



Welcome to your CDP Climate Change Questionnaire 2022

C0. Introduction

C0.1

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

General Dynamics is a global aerospace and defense company. The company offers a broad portfolio of products and services in business aviation; ship construction and repair; land combat vehicles, weapons systems and munitions; and technology products and services. The company consists of 10 business units, which are organized into four operating segments: Aerospace, Marine Systems, Combat Systems, and Technologies. Each business unit is responsible for the development and execution of its strategy and operating results. The company’s corporate function sets the overall strategy and governance for the company and is responsible for allocating and deploying capital.

Our primary customers are the U.S. government and allied countries as well as consumers of commercial aviation products and services. General Dynamics employs over 100,000 employees in all 50 states and in over 71 countries. We generated a total revenue of \$38.5 billion in 2021. The company is headquartered in Reston, Virginia.

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
Reporting year	January 1, 2021	December 31, 2021	No

C0.3

(C0.3) Select the countries/areas in which you operate.

- Argentina
- Australia
- Austria
- Bahrain
- Brazil
- Canada

China
Colombia
Ecuador
Egypt
Estonia
Ethiopia
Germany
Guam
Guyana
Hong Kong SAR, China
India
Iraq
Israel
Italy
Jamaica
Malaysia
Malta
Mexico
Oman
Peru
Philippines
Puerto Rico
Republic of Korea
Russian Federation
Saudi Arabia
Singapore
Spain
Switzerland
Taiwan, China
Turkey
United Arab Emirates
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-TO0.7/C-TS0.7) For which transport modes will you be providing data?

Aviation

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	GD

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 Chair	The Board Chair maintains oversight over the assessment and management of climate-related risks. The Board Chair’s consideration of material risks, including any related to climate, is continuous as she carries out her duties. Risk items predominate on the Board’s substantive agenda. Twice a year, the Board Chair receives comprehensive material risk briefings on all categories of risk, including any material climate risks. Throughout the year, the Board Chair also regularly assesses areas of potential risks and opportunities as identified by our senior management or Board members. For example, the Board Chair oversaw Gulfstream’s clean sheet development of new aircraft models with significantly more energy efficient jet engines and airframe and multi-billion-dollar investments in state-of-the-art energy-efficient production facilities.
Board-level committee	In 2021, the Board established a Sustainability Committee, which oversees sustainability practices and management, including those related to environmental, health and safety, human rights and social matters. Greenhouse gas emissions and climate topics have been briefed to the sustainability Sustainability Committee. The committee is chaired by an independent director with expertise and unique

	experience in the ESG field.
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C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies 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	The Board maintains oversight of material risks and opportunities, including those related to climate. It takes these risks and opportunities into account as it exercises its duties. The Sustainability Committee is responsible for assisting the Board in fulfilling its oversight duties related to sustainability, including those related to climate and environmental matters. One example of the Board exercising its strategic leadership of climate-related matters was its careful monitoring and shaping of the capital deployment that enabled Gulfstream to develop new aircraft that greatly increased jet engine and airframe efficiency and lowered carbon emissions per passenger mile. Climate-related risks and opportunities are typically briefed by the relevant business unit president or cognizant executive vice president for the relevant business line. Climate-related risks and opportunities may also be briefed by the chair of our corporate functional area councils, including the Environmental, Health, and Safety (EHS) Committee of the Manufacturing Council. This EHS Committee, sponsored by an executive vice president, provides an annual briefing of EHS related risks to the Board.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	In 2021, the board established a Sustainability Committee, which oversees sustainability practices and management, including those

		<p>related to environmental, health and safety, human rights and social matters.</p> <p>The committee is chaired by the co-chair of the board for the Value Reporting Foundation, a nonprofit that aims to help businesses and investors understand the creation, maintenance, and evolution of enterprise value. The SASB Standards (the “Standards”) are part of the Value Reporting Foundation’s initiatives, and the Standards include information on energy, greenhouse gas emissions, water, and other climate-related issues.</p>
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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)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	Quarterly

C1.2a

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

The Chief Executive Officer is ultimately responsible for all significant risks, including those related to climate. The CEO receives regular and ad hoc reports from each operating unit president, who in turn has responsibility for monitoring and mitigating risks within his or her business unit. For example, in instances where a severe wind event risks physical damage to a facility, the operating unit president is responsible for monitoring and mitigating the risk, and reports to the Chief Executive Officer regarding the risk and mitigation.

General Dynamics has company-wide councils that share information and best practices throughout the company. These councils are made up of the most senior operational executives from our business units. Many are considered experts in their field and within their council duties help address issues of shared importance, including those relating to climate. The chair of each council is mentored by a corporate EVP but reports directly to the Chairman and CEO on council matters. Our Manufacturing Council includes an Environmental, Health, and Safety (EHS) committee that directly addresses sustainability, energy, and environmental issues. Each GD business unit (BU) is represented by a senior EHS professional assigned by the BU president to the committee. For example, the subcommittee helps each BU establish their targets and collects and assesses energy and carbon emissions data from across the corporation. The Manufacturing Council makes regular EHS reports to the Board as part of the Board’s risk-management process. Our Supply Chain Management Council also shares best

practices and creates shared processes to support our supplier efforts, including to promote socially responsible performance and good environmental stewardship throughout our supply chain.

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	Our compensation program, which covers each Named Executive Officer along with executives from each business unit, includes strategic goals that specifically encompass sustainability topics. Our compensation program, which covers each Named Executive Officer along with each business unit president, includes strategic goals that specifically encompass sustainability topics. The sustainability goals vary depending on the officer’s role and responsibility, but they include greenhouse gas efforts, environmental conservation, and programs to bring new technologies to the market. For example, the president of Gulfstream, our business jet subsidiary, has been a leader in using and promoting the use of sustainable jet fuel. The reduction in energy usage translates into reduced operating expenses and may lead to gains in cash flow, a direct performance metric for management.

C1.3a

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

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Corporate executive team	Monetary reward	Energy reduction project	General Dynamics utilizes a mix of financial, strategic and operational goals to measure the performance of its executives. Based on the accomplishment of financial, strategic and operational goals, the executive team and various business leaders may receive monetary incentives as part of their variable compensation. ESG performance is considered when determining the achievement of strategic and operational goals. These goals are measured annually.
President	Monetary reward	Energy reduction project	General Dynamics utilizes a mix of financial, strategic and operational goals to measure the performance of its business unit presidents. Based

			on the accomplishment of financial, strategic and operational goals, the presidents may receive monetary incentives as part of their variable compensation. ESG performance is considered when determining the achievement of strategic and operational goals. These goals are measured annually.
Business unit manager	Monetary reward	Energy reduction project	General Dynamics utilizes a mix of financial, strategic and operational goals to measure the performance of its business unit managers. Based on the accomplishment of financial, strategic and operational goals, the business unit managers may receive monetary incentives as part of their variable compensation. ESG performance is considered when determining the achievement of strategic and operational goals. These goals are measured annually.
Management group	Monetary reward	Energy reduction project	General Dynamics utilizes a mix of financial, strategic and operational goals to measure the performance of its management groups. Based on the accomplishment of financial, strategic and operational goals, the management groups may receive monetary incentives as part of their variable compensation. ESG performance is considered when determining the achievement of strategic and operational goals. These goals are measured annually.
Facilities manager	Monetary reward	Efficiency project	Facility Managers' performance priorities include components of sustainability, which drive compensation and bonus rates. These components may include reduction of GHG emissions: new construction projects, such as solar panel installation; external ISO 14001 and other climate-related standards; energy reduction projects; lighting projects; and other related activities.
Environmental, health, and safety manager	Monetary reward	Behavior change related indicator	General Dynamics Environmental, Health, and Safety managers' responsibilities include supporting relevant sustainability goals and GHG emissions reduction, which are collected and measured annually. Environmental, Health, and Safety managers from each business unit are members of the General Dynamics EHS Committee, working closely with all business units and their CIOs on sustainability CIOs and GHG

			collection and reduction. These goals drive company performance which impacts potential bonus and annual increase percentages.
Environmental, health, and safety manager	Non-monetary reward	Emissions reduction project	The General Dynamics EHS Committee is dedicated to ensuring compliance with all applicable environmental, health and safety rules, regulations and laws as directed by Corporate Policy and as guided by industry best practices. Each business unit is represented on the Committee, which is sponsored by the General Dynamics Manufacturing Council and is established to: help ensure GD business units continue to operate in compliance with applicable EHS regulatory requirements; promote environmental, health and safety principles and strategies throughout GD; share EHS strategies to benefit company members where lessons learned, principles applied, and best practices have been successful; be a resource across GD for guidance on enterprise initiatives to promote an EHS culture; and continue to reinforce a culture of continuous improvement and measurement. While staff members may receive a monetary reward for their contribution to EHS goals, the Committee is able to provide non-monetary rewards by recognizing individuals publicly at the annual General Dynamics Manufacturing Symposium, providing the EHS Committee members an opportunity to present in front of their peers their actions, reductions in GHG emissions, sustainability programs, or other associated ESG activities to their peers.
All employees	Monetary reward	Behavior change related indicator	All employees are encouraged to report positive activities related to sustainability, which. These activities are eligible for a spot award at the discretion of business unit management.
All employees	Monetary reward	Environmental criteria included in purchases	Employees may participate in the alternative transportation incentives program (Emissions Reduction), which offers public transportation pass discounts and fuel cost subsidies for vanpool participants.

