy products designed to directly support the needs of the US Department of Defense. This represents a strategic shift in our overall Technology Strategy. Lockheed Martin's Energy business (LM Energy) partners with government, industrial and commercial customers to manage energy efficiency projects to ensure our customers conserve energy
Legal	Relevant, always included	At Lockheed Martin, we consider legal risks as relevant, but not exclusive to climate-related events and changes. Successful management of legal risks requires a coordinated risk management approach in order to prevent or mitigate the extent of such risks. Environmental remediation is an example of a legal risk that Lockheed Martin recognizes as having climate-related aspects, and that may be necessitated or exacerbated by acute weather events. Lockheed Martin routinely engages with policy makers on matters of interest to the Corporation. Lockheed Martin's advocacy and engagement on specific policy issues is coordinated with internal stakeholders to ensure a consistent, corporate-wide approach. Our policy engagement is managed by our Corporate Government Affairs organization. Our process to ensure consistency across Corporate functions and business elements on climate-related issues is to bring representative internal stakeholders into the Cross Corporate Sustainability Working Group, established specifically to ensure a coordinated, cohesive sustainability strategy and messaging. Lockheed Martin's Corporate ESH function tracks and provides analysis of new and revised ESH legal requirements and other standards that could have an impact on the Corporation's operations and products. Corporate ESH has also developed and implemented the ESH Management System (ESHMS) which goes beyond compliance by providing a risk-based, systematic framework to evaluate the management and performance of ESH processes, programs, and tasks against established standards. The ESHMS directs our business locations (sites) to complete corrective action within a specified timeframe depending on the nature and severity of incidents and provides internal documentation tools that serve as the record of authority. The Corporate ESH function also implements a process to report incidents, ensure timely communication, assure that appropriate response processes are initiated, and prevent further incidents. If non-compliance is identified, systemat
Market	Relevant, always included	At Lockheed Martin, we consider market risk as relevant, but, not exclusive to climate-related events and changes. Successful management of market risks requires a coordinated risk management approach in order to prevent or mitigate the extent of such risks. For example, although our primary customer (US Government) generally projects a reasonably high level of certainty in market signals, there is always variability that occurs based on the priorities of each Administration. To continue to excel as a market leader, Lockheed Martin will need to maintain core technical competencies that enable us to meet our customer's needs. Understanding market/sector variability has always been a key to success. Lockheed Martin monitors customers' analyses of climate-related risks they expect to confront in the near and long term. For example, in some instances, these risks have been publicly shared by our customers. As part of our overall market assessment and strategic decision-making, we assess the extent to which Lockheed Martin is and will be able to address the market's changing requirements associated with climate change. Opportunities to provide new products and/or services are considered, along with risks that may impact demand for current products and/or services.
Reputation	Relevant, always included	At Lockheed Martin, we consider reputational risk as relevant, but, not exclusive to climate-related events and changes and as pivotal to maintaining business with our key customers. Successful management of reputational risks requires a coordinated risk management approach in order to prevent or mitigate the extent of such risks. An example included in our assessment is our reputation with our primary customer, the US Government, which is key to our business and being awarded contracts. The Federal Acquisition Regulations (FAR) account for contractor reliability in awarding contracts. The ability to maintain reliable delivery of products and meet performance requirements may be directly, and indirectly, impacted by how Lockheed Martin is able to mitigate and/or adapt to climate-related risks and opportunities.
Acute physical	Relevant, always included	At Lockheed Martin, the geographic distribution of our facilities, customers, and suppliers is on a global scale. While 93% of our workforce is based in the United States, it is vital that we prepare for and assess the potential impact of acute weather events as physical risks to our operations and supply chain. In 2018, our initial climate-related risk assessment concluded that acute physical risks, in the form of extreme weather events were a key priority. In early 2020, we updated this assessment to distinguish different types of extreme weather events to better appreciate the geographic variation that occurs across our sites. Storms, wildfires, flooding and extreme heat are examples of key risk areas. In addition, through our formal risk assessment process, surveys of leaders provide an indication of top risk concerns including climate-related risks with varying degrees of impact. Survey findings are analyzed with risk data from our Treasury function to determine overlapping strategic and operational risk elements that warrant and provide direct input to the risk assessment process. Our assessment includes assumptions about business, industry, and economic risk factors associated with physical and transitional climate-related risks. We also consider feedback from functions such as Information Security, Global Supply Chain Operations and Human Resources. At an asset level, acute physical risks are managed by our Business Resiliency, Business Continuity, and Global Security and Crisis Management functions. Business Resiliency ensures that resiliency capabilities are addressed through Crisis Management, Business Continuity, information technology disaster recovery, and medical response to protect human life, safeguard assets and sustain critical operations. Business Continuity, information technology disaster recovery, and medical response to protect human life, safeguard assets and sustain critical operations. Business Continuity, information anticipation of significant incidents that may disrupt business ope

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Relevant, Chronic At Lockheed Martin, the geographic distribution of our facilities, customers, and suppliers is on a global scale and chronic physical risks are expected to develop over time. An example of physical alwavs a chronic physical risk considered in our assessment is sea level rise, which is the most prominent example that could impact our operations. Because of the global nature of our facilities, customers, and suppliers, chronic physical risks are deemed relevant based on climate-related risk assessments conducted in 2018 and updated in 2020. Many locations are not included vulnerable to this type of risk, however, it is a risk that cannot be assessed solely based on Lockheed Martin facilities, but also on our local communities and those of our suppliers Lockheed Martin's risk assessment process includes a senior leadership survey, a subject-matter expert survey, internal audit risk evaluation, global benchmark data, strategic planning assumptions, and interviews with the Executive Leadership Team. Through this process, we identify and prioritize key risks. These are reported to the Audit and other Board committees Risks are prioritized based upon impact, likelihood, trends, and the availability and effectiveness of controls. This includes property insurance capacity and costs at facilities with company assets in close proximity to climate-related weather hazards. Surveys of leaders provide an indication of top risk concerns including climate-related risks with varying degrees of impact. Survey findings are analyzed with risk data from our Treasury function to determine overlapping strategic and operational risk elements that warrant and provide direct input to the risk assessment process. Climate-related physical risks are also monitored through engagement with property and hazard insurers. Lockheed Martin's Corporate ESH function collaborates across all of our business segments to identify opportunities to mitigate the Corporation's contribution to climate-related risks. As an example, Corporate ESH coordinates a dedicated capital infrastructure fund, referred to as the Go Green gated capital program. This fund is primarily used to fund major energy or water-related efficiency projects, with the recipient business segment funding the capital depreciation. Prior to approval through Corporate management, Corporate ESH reviews each submitted project to ensure they meet the criteria established for use of this fund

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.

Identifie

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

	Emerging regulation	Carbon pricing mechanisms	
- 1			- 1

Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Increased pricing of GHG emissions is considered a key potential regulatory-driven climate risk at Lockheed Martin. Based on our current operations, only the State of California operates a cap and trade program requiring facilities to offset a percentage of their GHG emissions; however, the likelihood of a carbon based tax is expected to be high as we look at our global operations in the future and the added operations cost that would accompany such a tax. Lockheed Martin is taking action today to understand and manage this risk by stress testing historical cost implications of localized emissions against localized energy expenditures, under multiple pricing scenarios, and through efforts to decarbonize and conserve energy based on per capita metrics. Decarbonization encompasses numerous activities to support the use of clean energy in the form of Renewable Energy Credit (REC) purchases and on-site renewable generation. Energy conservation efforts are aimed at process and operational efficiency improvements.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

17000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Lockheed Martin is taking action today to understand and manage this risk by stress testing historical cost implications of localized emissions against localized energy expenditures, under multiple pricing scenarios, and through efforts to decarbonize and conserve energy based on per capita metrics. \$17 million is the estimated annual financial impact based on an estimated carbon tax of \$20/MTCO2e and our 2019 energy-based Scope 1 & 2 emissions. We are assuming an estimated range of \$8,600,000 to 86,000,000 based on tax rates from \$10 to \$100 per MTCO2e. This tax rate range and the tax rate of \$20 used in the financial impact estimate is based on analyses conducted by our Corporate Sustainability Office on recommended science-based CO2 tax rates in 2020 and 2030, integrating various sources including the World Bank, High-Level Commission on Carbon Price, Shared Socio-Economic Pathways, and Carbon Pricing Corridors Initiative, that evaluate '1.5 °C and less' and '2°C and less' scenarios.

Cost of response to risk

15000000

Description of response and explanation of cost calculation

Lockheed Martin is taking action today to understand and manage this risk. Specifically, in 2019, the Enterprise Risk & Sustainability team began stress testing historical cost implications of localized emissions against localized energy expenditures, under multiple pricing scenarios. We are assuming an estimated tax rate range of \$10 to \$100 per mtCO2e based on recommended science-based CO2 tax rates in 2020 and 2030, from various sources including the World Bank, High-Level Commission on Carbon Price, Shared Socio-Economic Pathways, and Carbon Pricing Corridors Initiative. The Corporate Environmental Health and Safety team and Corporate Sustainability Office are also investing in efforts to decarbonize and conserve energy based on per capita metrics outlined in the Resource Efficiency section of our 2019 Sustainability Report. Decarbonization encompasses numerous activities to support the use of clean energy in the form of REC power purchase agreements and on-site renewable generation. Energy conservation efforts are aimed at process and operational efficiency improvements. We are using a facility-by-facility strategy to understand where our attention should be focused for energy conservation and decarbonization initiatives based on factors, such as grid emissions and state incentives. In 2019 alone, we implemented 41 energy efficiency and carbon reduction projects, including HVAC, lighting, building control systems, and retro-commissioning. These projects result in an annual energy reduction of an estimated equivalent of 45 million kilowatt hours (kWh), with an estimated \$3.9 million in recurring annual cost avoidance. We also increased our annual consumption of renewable energy and consumed 321,941 megawatt hours (MWh) of clean energy, comprising 307,782 MWh of renewable energy certificates (RECs) and 14,159 MWh of on-site energy generation. The cost of response to this risk was calculated based on a single-year expenditure for capital improvements dedicated to energy efficiency and conservation that addres

Comment

Each climate-related risk category has been initially assessed by the Corporate Sustainability Office at Lockheed Martin. All submissions are estimations and are used to identify areas of further research. The magnitude of impact of each climate-related risk is a qualitative assessment made in relation to other climate-related physical and transitional risks to the Corporation and is not a measure of magnitude to the Corporation as a whole. In addition, the risks described in this section are not necessarily the greatest potential climate-related risks to Lockheed Martin; they are risks for which we are able to provide quantitative and qualitative estimates.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Climate change is directly impacting the strength and pace of storms and other weather-related events. The level of impact varies based on the location of our operations and supply chain and is not limited to just coastal regions. In addition to cyclones and flooding, other weather-related events such as tornado and wildfires will have a continued impact on our supply chain and operations. These impacts result in disruptions in manufacturing and the livelihoods of our workforce and families. In mid-September of 2017, Hurricane Maria, a Category 4 hurricane with 155 mph winds, destroyed infrastructure in Puerto Rico, causing power and communications outages and widespread flooding for the entire island, impeding transportation. Lockheed Martin's facility in Aguadilla, Puerto Rico, was impacted by Hurricane Maria as the site was closed over approximately a month and a half, due to loss of telecommunications. In 2017, Lockheed Martin was directly impacted by hurricanes in Texas and Florida. In 2017 and 2018, winter storms and other events disrupted operations on the East Coast, and wildfires in Northern California impacted local communities near suppliers and operations sites. As risks increase so too will the cost of operations and the potential for delays. Future weather events are expected to grow stronger, with greater impact.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

500000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Based on our experience following Hurricane Maria, we estimate the cost of another similar acute weather event to be approximately \$500,000, which was the cost of repairs at our Aguadilla, Puerto Rico, facility after that event. This value includes damage to infrastructure, machinery and equipment; losses from business interruption and payroll; incurred costs from debris removal; and extra expenses from emergency items such as generators, equipment rentals, etc. The main assumption in this estimate is that future costs would be similar to those historical costs faced in 2017. Total loss of the value exposed at this facility is unlikely because Lockheed Martin has rigorous standards to mitigate loss and damage.

Cost of response to risk

500000

Description of response and explanation of cost calculation

Acute physical risks are managed by Lockheed Martin's Business Resiliency, Business Continuity and Global Security and Crisis Management organizations. Our Crisis

Management Program establishes a strategic framework that directs prompt mobilization of responsibilities and practices to protect our employees and assets prior to, during, and after an emergency. In October of 2017, the Crisis Management team utilized the LM-100J to deliver over 80,000 pounds of critical supplies to our employees and the surrounding community. The Aguadilla site received minimal damage and was prepared with hurricane shelters, a fully operational generator and potable water. The greatest impact to the Aguadilla site was the loss of telecommunications, which was critical for a site that facilitates call center help desk operations. Thus, the closure of this site for over a month increased operating costs as the decrease in capacity resulted in work that had to be redirected to several other sites. In addition to formal management action, Lockheed Martin employees aided our Puerto Rico employees and the local community through monetary donations and supplies. Many of our facilities partnered with Lockheed Martin's Hispanic Organization for Leadership and Awareness (HOLA) employee group, collecting more than 300 pounds of supplies ranging from batteries, mosquito repellents, hygienic products, baby supplies and canned food. Through the donation of two LM-100J flights, at least 100 employees were able to receive a variety of critical supplies, including electric generators. Based on our experience following Hurricane Maria, we estimate the cost of responding to a similar acute weather event to be approximately \$500,000. This value is based on the total value exposed at our Aguadilla, Puerto Rico, facility, which includes damage to infrastructure, machinery and equipment; losses from business interruption and payroll; incurred costs from debris removal; and extra expenses from emergency items such as generators, equipment rentals, etc. The main assumption in this estimate is that future costs would be similar to historical costs of our response in 2017. Total loss of the value exposed at this faci

Comment

Each climate-related risk category has been initially assessed by the Corporate Sustainability Office at Lockheed Martin. All submissions are estimations and are used to identify areas of further research. The magnitude of impact of each climate-related risk is a qualitative assessment made in relation to other climate-related physical and transitional risks to the Corporation and is not a measure of magnitude to the Corporation as a whole. In addition, the risks described in this section are not necessarily the greatest potential climate-related risks to Lockheed Martin; they are risks for which we are able to provide quantitative and qualitative estimates.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Emerging regulation

Carbon pricing mechanisms

Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Increased pricing of GHG emissions is considered a key regulatory-driven climate risk at Lockheed Martin and extends to the affordability of our products, cost competitiveness in government contracts, and supply chain costs. The likelihood of a carbon based tax is expected to be high as we look at our global supply chain in the future and the added operational cost that would accompany such a tax for our suppliers. The majority of our sales are driven by pricing based on costs incurred to produce products or perform services under contracts with the U.S. Government. Cost-based pricing is determined under the FAR. The FAR provides guidance on the types of costs that are allowable in establishing prices for goods and services under U.S. Government contracts. We closely monitor compliance with the consistent application of our critical accounting policies related to contract accounting. Increases in operational costs will directly affect the affordability of our products and our competitive position against industry peers.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

260000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Lockheed Martin's Enterprise Risk & Sustainability team calculated the annual financial impact estimate of \$260 million based on an estimated carbon tax of \$20/MTCO2e and our 2019 Scope 3 emissions estimate for purchased goods and services. As energy costs are generally embedded in overall supplier costs and are often considered "allowable" under DFARS regulation in Department of Defense acquisitions, the impact is represented as the added cost to suppliers. Our analysis takes into consideration an estimated tax rate range of \$10 to \$100 per mtCO2e. This tax rate range and the tax rate of \$20 used in the financial impact estimate is based on analyses conducted by our Corporate Sustainability Office on recommended science-based CO2 tax rates in 2020 and 2030, from various sources including the World Bank, High-Level Commission on Carbon Price, Shared Socio-Economic Pathways, and Carbon Pricing Corridors Initiative, that evaluate '1.5 °C and less' and '2°C and less' scenarios.