C2. Risks and opportunities

C2.1

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

Yes

C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	1	Short-term focus is on the current calendar year performance. Climate-related risks and opportunities are identified that could have an immediate impact on General Dynamics.
Medium-term	1	5	Medium-term focus is aligned with the General Dynamics Operating Plan period and is oriented on the current year, next year and the following three years. Climate-related risks and opportunities are identified that could have an impact on General Dynamics.
Long-term	5	10	Long-term focus is from five years onwards, which is outside of our Operating Plan period. Associated risks and opportunities are identified and prioritized.

C2.1b

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

General Dynamics assesses climate-related risks within its overall risk identification framework. Our risk framework is based on the Delegation of Authority from the Board to our management, which defines criteria for allocating management responsibility. For competitive reasons, we do not disclose the specific factors. As a general matter, our framework assesses risks based on the totality of circumstances, rather than on a particular quantitative threshold. Risks, including climate-related risks, are assessed within this framework based on, among other factors, assessment of potential quantitative financial impact and qualitative factors, such as strategic considerations, compliance with law, and reputational impact. Specific quantitative analyses are prepared for specific risks as necessary and appropriate for management assessment and mitigation.

For purposes of our CDP response, General Dynamics defines substantive financial or strategic impact as risks and opportunities that could meaningfully affect our competitive position in the market. Risks included in this response as potentially having a substantive financial or strategic impact are analyzed on an unmitigated basis. We cannot reasonably estimate the effectiveness of mitigating factors on the extent of our financial exposure.

In addition, while the risks and opportunities described here are relevant to the business, they are not financially material on the enterprise level due to our size and scope of operations. It is also not possible to predict the outcome of particular climate risks, or scenarios, or preventative measures or mitigation taken by General Dynamics or our stakeholders. The discussion of any particular risk or opportunity in this document does not reflect any assessment or conclusion that it is reasonably likely to have material effect on our liquidity, financial condition or results of operations. For a complete discussion of risks affecting our business, please refer to our Annual Report on Form 10-K and other reports that we file with the Securities and Exchange Commission.

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 comprehensive risk management program is conducted by senior management and overseen by the Board of Directors. In particular, the Board oversees management's identification and prioritization of risk. The Board oversees risk management, focusing on the most significant risks facing the company, including environmental risks that could have a substantive financial or strategic impact. Senior management is responsible for day-to-day risk management and conducts a thorough assessment through internal management processes and controls. The chief executive officer and senior management team provide the Board a dedicated and comprehensive assessment of material risks at least twice per year, and the Board is briefed throughout the year as needed on specific risks facing the company, including environmental, safety and human capital risks. Each of our businesses has professional Environmental, Health and Safety (EHS) programs to ensure our facilities operate safely and comply with company programs and practices to minimize environmental impacts. Each business identifies risks and opportunities and develops annual objectives to drive

continuous improvement in EHS performance. General Dynamics has an active EHS Committee that includes experts from each of our business units. The group works together to promote best practices and shared strategies throughout the company to promote an environmentally aware culture. Climate-related risks and opportunities, along with the associated financial and strategic impacts, are identified at each of the businesses and reported to senior management.

In our process, upstream, downstream and operational risks are holistically assessed for potential financial or strategic impact holistically, taking into account the totality of the circumstances, including analyses of potential quantitative financial impact as well as qualitative factors such as compliance with laws and reputational impact. Senior management reviews each risk and opportunity and determines the appropriate path forward. Local teams work to mitigate, transfer or accept the risk or capitalize on the opportunity with oversight from senior management. For example, we have addressed the climate-related risk of significant weather events such as disruptive wind, floods and hurricanes and the impact on our business locations through this framework. Business units potentially affected by severe storms have identified the associated risks, and they work to shift the risk(s) under our corporate risk management process. In instances where a severe wind event risks physical damage to a facility, local management is responsible for monitoring and mitigating the risk, and they report relevant risk and mitigation information to the Chief Executive Officer regarding the risk and mitigation. Based on insurance data modeling, two of our largest sites – Groton, CT and Savannah, GA – have the greatest potential loss exposures to hurricane, storm surge and flood events. GD and our Groton, CT, and Savannah, GA, facilities have contemplated these types of events for many years, and business unit management has put specific procedures and business continuity plans in place to mitigate the risks to our staff, facilities and operations. These plans have been reviewed with senior leadership.

As a case study, at our Savannah location, Gulfstream has well-rehearsed hurricane planning and a mature response strategy that is implemented when a storm's path is projected near the Savannah area. Business unit leadership is responsible for organizing the response and communicating with the Chief Executive Officer regarding the incident as it develops. Over the past six years, Gulfstream has implemented its hurricane response plan six times (Matthew 2016, Irma 2017, Florence 2018, Michael 2018, Dorian 2018, and Elsa 2021). This same management framework also applies in identifying climate related opportunities, such as those related to potential transitions in the economy. For example, Gulfstream identified a potential opportunity in meeting customer interest in sustainable aviation. The business unit identified the opportunity and led the effort to support the use of Sustainable Aviation Fuel (SAF). Executive leadership and the Board provided oversight as appropriate. For example, the Board approved and provided oversight as Gulfstream developed new aircraft that greatly increased jet engine efficiency and lowered carbon emissions per passenger mile. Following our comprehensive risk framework, our businesses implement strategies to reduce GHG emissions from small actions, such as replacing incandescent lightbulbs with energy-efficient LED bulbs, to large-scale actions, such as investing in energy from renewable sources, building ISO-compliant buildings, and

establishing a global network of sustainable jet fuel sources for our customers and ourselves.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	<p>Government contractors operate in a highly regulated environment. At General Dynamics, compliance with current regulations (local, state, U.S. national and, where applicable, foreign) is extremely important to our business. Compliance with FAA, EPA, SEC and other regulations are a specific risk continuously considered and reviewed.</p> <p>An unfavorable event or trend in any one or more of these factors or failure to comply with U.S. or foreign laws could result in administrative, civil, or criminal liabilities, including suspension or debarment from government contracts.</p>
Emerging regulation	Relevant, always included	<p>The potential for new regulation to impact our day-to-day operations is a risk that is continuously monitored. The probability of more stringent noise, emissions and CO2 certification standards is considered as we review our current performance and develop new products.</p> <p>Many of the products and services we provide involve sophisticated technologies and engineering, with related complex manufacturing and system-integration processes. Our customers' requirements change and evolve regularly. Accordingly, our future performance depends in part on our ability to continue to develop, manufacture and provide innovative products and services and bring those offerings to market quickly at cost-effective prices. Some new products, particularly in our Aerospace segment, must meet extensive and time-consuming regulatory requirements that are often outside our control and may result in unanticipated delays. Our ability to develop new products that meet customers' changing needs and satisfy regulatory requirements in a timely manner is a relevant risk factor.</p>
Technology	Relevant, always included	<p>General Dynamics utilizes technology to enable our products to be more efficient and reduce waste as part of the development and build cycle. We also evaluate the risk of a new technology having a negative impact on the environment such as its use of excessive electricity or fuel.</p>
Legal	Relevant, always included	<p>We strive to comply with applicable environmental rules and regulations of cities, states, and nations. The legal risk of noncompliance with environmental law and regulations is an area General Dynamics considers as it looks across all Legal risks.</p>

Market	Relevant, always included	General Dynamics carefully monitors the aerospace and defense markets. Climate impact related to the use of business jets is an example of a market risk. Gulfstream and Jet Aviation are working to be market leaders in reducing environmental impacts by offering access to sustainable aviation fuel and developing more fuel-efficient business jets.
Reputation	Relevant, always included	Our ethos (Transparency, Trust, Alignment, Honesty) undergirds our culture, our business model and our daily interactions with all stakeholders. These values are a constant reminder of who we are and what we do. Our reputation as a company is critical to our employees, shareholders, partners, customers and local community. An example of a specific risk is in the companies we do business with (supplier selection). We seek suppliers that adhere to similar values in their businesses and seek to hold them to the same high standards as we hold ourselves.
Acute physical	Relevant, always included	Acute physical risks are frequently reviewed. A climate-related risk in this area is the increase in significant wind events and the impact on our business locations. The 100-year storms are happening more frequently, and we continue to evaluate the risk to our facilities and impact on our insurance costs.
Chronic physical	Relevant, always included	Chronic physical risks are also reviewed along with our acute physical risks. A chronic physical climate-related risk in this area is the increase in sea level due to climate change. General Dynamics evaluates this risk as it reviews its impacted real-estate portfolio. New construction projects/improvements are evaluated against this risk.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Cyclone, hurricane, typhoon

Primary potential financial impact

Other, please specify

Increased insurance claims liability

Company-specific description

Climate change is causing significant weather events such as disruptive wind, flood and hurricanes which have both a direct and indirect impact on our business. The indirect impact is the increase costs of property insurance that we have incurred in recent years, and we expect these costs to continue rising. From a direct standpoint, significant weather events can cause both extensive damage to company facilities and consequential disruption of production and other business activities. For example, during the 2017 hurricane season, Hurricanes Harvey, Irma, and Maria caused \$220B in economic damage across the U.S. As these events continue to increase in frequency and severity due to climate change, both the indirect and direct costs to business are expected to grow. Based on insurance data modeling, two of our largest sites – Groton, CT and Savannah, GA – have the greatest potential loss exposures to hurricane, storm surge and flood events.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

2,000,000

Potential financial impact figure – maximum (currency)

4,000,000,000

Explanation of financial impact figure

The insurance industry has been collecting data for many years on natural catastrophes and their economic impacts. Accordingly, they have built sophisticated models that can project loss-outcome scenarios based on the geography and physical characteristics of a company's locations. The financial impact figures rely on these models. The low end of our range (\$2 million) represents the forecasted increase to our premiums due to the impact of climate change with no direct impact or a significant weather event at a major GD location. The potential maximum impact (\$4 billion) represents an estimated impact of a significant event at one of our major locations such as Groton, CT or Savannah,

GA. This range was provided by our insurance provider. At a minimum this represents the increase in our premium. A more significant event could result in significant damage of property, goods, as well as the time loss of manufacturing due to a potential shut down in operations.

Cost of response to risk

1,200,000

Description of response and explanation of cost calculation

GD and our Groton, CT, and Savannah, GA, facilities have contemplated these types of events for many years and have put specific procedures and business continuity plans in place to mitigate the risks to our staff, facilities and operations.

As a case study, Situation: Increased severity and frequency of extreme weather events such as cyclones and floods have impacted our business.

TASK: In order to minimize the impacts of these events we have had to develop a response strategy to ensure as minimal as possible business disruption.

Action: At our Savannah location, Gulfstream has well-rehearsed hurricane planning and a mature response strategy that is implemented when a storm's path is projected near the Savannah area. Over the past six years, Gulfstream has implemented its hurricane response plan six times (Matthew 2016, Irma 2017, Florence 2018, Michael 2018, Dorian 2018 and Elsa 2021). The cost of preparation and response ranges from \$200,000 to \$1,200,000 and includes actions such as aircraft relocation, facility preparation and plant shut-down activities. For aircraft relocation expenses, our aviation insurance provides coverage of up to \$150K per event and up to \$250K per policy-year when such costs are incurred to relocate aircraft from areas under Hurricane Watch or Hurricane Warning.

Result: We have been able to avoid damage to many of our aircrafts and assets as well as significant cost impacts by implementing these strategies as storms approach

Comment

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

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

General Dynamics Mission Systems (GDMS) has an opportunity to increase revenues supporting our customers such as the U.S. Geological Survey (USGS) team on climate-related missions. GDMS was an integral technology partner to the Landsat 9 mission, which successfully launched on September 27, 2021. Our team leveraged technology to maintain our development and integration schedule during COVID for USGS' successful launch. For over 40 years, GDMS has realized significant business returns from its climate-related product and service offerings to various U.S. Federal Government agencies such as the Department of the Interior's U.S. Geological Survey, the National Aeronautics and Space Agency (NASA), and the National Oceanic and Atmospheric Administration (NOAA).

These products and services have taken the form of specially-engineered instruments and communications devices for on-orbit earth observation satellites to include the Landsat constellation whose mission has collected and archived data on the forests, farms, urban areas and fresh water of our home planet for almost 50 years, generating the longest continuous record of its kind. Decision makers from across the globe use freely available Landsat data to better understand environmental change, manage agricultural practices, allocate scarce water resources, respond to natural disasters and more. In addition, GDMS is a leading provider of complex ground stations, communications links and mission operations centers for NASA's Earth Observing System (EOS), which is a coordinated series of polar-orbiting and low inclination satellites for long-term global observations of the land surface, biosphere, solid Earth, atmosphere and oceans. These are a few of the climate related opportunities at GDMS.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

65,000,000

Explanation of financial impact figure

In July 2017, GDMS won a 10-year, \$155 million contract from the U.S Geological Survey (USGS) to design and integrate a new Landsat multi-mission operations center (LMOC) prior to the launch of Landsat 9 and provide Landsat-9 flight operations readiness, post-launch commissioning, and ongoing operations. Further, the USGS tasked GDMS to take over Landsat 8 flight operations and maintenance of the current Landsat 8 mission operations center and, following Landsat 9 launch, to transition Landsat 8 operations into the new LMOC. Landsat 9 was launched on time, cost and schedule on September 27, 2021.

Landsat 8 provided significant performance benefits to the user community from previous missions in both data quality and capability, including remote sensing of global land mass every 16 days. Landsat 9 has these same improvements and, collectively with Landsat 8, provides these same global land mass observations every 8 days. The constellation allows for applications such as weekly tropical deforestation alerts, water quality monitoring and crop condition reports. With increased activity in international and commercial remote sensing, Landsat has emerged as a cornerstone of the global constellation of imagers. The science quality of the Landsat archive, including careful calibration, allows it to serve as a “gold standard” for studies harmonizing multiple sources of satellite imagery. General Dynamics will perform the work at NASA’s Goddard Space Flight Center in Greenbelt, MD. The \$155 million contract covers five base years with five additional one-year options. The financial impact of \$65 million represents the potential growth over the 5 exercisable one-year options (approximately \$13M per year over five option years, five years X \$13M per option year = \$65M potential growth).

Cost to realize opportunity

8,000,000

Strategy to realize opportunity and explanation of cost calculation

The strategy to realize the full potential contract value of \$155 million requires an investment to establish and operate the GDMS’ “Futuræ Lab”, an innovation and collaboration center directly adjacent to the NASA Goddard campus. The Futuræ Lab is focused on deep data analytics applying advanced algorithms to perform pattern analysis and anomaly detection on the myriad of data derived from the on-orbit instrumentation. This investment enables our climate-minded customers to make more accurate, timely and informed decisions. The \$8M is comprised of facility cost along

with the investment in the infrastructure and equipment needed to run the lab has enabled GDMS to realize the first of five exercisable one-year options (up to \$65 million of potential growth).

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Increased government focus on mitigating and adapting to climate change could increase demand for services provided by General Dynamics Information Technology (GDIT). GDIT operates a diverse portfolio of programs supporting the Environmental Protection Agency and related environmentally focused organizations, currently generating approximately \$190 million per year in revenue. GDIT services related to combating climate changes include mission-centric consulting in environmental sciences and public health; technology services (including the recent large award in support of EPA's digital modernization via the Managed Application, Infrastructure, Networking, Enterprise, and Security Services – MAINES - contract); high performance computing; and data analytics.

Current programs include: the Western Climate Initiative (mission support), Regional Greenhouse Gas Initiative (mission support), EPA Climate Change Decision Support Tools (technology support), the EPA Energy Star Program (technology support), EPA Air Quality Modeling (data analytics support), EPA Emissions Verification (technology support) and High-End Scientific Computing (high-performance computing support). Our work on these programs, and the expertise that our staff bring to EPA, offer an opportunity to secure new work at EPA in similar areas of support.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)**Potential financial impact figure – minimum (currency)**

0

Potential financial impact figure – maximum (currency)

2,000,000,000

Explanation of financial impact figure

The financial impact figure of \$2 billion reflects the pipeline of potential new contract awards in this area through 2025. GDIT pursues these opportunities through its sales process, which is focused on innovation and prior successes with similar programs. For example, these potential new awards include contracts to provide mission and scientific support services to EPA's Office of Air, Office of Water, and Office of Land and Emergency Management, as well as at Department of Energy, Department of Homeland Security, and the National Oceanic and Atmospheric Administration. As of second quarter 2022, GDIT has captured nearly \$700m of new climate-related opportunities, such as the recently awarded MAINES contract (support of EPA's digital modernization via the Managed Application, Infrastructure, Networking, Enterprise, and Security Services).

Cost to realize opportunity

3,500,000

Strategy to realize opportunity and explanation of cost calculation

GDIT competes for these opportunities based on our track record of success and expertise that GDIT's specialized staff bring to EPA and other agencies in similar areas of support. The estimated costs to realize this opportunity include the costs associated with the sales cycle pursuit of these opportunities and estimated indirect costs supporting execution of the portfolio of programs.

These programs are primarily delivered as labor-based programs where the EPA provides the relevant IT systems and servers as needed. Through 2025, GDIT's investment in this area is estimated to be \$3.5M and focused on funding bid and proposals (B&P) to shape and capture the new opportunities, as well as management support and training through our indirect cost structure to sustain the full portfolio and ensure we continue to provide quality, innovative, environmentally-focused services.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization’s strategy include a transition plan that aligns with a 1.5°C world?