Cost of response to risk

0

Description of response and explanation of cost calculation

Lockheed Martin is taking action today to understand and manage this risk. In 2019, Lockheed Martin's Enterprise Risk and Sustainability team began stress testing historical cost implications of directly applied carbon taxes (based on a tax range of \$10 to \$100 per mtCO2e) against estimated supply chain emissions for 2019. This tax rate range is based on recommended science-based CO2 tax rates in 2020 and 2030, from various sources including the World Bank, High-Level Commission on Carbon Price, Shared Socio-Economic Pathways, and Carbon Pricing Corridors Initiative. Since energy costs are generally embedded in overall supplier costs and are often considered "allowable" under DFARS regulation in DoD acquisitions, the financial impact estimate is represented as the added cost to suppliers. These costs will drive up overall costs for our products and impact affordability for our customers. The cost of responding to a specific affordability issue cannot be disaggregated from Lockheed Martin's existing overhead expenditures, resulting in a disclosed value of "0". However, we do address the affordability of our products through our Sustainability

Management Plan, where we work to 1) Add criteria to fully identify cost drivers early in the product design cycle within each business segment's proposal planning and review processes; 2) Generate \$1 billion in life-cycle cost reductions from manufactured products related to the use of resources and impacts on human health and the environment; and 3) Achieve ≥\$700 million in corporate cost and supply chain efficiencies by the end of 2020. In 2018, we exceeded our goal of cumulative modelled life-cycle cost savings of \$1.34 billion and, in 2019, achieved a total \$823.7 million in cost and supply chain efficiencies.

Comment

Each climate-related risk category has been initially assessed by the Corporate Sustainability Office at Lockheed Martin. All submissions are estimations and are used to identify areas of further research. The magnitude of impact of each climate-related risk is a qualitative assessment made in relation to other climate-related physical and transitional risks to the Corporation and is not a measure of magnitude to the Corporation as a whole. In addition, the risks described in this section are not necessarily the greatest potential climate-related risks to Lockheed Martin; they are risks for which we are able to provide quantitative and qualitative estimates.

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?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Climate-related products and services represent the most significant climate-related opportunity for Lockheed Martin. As a company driven to provide technical solutions to the most complex challenges of our customers, our portfolio will expand to meet their needs, including to address climate change and adaptation solutions. Our customers have shaped product development and features based on climate-related risks and opportunities. Growing resource constraints and changes to our climate require technologies that strengthen society's resilience and solutions for monitoring and addressing impacts. For instance, Lockheed Martin has developed the meteorological observation systems that have fueled improvements in weather forecasting. Our primary customers have been federal agencies including the National Oceanic and Atmospheric Administration (NOAA), the National Aeronautics and Space Administration (NASA), the United States Air Force (USAF) and the Federal Aviation Administration (FAA). Through a collaborative development and acquisition effort between NOAA and NASA, in November of 2016, Lockheed Martin completed and launched the first of four next-generation geostationary weather satellites, the Geostationary Operational Environmental Satellite-R Series (GOES-R). GOES-R was launched in 2016 and was renamed GOES-16 once it reached geostationary orbit. GOES-S was launched in March 2018 and renamed GOES-17, and GOES-T is scheduled to launch in December 2021. with GOES-U in 2024.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

2000000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The approach used to generate a potential financial impact figure was by evaluating publicly available information. Specifically, financial impact is measured directly based on awarded amount of known contracts and the duration associated with those contracts related to a series of satellites developed to improve the monitoring and quality of climate data and inform climate adaptation solutions. The amount estimated above is is the contract value of the the GOES satellite program, which is valued at \$2 billion for the 4 next-generation satellites in the GOES series. This program was awarded to Lockheed Martin in 2008 and is scheduled to end in 2024.

Cost to realize opportunity

350000000

Strategy to realize opportunity and explanation of cost calculation

The NASA/NOAA GOES-R satellite program is a \$2 billion contract that was awarded to Lockheed Martin in 2008 for four (4) next-generation satellites in the GOES series. The GOES-R series satellites enable higher resolution images of weather patterns and severe storms five times faster than today. These enhanced capabilities will contribute towards more accurate and reliable weather forecasts, severe weather outlooks and warnings, maritime forecasts, seasonal predictions, drought outlooks and space weather predictions. These advanced prediction capabilities will in turn, enable avoidance of adverse impacts from weather events and inform solutions for climate

adaptation needs. GOES -16 and GOES -17 have already been launched. GOES-T is scheduled to launch in December 2021, with GOES-U in 2024. The estimated duration of this program is 16 years based on the scheduled launch of GOES-U in 2024. In addition to our GOES-R series satellites, Lockheed Martin's Space business segment's product portfolio includes spacecraft that contributes to deep-space exploration as well as advanced infrastructure resiliency for climate adaptation needs. These products include the Space Based Infrared System, the GPS III, and Orion. The \$350 million estimate is the investment Lockheed Martin has made to develop and construct the Gateway Center near Denver, CO. The Gateway Center was developed in support of various US Government programs, including the GOES-R Series weather satellites. Other spacecraft currently in production at the site include the Air Force's GPS III satellites, NASA's Lucy spacecraft which will explore Jupiter's Trojan asteroids, and other next-generation US Government satellites. Lockheed Martin invested \$350 million in the development and construction of the Gateway Center. Annualized investment was based on construction beginning in 2017, with Phase I completed in June 2018 and the second and final phase on target for completion in November 2020.

Comment

Each climate-related opportunity category has been initially assessed by the Corporate Sustainability Office at Lockheed Martin. The results are temporal and inclusive of supply chain impacts vs. operations. All submissions are estimations and are used to identify areas of further research.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

At Lockheed Martin, we develop technologies and instruments that continuously monitor the climate from space to sea to support our customers in protecting and strengthening global infrastructure. We are principally engaged in the research, design, development, manufacture, integration, and sustainment of advanced technology systems, products and services that improve and promote long-term capabilities in national security, space exploration, and information technology. Our strategic planning process pays close attention to shifts in U.S. national security policy and listens to feedback about how our equipment is used on a forward-operating basis. Our design process focuses on building longevity and resiliency into our technology. We periodically assess key global security priorities by country and strike partnerships with public and private sector research laboratories. Our research and development efforts also include investing in entrepreneurial technologists who can disrupt conventional approaches to engineering solutions. Our senior vice president of Ethics and Enterprise Assurance is also a board member of Lockheed Martin Ventures, which scopes emerging disruptive technologies and provides an ecosystem that promotes collaboration and strategic investments. To capture the opportunity of this strategy, Lockheed Martin publicly reports on progress towards our Sustainability Management Plan (SMP) goal of \$4 billion in product sales with direct, measurable benefits to energy and advanced infrastructure resiliency.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

4500000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

To capture the opportunity of this strategy, Lockheed Martin publicly reports on progress towards our Sustainability Management Plan (SMP) goal of \$4 billion in product sales with direct, measurable benefits to energy and advanced infrastructure resiliency. In 2019 we exceeded this goal with annual product sales that benefit energy and infrastructure resiliency totalling \$4.5 billion. This figure does not include sales representing sustainment service contracts for many of our products. Calculation of the financial impact is measured directly based on annual sales in 2019 for energy and advanced infrastructure projects.

Cost to realize opportunity

3870000000

Strategy to realize opportunity and explanation of cost calculation

Our strategic planning process pays close attention to shifts in U.S. national security policy and listens to feedback about how our equipment is used on a forward-operating basis. Our customers have shaped product development and features based on climate-related risks and opportunities. Growing resource constraints and changes to our climate require technologies that strengthen society's resilience and solutions for addressing impacts. For instance, Lockheed Martin is developing an advanced energy storage system - GridStar Flow, which is an innovative redox flow battery designed to be a durable, flexible, scalable, and safe long duration energy storage solution. This will provide energy storage for consistent availability and distribution, addressing the uncertainties of intermittent renewable energy. Our design process focuses on building longevity and resiliency into our technology. We periodically assess key global security priorities by country and strike partnerships with public and private sector research laboratories. As an example, Lockheed Martin is developing a state-of-the-art Geostationary Carbon Observatory (GeoCarb) with the University of Oklahoma and NASA's Jet Propulsion Laboratory, to be launched in 2022. GeoCarb aims to advance our collective understanding of the global carbon cycle by mapping key carbon gases from geostationary orbit. Over time, this technology can contribute much-needed data to support climate adaptation and resiliency efforts. GeoCarb will allow NASA to see how different weather patterns influence carbon dioxide and methane concentrations and address unanswered questions in carbon cycle science. Our research and development efforts also include investing in entrepreneurial technologists who can disrupt conventional approaches to engineering solutions. Our senior vice president of Ethics and Enterprise Assurance is also a board member of Lockheed Martin Ventures, which scopes emerging disruptive technologies and provides an ecosystem that promotes collaboration and strateg

Comment

Each climate-related opportunity category has been initially assessed by the Corporate Sustainability Office at Lockheed Martin. The results are temporal and inclusive of supply chain impacts vs. operations. All submissions are estimations and are used to identify areas of further research.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Move to more efficient buildings

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

According to life-cycle-based assessments, the biggest environmental impact within our direct business operations relates to energy use and greenhouse gas (GHG) emissions. We believe that we have a responsibility to operate our own facilities with efficient use of resources and to minimize environmental impacts. This is why we pursue and implement opportunities to reduce our operational footprint and strive for industry leading outcomes.

Time horizon

Long-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

39000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Lockheed Martin uses annual cost avoidance estimates to determine savings related to energy efficiency and decarbonization. Financial impact is measured directly based on these recurring annual cost avoidances (\$3.9 million) projected over a minimum of 10 years. Several of the highlights from 2019 that were incorporated into this estimate are shown below. In 2019, 41 energy efficiency and carbon reduction projects, including HVAC, lighting, building control systems, and retro-commissioning were completed. These projects resulted in an annual energy reduction of an estimated equivalent of 45 million kilowatt hours (kWh), with an estimated \$3.9 million in recurring annual cost avoidance. The projects included: Eight HVAC projects were completed, resulting in an approximate equivalent of 4.9 million kWh of energy savings and more than \$600,000 in recurring annual cost avoidance. Eight building control system projects were completed, resulting in an approximate equivalent of 6.8 million kWh of energy savings and nearly \$600,000 in recurring annual cost avoidance. 13 lighting projects were completed, resulting in an approximate equivalent of 22.9 million kWh of energy savings and more than \$1,700,000 in recurring annual cost avoidance.

Cost to realize opportunity

15000000

Strategy to realize opportunity and explanation of cost calculation

Lockheed Martin has adopted the United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) as the minimum standard for new construction, renovations, and/or retrofit projects. For existing buildings, installation of equipment should be life cycle cost effective and reduce the energy consumption for the building. The purpose of this procedure is to establish requirements for implementing green building practices in the design, construction and operations of all Lockheed Martin facilities and to meet the Corporation's goals on increasing our green footprint. We have also started utilizing advanced data analytics to optimize energy usage. For example, we have used regression analysis-based building modeling to measure the impact on energy consumption from production changes, weather variability, and energy efficiency projects to predict energy consumption with a high degree of confidence and to support decision making about upgrades. We are also piloting smart building algorithms that automatically gather data on existing building automation systems to reduce our carbon footprint and improve asset reliability. Cost to achieve this opportunity is represented by a single-year expenditure for capital improvements related to energy efficiency and conservation projects. Specifically, in 2019, Lockheed Martin spent approximately \$15 million on completed projects and initiatives related to energy efficiency and conservation.

Comment

Each climate-related opportunity category has been initially assessed by the Corporate Sustainability Office at Lockheed Martin. The results are temporal and inclusive of supply chain impacts vs. operations. All submissions are estimations and are used to identify areas of further research.