Row 1

Transition plan

No, our strategy has been influenced by climate-related risks and opportunities, but we do not plan to develop a transition plan within two years

Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future

In 2021, General Dynamics set a 40% absolute S1 + S2 reduction target by 2034 from a 2019 baseline. This target was selected as it was set in alignment with the Well-below 2-degree scenario. Understanding that this question is specific to 1.5 degrees, we are not currently aligned with this scenario, nor do we have plans to align for the foreseeable future.

Rather than adopt an issue-specific “transition plan” divorced from our ordinary management process, we address climate related risks and opportunities through our comprehensive risk management program. This program is conducted by senior management and overseen by the Board of Directors, who oversees management’s identification and prioritization of risks. The Board oversees risk management, focusing on the most significant risks facing the company, including environmental risks that could have a substantive financial or strategic impact. Senior management is responsible for day-to-day risk management and conducts a thorough assessment through internal management processes and controls. The CEO and senior management team provide the Board a dedicated and comprehensive assessment of material risks at least twice per year, and the Board is briefed throughout the year as needed on specific risks facing the company, including environmental, safety and human capital risks.

Each of our businesses identifies risks and opportunities and develops annual objectives to drive continuous improvement in environmental, health, and safety (EHS) performance. General Dynamics has an active EHS Committee that includes experts from each of our business units. The group collaborates on best practices and shared shares strategies throughout the company to promote an environmentally aware culture. Climate-related risks and opportunities, along with associated financial and strategic impacts, are identified at the business level and reported to senior management. In our process, upstream, downstream and operational risks are holistically assessed for potential financial or strategic impact, taking into account the totality of the circumstances, including quantitative analyses of potential financial impact as well as qualitative factors such as compliance with laws and reputational impact. Senior management reviews each risk and opportunity and determines the appropriate path

forward. Local teams work to mitigate, transfer or accept the risk or capitalize on the opportunity with oversight from senior management.

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	No, and we do not anticipate doing so in the next two years	Other, please specify business units within our decentralized business model use individualized risk management processes	<p>We have a mature and well-functioning risk management process that is tailored to our unique decentralized business model. We do not dictate a single mode of analysis relating to potential risks.</p> <p>Rather, given the diverse products, markets and communities served by each business unit, there is a unique strategy and approach for each unit. While an overall scenario analysis has not been performed to date, each business unit is expected to consider climate as part of its overall strategy.</p>

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Climate-related risks and opportunities influence how GD manufactures its products and services in the short- and medium-term. For example, Gulfstream, the market-leading producer of business jets, has worked with its suppliers to produce a quiet, low-emissions, and a more fuel-efficient aircraft, which includes the use of new, more efficient engines and advanced aerodynamic designs. We believe

		<p>more efficient aircraft respond to market demand for more sustainable transportation. Gulfstream has partnered with Bonneville Environmental Foundation to create a voluntary carbon offset program, enabling customers to easily participate in offsetting the carbon impacts from aircraft utilization. Program participants pay an annual fee based on utilization to fund activities that generate an equal reduction in carbon emissions. Offset funds are invested in projects in wind energy, forest management, or recovery of landfill gas. Many of our operators want to leverage the benefits of business aviation in an eco-friendly way, and this enables that goal. Through their participation in this service, customers can be part of the solution for meeting aviation's goals for global emissions reduction.</p>
Supply chain and/or value chain	Yes	<p>Climate risks and opportunities impact the way we engage our supply chain in the short-term. Gulfstream engages with our supply base on a regular basis to make our aircraft and our operations more efficient. Gulfstream suppliers are encouraged to look for ways to save weight in their products to improve overall aircraft performance. As stated in our Supplier Code of Conduct, our suppliers are expected to operate in a manner that actively manages risk, conserves natural resources and protects the environment in the communities where they operate. Recyclable packaging materials are used in the Gulfstream shipping areas, and we have worked with suppliers to use returnable containers where feasible. Gulfstream is engaged with the leaders in the Sustainable Aviation Fuel (SAF) industry to continue to increase both Gulfstream's and customers' use of SAF. In the area of risk mitigation, it is typically not practical for Gulfstream to select suppliers based solely on their geographic location; however, we do consider climate-related geographic risks in our sourcing decisions.</p>
Investment in R&D	Yes	<p>GD constantly monitors its products and explores ways to make more efficient products. The design of new aircraft models considers climate risks both short- and long-term. Therefore, a holistic approach is used to address noise, gaseous emissions and CO2 concerns together with other key customer expectations. Taking this good steward approach ensures an economic appeal to customers who have increasingly become sensitive to these environmental factors in their purchase decisions.</p>
Operations	Yes	<p>Climate risks and opportunities have many influences on how GD addresses its operations for the short- and medium-term. GD has measures in place to ensure minimal</p>

		<p>impact during high wind events, and flooding. Gulfstream became the first business jet aircraft manufacturer to use renewable fuel in daily operations. Since 2016, Gulfstream has used SAF to power its Savannah-based demonstration aircraft, flying more than 1.7 million nautical miles on the blend. Our Information Technology business unit has redesigned its workspace to meet energy standards as part of its capital investment process. This has led to more access to natural light and use of more energy efficient lighting. We include LEED certification as part of our design inputs, including the design and build of our new corporate headquarters in Reston, Virginia. Our corporate headquarters has also switched its fleet to all-electric, zero-emission vehicles.</p>
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C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures	<p>General Dynamics is committed to reducing our global environmental impact. We strive to operate our facilities in compliance with all applicable environmental laws and regulations, minimize waste and emissions, maximize recycling, and reduce the use of natural gas. The company’s business strategy considers these goals when reviewing sites and programs to establish goals for continuous improvement in conjunction with financial planning to support these activities.</p> <p>Our efforts help protect the environment, improve operating efficiency, reduce costs, and comply with relevant environmental laws and regulations. Our priorities include the integration of environmental considerations into business planning and decisions, including design, procurement, production, facilities management, and product support. Climate-related risks associated with the cost of electricity and opportunities, associated with the transition to renewable energy can figure into capital spending plans and operating cost assessments. The initial decisions to make a capital expenditure for individual projects are made at the business unit level (with approval from the Corporate Office depending on the value of the expenditure). The business unit is aware what is practical and what can deliver the best return, including reduced carbon emissions and lower operating and capital costs. The time horizons for planning covers our short-, medium- and long-term horizons previously mentioned. Capital expenditures made today could result in lower direct/indirect operating costs for years to come and could also</p>

		<p>drive additional demand from our customers resulting in higher revenues. Our GD Ordnance and Tactical Systems business, in conjunction with Today's Power, Inc., invested in four renewable energy projects in Calhoun County, Arkansas. The solar sites in this project produced cumulatively 3.3 million kWh of energy in their first year and will reduce the company's carbon footprint by 51,472 metric tons over 20 years. This project reduces our cost per kWh in year one (short-term impact), and will reduce our overall indirect cost each year, generating cost savings for over 20 years (long-term impact).</p>
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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

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2019

Base year Scope 1 emissions covered by target (metric tons CO2e)

313,413

Base year Scope 2 emissions covered by target (metric tons CO₂e)

439,710

Base year Scope 3 emissions covered by target (metric tons CO₂e)

Total base year emissions covered by target in all selected Scopes (metric tons CO₂e)

753,123

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2034

Targeted reduction from base year (%)

40

Total emissions in target year covered by target in all selected Scopes (metric tons CO₂e) [auto-calculated]

451,873.8

Scope 1 emissions in reporting year covered by target (metric tons CO₂e)

305,600

Scope 2 emissions in reporting year covered by target (metric tons CO₂e)

380,900

Scope 3 emissions in reporting year covered by target (metric tons CO₂e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO₂e)

686,500

% of target achieved relative to base year [auto-calculated]

22.1155774024

Target status in reporting year

Underway

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Target ambition

Well-below 2°C aligned

Please explain target coverage and identify any exclusions

In 2021, General Dynamics set a company-wide goal to reduce its GHG emissions by 40% by 2034. This is aligned with the Science Based Target initiative within the “well-below 2°C” ambition.

Plan for achieving target, and progress made to the end of the reporting year

GD plans on achieving these targets by empowering individual business units to set and create their own GHG emission pathways. In 2021, each BU set their own target and achievement roadmap to align with the overall corporate target. These pathways will consist of initiatives like energy efficiency projects, procuring renewable energy, and fuel switching (where applicable). To date, GD has achieved a 22% reduction from 2019.

List the emissions reduction initiatives which contributed most to achieving this target

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

C4.2a

(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

2020

Target coverage

Site/facility

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2008

Consumption or production of selected energy carrier in base year (MWh)

17,193

% share of low-carbon or renewable energy in base year

0

Target year

2021

% share of low-carbon or renewable energy in target year

100

% share of low-carbon or renewable energy in reporting year

100

% of target achieved relative to base year [auto-calculated]

100

Target status in reporting year

Underway

Is this target part of an emissions target?

No

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

In 2021, 100% of the power purchased at our Sterling Heights and Scranton, Pennsylvania, parts and manufacturing plants was from renewable sources. In total, we purchased more than 17 million KWH of electricity generated by wind farms, resulting in a reduction of our Scope 2 greenhouse gas emissions by 7,200 tons. GD Land Systems has contracts in place to continue our purchase of renewable energy for these sites.

Plan for achieving target, and progress made to the end of the reporting year

We had planned on procuring 100% renewable energy for our Sterling Heights and Scranton PA facility. In 2021 we were able to purchase 100% renewable energy for these sites which is how we were able to make progress towards these goals.

List the actions which contributed most to achieving this target

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	1	160
To be implemented*	7	2,156
Implementation commenced*	1	3,498
Implemented*	2	19,377
Not to be implemented	0	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
Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

476

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

254,000

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

1,200,000

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

GD has worked towards upgrading many of its lighting systems from traditional incandescent light bulbs to more energy efficient LED.

Initiative category & Initiative type

Low-carbon energy consumption
Nuclear

Estimated annual CO2e savings (metric tonnes CO2e)

18,901

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

0

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

0

Payback period

No payback

Estimated lifetime of the initiative

3-5 years

Comment

Where feasible, GD has entered green power contracts with local utilities to procure 100% renewable electricity.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	New structures and ongoing operations are evaluated for economic benefits, employee safety and other factors. Reviews are conducted with the local regulatory authorities to ensure the best solution is

	developed and implemented. We have drawn from across the company for ideas to make our facilities highly energy efficient and a good place to work for our employees. The use of capital is considered to improve operational safety and operational performance.
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C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Sustainable Aviation Fuel (SAF)

Type of product(s) or service(s)

Biofuels

Other, please specify

Sustainable aviation fuel

Description of product(s) or service(s)

General Dynamics uses and provides Sustainable Aviation Fuel (SAF) as an alternative to conventional Jet Fuel for our customers. SAF is a drop-in fuel which emits ~80% less emissions than conventional jet fuel.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Estimating and Reporting the Comparative Emissions Impacts of Products (WRI)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Other, please specify

Well to wake

Functional unit used

The function of the product(s) or service(s): decrease emissions associated with the combustion of aviation fuel.

The duration or service life of the product(s) or service(s) (i.e., the amount of time needed to fulfil the function): one-time use (i.e., SAF is consumed during individual flight segments).

The quality of the product(s) or service(s): SAF has been tested and approved to be used in partial replacement of traditional jet fuel.

Reference product/service or baseline scenario used

Well-to-Wake conventional jet fuel used as a baseline for comparison

Life cycle stage(s) covered for the reference product/service or baseline scenario

Other, please specify
Well to wake

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

0.0000713

Explain your calculation of avoided emissions, including any assumptions

The lifecycle emissions associated with SAF are 80% less carbon intensive than conventional jet fuel. The baseline for well-to wake emissions associated with conventional jet fuel is roughly .00009 mt CO2e/MJ. SAF can vary on carbon content but is roughly 80% less carbon intensive from a well to wake perspective at roughly .0000187 mt CO2e/MJ. Therefore to calculate the emissions avoided by using SAF rather than conventional jet fuel, we subtract .00009 mt CO2e/MJ from .0000187 mt CO2e/MJ which is equal to .0000713 mtCO2e/MJ avoided.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

1

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

Change(s) in methodology, boundary, and/or reporting year definition?	
Row 1	No

C5.2

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

Scope 1

Base year start

January 1, 2008

Base year end

December 31, 2008

Base year emissions (metric tons CO2e)

298,818

Comment

Scope 2 (location-based)

Base year start

January 1, 2008

Base year end

December 31, 2008

Base year emissions (metric tons CO2e)

604,544

Comment

Scope 2 (market-based)

Base year start

January 1, 2008

Base year end

December 31, 2008

Base year emissions (metric tons CO2e)

605,730

Comment

Scope 3 category 1: Purchased goods and services

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

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

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

143,344

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 6: Business travel

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO₂e)

101,450

Comment

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

C5.3

(C5.3) 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)

The Greenhouse Gas Protocol: Scope 2 Guidance

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)

305,600

Comment

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

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

Reporting year

Scope 2, location-based

408,400

Scope 2, market-based (if applicable)

380,900

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, not yet calculated

Please explain

Capital goods

Evaluation status

Relevant, not yet calculated

Please explain

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

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

143,344

Emissions calculation methodology

Average data method

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

0

Please explain

This value is calculated for all upstream and T&D emissions for fuels, electricity, steam, and chilled water.

Upstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Please explain

Waste generated in operations

Evaluation status

Relevant, not yet calculated

Please explain

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

49,500

Emissions calculation methodology

Distance-based method

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

0

Please explain

To calculate emissions from business travel GD worked with its invoicing and travel department to obtain travel information from personal car mileage, car rentals, hotel stays, rail and air travel. Emission factors were compiled from the EPA GHG Hub “Scope 3 Category 6: Business Travel” which leverage the IPCC 4th assessment.

Employee commuting

Evaluation status

Relevant, not yet calculated

Please explain

Upstream leased assets

Evaluation status

Relevant, not yet calculated

Please explain

Downstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Please explain

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

All products are made as a complete unit within General Dynamic facilities before being shipped and therefore no processing of sold products occur.

Use of sold products

Evaluation status

Relevant, not yet calculated

Please explain

End of life treatment of sold products

Evaluation status

Relevant, not yet calculated

Please explain

Downstream leased assets

Evaluation status

Relevant, not yet calculated

Please explain

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

General Dynamics does not have any franchises within its business operations.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

General Dynamics does not have any investments in the reporting year, which were not already included in scope 1 or scope 2

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

General Dynamics does not have any "Other (upstream)" emissions associated with its operations

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

General Dynamics does not have any "Other (downstream)" emissions associated with its operations

C6.7

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

No

C6.10

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

Intensity figure

0.00001785

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

686,500

Metric denominator

unit total revenue

Metric denominator: Unit total

38,469,000,000

Scope 2 figure used

Market-based

% change from previous year

8.01

Direction of change

Decreased

Reason for change

GD experienced an increase in revenue from 2020 to 2021 and a decrease in absolute emissions from 2020 and 2021 which resulted in a decrease in our intensity-based figure. Emission reductions can be attributed to the upgrade of many of our facilities' lighting systems from traditional incandescent lighting to more energy-efficient LED. In addition, GD has increased use of renewable energy at multiple sites in our Aerospace business and consolidated some of our IT operations into fewer, more energy-efficient sites.

Intensity figure

0.00001856

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

714,000

Metric denominator

unit total revenue

Metric denominator: Unit total

384,690,000,000

Scope 2 figure used

Location-based

% change from previous year

4.8

Direction of change

Decreased

Reason for change

GD experienced an increase in revenue from 2020 to 2021 and a decrease in absolute emissions from 2020 and 2021 which resulted in a decrease in our intensity-based figure. Emission reductions can be attributed to the upgrade of many of its lighting systems from traditional incandescent lighting to more energy efficient LED,. In addition, GD consolidated some of our IT operations into fewer, more energy-efficient sites.

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	290,623	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	236	IPCC Fourth Assessment Report (AR4 - 100 year)

N2O	865	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	13,876	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO ₂ e)
United States of America	270,535
Canada	20,793
Spain	2,946
Switzerland	3,007
Germany	1,919
United Kingdom of Great Britain and Northern Ireland	1,793
Mexico	1,928
Australia	282
Austria	627
Other, please specify All other countries	1,770

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 CO ₂ e)
Aerospace	83,590
Marine Systems	71,699
Technologies	31,660
Combat Systems	114,607
Corporate Operations	4,044

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 CO ₂ e	Comment
Transport OEM activities	83,590	The scope 1 emissions associated with General Dynamics transport service activities is provided. This figure comprises the scope 1 emissions from our Aerospace divisions.

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
United States of America	379,570	346,740
Mexico	9,587	9,587
Canada	3,250	3,249
Switzerland	2,628	2,684
United Kingdom of Great Britain and Northern Ireland	2,223	4,321
Germany	2,120	2,747
Spain	2,102	4,630
Singapore	1,066	1,065
United Arab Emirates	1,083	1,083
Australia	1,276	1,275
Kuwait	940	940
Iraq	869	869
Saudi Arabia	238	238
China	166	166
Puerto Rico	378	378
Italy	167	254
Hong Kong SAR, China	102	102
Austria	154	62
Turkey	141	141

Other, please specify All other countries	340	369
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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)
Aerospace	104,119	101,573
Marine Systems	106,088	83,102
Information Systems & Technology	97,486	98,954
Combat Systems	99,702	96,266
Corporate Operations	1,005	1,005

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-TO7.7/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
Transport OEM activities	104,119	101,573	The scope 2 emissions associated with General Dynamics transport service activities is provided. This figure comprises the scope 2 emissions from our Aerospace divisions.