C3. Business Strategy

C3.1

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

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

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

Yes, qualitative, but we plan to add quantitative in the next two years

C3.1b

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

carbon reduction goal to do our part in holding global temperature increase below 1.5 degrees C.

scenario and Lockheed Martin is conducting qualitative scenario analyses based on two possible future scenarios at the facility, production operations, employee, and supply chain levels. One scenario restricts **RCP 2.6** warming to no more than 2°C, aligning with RCP 2.6, and the other scenario exceeds 2°C warming, aligning with RCP 8.5, globally. In consideration of these two scenarios there are multiple substrategies used to incorporate variability in key performance measures representing both physical and transitional risks. Shared Socio-economic Pathways and Integrated Assessment Model data are being used to determine boundaries for impact trajectories in 2030 and 2100 for both scenarios. A quantitative model is being developed for application in future iterations of scenario modelling to expand on unique sensitivities and to stress test strategic planning. Since the scenario analysis described above is still in progress, we can look to previous analyses conducted to understand how those results have impacted business strategy. We have used the Context Based Metric model method under a variety of revenue and emissions growth scenarios to understand the relative impact of such scenarios on our ability to meet existing Go Green goals through 2020 and compare our performance to a select number of industry peers. In 2018, we applied an updated model from the Center for Sustainable Organizations that sets the global average temperature target at 1.5C instead of 2C. The scenarios used extend beyond 2050 and are based on a series of assumed growth rates in annual revenues and our ability to reduce our CO2e emissions footprint. The models are based on Scope 1 and 2 emissions only and do include comparative data for select industry peers. Based on these results, we were able to ascertain that our 2019 carbon emission reduction results outperform a science-based target threshold to stabilize atmospheric carbon emissions. Using the Center for Sustainable Organizations' Context Based Carbon Metric methodology, we produce less than our calculated threshold of emissions based on our contribution to gross domestic product. These results influenced the development of our new Go Green 2030 carbon goal. Specifically, we have evaluated the applicability of the science-based target methodology and established our own ambitious carbon reduction goal to do our part in holding global temperature increase below 1.5 degrees C. Lockheed Martin is conducting qualitative scenario analyses based on two possible future scenarios at the facility, production operations, employee, and supply chain levels. One scenario restricts warming to no more than 2°C, aligning with RCP 2.6, and the other scenario exceeds 2°C warming, aligning with RCP 8.5, globally. In consideration of these two scenarios there are multiple substrategies used to incorporate variability in key performance measures representing both physical and transitional risks. Shared Socio-economic Pathways and Integrated Assessment Model data are being used to determine boundaries for impact trajectories in 2030 and 2100 for both scenarios. A quantitative model is being developed for application in future iterations of scenario modelling to expand on unique sensitivities and to stress test strategic planning. Since the scenario analysis described above is still in progress, we can look to previous analyses conducted to understand how those results have impacted business strategy. We have used the Context Based Metric model method under a variety of revenue and emissions growth scenarios to understand the relative impact of such scenarios on our ability to meet existing Go Green goals through 2020 and compare our performance to a select number of industry peers. In 2018, we applied an updated model from the Center

for Sustainable Organizations that sets the global average temperature target at 1.5C instead of 2C. The scenarios used extend beyond 2050 and are based on a series of assumed growth rates in annual revenues and our ability to reduce our CO2e emissions footprint. The models are based on Scope 1 and 2 emissions only and do include comparative data for select industry peers. Based on these results, we were able to ascertain that our 2019 carbon emission reduction results outperform as science-based target threshold to stabilize atmospheric carbon emissions. Using the Center for Sustainable Organizations' Context Based Carbon Metric methodology, we produce less than our calculated threshold of emissions based on our contribution to gross domestic product. These results influenced the development of our new Go Green 2030 carbon goal. Specifically, we have evaluated the applicability of the science-based target methodology and established our own ambitious

C3.1d

	Have climate- related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	We develop technologies that continuously monitor the climate from space to sea to support our customers in protecting and strengthening global infrastructure. Our business strategy related to climate change has been influenced by our stakeholders including employees, academic institutions, investors, non-governmental organizations, customers, policy organizations, suppliers and analysts through our Core Issues Assessment process. In our current SMP, which was extended over five years and will come to a close at the end of 2020, we include specific core issues with goals that we monitor and voluntarily disclose. Two of our core issues, Product Impact and Resource Efficiency, relate to our climate change strategy, and address the development of products and services, carbon reduction initiatives, and eco-innovation. For example, we had a goal to help energy customers reduce carbon emissions by at least twice the carbon impact of our business operations. In 2019, before the divestiture of the Distributed Energy Solutions Group, Lockheed Martin Energy enabled carbon emissions savings of 1,027,634 MTCO2e for our customers, compared to our operational emissions, net of RECs, of 775,997 MTCO2e. Our customers have shaped product development and features based on climate-related risks and opportunities. Growing resource constraints and changes to our climate require technologies that strengthen society's resilience and solutions for addressing impacts. As an example, Lockheed Martin is developing a state-of-the-art Geostationary Carbon Observatory (GeoCarb) with the University of Oklahoma and NASA's Jet Propulsion Laboratory, to be launched in 2022. GeoCarb aims to advance our collective understanding of the global carbon cycle by mapping key carbon gases from geostationary orbit. Over time, this technology can contribute much-needed data to support climate adaptation and resiliency efforts. GeoCarb will allow NASA to see how different weather patterns influence carbon dioxide and methane concentrations and address una
Supply chain and/or value chain	Yes	Climate-related risks and opportunities for suppliers are publicly laid out in the supplier code of conduct and our sustainable supplier web page. They also align with Lockheed Martin's corporate-wide environmental program, known as Go Green 2020, which are developed in consideration of climate risks and opportunities. Through our Supplier Code of conduct, we expect our suppliers to operate in a manner that actively manages risk, conserves natural resources, prevents pollution, and protects the environment. We expect our suppliers to apply environmental management system principles in order to establish a systematic approach to the management of risks/hazards and opportunities associated with the environment, including potential risk from regulatory non-compliance, reputational loss, as well as opportunities for business growth through operational and product stewardship. We also ask each supplier to reduce packaging waste from their facilities, investigate the use of reusable packaging at sites with high volume, follow Lockheed Martin's Sustainable Packaging Guidelines, and identify and share how their company's product lines can assist with our sustainability objectives. Lockheed Martin prescribes Sustainable Packaging Guidelines to all vendors. The criteria blend broad climate objectives with business considerations and strategies that address environmental concerns related to the life cycle of packaging. Packaging has been identified as a large component of Lockheed Martin's waste stream going to landfill. As part of Lockheed Martin's Go Green waste goals, we are encouraging our suppliers to use these Guidelines to improve their packaging solutions. This supports Lockheed Martin's goal to reduce our total annual waste from a 2014 baseline by 7% by 2020, which has already been achieved, and reduce total annual waste per occupant by 11% by 2025. Climate-related issues that have led to opportunities in Lockheed Martin's value chain include the reclamation of precious metals at the end of our product life-cycle
Investment in R&D	Yes	Lockheed Martin invests in R&D that addresses climate risks and opportunities through our Bioinspired Design (BID) program. To further our industry's direction in sustainable science, we are turning to nature for inspiration. Also called biomimicry, BID uses nature's time-tested structures and functions to solve engineering challenges. Nature selects processes that conserve the most material and energy, while avoiding harmful elements. Taking inspiration from biology can lead to more sustainable designs and reduce the product development cycle. As a case study, Lockheed Martin's Advanced Development Programs (ADP) has integrated BID into the Skunk Works® technology and product development process to spark innovation and instill a culture of sustainable product design. In 2019, the Environment, Safety, and Health (ESH) office of ADP funded 13 BID proof-of-concept projects leading to sustainable technology innovation in aircraft noise and drag reduction, lightweight structures, chemical and optical sensors, self-cleaning and pigment-free coatings, biodegradable materials, morphing structures, and more efficient heat transfer. These projects were inspired by a variety of organisms, including birds, insects, plants, and even fungi. BID is opening the design space in critically important new areas, while making engineers more sensitive to the environmental impacts of new products over their life cycles. This BID program aligns with our current Sustainability Management Plan (SMP) core issues, which was extended over five years and will come to a close at the end of 2020. Within the SMP, two of our core issues, Product Impact and Resource Efficiency, address climate risks and opportunities through the research and development of products and services, carbon reduction initiatives, and product eco-innovation, in particular, looks at developing and enhancing our products, taking into account material efficiency, reusability, and use-phase emissions and energy consumption considerations throughout design and development
Operations	Yes	According to life-cycle-based assessments, the biggest environmental impact within our direct business operations relates to energy use and greenhouse gas (GHG) emissions. Although these emissions are small compared to the estimated emissions of our products (70% overall) in use by our customers, we believe that we have a responsibility to operate our own facilities with efficient use of resources and to minimize environmental impacts. Our Go Green program aligns with our ESH Policy objective to reduce environmental, operational, and cost risks in our business practices and facility processes. Each year, teams of energy and water experts across the corporation evaluate potential energy and water savings projects. Based on their findings, we invest significantly to improve our facilities' efficiency. We also partner with the U.S. Department of Energy's Better Plants Program and the U.S. Environmental Protection Agency's ENERGY STAR Program and Green Power Partnership to support our ongoing energy management. Since the inception of our Go Green Program in 2007, we've reduced carbon emissions by more than 45%, energy by 25%, water by 40%, and waste since 2014 by 12%. These reductions are attributed to persistent efforts across the enterprise to improve efficiency gains from a combination of energy and water projects involving HVAC systems, controls, cooling towers, irrigation, and lighting. As our Go Green 2020 goals come to a close, we are looking ahead to even more robust goals. In 2019, we made a substantial strategic decision to address climate risks and opportunities through a new 2030 Go Green Goal to reduce carbon emissions 70% from a 2015 baseline. We have evaluated the applicability of the science-based target methodology and established our own ambitious carbon reduction goal to do our part in holding global temperature increase below 1.5 degrees C. This new goal will not only outperform the science-based target methodology for reducing emissions, but will also support the continued growth of the company

C3.1e

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

	Financial planning elements that have been	Description of influence
	influenced	
Rov 1	costs Capital	Lockheed Martin's Corporate Environment, Safety and Health (ESH) function coordinates a dedicated capital infrastructure fund, referred as the Go Green gated capital program. The time horizon for this fund is reviewed on annual basis. This fund is primarily used to fund major energy projects with the recipient business segment funding the capital depreciation. Each year, business functions are given the opportunity to submit projects across their sites for consideration, submitting project financials that include cost and estimated savings. Energy projects are assessed for return on investment (ROI) for approval and funding. Prior to approval through Corporate management, Corporate ESH reviews each submitted project to ensure they meet the criteria established for use of this fund. Additional energy-related projects are funded at the site and business segment level, using both expense and normal business capital processes. Furthermore, Lockheed Martin has a dedicated budget for the purchase of green power (RECs) to reduce our emissions. In 2018, one of the most substantial business decisions was to approve funding through the gated capital program to complete a solar field at our facility in Moorestown, NJ, which is comprised of over 7,000 solar panels and is expected to produce 3,375 MWh/year. Since 2008, we have installed 13 on-site renewable energy systems, including 12 solar systems and one biomass facility for a total of 9.3 MW of capacity. In 2019, Lockheed Martin spent approximately \$15 million on completed projects and initiatives specifically related to energy efficiency and conservation. We completed 41 energy-efficiency and GHG emissions reductions projects in 2019, which contributed towards a 22% energy reduction and a 39% reduction in attributed GHG emissions. In 2019, Lockheed Martin avoided approximately \$32 million (compared to a 2010 baseline) in energy and water costs through the implementation of similar projects over the years. The implementation of these projects reduces our GHG emissions a

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

C4. Targets and performance

C4.1

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

C4.1a

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

Target reference number

Abs 1

Year target was set

2012

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (location-based)

Base year

2010

Covered emissions in base year (metric tons CO2e)

1271358

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

96

Target year

2020

Targeted reduction from base year (%)

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

826382.7

Covered emissions in reporting year (metric tons CO2e)

771435

% of target achieved [auto-calculated]

112.348483162998

Target status in reporting year

Achieved

Is this a science-based target?

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

Please explain (including target coverage)

Lockheed Martin's absolute target includes Scope 1 and 2 emissions of CO2, CH4, N2O, and HFC from the following sources: electricity generation, natural gas, chilled water, jet fuel, gasoline, diesel, propane, #2 fuel oil, and refrigerants. We define our Go Green year as a twelve-month period from November 1 through October 30 to align with our internal reporting requirements while taking into account time for utility company invoicing. Lockheed Martin takes a comprehensive approach to energy reduction and GHG management. When establishing our reduction targets, we consider past performance, the goals of our primary customers, projected business growth and the material issues of our key stakeholders. We have also evaluated our performance through tools for science-based goal setting approaches including: 1) "Science-Based GHG Performance Model" developed by the Center for Sustainable Organizations (CSO); 2) "Sectoral Decarbonization Approach (SDA) published by the Science Based Targets Initiative (SBTI), Ecofys, CDP, World Wildlife Fund (WWF) and World Resources Institute (WRI); and 3) "The 3% Solution Calculator" developed by CDP, WWF and McKinsey & Company. The outcomes projected by these tools reflect that our targets and performance to date produce stronger results and are more aggressive than the science-based method.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

Other climate-related target(s)

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2015

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: energy carrier

All energy carriers

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

MWh

Target denominator (intensity targets only)

<Not Applicable>

Base year

2018

Figure or percentage in base year

307378

Target year

2019

Figure or percentage in target year

321941

Figure or percentage in reporting year

321941

% of target achieved [auto-calculated]

100

Target status in reporting year

Underway

Is this target part of an emissions target?

Lockheed Martin's commitment through our Sustainability Management Plan to increase our annual renewable energy consumption complements our internal Go Green 2020 commitments to achieve a 35% reduction in carbon emissions and a 25% reduction in energy use by the year 2020, from a 2010 baseline. In 2019, as part of Lockheed Martin's Sustainability Management Plan, we committed to increasing our annual renewable energy consumption. As of 2019 year-end, we have achieved this goal through on-site renewable energy installations, renewable electricity procurement through a 17-year power purchase agreement (PPA) and the purchase of renewable energy certificates (RECs).

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

Lockheed Martin's commitment through our Sustainability Management Plan to increase our annual renewable energy consumption complements our internal Go Green 2020 commitments to achieve a 35% reduction in carbon emissions and a 25% reduction in energy use by the year 2020, from a 2010 baseline. In 2019, as part of Lockheed Martin's Sustainability Management Plan, we committed to increasing our annual renewable energy consumption from 2018. As of 2019 year-end, we have achieved this goal through on-site renewable energy installations, renewable electricity procurement through a 17-year power purchase agreement (PPA) and the purchase of renewable energy certificates (RECs). In 2019, we consumed 321,941 megawatt hours (MWh) of clean energy, comprising 307,782 MWh of renewable energy certificates (RECs) and 14,159 MWh of on-site energy generation. In 2018, we consumed 307,378 MWh of renewable energy. This is an annually reported, company-wide goal.