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)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	11,775	Decreased	17	This year, several facilities increased the amount of electricity secured from suppliers via contracts for 100% renewable electricity. This reduced our total S1+S2 (market-based) emissions by 17%. In total 11775 tCO2e were avoided by these renewable energy purchases and our total S1 and S2 (market-based) emissions in the previous year were 686500 tCO2e, therefore we arrived at 17% through $(11775/686500) * 100\% = 17\%$.
Other emissions reduction activities	476	Decreased	0.07	This year, we have implemented various projects at sites around the globe to reduce our S2 energy use in associated with lighting. These lighting design changes accounted for a decrease of about 476 mtCO2e, and our total S1 and S2 (market-based) emissions in the previous year were 686500 tCO2e, therefore we arrived at 0.07% through $(476/686500) * 100\% = 0.07\%$.
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	0	No change	0	
Change in methodology	0	No change	0	

Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

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

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	Yes
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	1,020,119	1,020,119
Consumption of purchased or acquired electricity		28,190	1,331,563	1,359,753
Consumption of purchased or acquired steam		0	57	57
Consumption of purchased or acquired cooling		0	0	0
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		28,190	2,351,739	2,379,929

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	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	Yes
Consumption of fuel for co-generation or tri-generation	No

C8.2c

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

Sustainable biomass

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

Comment

Other biomass

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

Comment

Coal

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

Comment

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

8,809

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

0

Comment

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

1,011,310

MWh fuel consumed for self-generation of heat

582,887

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

Comment

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

1,020,119

MWh fuel consumed for self-generation of heat

582,887

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

Comment

C8.2d

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	0	0	0	0
Heat	582,887	582,887	0	0
Steam	57	57	0	0
Cooling	1,259	1,259	0	0

C8.2e

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

Sourcing method

Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier

Electricity

Low-carbon technology type

Nuclear

Country/area of low-carbon energy consumption

United States of America

Tracking instrument used

Other, please specify

Emissions Free Energy Credits (EFECs)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

95,181

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1,986

Comment

One major facility is enrolled in Constellation Energy's Carbon-Free Electricity Plan, which matches all electricity purchased with emissions free energy credits (EFECs) that certify the electricity purchased is carbon free. The retirement is verified by LRQA to ensure no double counting.

Sourcing method

Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier

Electricity

Low-carbon technology type

Wind

Country/area of low-carbon energy consumption

United States of America

Tracking instrument used

US-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

7,691

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

One facility is enrolled in TXU Energy's renewable energy program that matches 100% of the annual electricity consumption to Green-e certified RECs from wind farms.

Sourcing method

Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Country/area of low-carbon energy consumption

Austria

Tracking instrument used

Contract

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

800

Country/area of origin (generation) of the low-carbon energy or energy attribute

Austria

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Based on the utility contract, one facility's electricity consumption is 100% from hydropower sources.

Sourcing method

Unbundled energy attribute certificates (EACs) purchase

Energy carrier

Electricity

Low-carbon technology type

Wind

Country/area of low-carbon energy consumption

United States of America

Tracking instrument used

US-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

9,331

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

One facility purchased Green-e certified RECs from national wind farms through Constellation NewEnergy.

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area

Argentina

Consumption of electricity (MWh)

147

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

147

Country/area

Australia

Consumption of electricity (MWh)

4,247

Consumption of heat, steam, and cooling (MWh)

4

Total non-fuel energy consumption (MWh) [Auto-calculated]

4,251

Country/area

Austria

Consumption of electricity (MWh)

511

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

511

Country/area

Bahamas

Consumption of electricity (MWh)

2

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

2

Country/area

Brazil

Consumption of electricity (MWh)

98

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

98

Country/area

Canada

Consumption of electricity (MWh)

10,820

Consumption of heat, steam, and cooling (MWh)

10

Total non-fuel energy consumption (MWh) [Auto-calculated]

10,830

Country/area

China

Consumption of electricity (MWh)

553

Consumption of heat, steam, and cooling (MWh)

1

Total non-fuel energy consumption (MWh) [Auto-calculated]

554

Country/area

Hong Kong SAR, China

Consumption of electricity (MWh)

340

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

340

Country/area

Colombia

Consumption of electricity (MWh)

95

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

95

Country/area

Ecuador

Consumption of electricity (MWh)

15

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

15

Country/area

Egypt

Consumption of electricity (MWh)

1

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1

Country/area

Ethiopia

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area

Germany

Consumption of electricity (MWh)

7,057

Consumption of heat, steam, and cooling (MWh)

7

Total non-fuel energy consumption (MWh) [Auto-calculated]

7,064

Country/area

Iraq

Consumption of electricity (MWh)

2,894

Consumption of heat, steam, and cooling (MWh)

3

Total non-fuel energy consumption (MWh) [Auto-calculated]

2,897

Country/area

Israel

Consumption of electricity (MWh)

19

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

19

Country/area

Italy

Consumption of electricity (MWh)

558

Consumption of heat, steam, and cooling (MWh)

1

Total non-fuel energy consumption (MWh) [Auto-calculated]

559

Country/area

Jamaica

Consumption of electricity (MWh)

29

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

29

Country/area

Japan

Consumption of electricity (MWh)

42

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

42

Country/area

Kuwait

Consumption of electricity (MWh)

3,129

Consumption of heat, steam, and cooling (MWh)

3

Total non-fuel energy consumption (MWh) [Auto-calculated]

3,132

Country/area

Malaysia

Consumption of electricity (MWh)

169

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

169

Country/area

Malta

Consumption of electricity (MWh)

5

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

5

Country/area

Mexico

Consumption of electricity (MWh)

31,923

Consumption of heat, steam, and cooling (MWh)

31

Total non-fuel energy consumption (MWh) [Auto-calculated]

31,954

Country/area

Netherlands

Consumption of electricity (MWh)

158

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

158

Country/area

Oman

Consumption of electricity (MWh)

1

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1

Country/area

Peru

Consumption of electricity (MWh)

23

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

23

Country/area

Philippines

Consumption of electricity (MWh)

324

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

324

Country/area

Puerto Rico

Consumption of electricity (MWh)

1,257

Consumption of heat, steam, and cooling (MWh)

1

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,258

Country/area

Saudi Arabia

Consumption of electricity (MWh)

792

Consumption of heat, steam, and cooling (MWh)

1

Total non-fuel energy consumption (MWh) [Auto-calculated]

793

Country/area

Singapore

Consumption of electricity (MWh)

3,548

Consumption of heat, steam, and cooling (MWh)

3

Total non-fuel energy consumption (MWh) [Auto-calculated]

3,551

Country/area

Spain

Consumption of electricity (MWh)

6,999

Consumption of heat, steam, and cooling (MWh)

7

Total non-fuel energy consumption (MWh) [Auto-calculated]

7,006

Country/area

Switzerland

Consumption of electricity (MWh)

8,749

Consumption of heat, steam, and cooling (MWh)

8

Total non-fuel energy consumption (MWh) [Auto-calculated]

8,757

Country/area

Turkey

Consumption of electricity (MWh)

469

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

469

Country/area

United Arab Emirates

Consumption of electricity (MWh)

3,612

Consumption of heat, steam, and cooling (MWh)

3

Total non-fuel energy consumption (MWh) [Auto-calculated]

3,615

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of electricity (MWh)

7,401

Consumption of heat, steam, and cooling (MWh)

7

Total non-fuel energy consumption (MWh) [Auto-calculated]

7,408

Country/area

United States of America

Consumption of electricity (MWh)

1,263,766

Consumption of heat, steam, and cooling (MWh)

1,223

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,264,989

C-TO8.5

(C-TO8.5) Provide any efficiency metrics that are appropriate for your organization's transport products and/or services.

Activity

Aviation

Metric figure

8.32

Metric numerator

Other, please specify
liters of fuel

Metric denominator

Other, please specify
Y mile

Metric numerator: Unit total

24,799,074

Metric denominator: Unit total

2,978,975.77

% change from previous year

-5

Please explain

Flown miles increased as COVID-19 Domestic and International Travel restrictions have been reduced or removed.
 This calculation uses liters of fuel as the numerator and passenger miles flown as the denominator.

C9. Additional metrics

C9.1

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

Description

Other, please specify
 No additional metrics

Metric value

Metric numerator

No additional metrics

Metric denominator (intensity metric only)

No additional metrics

% change from previous year

Direction of change

Please explain

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.

Activity

Aviation

Metric

Yearly purchase

Technology

Other, please specify

Sustainable Alternative Jet Fuel

Metric figure

54,994

Metric unit

Other, please specify
gallons

Explanation

General Dynamics has purchased 54,994 gallons of sustainable aviation jet fuel. This helps reduce the emissions associated with flying our aircraft. We will continue to explore purchasing additional SAF as it becomes available.

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 in low-carbon R&D	Comment
Row 1	Yes	We continue to explore the use of batteries and other renewable use solutions to power armored vehicles. While there is work being done on battery powered jet aircraft, the physics of carrying fuel and burning it off is still far less expensive than using batteries, which have essentially the same weight at the end of the trip with a used battery. In aggregate, jet aviation for longer-range trips.

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.

Activity

Aviation

Technology area

Airframe

Stage of development in the reporting year

Full/commercial-scale demonstration

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

≤20%

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

Comment

We are in the process of developing the G400, G700, and G800 which are highly efficient business jets. Efforts include the use of a new engine and improved avionics.

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

 APEX - CDP Verification Statement Limited RY2021_General Dynamics_FINAL (002).pdf

Page/ section reference

Page 1

Relevant standard

ISO14064-3

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 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 APEX - CDP Verification Statement Limited RY2021_General Dynamics_FINAL (002).pdf

Page/ section reference

Page 1

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

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

 APEX - CDP Verification Statement Limited RY2021_General Dynamics_FINAL (002).pdf

Page/ section reference

Page 1

Relevant standard

ISO14064-3

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: 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

 APEX - CDP Verification Statement Limited RY2021_General Dynamics_FINAL (002).pdf

Page/section reference

Page 1

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.2

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

No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.1

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

Yes

C11.1a

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

Other carbon tax, please specify

ICAO's Carbon Offsetting and Reduction Scheme for International Aviation (CORSA)

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

Other carbon tax, please specify

Period start date

January 1, 2021

Period end date

December 31, 2035

% of total Scope 1 emissions covered by tax

25

Total cost of tax paid

0

Comment

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) is a carbon offset and carbon reduction scheme to lower CO2 emissions for international flights to curb the aviation industry's impact on climate change. CORSA was developed by the International Civil Aviation Organization (ICAO) and adopted in October 2016. CORSA is an ICAO Assembly Resolution designed to help the aviation industry reach its "aspirational goal" to make all growth in international flights after 2020 "carbon neutral." CORSA was amended such that 2019 emissions are the baseline year, against which emissions in future years are compared.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

EU Emissions Trading System (EU ETS)

We have been working with the EU ETS program since 2008, and data have been verified since 2017. We have established procedures to ensure compliance with current and future EU ETS regulations. We will continue to work with our data verifier and the EU on amended legislation to ensure compliance and participation.

ICAO Carbon Offsetting and Reduction Scheme for International Aviation (CORSA)

CORSA was adopted in October 2016 and will begin operating in January 2021 with a voluntary phase that will last until the end of 2023. Although we are exempt from reporting because international emissions must be above 10,000 tCO₂ per year, we will monitor and benchmark during the voluntary phase.

Both EU ETS and CORSA have the goal of reducing or capping emissions. In addition to our continuous participation and monitoring of these programs and others, our use of Sustainable Aviation Fuel and more efficient aircraft will contribute to our reduction in emissions.

We applied the strategy with the following case study. For each of the 182 applicable aircraft in 2021, we worked with Shockwave Aviation to verify the emissions with the customer. For example, an aircraft operator in 2021 operated within the applicable EU ETS area. Data is compiled through filed flight plans and actual flown routes and prepared for verification. All data is prepared utilizing the European Commission template called the Annual Emissions Report for Aircraft Operations, which is a combined template for the EU ETS and ICAO CORSA programs. The verification process utilizes an independent verifier under Article 28a(6) and was completed for all aircraft and operators. The EU ETS program assigns a unique operator identifier that ties the aircraft's registration number into their tracking systems. For this particular case study, the member state of the aircraft operator was assigned to Spain -- Ministerio de Medio Ambiente. As standard practice, the CO₂ emissions of Jet Fuel and other related gasses, the number of flights in EU ETS airspace, total emissions in the reporting year (which for this example was 5334 t CO₂) and other emissions-related information is included in the submission. The detailed 20-page report and processes were completed under Version 2-3799 of the approved operating monitoring plan.

C11.2

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

Yes

C11.2a

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

Credit origination or credit purchase

Credit purchase

Project type

Forests

Project identification

Project Name- Iberpapel Silvipastural System on Degraded Land ID-920.

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO2e)

8,626

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

8,626

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

CO2 usage

Project identification

General Dynamics confirms its ongoing commitment to sustainable aviation in the industry's first ever sustainability summit hosted by the Business Aviation Coalition for Sustainable Aviation Fuel (SAF Coalition). Jet Aviation was the first, exclusive provider of SAF in Switzerland through its pilot program during the 2020 World Economic Forum. It continues to invest in sustainable solutions, recently delivering industry-leading weight values in its quietest ever VIP cabin interior. Jet Aviation was the first supplier to offer sustainable fuel via a blended fuel option at Van Nuys Airport. The Van Nuys Airport is also the first Jet Aviation site to carry blended fuel. The site was built to LEED silver specifications and construction practices included using regional materials, installing energy efficient lighting and low-flow plumbing fixtures, and a commitment to divert the majority of construction waste from landfills.

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO2e)

141

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

141

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

Landfill gas

Project identification

Dalton-Whitfield Landfill Project: The Dalton-Whitfield Landfill Gas to Energy project, located in Dalton, Georgia, collects, compresses, dehydrates and transports landfill gas (LFG) to an industrial facility boiler two miles from the landfill to offset the industry's use of natural gas, a nonrenewable fossil fuel. Commissioned in 2008 and developed and operated by the Dalton-Whitfield Solid Waste Authority, the project provides a reliable source of renewable energy to local industry while also minimizing greenhouse gas emissions. The project typically offsets 90 to 100% of the industrial customers' use of natural gas. The result is an estimated reduction of 47,600 metric tons of carbon dioxide emissions per year, equivalent to offsetting the greenhouse gas emissions from almost 9,108 passenger vehicles. This not only replaces a non-renewable energy source with a renewable one, but it improves air quality. In addition to its environmental benefits, the project results in economic benefits and provides a revenue source that will repay project development costs and fund operation and future expansion, without the use of tax revenue. The contract ties the value of LFG to the price for natural gas, thereby reflecting the market value of energy over time. In addition, the project receives financial benefits for its share of carbon credits generated by the project. Rather than in response to a regulatory requirement, the project was developed to help achieve the Authority's goals of financial and environmental sustainability.

Verified to which standard

CAR (The Climate Action Reserve)

Number of credits (metric tonnes CO₂e)

50

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

50

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

CO2 usage

Project identification

Jet Aviation participates in the European Union Emissions Trading Scheme (EU ETS), which is the world's first and largest installation-level 'cap-and trade' system for reducing greenhouse gas (GHG) emissions. The system is intended to assist the EU in reaching both its immediate and longer-term emissions reduction objectives by "promoting reductions of emissions in a cost-effective and economically efficient manner." The main features of the EU ETS are the emission cap (a ceiling on the maximum amount) and the trading of EU emission allowances (EUAs). The cap guarantees that total emissions are kept to a pre-defined level (and does not rise above it) in the period for which the cap applies. Covered installations have to submit an EUA for each tonne of carbon dioxide equivalent (CO2 eq) they emit during a year.

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO2e)

5,334

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

5,334

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers/clients

C12.1a

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

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Other, please specify

We collect information from suppliers on climate-related risks and monitor suppliers that have had climate-related incidents

% of suppliers by number

25

% total procurement spend (direct and indirect)

25

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

0

Rationale for the coverage of your engagement

Climate risks and opportunities impact the way we engage our supply chain in the short term. Gulfstream engages with our supply base on a regular basis to make our aircraft and our operations more efficient. Gulfstream suppliers are encouraged to look for ways to save weight in their products to improve overall aircraft performance. Through our Supplier Code of Conduct, our suppliers are expected to operate in a manner that actively manages risk, conserves natural resources and protects the environment in the communities where they operate. Recyclable packaging materials are used in the Gulfstream shipping areas, and we have worked with suppliers to use returnable containers where viable. Gulfstream is engaged with the leaders in the Sustainable Aviation Fuel (SAF) industry to continue to increase both Gulfstream and customer use of SAF. In the area of risk mitigation, it is typically not practical for Gulfstream to select suppliers based solely on their geographic location, however we do consider climate-related geographic risks in our sourcing decisions.

Impact of engagement, including measures of success

The measure of success is determined by the results of our suppliers and ultimately our customers. We strive to create efficient products, and we base our success on the new technologies that our suppliers can provide us to ensure efficient design to help mitigate climate impacts. We measure this success not only on how effective our suppliers' technology is but also on how our customers benefit from these technologies through customer engagement and evaluation.

Comment

GD does not currently quantify the emissions associated with its suppliers. It has been GD's practice to work with its suppliers to ensure that our products are as efficient as possible. Our current generation of aircraft reduces fuel consumption by roughly 30%, which has a direct correlation to the overall GHG emitted. Additionally, we continue to work with our suppliers to ensure we can supply our aircraft with SAF, which further reduces our GHG impacts.

C12.1b

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

Type of engagement & Details of engagement

Collaboration & innovation

Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

1

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

0

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

Our business aviation customers have shown a desire to utilize Sustainable Aviation Fuel (SAF) in their aircraft to reduce emissions. Jet Aviation has been offering SAF at our Van Nuys facility and at the World Economic Forum in Switzerland. Jet Aviation is engaged with our customers to promote the use of SAF in business aircraft and offering customers the ability to purchase carbon offset credits as part of our climate-related strategy.