Target reference number

Low 2

Year target was set

2014

Target coverage

Company-wide

Target type: absolute or intensity

Intensity

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source Renewable energy source(s) only

Target denominator (intensity targets only)

Metric (target numerator if reporting an intensity target)

unit hour worked

Base year

2014

Figure or percentage in base year

2.2

Target year

2020

Figure or percentage in target year

10

Figure or percentage in reporting year

% of target achieved [auto-calculated]

91.025641025641

Target status in reporting year

Underway

Is this target part of an emissions target?

No, Lockheed Martin's voluntary commitment to EPA Green Power Partnership's On-site Renewables Challenge to quadruple our onsite renewable generation to 10 MW by 2020 complements our internal Go Green 2020 commitments to achieve 25% reduction in energy usage and 35% reduction in carbon emissions by the year 2020, from a 2010 baseline

Is this target part of an overarching initiative?

Other, please specify (EPA Green Power Partnership, EPA's Green Power Partnership On-Site Renewables Challenge)

Please explain (including target coverage)

EPA's Green Power Partnership program provides a framework that includes credible usage benchmarks, market information, technical assistance and public recognition to companies and other organizations that use green power. In 2010, Lockheed Martin joined EPA's Green Power Partnership, committing to use green power for a portion of our annual electricity consumption. In 2014, Lockheed Martin committed to the Green Power Partnership's On-site Renewables Challenge which aimed to double the use of onsite green power generated by partners by the end of 2020. Through this challenge, Lockheed Martin has made a pledge to quadruple its on-site renewable generation to 10 MW by the end of 2020. As of 2019, we currently have over 9 MW of capacity of on-site renewable generation and are on track to meet this commitment. Lockheed Martin's voluntary commitment to EPA Green Power Partnership's On-site Renewables Challenge to quadruple our onsite renewable generation to 10 MW by 2020 complements our internal Go Green 2020 commitments to achieve 25% reduction in energy usage and 35% reduction in carbon emissions by the year 2020, from a 2010 baseline. Since 2008, we have installed 13 on-site renewable energy systems, including 12 solar systems and one biomass facility, for a total of 9.3 MW AC of capacity.

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2013

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Low-carbon buildings

Other, please specify (Green building footprint - square foot)

Target denominator (intensity targets only)

<Not Applicable>

Base year

2013

Figure or percentage in base year

1100000

Target year

2019

Figure or percentage in target year

3500000

Figure or percentage in reporting year

3500000

% of target achieved [auto-calculated]

100

Target status in reporting year

Underway

Is this target part of an emissions target?

Since 2013, Lockheed Martin has committed to annually increasing the percentage of our facilities with green building certifications. We will continue to commit to this annual increase through 2020. As of 2019, we operated 24 Leadership in Energy and Environment Design (LEED), one Building Research Establishment Environmental Assessment Method (BREEAM], and nine ENERGY STAR certified buildings, totaling 3.5 million sq. ft. of green buildings. Lockheed Martin's commitment through our SMP to increase our green building footprint complements our internal Go Green 2020 commitments to achieve 25% reduction in energy usage and 35% reduction in carbon emissions by the year 2020, from a 2010 baseline.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

Since 2013, Lockheed Martin has committed to annually increasing the percentage of our facilities company-wide with green building certifications. We will continue to commit to this annual increase through 2020. As of 2019, we operated 24 Leadership in Energy and Environment Design (LEED), one Building Research Establishment Environmental Assessment Method (BREEAM], and nine ENERGY STAR certified buildings, totaling 3.5 million sq. ft. of green buildings. Lockheed Martin's commitment through our SMP to increase our green building footprint complements our internal Go Green 2020 commitments to achieve 25% reduction in energy usage and 35% reduction in carbon emissions by the year 2020, from a 2010 baseline.

Target reference number

Oth 2

Year target was set

2016

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Engagement with customers

Other, please specify (Reduce customers' emissions)

Target denominator (intensity targets only)

<Not Applicable>

Base year

2019

Figure or percentage in base year

1027634

Target year

Figure or percentage in target year

2055268

Figure or percentage in reporting year

1027634

% of target achieved [auto-calculated]

0

Target status in reporting year

Retired

Is this target part of an emissions target?

With the divestiture of our Distributed Energy Solutions Group this year, we have retired this goal and it is no longer attached to any overarching emission target.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

In 2019, through our Sustainability Management Plan, Lockheed Martin committed to helping our energy customers reduce their carbon emissions by at least twice the carbon impact of our business operations. As of 2019, Lockheed Martin's Energy business enabled carbon emissions savings of 1,027,634 MTCO2e for our customers, compared to our operational emissions of 775,997 MTCO2e. With the divestiture of our Distributed Energy Solutions Group this year, we have retired this goal.

Target reference number

Oth 3

Year target was set

2014

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Waste management	Other, please specify (Percentage of total waste reduced)	
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Target denominator (intensity targets only)

<Not Applicable>

Base year

2014

Figure or percentage in base year

1

Target year

2020

Figure or percentage in target year

7

Figure or percentage in reporting year

12

% of target achieved [auto-calculated]

183.33333333333

Target status in reporting year

Achieved

Is this target part of an emissions target?

Lockheed Martin's commitment through our SMP to increase our green building footprint complements our internal Go Green 2020 commitments to achieve 25% reduction in energy usage and 35% reduction in carbon emissions by the year 2020, from a 2010 baseline.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

Since 2014, as part of our 2020 Go Green Goals, Lockheed Martin has committed to reduce total waste generated by 7% from a 2014 baseline. In 2019, we surpassed this goal by reducing our company-wide waste by 12%.

C4.3

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

Yes

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	41	19309
Not to be implemented	0	

C4.3b

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

Initiative category & Initiative type

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

Estimated annual CO2e savings (metric tonnes CO2e)

3346

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1207901

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

3865681

Payback period

4-10 years

Estimated lifetime of the initiative

Please select

Comment

Initiative category & Initiative type

Energy efficiency in buildings

Other, please specify (Building Control System)

Estimated annual CO2e savings (metric tonnes CO2e)

3433

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

573247

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

1266877

Payback period

1-3 years

Estimated lifetime of the initiative

Please select

Comment

In 2019, 8 building control system projects were completed, resulting in an approximate equivalent of 6.8 million kWh of energy savings and nearly \$600,000 in recurring annual cost avoidance. These are voluntary projects that help to reduce Scope 2 emissions by allowing facility managers to more closely monitor and optimize energy use throughout the building.

Initiative category & Initiative type

Energy efficiency in buildings

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

11154

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1738619

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

8418365

Payback period

4-10 years

Estimated lifetime of the initiative

Please select

Comment

In 2019, 13 lighting projects were completed, resulting in an approximate equivalent of 22.9 million kWh of energy savings and more than \$1,700,000 in recurring annual cost avoidance. These are voluntary projects that help to reduce Scope 2 emissions by allowing facility managers to more closely monitor and optimize energy use throughout the building.

Initiative category & Initiative type

Energy efficiency in production processes

Compressed air

Estimated annual CO2e savings (metric tonnes CO2e)

1376

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

348788

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

1542027

Payback period

4-10 years

Estimated lifetime of the initiative

Please select

Comment

Completed compressed air, building envelope and production equipment projects. These are voluntary projects that help to reduce Scope 2 emissions by maintaining the conditions of a dry, heated or cooled indoor environment and facilitating its climate control.

C4.3c

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

Method	Comment
Dedicated budget for energy efficiency	Lockheed Martin's Corporate Environment, Safety and Health (CESH) organization helps facilitate the funding of energy efficiency projects in addition to our business areas' facility improvements, which are allocated in their capital budgets. Each year, business functions are given the opportunity to submit projects across their sites for consideration, submitting project financials that include cost and estimated savings. Energy projects are assessed for return on investment (ROI) for approval and funding. We completed 41 energy efficiency and GHG emissions reduction projects in 2019, resulting in an 22% energy reduction and 39% GHG reduction from 2010 to 2019, and avoiding an estimated \$32 million in costs since 2010. In 2019, Lockheed Martin spent approximately \$15 million on completed projects and initiatives specifically related to energy efficiency and conservation. Furthermore, Lockheed Martin has a dedicated budget for the purchase of green power (i.e. RECs) to reduce our emissions.
Partnering with governments on technology development	We partner with the U.S. Department of Energy's Better Plants Program and the U.S. Environmental Protection Agency's ENERGY STAR Program and Green Power Partnership to support our ongoing energy management. We benefit from the resources, expertise, and valuable peer networking opportunities offered through these partnerships, which help us achieve our energy and carbon reduction goals.
Compliance with regulatory requirements/standards	The Federal Mandatory Greenhouse Gas (GHG) Reporting Rule requires our four largest facilities to report on their GHG emissions. Additionally, state regulations such as California's Global Warming Solutions Act of 2006 (AB32) impact our facilities. Reduction of GHG emissions at these facilities would reduce the regulatory reporting burden; therefore, we prioritize many of our energy reduction projects at these locations as readily achievable reductions that are preferable to burdensome reporting requirements.
Other (Go Green energy and carbon emission reduction goals)	Lockheed Martin's business areas are measured on their performance towards Go Green energy and carbon emission reduction goals. Since 2010, a team of experts including facilities and energy engineers called the Tiger Team has been conducting an in-depth analysis of energy systems across the company to create strategic "get to excellence" plans that are site-specific. In 2019, 11 team improvement sessions were held for business segments to identify projects based on energy use and infrastructure sub-system optimization opportunities. These projects focus on increased performance standards for our buildings and have resulted in significant operational cost avoidance. In 2019, we achieved energy and environmental Design (LEED) as the minimum standard for new construction, renovations, and/or retrofit projects. Lockheed Martin has a Green Building Corporate Functional Procedure that requires implementation of green building practices in the design, construction and operations of owned or commercially leased Lockheed Martin facilities. The design, construction or renovation of a facility requires the use of latest green-building technologies that meets the ANSI/ASHRAE/IESNA Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings. For existing buildings, installation of equipment should be life cycle cost effective and reduce the energy consumption for the building. The purpose of this procedure is to establish requirements for implementing green building practices in the design, construction and operations of all Lockheed Martin facilities and to meet the Corporation's goals on increasing our green footprint. From our 2013 baseline year to 2019, Lockheed Martin more than tripled our green footprint through Energy Star®, LEED and BREEAM certifications.
Employee engagement	Throughout the year, Lockheed Martin encourages employee education and awareness regarding energy conservation initiatives including simple solutions such as turning off lights, computers and equipment and lowering thermostats. Each month the Corporate Sustainability Office hosts lunch and learn sessions available for all employees to attend live or watch the recording on demand. Topics such as renewable energy, energy conservation, and sustainable actions promote emissions reductions and sustainable education for our employees at work and home. During "Earth Month" every April and Energy Awareness Month every October, we highlight internal case studies about energy conservation and renewable energy across the company. Lockheed Martin CESH releases regular employee communications describing the importance of being conscious of energy usage and implementing projects that conserve energy. The current focus of emission reduction activities is on the largest energy consuming equipment within facilities (i.e., heating, ventilation and air conditioning (HVAC) systems and lighting). All employees are eligible for internal recognitions Spot Award and SRA's at management's discretion, recognizing excellent performance. Furthermore, Lockheed Martin presented the 2019 ESH Excellence Awards to select employees based on qualities such as superiority in customer satisfaction, leadership, application of technology, tools/processes that improve efficiency and productivity, benchmarking and best practices, and affordability.

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

Energy Management (until Nov. 2019) Lockheed Martin's Energy business (LM Energy) partners with government, industrial and commercial customers to manage energy efficiency projects to ensure our customers conserve energy, increase operational efficiencies and maximize capital spending. We help federal agencies reduce energy costs and environmental impact without up-front capital spending and are an approved U.S. Department of Energy Super Energy Savings Performance Contract. In 2019, single year gross energy savings for our Utility customer programs were 1.5 million MWh and 8,413,627 therms. Also in 2019, Lockheed Martin Energy enabled carbon emissions savings of 1,027,634 MTCO2e for our customers, reducing their Scope 2 emissions. Energy Storage We provide turnkey energy storage systems for commercial, industrial, and utility applications using our GridStar energy storage systems. Since 2017, we have installed over 100 MWh of energy storage across the U.S. and Canada. We are also developing a durable, flexible, and distributed storage required for large-scale energy storage.— GridStar Flow, which is an innovative redox flow battery designed to be a durable, flexible, scalable, and safe long-duration energy storage solution. Nuclear Energy We provide instrumentation and control systems to ensure safety of commercial and government nuclear power programs and are the leading provider of safety-critical nuclear instrumentation & control systems for commercial and Department of Defense Customers. Our systems are currently operating aboard all U.S. Navy submarines and aircraft carriers deployed worldwide.

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

Low-carbon product and avoided emissions

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

Other, please specify (EPA)

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

0.3

% of total portfolio value

<Not Applicable>

Asset classes/ product types

<Not Applicable>

Comment

As of November 2019, LM Energy divested itself of our Energy Management services to focus on energy products designed to support the needs of the Department of Defense. Gridstar was not a part of this sale.

C5. Emissions methodology

C5.1

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

Scope 1

Base year start

November 1 2009

Base year end

October 31 2010

Base year emissions (metric tons CO2e)

346734

Comment

Scope 2 (location-based)

Base year start

November 1 2009

Base year end

October 31 2010

Base year emissions (metric tons CO2e)

1096826

Comment

Our combined Scope 1 and 2 emissions for our baseline year are calculated using the location-based method, net of carbon from RECs, which we consider to be a market-based accounting method at the time of our base year's calculation. However, as reported in 4.1a, our combined Scope 1 and 2 (market-based) emissions are 1,271,358 MTCO2e (346,734 Scope 1 MTCO2e + 1,096,826 Scope 2 MTCO2e - 172,202 MTCO2e avoided from RECs)

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

305362

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

Lockheed Martin's GHG reduction target is to reduce absolute Scope 1& 2 emissions by 35% by 2020 measured from a 2010 baseline. We report emissions data for our largest active 79 facilities in the United States, United Kingdom, Poland, Canada, Australia and Mexico. The combined Scope 1 and 2 emissions data in our Sustainability Report was calculated using The Greenhouse Gas Protocol's market-based methodology for scope 2, which reflects emissions net of unbundled RECs, off-site power Purchase Agreements and on-site renewable energy generation.

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?

Reporting year

Scope 2, location-based

662659

Scope 2, market-based (if applicable)

466073

Start date

<Not Applicable>

End date

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

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

7700000

Emissions calculation methodology

In 2016, we conducted an analysis to estimate the environmental impacts across our entire value chain. We completed an economic input-output life cycle assessment (EIO-LCA) of our supply chain, our own facilities, and the use of our most material products and services to understand and prioritize the environmental issues that may have the most impact on our business. This LCA is a comprehensive analysis of our overall footprint, including the emissions attributed to our supply chain associated with purchased goods and services. For this category, we compiled 12 months of supplier spend, assigned a NAICS classification to each vendor and estimated the global warming potentials from multiple environmental and social impact categories.

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

100

Please explain

Purchased goods and services are calculated based on annual supplier spend (\$US) and classification by NAICS code. Those NAICS codes representing capital goods are excluded from this calculation.

Capital goods

Evaluation status

Relevant, calculated

Metric tonnes CO2e

370000

Emissions calculation methodology

In 2016, we conducted an analysis to estimate the environmental impacts across our entire value chain. We completed an economic input-output life cycle assessment (EIO-LCA) of our supply chain, our own facilities, and the use of our most material products and services to understand and prioritize the environmental issues that may have the most impact on our business. This LCA is a comprehensive analysis of our overall footprint, including the emissions attributed to our supply chain associated with purchased goods and services, and capital goods classified by NAICS code. For this category, we compiled 12 months of supplier spend, assigned a NAICS classification to each vendor and estimated the global warming potentials from multiple environmental and social impact categories.

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

100

Please explain

Capital goods are classified based on NAICS code as part of the data included in the Purchased Goods and Services emissions category described above.

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

Evaluation status

Relevant, calculated

Metric tonnes CO2e

105000

Emissions calculation methodology

Lockheed Martin calculated the estimates of the transportation and distribution loss associated with the delivery of electricity and natural gas from the utility to our facilities. We calculated the transmission and distribution (T&D) losses associated with electricity using the country-specific factors provided by World Bank, "Electric power transmission and distribution losses (% of output), 2011-2015." T&D losses associated with natural gas were calculated using the 4.7% loss factor provided by the EIA.

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

100

Please explain

Our Scope 3 emissions for this category increased because we used more electricity and natural gas in reporting year 2019 than in reporting year 2018.

Upstream transportation and distribution

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

60000

Emissions calculation methodology

A previous analysis evaluated upstream transportation of materials to and from our facilities from 15 of our largest transportation vendors representing approximately 62% of our total transportation by spend. Lockheed Martin directly contacted our transportation vendors to receive information about their emissions. Transportation vendors provided MTCO2e/Year or Miles Travelled/Year associated with Lockheed Martin shipments. If the transportation vendor did not directly provide emissions data, we utilized EPA's SmartWay emission rates for vendors and applied these rates to their Miles Travelled/Year. EPA's SmartWay Partners fleet emissions rates are found at: https://www3.epa.gov/smartway/forpartners/performance.htm

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

62

Please explain

The amount of transportation and delivery both from suppliers and to customers is very small and is considered de minimis for Scope 3 reporting purposes. Previous analysis revealed that this category represents less than 0.5% of total emissions.

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

4500

Emissions calculation methodology

Emissions associated with operational waste generation are calculated using the U.S. EPA's WARM calculator. These emissions are reported as part of Scope 3 GHG emissions. The EPA WARM calculator also estimates Lockheed Martin's avoided emissions derived from recycling initiatives, which are approximately 77,395 MTCO2e.

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

100

Please explain

Decreased compared to 2018 (which included one time disposal activities).

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

190000

Emissions calculation methodology

Rental car mileage data are obtained from our corporate approved car rental agency. Airline emissions are obtained from our corporate travel provider. The emissions are calculated based on the GHG protocol. NOTE: This data includes air travel for all of Lockheed Martin's business areas during 2019 plus additional services such as business relocation and recruiting.

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

100

Please explain

Our Scope 3 emissions for this category increased because of an increase in business travel in 2019.

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

215000

Emissions calculation methodology

Emissions associated with employee commuting are estimated using a zip code analysis of the distance between our employees' home and assigned work location, for U.S. employees only. Telecommuters are not included in this estimate. The total daily distance is multiplied by an estimated 240 work days per year. We assume an average of 23.4 mpg based on U.S. Energy Information Administration "Annual Energy Review 2012, Table 2.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy, Selected Years, 1949-2012, Miles per Gallon for All Vehicles in 2013." We estimate the emissions from the total miles travelled per year using the EPA Mandatory Reporting Rule gasoline emission factor for MTCO2.

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

100

Please explain

Our Scope 3 emissions for this category increased because of an increase in the number of employees who commuted

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Leased assets are included in Lockheed Martin's Scope 1 and 2 emissions data in accordance with the operational control boundary.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Lockheed Martin manages the delivery of products and services directly to the customer. The amount of deliveries of products handled by the customer is extremely small and is considered de minimis for Scope 3 reporting purposes.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Lockheed Martin primarily acts as the final point in the manufacturing and assembly of products before delivery to the customer. This category would apply to our upstream supply chain.

Use of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

22000000

Emissions calculation methodology

In 2016, we conducted an analysis to estimate the environmental impacts across our entire value chain. We completed an economic input-output life cycle assessment (EIO-LCA) of our supply chain, our own facilities, and the use of our most material products and services to understand and prioritize the environmental issues that may have the most impact on our business. This LCA is a comprehensive analysis of our overall footprint, including the emissions attributed to our supply chain associated with purchased goods and services. For this category, we compiled 12 months of supplier spend, assigned a NAICS classification to each vendor and estimated the global warming potentials from multiple environmental and social impact categories.

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

100

Please explain

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Because of sensitive technology and impact to national security, end-of-life treatment is tightly dictated by the customer. Our platforms are typically durable goods with long lifespans of decades or more.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Lockheed Martin maintains several LMC-owned properties with portions of the space leased to other tenants. Because of the limited percentage of area represented by such examples, Lockheed Martin does not calculate emissions data for these tenants and consider it to be a relevant scope 3 emission category. Other leased assets (i.e., products) do not make up a measurable percentage of annual revenue at Lockheed Martin.

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Lockheed Martin does not own or operate any franchises.

Investments

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Lockheed Martin is not a financial institution and therefore does not meet the relevancy as stated in the Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

Other (upstream)

Evaluation status

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

Other (downstream)

Evaluation status

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Please explain

C-CG6.6

(C-CG6.6) Does your organization assess the life cycle emissions of any of its products or services?

	Assessment of life cycle emissions	Comment
Row 1		We conducted life-cycle assessment case studies on three products, identifying cost savings of \$764.5 million versus business-as-usual scenarios. These results bring our cumulative modeled life-cycle cost savings to \$1.34 billion, achieving our goal of \$1 billion by 2020. As a defense contractor, we balance our customers' needs through efforts such as Design for Alfordability, which is an initiative to reduce total life-cycle costs of our products while preserving and even enhancing mission capabilities. Furthermore, as our life-cycle-based assessments have estimated that approximately 70% of the GHG impacts of our products are in the customer-use phase, we have developed three SMP goals to address GHG reductions in our products to focus on the greatest area of our impact. We innovate renewable and high-efficiency energy systems that reduce costs and carbon emissions for our customers and when possible, we pilot energy-saving products at our facilities to reduce energy consumption and showcase the value of these solutions. In 2016, we conducted an analysis to estimate the environmental impacts across our entire value chain. We completed an economic input-output life cycle assessment (EIO-LCA) of our supply chain, our own facilities, and the use of our most material products and services to understand and prioritize the environmental issues that may have the most impact on our business. This LCA is a comprehensive analysis of our overall footprint, including the emissions attributed to our supply chain associated with purchased goods and services. For this category, we compiled 12 months of supplier spend, assigned a NAICS classification to each vendor and estimated the global warming potentials from multiple environmental impacts across our entire value chain. We completed an economic input-output life cycle assessment (EIO-LCA) of our supply chain, our own facilities, and the use of select products and services to understand and prioritize the environmental issues that may have the most impact on our business.

C-CG6.6a

(C-CG6.6a) Provide details of how your organization assesses the life cycle emissions of its products or services.

Products/services assessed Life cycle stage(s) most commonly covered Methodologies/standards/tools applied Commen					
	FIDUUCIS/SEI VICES ASSESSEU	Life Cycle Stage(S) most commonly covered	Methodologies/standards/tools applied	Comment	
Row 1	On a case-by-case basis	Cradle-to-gate	ISO 14040 & 14044		

C6.7

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

Yes

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

	CO2	Comment
	emissions	
	from biogenic	
	carbon (metric	
	tons CO2)	
Row	11861	The Lockheed Martin facility in Owego, New York operates a combined heat and power system (back pressure turbine) fueled by biomass that provides self-generation of electric power using
1		the existing main steam system. The metric tonnes of CO2e released in 2019 were calculated based on the volume of wood burned (11,668 tons) with an estimated moisture content of 38%.
		Calculations were performed according to U.S. 40 CFR 98 - Greenhouse Gas Reporting, Tables A-1 (Global Warming Potentials), C-1 (Default CO2 Emission Factors and High Heat Values
		for Various Types of Fuel) and C-2 (Default CH4 and N2O Emission Factors for Various Types of Fuel).

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

8.8

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

968021

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

110000

Scope 2 figure used

Location-based

% change from previous year

4.24

Direction of change

Decreased

Reason for change

Lockheed Martin's employee population increased from 105,000 in 2018 to 110,000 in 2019. During this period, our total location based Scope 1 and 2 emissions increased at a lesser rate; therefore the intensity metric of MTCO2e per FTE employee decreased. Reduction in Scope 1 and 2 carbon emissions is also partially due to energy reduction initiatives and efficiency improvements within our manufacturing facilities, data centers and offices. For example, in 2019, we implemented 41 energy efficiency and carbon reduction products including HVAC, lighting, building control systems, and retro-commissioning. These projects result in an annual energy reduction of an estimated equivalent of 45 million kWh, with an estimated \$3.9 million in recurring annual cost avoidance. In 2019, we achieved the ENERGY STAR Challenge for Industry at our Rotary and Mission Systems (RMS) Troy facility by reducing energy consumption 23% in just one year.

Intensity figure

0.136

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

968021

Metric denominator

square foot

Metric denominator: Unit total

71400000

Scope 2 figure used

Location-based

% change from previous year

1.22

Direction of change

Decreased

Reason for change

Lockheed Martin's square footage increased by approximately 2% from 2018 to 2019 while Scope 1 and 2 carbon emissions also increased over the same period by a lesser rate. We are consolidating facilities where possible to support cost reduction initiatives. Reduction in carbon emissions is also partially due to energy reduction initiatives and efficiency improvements within our manufacturing facilities, data centers and offices. For example, in 2019, we implemented 41 energy efficiency and carbon reduction products including HVAC, lighting, building control systems, and retro-commissioning. These projects result in an annual energy reduction of an estimated equivalent of 45 million kWh, with an estimated \$3.9 million in recurring annual cost avoidance. In 2019, we achieved the ENERGY STAR Challenge for Industry at our Rotary and Mission Systems (RMS) Troy facility by reducing energy consumption 23% in just one year.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	300595	IPCC Second Assessment Report (SAR - 100 year)
CH4	206	IPCC Second Assessment Report (SAR - 100 year)
N2O	438	IPCC Second Assessment Report (SAR - 100 year)
HFCs	4124	IPCC Second Assessment Report (SAR - 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)
Australia	0
Canada	1645
Mexico	0
Poland	1461
United Kingdom of Great Britain and Northern Ireland	181
United States of America	302074

C7.3

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

By business division

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Aeronautics	136980
Enterprise Operations	14978
Missiles and Fire Control	20768
Rotary and Mission Systems	84201
Space	48435

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Chemicals production activities	Chemicals production activities <not applicable=""> <n< td=""><td><not applicable=""></not></td></n<></not>		<not applicable=""></not>
Coal production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Electric utility activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Metals and mining production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Oil and gas production activities (upstream)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Oil and gas production activities (midstream)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Oil and gas production activities (downstream)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Steel production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Transport OEM activities		<not applicable=""></not>	
Transport services activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>

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)	1 ' '		Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Australia	980	980	1227	0
Canada	2170	2170	14461	0
Mexico	817	817	1613	0
Poland	7735	7735	10058	0
United Kingdom of Great Britain and Northern Ireland	2291	2291	5560	0
United States of America	648667	452080	1544626	321941

C7.6

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

By business division

C7.6a

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

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Aeronautics 234986 16		162345
Enterprise Operations	32776	13130
Missiles and Fire Control	134417	133995
Rotary and Mission Systems	116410	99419
Space	144070	57184

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Chemicals production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Coal production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Metals and mining production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Oil and gas production activities (upstream)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Oil and gas production activities (midstream)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Oil and gas production activities (downstream)	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Steel production activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Transport OEM activities			
Transport services activities	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>

C-TO7.8

(C-TO7.8) Provide primary intensity metrics that are appropriate to your indirect emissions in Scope 3 Category 11: Use of sold products from transport.

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)		Emissions value (percentage)	Please explain calculation	
Change in renewable energy consumption	250	Decreased	0.03	In 2019, we increased our renewable energy consumption by approximately 14,000 MWh as compared to 2018. Through our market-based emissions calculations, we determined that this renewable energy use translated to a 250 MTCO2e reduction. Given that our total Scope 1 and Scope 2 (market-based) emissions in 2018 was 819,548 MTCO2e, the change in our renewable energy consumption represented a 0.03% decrease in total Scope 1 and Scope 2 (market-based) emissions from 2018 to 2019 (250 MTCO2e / 819,548 MTCO2e = 0.03%).	
Other emissions reduction activities	48113	Decreased	6	Lockheed Martin's absolute Scope 1 and 2 emissions have decreased from 2018 to 2019 due to projects and initiatives that improve energy efficiency and reduce consumption. These projects and initiatives include building services, processes, and building fabric efficiency improvements at facilities over which we have operational control. We calculate our emissions reductions by comparing our change in Scope 1 and 2 emissions from 2018 to 2019. In 2018, our Scope 1 (291,782) and 2 (527,766) market-based emissions totaled 819,548 MTCO2e and in 2019, our Scope 1 (305,362) and 2 (466,073) market-based emissions totaled 771,435 MTCO2e. The difference in our emissions from 2018 to 2019 is 48,113 MTCO2e, which we attribute to emissions reductions activities because there were no other significant changes as a result of divestment, acquisitions, mergers; or changes in output, methodology, boundary, and physical operating conditions. Therefore, we arrive at a 6% decrease in total Scope 1 and 2 emissions from 2018 to 2019 through ((819,548 - 771,435)/ 819,548) *100 = 6%.	
Divestment		<not Applicable ></not 			
Acquisitions		<not Applicable</not 			
Mergers		<not Applicable ></not 			
Change in output		<not Applicable ></not 			
Change in methodology		<not Applicable ></not 			
Change in boundary		<not Applicable ></not 			
Change in physical operating conditions		<not Applicable ></not 			
Unidentified		<not Applicable ></not 			
Other		<not Applicable ></not 			

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?

Market-based

C-CG7.10

(C-CG7.10) How do your total Scope 3 emissions for the reporting year compare to those of the previous reporting year? Remained the same overall

(C-CG7.10a) For each Scope 3 category calculated in C6.5, specify how your emissions compare to the previous year and identify the reason for any change.

Purchased goods and services

Direction of change

No change

Primary reason for change

<Not Applicable>

Change in emissions in this category (metric tons CO2e)

<Not Applicable>

% change in emissions in this category

<Not Applicable>

Please explain

Our Scope 3 emissions for this category remained the same because there was no change in our methodology. We estimated our emissions from purchased goods and services as part of a larger LCA we conducted through a third-party model.

Capital goods

Direction of change

No change

Primary reason for change

<Not Applicable>

Change in emissions in this category (metric tons CO2e)

<Not Applicable>

% change in emissions in this category

<Not Applicable>

Please explain

Our Scope 3 emissions for this category remained the same because there was no change in our methodology. We estimated our emissions from purchased goods and services as part of a larger LCA we conducted through a third-party model.

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

Direction of change

Increased

Primary reason for change

Change in output

Change in emissions in this category (metric tons CO2e)

14464

% change in emissions in this category

16

Please explain

Our Scope 3 emissions for this category increased because we added fuel and energy related activities across our operational footprint.

Upstream transportation and distribution

Direction of change

No change

Primary reason for change

<Not Applicable>

Change in emissions in this category (metric tons CO2e)

<Not Applicable>

% change in emissions in this category

<Not Applicable>

Please explain

Our Scope 3 emissions for this category remained the same because there was no change in our methodology. We estimated our emissions from upstream transportation and distribution from a previous analysis using EPA SmartWay emissions rates for our transportation vendors and applied these rates to miles traveled per year.

Waste generated in operations

Direction of change

Decreased

Primary reason for change

Change in material efficiency

Change in emissions in this category (metric tons CO2e)

5971

% change in emissions in this category

57

Please explain

Our Scope 3 emissions for this category decreased because of a decrease in materials required to be landfilled from operations, an increase in recycling and a decrease in total waste generation. Because there is less waste being landfilled and incinerated, there are less emissions associated with operational waste generation.

Business travel

Direction of change

Increased

Primary reason for change

Change in output

Change in emissions in this category (metric tons CO2e)

15618

% change in emissions in this category

α

Please explain

Our Scope 3 emissions for this category increased due to additional miles being traveled for business as well as more employees traveling overall.

Employee commuting

Direction of change

Increased

Primary reason for change

Change in output

Change in emissions in this category (metric tons CO2e)

5897

% change in emissions in this category

3

Please explain

Our Scope 3 emissions for this category increased due to the increase in total number of employees, resulting in more employees commuting.

Use of sold products

Direction of change

No change

Primary reason for change

<Not Applicable>

Change in emissions in this category (metric tons CO2e)

<Not Applicable>

% change in emissions in this category

<Not Applicable>

Please explain

Our Scope 3 emissions for this category remained the same because there was no change in our methodology. We estimated our emissions from purchased goods and services as part of a larger LCA we conducted through a third-party model.

C8. Energy

C8.1

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

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

C8.2

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

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

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	1564189	1564189
Consumption of purchased or acquired electricity	<not applicable=""></not>	307782	1553292	1861074
Consumption of purchased or acquired heat	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of purchased or acquired steam	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of purchased or acquired cooling	<not applicable=""></not>	0	24252	24252
Consumption of self-generated non-fuel renewable energy	<not applicable=""></not>	14159	<not applicable=""></not>	14159
Total energy consumption	<not applicable=""></not>	321941	3141733	3463674

C8.2b

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

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

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

1275001

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

1055133

MWh fuel consumed for self-generation of steam 0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

219868

Emission factor

0.05311

Unit

metric tons CO2e per million Btu

Emissions factor source

U.S. EPA Mandatory Reporting Rule, 40 CFR 98 Subpart C, Table C-1, C-2

Commen

Lockheed Martin's natural gas consumption may be used for facility heating purposes

Fuels (excluding feedstocks)

Fuel Oil Number 2

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

4461

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

 $\label{eq:mwh} \mbox{MWh fuel consumed for self-generation of steam}$

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

Emission factor

0.00271

Unit

metric tons CO2e per liter

Emissions factor source

U.S. EPA Mandatory Reporting Rule, 40 CFR 98 Subpart C, Table C-1, C-2 (converted from MTCO2e per gallon to MTCO2e per liter)

Lockheed Martin's #2 fuel oil consumption may be used for facility heating purposes

Fuels (excluding feedstocks)

Propane Liquid

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

Emission factor

0.00152

Unit

metric tons CO2 per liter

Emissions factor source

U.S. EPA Mandatory Reporting Rule, 40 CFR 98 Subpart C, Table C-1, C-2 (converted from MTCO2 per gallon to MTCO2 per liter).

Comment

Lockheed Martin's propane consumption may be used for heating purposes and in our labs. Although we track total consumption, we are unclear of all its consumption purposes across our facilities.

Fuels (excluding feedstocks)

Jet Gasoline

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

222781

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

Emission factor

0.00258

Unit

metric tons CO2 per liter

Emissions factor source

U.S. EPA Mandatory Reporting Rule, 40 CFR 98 Subpart C, Table C-1, C-2 (converted from MTCO2 per gallon to MTCO2 per liter).

Comment

CDP

Fuels (excluding feedstocks)

Motor Gasoline

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

16080

MWh fuel consumed for self-generation of electricity

_

MWh fuel consumed for self-generation of heat

Λ

MWh fuel consumed for self-generation of steam

^

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

0.00232

Unit

metric tons CO2 per liter

Emissions factor source

U.S. EPA Mandatory Reporting Rule, 40 CFR 98 Subpart C, Table C-1, C-2 (converted from MTCO2 per gallon to MTCO2 per liter).

Comment

Lockheed Martin's motor gasoline consumption is related to mobile combustion (e.g., use of various vehicles across our facilities) and does not apply to our energy consumption in CDP's predefined fields of electricity, heat, steam, cogeneration/trigeneration.

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

11087

$\begin{tabular}{ll} MWh fuel consumed for self-generation of electricity \\ 0 \end{tabular}$

.

MWh fuel consumed for self-generation of heat

U

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

U

Emission factor

0.0027

Unit

metric tons CO2 per liter

Emissions factor source

U.S. EPA Mandatory Reporting Rule, 40 CFR 98 Subpart C, Table C-1, C-2 (converted from MTCO2 per gallon to MTCO2 per liter).

Comment

Lockheed Martin's diesel consumption is related to mobile combustion (e.g. use of various vehicles across our facilities) and does not apply to our energy consumption in CDP's predefined fields of electricity, heat, steam, cogeneration/trigeneration.

Fuels (excluding feedstocks)

Wood

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

750

MWh fuel consumed for self-generation of electricity

750

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

Ω

Emission factor

93.8

Unit

kg CO2 per million Btu

Emissions factor source

U.S. EPA Mandatory Reporting Rule, 40 CFR 98 Subpart C, Table C-1, C-2

Commen

Lockheed Martin's wood consumption used for facility heating purposes

C8.2d

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

	,			Generation from renewable sources that is consumed by the organization (MWh)
Electricity	234026	234026	14159	14159
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

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

Sourcing method

Power purchase agreement (PPA) with a grid-connected generator with energy attribute certificates

Low-carbon technology type

Solar

Country/region of consumption of low-carbon electricity, heat, steam or cooling

United States of America

MWh consumed accounted for at a zero emission factor

62392

Comment

In June 2016 Lockheed Martin became the off-taker of 30 MW from a solar power purchase agreement in North Carolina. The Renewable Energy Certificates (REC's) produced from this project contribute to the company's energy mix.

Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, not supported by energy attribute certificates

Low-carbon technology type

Solar

Country/region of consumption of low-carbon electricity, heat, steam or cooling

United States of America

MWh consumed accounted for at a zero emission factor

1800

Comment

Participate in green tariff program for our Palmdale, CA facility that receives Renewable Energy Certificates (RECs).

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Wind

Country/region of consumption of low-carbon electricity, heat, steam or cooling

United States of America

MWh consumed accounted for at a zero emission factor

243590

Comment

Lockheed Martin purchases green power in the form of unbundled Renewable Energy Certificates (RECs).

C-CG8.5

(C-CG8.5) Does your organization measure the efficiency of any of its products or services?

	Measurement of product/service efficiency	Comment
Row 1		Our enterprise-wide Logistics and Sustainment community has always embraced Design for Sustainability principles to reduce total cost of ownership for our customers, while achieving long-term performance objectives and mission readiness. Close to 70% of a product's life-cycle costs can be influenced during the initial engineering design phase. We implement designs that drive affordability and look to augment proven systems engineering techniques by incorporating circular economy principles where possible. Our goal is to help our customers achieve their vision, while balancing competing priorities in a smart and sustainable way. Our Design for Sustainability approach includes: • Promoting high reliability to drive down customer operating costs through reduced repair and maintenance needs. • Designing efficient maintenance solutions to reduce the need for manpower and support equipment maintainability. • Leveraging automated fault detection and isolation methods to enable self-monitoring technology that evaluates its own health. • Employing materials and coatings that minimize post-production environmental impacts while driving down life-cycle costs. • Enhancing the commonality between technology solutions to drive procurement and supply support efficiencies. • Utilizing Human Factors Engineering to develop user-centered design solutions that optimize safe system operation and maintenance. • Evaluating and reducing Environment, Safety, and Health (ESH) risks to people, the environment, and equipment. Managing energy requirements to enable load sharing and advanced technologies, such as solar, when appropriate. • Preventing and controlling corrosion of our technologies to ensure longevity in austere environments.

C-CG8.5a

(C-CG8.5a) Provide details of the metrics used to measure the efficiency of your organization's products or services. Category of product or service Other, please specify (Manufactured products) Product or service (optional) % of revenue from this product or service in the reporting year Efficiency figure in the reporting year **Metric numerator** Other, please specify (\$) Metric denominator Not applicable Comment As part of Lockheed Martin's Sustainability Management Plan, we have a goal to generate \$1 billion in modeled life-cycle cost reductions from manufactured products related to the use of resource and impacts on human health and the environment. Such life-cycle cost reductions stem from efficiencies that include, designing efficient maintenance solutions to reduce the need for manpower and support equipment maintainability, enhancing the commonality between technology solutions to drive procurement and supply support efficiencies, employing materials and coatings that minimize post production environmental impacts while driving down life-cycle costs, and managing energy requirements to enable load sharing and advanced technologies, such as solar, when appropriate. In 2018, we exceeded our goal of cumulative modeled life-cycle cost savings of \$1.34 billion. In 2019, we adapted our life-cycle assessment capabilities to other programs such as supply chain impact and chemical stewardship. Total life cycle cost reduction is a combination of internal and external cost. The external costs are calculated utilizing LCA methodology that takes into account environmental and social impacts, such as water quality, carbon emissions, and water quality. In the 2019 reporting year, the percentage of revenue is 0% and efficiency figure in the reporting year is \$0 because the lifecycle-cost efficiency analyses performed in 2019 were operational-focused related to our F-35 production and manufacturing technologies. C-TO8.5 (C-TO8.5) Provide any efficiency metrics that are appropriate for your organization's transport products and/or services.

C9. Additional metrics

C9.1

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

Description

Energy usage

Metric value

321000

Metric numerator

Metric denominator (intensity metric only)

% change from previous year

4.5

Direction of change

Increased

Please explain

We consumed 321,000 megawatt hours (MWh) of clean energy, comprising 243,590 MWh of renewable energy certificates (RECs) and 77410MWh of on-site energy generation. In 2018, we consumed 307,000 MWh of renewable energy.

Description

Other, please specify (Green Buildings)

Metric value

3500000

Metric numerator

Metric denominator (intensity metric only)

% change from previous year

3

Direction of change

Increased

Please explain

We operated 20 Leadership in Energy and Environmental Design (LEED), 1 Building Research Establishment Environmental Assessment Methodology (BREEAM) and 9 Energy Star-certified buildings totalling 3.5 million square feet of green buildings, an increase of 3 percent over our adjusted 2018 total.

Description

Other, please specify (Customer Carbon Savings)

Metric value

1.34

Metric numerator

1027634

Metric denominator (intensity metric only)

775997

% change from previous year

0

Direction of change

No change

Please explain

Lockheed Martin Energy enabled carbon emissions savings of 1,027,634 metric tonnes of carbon dioxide equivalent (MTCO2e) for our customers, compared to our operational emissions, net of RECs, of 775997 MTCO2e. In 2020 Lockheed Martin will no longer track this metric as the source of our service-based customer savings was part of a divestiture transaction in Nov. 2019. These figures represent our performance to that point in time.

C-TO9.3/C-TS9.3

(C-TO9.3/C-TS9.3) Provide tracking metrics for the implementation of low-carbon transport technology over the reporting year.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment	Comment
	in low-	
	carbon	
	R&D	
Row 1	Yes	The mission of Lockheed Martin's Ventures business element is to make strategic investments in companies that are developing disruptive, cutting-edge technologies in core businesses and new markets important to Lockheed Martin. These emerging innovations have the potential to become foundational technologies that solve the complex challenges our customers face. Lockheed Martin Ventures includes energy and power systems within its areas of interest, as well as autonomous systems and robotics, cyber security, space technologies, advanced communications and sensors, undersea technologies, data analytics, artificial intelligence and machine learning, NextGen electronics, and advanced materials and manufacturing. At the Advanced Technologies Center (ATC), innovation extends beyond incremental change. The ATC is comprised of the research labs for Lockheed Martin Space. It pushs for first-of-a-kind capability with enduring impact. Whatever the application, the ATC charter is to create game-changing technologies. The ATC creates foundational technologies that inspire, protect and connect our world. Its history goes back to 1956, founded in Palo Alto, California, helping seed what would become Silicon Valley. Today, the ATC still carries on the legacy that started our labs, like the very beginnings of solar science and rocket technology (even underwater). It continues to evolve and lead the way in new realms, like lasers, nanomaterials and informatics. The Advanced Technology Laboratories (ATL) is a Lockheed Martin applied research and development center. Aligned with the Corporation's Chief Technology Officer, the ATL works to advance scientific discovery and technology transition in human systems, robotics and autonomy, spectrum systems, data analytics and more. It is in the business of turning emerging ideas into new technologies for our customers. It embraces the diversity of thought, collaborating with some of the best and brightest in government, industry and academia. The ATL partners with U.S. government service

C-CG9.6a

(C-CG9.6a) Provide details of your organization's investments in low-carbon R&D for capital goods products and services over the last three years.

Technology area

Unable to disaggregate by technology area

Stage of development in the reporting year

<Not Applicable>

Average % of total R&D investment over the last 3 years

≤20%

R&D investment figure in the reporting year (optional)

Comment

Since 2007, we have invested more than \$100 million in start-up companies.

C-TO9.6a/C-TS9.6a

(C-TO9.6a/C-TS9.6a) Provide details of your organization's investments in low-carbon R&D for transport-related activities over the last three years.

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 emissions, and attach the relevant statements.

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

DNV GL_2020.pdf

Page/ section reference

Page 3

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

100

C10.1b

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

Scope 2 approach

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

DNV GL_2020.pdf

Page/ section reference

Page 3

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

100

C10.1c

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

Scope 3 category

Scope 3: Purchased goods and services

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

DNV GL_2020.pdf

Page/section reference

Page 3

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

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

DNV GL_2020.pdf

Page/section reference

Page 3

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Capital goods

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

DNV GL_2020.pdf

Page/section reference

Page 3

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

Scope 3 category

Scope 3: Waste generated in operations

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

DNV GL_2020.pdf

Page/section reference

Page 3

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

Scope 3 category

Scope 3: Business travel

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

DNV GL_2020.pdf

Page/section reference

Page 3

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

Scope 3 category

Scope 3: Employee commuting

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

DNV GL_2020.pdf

Page/section reference

Page 3

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

Scope 3 category

Scope 3: Use of sold products

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

DNV GL_2020.pdf

Page/section reference

Page 3

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

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	Progress against emissions reduction target	Our assurance engagement was planned and carried out in accordance with AA1000 Assurance Standard (AA1000 AS), using DNV GL's VeriSustain methodology. VeriSustain is based on international assurance best practice including AA1000AS, International Standard on Assurance Engagements 3000 (ISAE 3000) and the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines.	We evaluated the adherence to the AA1000AS (2008) principles of inclusivity, materiality and responsiveness (the Principles) and followed the procedures as outlined in the VeriSustain protocol to complete the project. We used the Global Reporting Initiative (GRI) Quality of Information Principles (Balance, Clarity, Accuracy, Reliability, Timeliness and Comparability) as criteria for evaluating performance information, together with Lockheed Martin's data protocols for how the data are measured, recorded and reported. Please see 2019 Assurance statement provided by DNV GL on our sustainability website for more information.
C6. Emissions data	Progress against emissions reduction target	Our assurance engagement was planned and carried out in accordance with AA1000 Assurance Standard (AA1000 AS), using DNV GL's VeriSustain methodology. VeriSustain is based on international assurance best practice including AA1000AS, International Standard on Assurance Engagements 3000 (ISAE 3000) and the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines.	We evaluated the adherence to the AA1000AS (2008) principles of inclusivity, materiality and responsiveness (the Principles) and followed the procedures as outlined in the VeriSustain protocol to complete the project. We used the Global Reporting Initiative (GRI) Quality of Information Principles (Balance, Clarity, Accuracy, Reliability, Timeliness and Comparability) as criteria for evaluating performance information, together with Lockheed Martin's data protocols for how the data are measured, recorded and reported. Please see 2019 Assurance statement provided by DNV GL on our sustainability website for more information.
C1. Governance	Other, please specify (Sustainability governance and oversight)	Our assurance engagement was planned and carried out in accordance with AA1000 Assurance Standard (AA1000 AS), using DNV GL's VeriSustain methodology. VeriSustain is based on international assurance best practice including AA1000AS, international Standard on Assurance Engagements 3000 (ISAE 3000) and the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines.	We evaluated the adherence to the AA1000AS (2008) principles of inclusivity, materiality and responsiveness (the Principles) and followed the procedures as outlined in the VeriSustain protocol to complete the project. We used the Global Reporting Initiative (GRI) Quality of Information Principles (Balance, Clarity, Accuracy, Reliability, Timeliness and Comparability) as criteria for evaluating performance information, together with Lockheed Martin's data protocols for how the data are measured, recorded and reported. Please see 2019 Assurance statement provided by DNV GL on our sustainability website for more information.

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

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

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

Yes, other partners in the value chain

C12.1a

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

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

% of suppliers by number

53

% total procurement spend (direct and indirect)

53

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

Rationale for the coverage of your engagement

In order to enhance our understanding of potential sustainability-driven risk and opportunities within our tier one supply base, we conduct an annual supplier sustainability assessment. Through the Sustainable Supply Chain Management (SSCM) program, in 2019 we completed our fifth voluntary Supplier Sustainability Assessment for suppliers to report on their Environmental, Social and Governance (ESG) management systems and performance. In the environmental section of this annual survey, suppliers are asked a series of questions related to climate change risks, GHG emissions and water. In 2019, we surveyed 327 Lockheed Martin suppliers. Our methodology in the selection of suppliers for this voluntary survey prioritized suppliers of concern, or those deemed at higher risk to Lockheed Martin as well as small businesses identified through our Ethics Mentoring Program. In addition to factoring in supplier spend and risk factors, other key internal stakeholders contributed input in shaping the supplier list. Suppliers were selected based on a number of criteria: high sales with our company, participation in a current or previous supplier ethics mentoring program, travel and transportation vendors (e.g. airlines), and small businesses with significant spend. These 327 suppliers represent approximately 53% of total prior year supplier spend. We incentivize suppliers to respond to this survey by providing respondents with a benchmarking report that compares their input with those of other survey participants, providing an actionable resource that enables them to address findings.

Impact of engagement, including measures of success

Lockheed Martin's voluntary annual Supplier Sustainability Assessment provides insights across a diverse set of suppliers, enhancing our understanding of our first-tier supplier's established environmental, social and governance (ESG) oriented practices. By analyzing supplier responses, we contribute valuable perspectives to our key internal stakeholders by helping them to identify risks and opportunities across our supply chain and we gain insights and take actions on topics that span ESG categories. We also have developed action plans for supplier engagement and our own sustainability performance based on survey results. For example, in past surveys, 5% of respondents indicated that they do not have a way for employees to report misconduct under their own codes of conduct. We used this information to send out tailored communications inviting suppliers to take advantage of our free ethics resources to help them develop methods for employees to report misconduct, including our Ethics Supplier Mentoring Program. We also have a dedicated site for suppliers called Supplier Wire, where we provide news articles on GHG emissions and environmental resources and send a quarterly publication to all active suppliers that highlights these resources. Survey respondents are also sent a benchmarking report comparing their input with that of other respondents, providing actionable resources to address survey findings. As a result of the survey assessment, we also engaged our new talent intern program to brainstorm solutions to sustainability challenges within the company. Our ESH, Sustainability, Supplier Diversity, Ethics, Global Emergency Operations Center and Cyber Risk and Compliance functions all sponsor their own challenges for interns to resolve. These challenges encompass ESG topics and result in real solutions. For instance, 2019's summer intern class created solutions to Human Trafficking that kickstarted a full embrace to explore Human Trafficking reports and steps we take to combat it. Our SSCM program measures th

Comment

C12.1b

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

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number

100

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

72

Portfolio coverage (total or outstanding)

<Not Applicable>

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

We voluntarily publish a comprehensive annual Sustainability Report, which is available externally to the public, including to all of our customers. This report is used to educate the public on our Sustainability Management Plan (SMP) and climate change performance and strategy. Our performance is measured across five Sustainability Core Issues and 26 performance metrics outlined in our SMP. Through the SMP, reported in our Sustainability Report, we describe how we capitalize on opportunities related to Resource Efficiency and strive to drive sustainable elements into Product Impact. Through the Resource Efficiency metrics of our SMP, we commit to helping our energy customers reduce their carbon emissions by at least twice the carbon impact of our business operations by 2020 (please note that we have retired this goal as of November 2019 with the divestiture of Lockheed Martin's Distributed Energy Solutions group). As of 2019, our progress against the Resource Efficiency metric of our SMP has resulted in: 1,027,634 MTCO2e of savings for our customers. We also describe how, since 2010, we have reduced operational energy use by 22% and carbon emissions by 39% and, that our latest carbon emission reduction results outperform a science-based target threshold to stabilize atmospheric carbon emissions. Through the Product Impact metric of our SMP, we commit to: 1) Generating \$1 billion in product life-cycle cost reductions, resulting in lower resource consumption and reduced adverse impacts on human health and the environment; and 2) Achieving \$4 billion in product sales with direct, measurable benefits to energy and advanced infrastructure resiliency. For our Resource Efficiency metric on reducing customer emissions, the scope of our engagement is limited to our energy customers. For our Product Impact metric, our commitment pertains to all customers and our product portfolio overall. These metrics and scopes of engagement were determined during our formal core issues assessment conducted in 2015, where we gathered

Impact of engagement, including measures of success

Lockheed Martin publishes a comprehensive annual Sustainability Report which is available externally to the public, including to our customers. Every year, we engage our suppliers on sustainability and climate-related issues through our regularly updated Supplier Wire newsletter and website (https://www.lockheedmartin.com/en-us/suppliers.html). As of 2019, Lockheed Martin's progress against the Product Impact metrics of our SMP has resulted in the identification of \$1.34 billion in cost savings as compared to a business-as-usual scenario, through life-cycle assessment cases on products; and the achievement of \$4.5 billion in product sales that directly benefit energy and infrastructure resiliency. Our progress against the Resource Efficiency metric of our SMP has resulted in:1,027,634 MTCO2e of savings for our customers. Since 2010, we have reduced operational energy use by 22% and carbon emissions by 39%, and, our latest carbon emission reduction results outperform a science-based target threshold to stabilize atmospheric carbon emissions.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Lockheed Martin has a comprehensive Sustainable Supply Chain Management (SSCM) program that partners with our supply base to reduce adverse environmental impacts, to promote human rights, health, safety and ethical behavior, and to enable responsible supplier growth and raise standards. Through our SSCM program, we conducted an annual supplier sustainability assessment prioritized to survey 327 Lockheed Martin suppliers. Suppliers are selected based on a number of criteria: high sales with our company, participation in a current or previous supplier ethics mentoring program, travel and transportation vendors (e.g. airlines), and small businesses with significant spend. These 327 suppliers represent approximately 53% of total 2019 supplier spend. In the environmental section of the assessment, suppliers were asked a series of questions related to GHG emissions and climate change, including:

- Whether they have responded to Climate Change CDP
- Awareness of external Environmental, Safety, and Health Certification and/ or reporting to voluntary frameworks
- Awareness of suppliers having an Environmental Management System
- Indicators tracked pertaining to GHG, Renewable Energy Use, Green Building Footprint, Regulatory-driven emissions
- Any environmental safety and health claims, penalties, fines, or violations in the last 2 years
- Awareness of supplier communication programs on environmental sustainability
- · Awareness of programs suppliers have in place, or planned, for promoting resource efficiency
- If they have identified any climate change-related risks in their operations or supply chain that have the potential to generate substantial change in business operations, revenue or expenditure? If these risks directly impact their business with Lockheed Martin
- Corporation's total Scope 1 & 2 GHG emissions in MT CO2e

The success of these assessments is measured by the completion/response rate of the suppliers, as well as a detailed analysis of the responses. A cross-functional team within Lockheed Martin analyzes supplier responses and determines if follow-up with any suppliers based on their response is necessary. This engagement with suppliers enhances our overall understanding of our supplier's sustainability maturity and landscape.

To help us identify chemicals of potential concern used in our supply chain, Lockheed Martin has collaborated with industry partners to develop the standard IPC-1754: Materials and Substances Declaration for the Aerospace, Defense and Other Industries. IPC-1754 establishes requirements for exchanging product and process material and substance data between suppliers and customers. Lockheed Martin is working through IAEG (International Aerospace Environmental Group), of which Lockheed Martin is a member, and IPC® (Association Connecting Electronics Industries) to develop resources to support the use of the standard, thus promoting improved efficiencies and data quality. We also provide a case study on our work on IPC 1754 and increasing transparency in chemical reporting on pg. 20 of our 2018 Sustainability Report (
https://www.lockheedmartin.com/content/dam/lockheed-martin/eo/documents/sustainability/Lockheed Martin Sustainability Report Full 2018.pdf).

We have been a proud member of the U.S. Department of Energy's (DOE) Better Plants Program (BPP) since 2010. In 2015, Lockheed Martin invited 34 of our top small businesses to join the BPP through its supplier cohort initiative. Seven of our suppliers joined the Better Plants Program and their participation will help us understand our upstream energy footprint, reduce GHG emissions in our value chain and potentially lead to more affordability for our customers.

In 2019 our supply chain organization sponsored a Lifecycle Analysis for Supply Chain using the DoD Sustainability methodology. As a result, we now have identified our top 25 environmentally impactful suppliers. This information is being used to pioneer an A&D Industry Supply Chain Sustainability Impact Projection, connecting sustainability factors to drive collaborative impact.

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?

Direct engagement with policy makers

Trade associations

Funding research organizations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation		Details of engagement	Proposed legislative solution
	with minor exceptions	, , , , ,	Lockheed Martin's engagement contributed toward the California governor's action to extend the Cap and Trade program to 2030 and retain key program thresholds. Recent allowance auctions have yielded favorable program cost recovery and emission reductions.

C12.3b

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

C12.3c

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

Trade association

American Council on Renewable Energy (ACORE)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

ACORE is dedicated to building a secure and prosperous America with clean, renewable energy. ACORE provides a common educational platform for a wide range of interests in the renewable energy community, focusing on technology, finance, policy, and market development. ACORE convenes thought leadership forums and creates energy industry partnerships to communicate the economic, security, and environmental benefits of renewable energy.

How have you influenced, or are you attempting to influence their position?

Lockheed Martin serves on the Board of Directors of ACORE. We engage with ACORE on renewable energy education and speaks at various ACORE events to promote the use and development of renewable energy technology. Most recently, Lockheed Martin presented on a panel about how renewables and storage can replace inefficient peaker plants. Lockheed Martin and ACORE partnered with NASCAR Green, the sustainability arm of the National Association for Stock Car Auto Racing, Inc., to deliver educational content about the benefits of renewable energy, sustainability, and energy security to millions of fans.

Trade association

Aerospace Industries Association (AIA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The AIA does not have a formal stated position on climate change; however, it has stated the need for a comprehensive energy policy using a central/federal framework. It also emphasizes that the debate should be based on facts and science.

How have you influenced, or are you attempting to influence their position?

Lockheed Martin is a member of the Aerospace Industries Association (AIA). While AIA does not have an official position on climate change, it is engaged in specific programs that address greenhouse gas emission from aircraft engines, including the recent EPA decision to move forward on harmonization with the ICAO recommendations for reduced emission from new engine designs. To learn more about this program as well as other AIAs and US industry activities related to Climate Change, please visit https://www.aia-aerospace.org/issue/environment/

Trade association

National Association of Manufacturers (NAM)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The NAM's stated position is a commitment to protecting the environment through greater environmental sustainability, increased energy efficiency and conservation, and reducing greenhouse gas emissions believed to be associated with global climate change. Its position is also that the establishment of federal climate change policies to reduce greenhouse gas emissions, whether legislative or regulatory, must be done in a thoughtful, deliberative and transparent process that ensures a competitive level playing field for U.S. companies in the global marketplace. It believes that carbon capture, use and storage (CCUS) is an essential element in the portfolio of solutions needed to take on the dual challenge of supplying energy while addressing the risks of climate change. NAM opposes any federal or state government actions regarding climate change that could adversely affect the international competitiveness of the U.S. marketplace economy. Any climate change policies should focus on cost-effective reductions, be implemented in concert with all major emitting nations, and take into account all greenhouse sources and sinks. NAM supports proposals that would scale up the adoption of energy- and water-efficient products and technologies, prioritizing innovation and creating pathways for the deployment of new technologies like carbon capture, utilization and storage. It also supports working collaboratively by creating public-private partnerships between government and manufacturers to help them further decarbonize. Manufacturers also continue to lead the way in investing in energy efficiency and advancing sustainability efforts that positively impact manufacturing and the industry's contributions to environmental protection, economic performance, and the social well-being of the employees, communities, customers, and consumers they serve. http://www.nam.org/lssues/Energy-and-Environment/

How have you influenced, or are you attempting to influence their position?

Our corporate focus on EPA regulations is to ensure that best available science is used to support any requirements. We publicly state our focus on renewable energy technology and support of the Federal government to meet its energy efficiency, alternative energy, and energy security objectives.

Trade association

US Chamber of Commerce

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Chamber's stated position on climate change is that the climate is changing and humans are contributing to these changes. It believes in policies that are practical, flexible, predictable, and durable and that a policy approach should acknowledge the costs of action and inaction and the competitiveness of the U.S. economy. Specifically, the Chamber believes that an effective climate policy should: 1. Leverage the power of business, 2. Maintain U.S. leadership in climate science, 3. Embrace technology and innovation, 4. Aggressively pursue greater energy efficiency, 5. Promote climate resilient infrastructure, 6. Support trade in U.S. technologies and products, 7. Encourage international cooperation. It looks to policymakers to develop an approach that leverages business leadership, expertise, and energy innovation. https://www.uschamber.com/climate-change-position

How have you influenced, or are you attempting to influence their position?

Lockheed Martin's participation and basis for membership in trade organizations that are not unanimous consensus organizations are not limited to a single topic. We continue to actively engage with the Chamber and its foundation and openly express our corporate views on the importance of energy efficiency and technology developments. In 2016 Lockheed Martin was awarded the U.S. Chamber's Corporate Citizenship Award in the "Best Environmental Stewardship" category. This award was for our efforts to design energy efficiency programs for commercial and government customers, helping them achieve both environmental stewardship and responsible growth. Leading by example, Lockheed Martin has helped federal, state, and regional energy organizations, utilities, and its own operations implement more than \$100 million in energy efficiencies. The benefits of these initiatives were publicly highlighted by the Chamber and are available on its website. We continue to actively engage with the Chamber and openly express our corporate views on the importance of energy efficiency and technology developments. In 2013, Lockheed Martin was awarded the U.S. Chamber's Corporate Citizenship Award in the "Best Environmental Stewardship" category. This award was for our efforts to design energy efficiency programs for commercial and government customers, helping them achieve both environmental stewardship and responsible growth. Leading by example, Lockheed Martin has helped federal, state, and regional energy organizations, utilities, and its own operations implement more than \$100 million in energy efficiencies. The benefits of these initiatives were publicly highlighted by the Chamber and are available on its website.

Trade association

US Sustainable Purchasing Leadership Council

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Sustainable Purchasing Leadership Council is a non-profit organization whose mission is to support and recognize purchasing leadership that accelerates the transition to a prosperous and sustainable future. The Council's programs and community of practice will help institutional purchasers to prioritize opportunities to influence the social, environmental and economic life cycle impacts of purchased goods and services, identify existing leadership standards and approaches that address these priorities, benchmark progress toward goals, and receive recognition for advancement. https://www.sustainablepurchasing.org/about/

How have you influenced, or are you attempting to influence their position?

Lockheed Martin plays an active role in the US Sustainable Purchasing Leadership Council (SPLC) to support our goal of becoming a US leader in sustainable procurement. The SPLC platform is one of only a few forums world-wide focused entirely on supply chain sustainability, where members bring to the table common problems and work collectively to devise solutions with global applicability. As a member of the Founders Circle, we provide financial and technical support for the Council, and advise on its pilot rating system.

Trade association

Alliance to Save Energy

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Alliance to Save Energy promotes energy efficiency worldwide to achieve a healthier economy, a cleaner environment and energy security. To achieve this mission, the Alliance leads worldwide energy efficiency initiatives in policy advocacy, research, education, technology deployment and communications that impact all sectors of the economy; provides vision and activism which includes active and engaged members of Congress, leaders from business, the public interest sector and academia; initiates and participates in public-private partnerships, collaborative efforts, and strategic alliances to optimize resources and expand its sphere of influence; and executes its mission through a team of recognized energy efficiency experts and professionals.

How have you influenced, or are you attempting to influence their position?

Lockheed Martin served on the Board of Directors for the Alliance to Save Energy until November 2019. Its mission to promote worldwide energy efficiency directly aligns with our efforts to increase operational energy efficiency at our facilities worldwide as well as to develop and implement renewable energy technologies and efficiency services that support public-private partnerships and the advancement of collaboration in the global energy space.

Trade association

Business Roundtable

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Business Roundtable CEOs embrace sustainable practices across their businesses, resulting in stronger communities and a healthier environment. CEOs are leading the way through investments, innovation and strategic decisions, toward a more environmentally and economically sustainable future. For over a decade, Business Roundtable CEOs have been leading voices for the sustainability business case – demonstrating that environmental sustainability and economic growth in the U.S. can be achieved together. U.S. businesses are making a positive impact on sustainable outcomes which can be seen through major initiatives such as: Driving Efficiency, Reuse, and Recycling Growing Sustainable Investment Reducing Carbon Emissions Advancing Renewable Energy https://www.businessroundtable.org/policy-perspectives/energy-environment/sustainability

How have you influenced, or are you attempting to influence their position?

In 2019, Lockheed Martin's Chairman, President and CEO, Marillyn Hewson signed on to support the Business Roundtable's new "statement on the purpose of a corporation" indicating that corporations have a responsibility to deliver value to all of its stakeholders, including local communities, employees, and customers, a principle we demonstrate through Lockheed Martin's own sustainability management program.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

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?

Lockheed Martin routinely engages with policy makers on matters of interest to the Corporation. Lockheed Martin engagement on specific policy issues is coordinated with internal stakeholders to ensure consistency. Our policy engagement goes through our Government Affairs organization to ensure that we are in alignment with our overall climate change strategy. The process we have in place to ensure consistency across our corporate functions, business areas and different geographies is to bring representative areas into a Cross Corporate Sustainability Working Group for a cohesive sustainability strategy. Lockheed Martin also participates in a wide array of trade associations and coalitions, often sector specific or cross-sector in nature. Membership decisions in sector trade associations are not typically driven by one singular policy issue, but by multiple factors. Lockheed Martin seeks to engage on the policy issues that drive its membership in a particular trade association. Moreover, while trade associations tend to operate on a consensus basis, few do not require unanimity to adopt formal positions. When we engage in any trade association on climate change or related issues, we represent our positions and interests as reflected in the climate change strategy outlined in this report. The funding provided to research organizations such as the MIT Energy Initiative, aligns with our overall climate change strategy by providing sound science and objective analysis for global issues, such that we develop products and services that help our customers respond to climate change concerns.

(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 mainstream reports

Status

Complete

Attach the document

Lockheed_Martin_Sustainability_Report_Full_2019.pdf

Page/Section reference

- Page 8 & 10: Facilitating Climate Resiliency - Page 12-17: Strategy and Governance - Page 39-42: Resource Efficiency - risks, opportunities, emissions figures, emission targets, other metrics - Page 50-60: GRI Index 305-1, 305-2, 305-3, 305-4, 305-5

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

Comment

Our Sustainability Report is included in the package of "mainstream" reports that are available on our website and physical copies are provided to all in-person attendees to our Annual Meeting of Stockholders and provided to our Board of Directors. This is our eighth year using the Global Reporting Initiative (GRI) framework, the world's most widely used sustainability reporting framework. This report has been prepared in accordance with the GRI Standards: Core Option. We anticipate integrating SASB into our next sustainability report.

C15. Signoff

C-FI

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

C15.1

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

	Job title	Corresponding job category
Row 1	President and Chief Executive Officer of Lockheed Martin Corporation	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

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

As the world's leading provider of Global Security Solutions, Lockheed Martin maintains the highest standards for ethical business practices and performance in every aspect of its business conduct.

Lockheed Martin builds sustainable supplier capacity by partnering with our supply chain to reduce adverse environmental impacts, to promote human rights, health, safety, and ethical behavior, and to enable responsible supplier growth and raise standards. We define Sustainable Supply Chain Management as "management of our supply base to drive affordability and innovation through social responsibility and environmental stewardship." The objective of Sustainable Supply Chain Management is to ensure alignment of our supply base's social, ethical, environmental, safety, and health responsibilities with Lockheed Martin's sustainability commitments.

Our focus on environmental sustainability continues to improve energy efficiency, reduce natural resource usage, and reduce waste. Our focus on social sustainability continues to promote ethics, safety, and human rights. Our focus on governance sustainability continues to progress disclosure, transparency, and accountability of management systems, processes, and practices. For each aspect, our suppliers represent a key partner in achieving success in sustainability.

Suppliers are encouraged to download a copy of our sustainability supply chain brochure to learn more about our program and how they can become more sustainable in their own operations.

SC0.1

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

	Annual Revenue
Row 1	59812000000

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

Yes

SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

		ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
ĺ	Row 1	us	5398301094

SC1.1

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

SC1.2

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

SC1.3

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

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	We do not have an activity-based accounting system for infrastructure costs which would permit us to more accurately track and allocate emissions for each of our product and service offerings. Furthermore, our complex supply chain with many layers presents even more of a challenge because a large proportion of GHG emissions can be attributed to the supply chain.
Doing so would require we disclose business sensitive/proprietary information	In order to overcome emissions allocation challenges, we are more open to working closely with our customers to obtain a better understanding of contract value and emissions associated with that work. Due to the sensitive and classified nature of some of work for federal government customers, we may not be able to fully disclose information that could contribute to a better emissions allocation estimate. In order to help signal our values, in 2019 our supply chain organization sponsored a Lifecycle Analysis for Supply Chain using the DoD Sustainability methodology. As a result, we now have identified our top 25 environmentally impactful suppliers. This information is being used to pioneer an A&D Industry Supply Chain Sustainability Impact Projection, connecting sustainability factors to drive collaborative impact

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2	U.	L.4

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

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

Implementing an activity-based accounting system for infrastructure costs that allocates our emissions to our very large number of programs would involve complex design and implementation, with significant unplanned expenses. Additionally, because a large portion of our GHG emissions come from our supply chain, similar tracking systems would have to be implemented across many suppliers.

SC2.1

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

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

SC3.1

(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative?

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative?

SC4.1

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

Submit your response

In which language are you submitting your response? English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Investors	Public	Yes, submit Supply Chain Questions now
	Customers		

Please confirm below

I have read and accept the applicable Terms

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