Impact of engagement, including measures of success

We measure success by the number of gallons of SAF sold. Improved availability of the fuel would increase demand as it would lower the price and increase locations where it is available. The impact of SAF is a reduction in CO₂, improved local air quality, and improved fuel efficiency. Sustainable fuel, such as biofuel, is critical to the net-zero emissions outcome. Jet Aviation has been working with partners such as World Energy and Neste to increase the availability of SAF in the market and aircraft operators have been responding. Success is measured in many ways, which include promotion of SAF, education, gallons of SAF utilized, and increasing the production and availability of SAF globally. Customers can claim a reduction for their Scope 3 emissions.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization’s purchasing process and the compliance mechanisms in place.

Climate-related requirement

Other, please specify

environmental risk management and resource conservation

Description of this climate related requirement

Our business units use different mechanisms to address supply chain environmental risk. These codes of conduct generally do not impose requirements specifically. Many have supplier codes of conduct that specify environmental standards. For example, Gulfstream has a supplier code of conduct that outlines the company’s expectations of suppliers as it relates to human rights, employment practices, and environmental activities, among other criteria. These environmental criteria are not in suppliers’ contracts, but the code of conduct is applicable to all suppliers Gulfstream contracts with. Specifically, suppliers are expected to actively manage risk while protecting the environments they operate in and conserving natural resources. Gulfstream expects suppliers to have an environmental, health, and safety (EHS) management system to address these issues while acting in compliance with applicable EHS laws and regulations.

% suppliers by procurement spend that have to comply with this climate-related requirement

70

% suppliers by procurement spend in compliance with this climate-related requirement

70

Mechanisms for monitoring compliance with this climate-related requirement

Other, please specify

Supplier conduct and compliance with standards varies based on business unit and particular supplier management mechanisms.

Response to supplier non-compliance with this climate-related requirement

Other, please specify

Depending on the nature and extent of a known violation of our supplier code of conduct by a supplier, we will take appropriate action to remedy the situation, up to and including suspending or terminating engagement with the supplier.

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, we engage indirectly through trade associations

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

No, and we do not plan to have one in the next two years

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

General Dynamics engages with trade associations and policy makers on a variety of matters that are of interest to the company. GD's engagement on specific policy issues is coordinated with internal stakeholders to ensure consistency. To start, the individuals that directly face trade associations and policymakers are senior executives (e.g., presidents of business units and corporate vice presidents) who have visibility of GD's overall strategies and plans. These executives also directly influence or authorize our business unit and corporate strategic plans. Additionally, coordination for engagements that influence government policy routinely includes collaboration and updates between leadership and relevant stakeholders within the company, including the business unit presidents, corporate councils, the Strategic Planning office and the Government Relations office. GD often uses corporate councils that address cross-cutting functional matters to ensure consistency across our business units. Through this coordination, we ensure alignment with our overall climate-change strategy.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Focus of policy, law, or regulation that may impact the climate

Other, please specify

Regulation

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Aviation Emissions Reduction Opportunity Act (AERO Act)

Policy, law, or regulation geographic coverage

National

Country/region the policy, law, or regulation applies to

United States of America

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

We have also engaged with members of Congress regarding the proposed Aviation Emissions

Reduction Opportunity Act (AERO Act).

This establishes a competitive grant program to provide grants to eligible entities to carry out projects located in the United States that produce, transport, blend, or store sustainable aviation fuel, or develop, demonstrate, or apply low-emission aviation technologies.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

No, we have not evaluated

Focus of policy, law, or regulation that may impact the climate

Renewable energy generation

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Sustainable Skies Act

Policy, law, or regulation geographic coverage

National

Country/region the policy, law, or regulation applies to

United States of America

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

We have engaged with members of Congress regarding the proposed federal tax credit for SAF, including in the Sustainable Skies Act. The legislation would provide a tax

credit for SAF that achieves at least a 50% reduction in lifecycle greenhouse gas emission compared to conventional jet fuel. We have also communicated with lawmakers our support for a federal grant program administered by the Department of Transportation that would provide funding to help stand up facilities to produce Sustainable Aviation Fuel and develop new aviation technologies that would reduce greenhouse gas emissions.

Details of exceptions (if applicable) and your organization’s proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization’s engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify
Aerospace Industries Association (AIA)

Is your organization’s position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

State the trade association’s position on climate change, explain where your organization’s position differs, and how you are attempting to influence their position (if applicable)

AIA is a trade association representing major aerospace and defense manufacturers and suppliers in the United States. AIA has set short-term, mid-term and long-term goals for reducing the industry’s climate impact. In October 2021, AIA made a commitment for commercial aviation manufacturers to work with airline customers and governments around the world to achieve net-zero carbon emissions by 2050.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization’s funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

No, we have not evaluated

Trade association

Other, please specify

General Aviation Manufacturers Association (GAMA)

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

GAMA exists to foster and advance the general welfare, safety, interests and activities of the global business and general aviation industry. GAMA and the International Business Aviation Council (IBAC), on behalf of the manufacturers and operators of business aviation worldwide, have developed a strategy for CO₂ emissions reductions by 2050. They have joined with the commercial aviation sector in endorsing the International Civil Aviation Organization's (ICAO) proposal for a global sectoral approach for aviation emissions in a post-Kyoto Agreement on climate change. GAMA's Environment Committee is charged with discussions and policy positions about general aviation's environmental impact and initiatives. GAMA, its member OEMs and business aviation stakeholders have three objectives related to these goals: 1. reducing CO₂ emissions by 50% by 2050, 2. improving fuel efficiency by 2%, and 3. achieving carbon-neutral growth. Commitment to the environment is demonstrated by the remarkable improvements in environmental performance delivered over the last half century. The industry believes that if opportunity is given to the aviation community to manage environmental stewardship in partnership with industry and under the leadership of ICAO, all will enjoy a vibrant and healthy industry that will continue to proactively reduce its impact on the environment even as the demand for business aviation continues to grow. The Environment Committee also works to build support for more research and technology to further improve upon its long track record of reducing aviation's carbon footprint. GAMA has conducted several outreach and advocacy activities to influence the public policy debate on environmental issues, including Congressional testimony and input to legislation.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization’s engagement with this trade association is aligned with the goals of the Paris Agreement?

No, we have not evaluated

Trade association

Other, please specify

National Air Transportation Association (NATA)

Is your organization’s position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

State the trade association’s position on climate change, explain where your organization’s position differs, and how you are attempting to influence their position (if applicable)

NATA supports the sustainable fuel initiative and industry standards related to greenhouse gas initiatives. For example, NATA recently developed the sustainability standard for aviation businesses. As NATA describes,

“The NATA Sustainability Standard for Aviation Businesses is a new sustainability initiative, created to provide FBOs and other aviation businesses a self-certification process for pursuing flexible, cost-effective options to lower their carbon footprint.

Developed by a working group under NATA’s Environment Committee, the NATA Sustainability Standard for Aviation Businesses is a free industry standard designed to reduce greenhouse gas (GHG) emissions (including CO₂), increase use of more environmentally friendly energy sources, reduce waste, and encourage sustainability operation-wide.”

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization’s funding

Have you evaluated whether your organization’s engagement with this trade association is aligned with the goals of the Paris Agreement?

No, we have not evaluated

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In voluntary sustainability report

Status

Complete

Attach the document

 GD-2021-Sustainability-Report.pdf

 GD-2021-Sustainability-Report.pdf

Page/Section reference

GD published information relating to environmental responsibility, including our 2020 emissions results, in the 2021 Corporate Sustainability Report (pp.47-55)

Content elements

Governance

Emissions figures

Emission targets

Other metrics

Comment

The approach GD has taken is to use our annual Corporate Sustainability Report to represent the past year's ESG plans and performance, including in environmental matters and GHG emissions. Our 2021 Corporate Sustainability Report included our 2020 emissions performance. Our 2021 emissions performance will be included in our 2022 Corporate Sustainability Report. Throughout the year as we take proactive steps on ESG matters and as we receive real-time feedback from stakeholders, we will update the Responsibility section of our website.

Publication

In voluntary communications

Status

Complete

Attach the document

 GD 2022 Proxy Statement.PDF

Page/Section reference

2022 Proxy Statement (pp.12-14).

Content elements

- Governance
- Emissions figures
- Emission targets
- Other metrics

Comment

Our 2021 emissions performance will be included in our 2022 Corporate Sustainability Report. Throughout the year as we take proactive steps on ESG matters and as we receive real-time feedback from stakeholders, we will update the Responsibility section of our website.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues
Row 1	

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity
Row 1	

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?
Row 1	

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	
Row 1	

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1		

C15.6

(C15.6) Have you published information about your organization’s response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located

C16. 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.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Financial Officer (CFO)	Chief Financial Officer (CFO)

SC. Supply chain module

SC0.0

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

SC0.1

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

	Annual Revenue
Row 1	

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
-----------------------	--

SC1.4

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

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?

SC4.1

(SC4.1) Are you providing product level data for your organization’s goods or services?

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms