Message from CEO

A more connected and protected world, and a universe better understood.

That’s our mission at Northrop Grumman. To create cutting edge technology that solves the world’s most complex challenges and defines what is possible. To make a massive aircraft disappear; intercept moving targets continents away; peer backwards through time to the creation of the universe.

Behind each groundbreaking program are people and communities who turn these ideas into realities. They are the driving force of our company, counting on us to adapt, innovate and lead as the defense and national security stages evolve.

Globally, we’ve witnessed environmental and societal changes threatening values that we hold dear: from resource inequity to severe weather events, data privacy breaches to social justice and sovereignty. These dynamic shifts threaten our way of life and demand bold, meaningful action. Now.

Northrop Grumman has the talent, technology, purpose, and ingenuity to help our world become more sustainable, equitable and secure for everyone.

Our vision for the future is built on decades of experience supporting communities. Purpose and ethics are foundational to our company and our values. We foster transparency and trust among employees, customers, and shareholders, enabling us to innovate fearlessly and operate with excellence; qualities earning our team the 2022 Deming Cup for Operational Excellence.

Harnessing our technology leadership, we’ve also made strides to reduce our carbon, water, and waste footprints, and partnered with customers and suppliers to help them do the same. Last year, we released bold sustainability goals, including Net Zero greenhouse gas emissions in our operations by 2035.¹ We were named one of America’s Most JUST Companies for our work making a more equitable business environment and named to the Dow Jones Sustainability Index for the seventh year in a row. We also brought forth our inaugural sustainability hackathon and two incredible Tech for Conservation projects – HOP Queue and Project Glacier Watch – which rethink how we use AI, sensors, and satellites to monitor water quality and ice melt rates.

From undersea to outer space, there is infinite opportunity to make positive contributions to our communities and our planet. And a journey to a more sustainable, equitable and secure world is underway.

Our legacy of success emboldens our vision for a brighter future fueled by innovation. Because while the challenges that face our world may seem great, we are ready, as always, to define what is possible.

Sincerely,

KATHY J. WARDEN
Chair, Chief Executive Officer and President
March 16, 2023

¹ "Net Zero operations", as referred to throughout this report, is defined as our goal to reach Net Zero GHG emissions in our operations (i.e., our Scope 1 and 2 GHG emissions) by 2035. Our baseline year for tracking interim progress on the goal is 2019.
Our Company

Northrop Grumman Corporation is a leading global aerospace and defense technology company. Our pioneering solutions equip our customers with the capabilities they need to connect and protect the world, and push the boundaries of human exploration across the universe. Driven by a shared purpose to solve our customers’ toughest problems, our 95,000 employees define possible every day. We have four operating sectors that comprise our business:

**Aeronautics Systems** is a leader in the design, development, production, integration, sustainment and modernization of advanced aircraft systems for the United States (U.S.), Air Force, the U.S. Navy, other U.S. government agencies and international customers. These aircraft systems support four mission areas: strike; air dominance; battle management and control; and intelligence, surveillance and reconnaissance (ISR).

**Defense Systems** is a leader in the design, development, production, integration, sustainment and modernization of weapon and mission systems for U.S. military and civilian agency customers, and a broad range of international customers. Major products and services include integrated battle management systems, weapons systems and aircraft and mission system sustainment and modernization.

**Mission Systems** is a leader in advanced mission solutions and multifunction systems, primarily for the U.S. defense and intelligence community, and international customers. Major products and services include cyber; command, control, communications and computers, intelligence, surveillance and reconnaissance (C4ISR) systems; radar, electro-optical/infrared (EO/IR) and acoustic sensors; electronic warfare systems; advanced communications and network systems; cyber solutions; intelligence processing systems; navigation; and maritime power, propulsion and payload launch systems.

**Space Systems** is a leader in delivering end-to-end mission solutions through the design, development, integration, production and operation of space, missile defense, launch and strategic missile systems for national security, civil government, commercial and international customers. Major products include satellites and payloads; ground systems; missile defense systems and interceptors; launch vehicles and related propulsion systems; and strategic missiles.
At Northrop Grumman, our pioneering solutions equip our customers with the capabilities they need to connect and protect the world, and push the boundaries of human exploration across the universe. Driven by a shared purpose to solve our customers’ toughest problems, we endeavor to advance our understanding of the universe and how we sustain it for the future. We aim to identify and manage our environmental, social and governance (ESG) impacts and define what is possible across our company and in our communities. Whether it’s singular engineers bringing the power of their whole selves to a project, our teams and suppliers working ethically to source materials or facilities managers reducing the footprint of our operations, sustainability and doing the right thing is part of our culture and is grounded in our Values. We strive to responsibly manage our ESG impacts as we deliver and build on that innovative spirit that has guided us for decades. At Northrop Grumman, we make a safe, sustainable and inclusive world possible.

**Non-Financial Performance Metrics**
We are committed to developing a fair and equitable workplace for our employees and enhancing environmental sustainability while maintaining an unrelenting focus on our customers. To reinforce these commitments we include related non-financial performance metrics in our annual incentive compensation program. These metrics — Diversity, Employee Experience, Environmental Sustainability, Quality and Customer Satisfaction — align our commitment to achieving a high level of ESG performance with our overall strategy. Our ESG reporting covers our performance against these metrics, as well as other important ESG metrics, as determined by our ESG materiality assessment.

**DIVERSITY**
**EMPLOYEE EXPERIENCE**
**ENVIRONMENTAL SUSTAINABILITY**
**QUALITY**
**CUSTOMER SATISFACTION**

**Our Values**

*We do the right thing*
*We do what we promise*
*We commit to shared success*
*We pioneer*
Our Environmental Sustainability Goals

In 2022, we introduced our Next-Generation sustainability goals in three mission areas. In our 2022 ESG Report, we announce our pioneering goals for water and waste. All of these goals serve as success markers to help us better measure our sustainability progress.

**FOOTPRINT**
Address the fundamental needs driving environmental sustainability by minimizing the footprint of our operations.

**FOOTPRINT GOALS INCLUDE:**
- Net Zero greenhouse gas emissions in our operations (Scopes 1 and 2) by 2035. Interim target of 50% reduction by 2030.2
- Source 50% of total electricity from renewable sources by 2030.
- Reduce 10% of absolute water withdrawals,2 reuse 10% of water withdrawals and replenish 10% of water withdrawals, focusing in water-stressed regions - all by 2030.
- Reduce solid waste sent to landfill and incineration by 10% by 2030.2

**2022 PROGRESS**
- Achieved 10.6% reduction in emissions, compared to 2019 base year and sourced 10.0% of electricity from renewable sources.
- Set pioneering goals in environmental stewardship for water and waste.3

**HANDPRINT**
Enhance sustainability within the aerospace & defense industry by supporting customer needs and supply chain objectives.

**HANDPRINT GOALS INCLUDE:**
- In collaboration with key customers, work to develop a pioneering product stewardship program focused on material efficiency, product design and life cycle assessment.
- Update the company’s “Standards of Business Conduct for Suppliers and Other Trading Partners” to incorporate industry-leading sustainability practices by 2023.

**2022 PROGRESS**
- Engaged with customers, industry trade associations and internal stakeholders on product stewardship, chemical management, material efficiency, product design and life cycle assessment. Began planning our first comprehensive life cycle assessment that will occur in 2023.
- Performed benchmarking to identify industry-leading supply chain sustainability practices and integrated practices into the Supplier Standards of Business Conduct, to be published by the end of 2023.

**BLUEPRINT**
Affirm our leadership in sustainability by collaborating to protect ecosystems and define environmental opportunities in our communities.

**BLUEPRINT GOALS INCLUDE:**
- Expand Technology for Conservation (T4C) initiatives in proximity to Northrop Grumman’s U.S. locations by 2030, in collaboration with external partners.

**2022 PROGRESS**
- Expanded T4C initiatives to 54 additional sites (up from 17 sites in 2021).
- Launched two new T4C projects, HOP Queue and Project Glacier Watch.

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2 Indicated footprint reduction goals and/or targets have a base year of 2019.

3 The water and waste goals listed under footprint replace our initial water and waste goal, originally written as “Strengthen leadership in operational footprint reduction through setting and achieving pioneering targets in environmental stewardship by 2025, including potable water use and solid waste to landfill.”
## 2022 ESG Success Indicators

<table>
<thead>
<tr>
<th>Category</th>
<th>Indicator</th>
<th>Number/Value</th>
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<tbody>
<tr>
<td><strong>Zero</strong></td>
<td>Northrop Grumman is committed to achieving net zero greenhouse gas (GHG) emissions in our operations by 2035</td>
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<tr>
<td></td>
<td>$1.4 billion in capital investment (CapEx)</td>
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<td></td>
<td>25% female employees</td>
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<td></td>
<td>34% female leadership (Vice President and above)</td>
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<td></td>
<td>37% employees of color</td>
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<td></td>
<td>19% people of color in leadership (Vice President and above)</td>
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<td><strong>43</strong></td>
<td>million pounds of waste diverted from landfill</td>
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<tr>
<td></td>
<td>$36.6 billion total sales</td>
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<td></td>
<td>$1.2 billion in Research &amp; Development (R&amp;D) investments</td>
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<tr>
<td><strong>10.6%</strong></td>
<td>reduction in GHG emissions from 2019</td>
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Industry Recognitions

One of DiversityInc’s “Top 50 Companies for Diversity,” as well as a top company for Veterans, employee resource groups, Native American/Pacific Islander employees, people with disabilities, executive diversity councils, Black executives and ESG

MSCI ESG Rating of AA

Achieved a perfect score on the CPA-Zicklin Index of Corporate Political Disclosure and Accountability

Support of 14 employee resource groups (ERGs) with more than 28,000 total employee participants

Included on the Dow Jones Sustainability North America Index for the seventh consecutive year

Achieved a perfect score on the Corporate Equality Index and designated as a “Best Place to Work for LGBTQ+ Equality”

18th consecutive year that Northrop Grumman has exceeded the U.S. government’s 23% small business statutory goal

Participated in the CDP Climate Survey for the 11th consecutive year, receiving a B score

Designated as a “High Performing Company” by Willis Tower Watson for our high levels of employee engagement

Named as one of JUST Capital’s “100 Most Just Companies” for 2022
Governance is the foundation of our approach to ESG. The policies, systems and principles to which we hold ourselves represent the fundamentals of what fuels our innovation and long-term growth. Governance sets us all on a path to success— the kind of success we can be proud of—that is sustained by ethics, responsibility and motivation to go beyond what is required to what is needed by the world. But we know that governance is more than just a rule book or set of standards. It’s a sense of accountability that empowers us to make a difference to our customers and to countless communities around the world.

Company Performance

Northrop Grumman is focused on performance, our portfolio and a balanced approach to capital deployment as a foundation for long-term value creation for our shareholders. We assess and transparently report against the performance of our company using a comprehensive set of measures important to our shareholders, customers and other stakeholders. Our Principles of Corporate Governance and Standards of Business Conduct, among other documents, serve as key pillars of our strong corporate governance practices, which reflect and reinforce our commitment to our core values and robust governance practices.

Our Board of Directors (BoD) is responsible for fostering the long-term success of the company and promoting the interests of our shareholders. We have a balanced, independent BoD with a diversity of backgrounds and experiences, all of which help to enhance diversity of thought and the overall effectiveness of our Board. The BoD oversees enterprise risk management, and each of our Board committees assists in this role and provides expertise.

In 2022, we revised our annual incentive plan design to include non-financial metrics in our core metrics, as opposed to a negative-only modifier as in prior years. The non-financial metrics account for 10% of the overall 2022 annual incentive plan score and include specific metrics for performance across ESG topics.

Governance Structure

We are committed to maintaining high standards of corporate governance consistent with our Values and in service to our shareholders, employees, customers and other stakeholders. Our Principles of Corporate Governance and Standards of Business Conduct, among other documents, serve as key pillars of our strong corporate governance practices, which reflect and reinforce our commitment to our core values and robust governance practices.

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## ESG Oversight

### BOARD OF DIRECTORS

Our BoD provides leadership and oversight with respect to ESG practices, among other duties, and regularly receives reports from management throughout Northrop Grumman on these matters.

### AUDIT AND RISK COMMITTEE

- Reviews and discusses the company's global compliance programs with our General Counsel and Chief Compliance Officer, including the tone set by leaders throughout the organization.
- Meets quarterly with our Vice President of Global Corporate Responsibility to receive a report on matters that are communicated through the OpenLine reporting system.
- Assists the BoD in its overall financial and enterprise risk management responsibilities, including review of the company's financial risks, as well as risks pertaining to anti-corruption, cybersecurity, insurance, nuclear, natural and environmental matters and the company compliance program.
- Responsible for overseeing the audit and assurance processes for ESG reporting.

### POLICY COMMITTEE

- Receives a report from our Vice President of Global Corporate Responsibility at least annually regarding our ethics and corporate responsibility programs, including our Standards of Business Conduct, and reviews and oversees practices with respect to sustainability and environmental matters, human rights, health and safety and charitable organizations.
- Oversees the company's environmental program, including Net Zero operations, water and waste plans; receives updates from the Chief Sustainability Officer; and oversees management of climate change risks (including, among other things, Scope 1 and 2 greenhouse gas (GHG) emissions and targets for emissions reductions), TCFD evaluations and our annual ESG report (formerly known as the sustainability report).

### GOVERNANCE COMMITTEE

- Provides the BoD with oversight of the company's corporate culture and governance-related risks.
- Oversees our corporate governance, the make-up and effectiveness of our BoD, with a focus on diversity and succession planning, and engagement with our shareholders, including on shareholder proposals.

### COMPENSATION COMMITTEE

- Reviews the company's human capital management processes with the Chief Human Resources Officer, oversees policies and practices with respect to diversity, equity and inclusion (DE&I) and reviews a risk assessment of the company's compensation programs.
- Approves DE&I goals and financial and non-financial metrics for our compensation programs.
Compliance
Our compliance program, overseen by the Northrop Grumman Chief Compliance Officer (CCO) helps ensure that we meet or exceed our performance standards and set ourselves and our stakeholders up for success. Our CCO chairs the company’s Compliance Council, which includes senior representatives from Internal Audit, Human Resources, Finance, the Sustainability Office, Security, Quality, Digital Transformation, Ethics, Global Corporate Responsibility and all four of our operating sectors.

Ethics
We have built our business on doing the right thing. Our commitment to ethics and integrity is the foundation of our business culture — so much so that doing the right thing is the first of our company Values. When we lead with honesty and integrity, we create a work environment where each employee is empowered to speak up and perform at the highest standards. We encourage stakeholders to use the Northrop Grumman OpenLine to report any concerns or potential violations of the law, regulations or company policies without fear of retaliation. We report additional details on our OpenLine contacts, inquiries and allegations in the ESG Report.

Responsible Business Practices
We act responsibly at all times, whether it’s in the way we engage in the political process or how we develop our products and determine where we sell them. We have robust procedures to ensure we do not conduct business in countries or with customers who are not properly approved by the U.S. government, or, even if permissible, where the risk is too significant and cannot adequately be mitigated.

We are committed to high standards of ethical business conduct in our developments, offerings and provisions of goods and services. We consider potential risks and impacts in assessing whether and how to design and manufacture products, as well as to whom and under what circumstances our products and services can and should be sold. We are mindful of how our products might be used and potential unintended uses. We have robust processes and procedures in place that are designed to ensure we do not do business in certain countries or sell products to certain customers. We also have made the following commitments as it relates to certain products:

- We do not manufacture or sell cluster munitions or components of such munitions as defined in the Convention on Cluster Munitions issued on May 30, 2008 as initiated at the Oslo Conference in 2007 (Oslo Conference).
- We do not manufacture or sell anti-personnel mines or components of such articles as defined in the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-personnel Mines and on their Destruction (Ottawa Treaty).
- We do not manufacture or sell biological or chemical weapons or components of such articles as defined in the Biological and Toxin Weapons Convention and Chemical Weapons Convention.
- We do not manufacture or sell white phosphorus weapons or components of such articles.

Additionally, in 2022 we announced our decision to exit our prime role in depleted uranium ammunition.
Human Rights
Northrop Grumman deeply respects individual and human rights. To that end, we have a robust and wide-reaching Human Rights Policy, as well as other company policies, practices and procedures that reflect and reinforce our commitment. Our policies address discrimination, harassment and retaliation; they also cover freedom of association, fair working conditions, ethical procurement practices, health and safety and the protection of the environment. Our Human Rights Policy also addresses how we do business, including how we develop and provide our goods and services, and how we work with our supply chain.

We have established a Human Rights Working Group to help ensure our Human Rights Policy is implemented effectively. The general counsel or her designee leads the working group, which consists of senior representatives from Global Corporate Responsibility, Human Resources, Legal, Global Supply Chain, Investor Relations, Contracts, Environmental, Health and Safety (EH&S), Global Business Office, Government Relations, Communications and each of our four operating sectors.

Global Supply Chain
A diverse supplier base is essential to Northrop Grumman’s continued growth and leadership in supply chain management. Successful program performance is defined by our ability to foster these supplier partnerships and deliver on our Values. To help create the most cutting-edge solutions for our customers and generate shared value, we prioritize suppliers who provide high-quality, ethically sourced raw materials, products and services.

In 2022, we established a Global Supply Chain sustainability working group. The group is working on advancing internal and external goals and developing programs and processes to implement these goals. One of these goals, announced in 2022, was to update the company’s Standards of Business Conduct for Suppliers and Other Trading Partners to incorporate industry-leading sustainability practices.

Through our Global Supplier Diversity Program (GSDP), we work to expand our relationships with small and diverse suppliers, including businesses owned by minorities, women, veterans, service-disabled veterans, people with disabilities, the LGBTQ+ community and businesses located in historically underutilized business zones, such as HUBZone small businesses. Northrop Grumman spent nearly $11.0 billion domestically on subcontractors during government fiscal year 2022. Over $3.9 billion was awarded to small business suppliers, representing 36% of our total domestic spend. This marks the 18th consecutive year that Northrop Grumman has exceeded the U.S. government's 23% small business statutory goal. These expenditures represent important investments in the local economies where our subcontractors operate.

Cybersecurity and Data Protection
We recognize the critical importance of maintaining the security of our systems and data, both internally and throughout our supply chain. To achieve this high level of security, we must continually improve our approach to guard against threats as our business evolves. We are vigilant in protecting our networks, systems and intellectual property, as well as company, customer, partner and employee data wherever it resides. We provide Northrop Grumman employees with a range of tools to help keep our information secure, including training, information-sharing and assessments. We implement leading data protection standards through a comprehensive approach that complies with global, federal, state and local laws, where applicable.
Possibility becomes reality because of people. The individuals who have chosen Northrop Grumman as the place to develop themselves and their careers are the harbingers of success and innovation. We see firsthand that when people can be themselves, they can be their best. With our immense scale and scope, we support our people to shape their career journeys, feed their curiosity and fuel their passion in our culture of belonging that embraces diverse experiences and perspectives. We take that mindset beyond our walls, to invest in the growth and success of the communities of which we are a part. Inclusivity powers success at Northrop Grumman. Because we know that the most innovative ideas are only possible when people can thrive.

Diversity, Equity & Inclusion

At Northrop Grumman, we believe that an innovative idea can come from anywhere or anyone. When bringing a diverse community together, anything is possible. We work every day to support that community by providing a strong, inclusive culture that emphasizes equity across our entire business. We are advancing social justice and unity within our workforce and through our partnerships while remaining focused on providing growth and development opportunities to all of our employees. Our culture of DEI enables us to recognize diversity in many forms and fosters an environment where all of our employees belong.

DEI is a part of our history and our legacy as a company. Since 2009, we have enacted formal diversity plans to ensure long-term support as a critical business function. We use our diversity plans to set priorities for the business, demonstrate accountability and incorporate the company’s non-financial performance metrics for diversity. In 2022, we completed year three of our current five-year diversity plan, showing continued alignment of our representation to our available talent pool. The rate of women in all leadership roles was consistent at 27% from 2021 to 2022. The rate of people of color in leadership roles continued to increase, from 28% in 2021 to 29% in 2022.

We embed DE&I into our culture through a variety of activities, including DE&I councils, attendance at achievement conferences, training and education opportunities and supporting our ERGs. In 2022, more than 28,000 employees participated in our 14 ERGs, which helped Northrop Grumman rank #3 on DiversityInc's Top Companies for ERGs.

Our inclusive culture relies on our commitment to equity and access. At Northrop Grumman, we reinforce equity through our Equal Employment Opportunity (EEO) compliance activities as a federal contractor. We are committed to equitable pay for all employees, including for women and people of color, and we promote internal equity through external salary survey benchmarks and a performance-based incentive system.

Employee & Family Well-being

A rewarding career starts with the foundational well-being that encompasses many aspects of an employee's life. When our employees and their families have the tools to care for their well-being, we all thrive. Our well-being strategy focuses on increasing awareness, organizing introductions for employee participation, equipping leadership with the right tools and using data analytics to promote, execute and evaluate the program’s ability to meet employee needs. We offer a variety of programs, focused on emotional, physical, social and financial well-being that play an important role in overall employee health. In 2022, we expanded our paid parental leave from two weeks to four weeks, offering our new parents more time to connect with their growing families. We implemented this change as a result of feedback from our second Total Rewards Survey, which had a 48% participation rate among all employees.
Our Diverse Workforce

TOTAL POPULATION

- **25%** Women
- **18%** Veterans
- **8%** People With Disabilities

LEADERSHIP — TOTAL MANAGEMENT POPULATION

- **27%** Women
- **29%** People of Color

LEADERSHIP — VICE PRESIDENT & ABOVE POPULATION

- **34%** Women
- **19%** People of Color

2022 HIRES

- **16,000** External Hires
- **3,900** Women
- **7,100** People of Color
- **3,300** Veterans
- **1,300** People with Disabilities

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4. All demographic data reflects U.S. population only.
5. New hires may fall into one or more diversity categories.
Employee Health & Safety

Success at our company begins and ends with the health of our employees, customers, visitors and contractors. We work diligently to protect their health and safety, and we evolve our safety program to address emerging challenges. By prioritizing the safety of our people, we enable them to continue defining possible. We work every day to create a safe workplace for our employees. We focus our efforts on training, risk and hazard identification, abatement and prevention. Everyone at Northrop Grumman has a responsibility to safely perform tasks and identify workplace hazards.

Our 2022 safety performance was impacted by the rise of the more infectious COVID-19 Omicron variant, which led to a relatively higher rate of COVID-19 cases and therefore total case rate, as reported in accordance with the Occupational Safety and Health Administration (OSHA) recommendations. Here, we also provide information about our safety performance, excluding COVID-19 cases to highlight our safety trends more broadly.

Talent Strategy

As demand for top talent increases and the employment landscape changes, we are working to ensure that we have the right talent at the right place and at the right time. We are broadening our talent pool with diverse candidates and skills-based hiring and redesigning work models to create a superior and tailored career experience for each Northrop Grumman employee. We align our employee development, engagement and retention efforts with pivotal career milestones and strive to address the specific needs of Northrop Grumman employees throughout every step of their journey.

In 2022, we focused our efforts on broadening our talent pools by incorporating a skills-driven talent strategy, identifying and counteracting unconscious bias in the hiring process, expanding our network through diverse job boards and leveraging partnerships with our ERGs. It is our top priority to foster a diverse future workforce of Northrop Grumman employees with the skills they need to succeed in their careers. We support engineering and technology-based programs at colleges and universities to support a diverse Science, Technology, Engineering and Mathematics (STEM) pipeline. Military veterans are another important source of talent for us, and through programs like Operation IMPACT and the Department of Defense Skillbridge program, we support service members transitioning out of the U.S. military.
Talent Management and Development

From pre-hire to retirement, we focus on employee well-being and growth, keeping the holistic experience of our employees in mind. Our employee and leadership development offerings are rooted in our Values and Leadership Behaviors. We aim to strengthen the skill sets, behaviors and mindsets that support both our current and future business needs. We foster knowledge-sharing and support career growth and progression. We encourage employees to pursue diverse job experiences that expand their knowledge of our business, products and customers. As developers of talent, we expect our leaders to provide performance feedback, coaching and development opportunities to employees to foster a culture of continuous improvement.

In 2022, we provided formal and informal learning and development opportunities to our employees at all levels of the organization, including $37.5 million provided in education assistance.

Our focus on employee experience requires continuous listening and ongoing improvements at every level of the company. Employees are able to provide honest feedback through surveys deployed in the flow of work, as well as quarterly pulses and an annual experience survey. In 2022, 79% of Northrop Grumman employees completed the annual employee survey, performing in the top 6% of companies, exceeding industry norms and earning us the designation of a High Performing Company by Willis Towers Watson.

Corporate Citizenship

Corporate Citizenship at Northrop Grumman starts with people — the people we employ, the people in our communities and the people who may become part of our workforce. Together with our employees, we strive to make the lives of the people in our communities better, safer and more successful. Our corporate citizenship strategy prioritizes developing a diverse STEM workforce, engaging employees, enhancing Northrop Grumman’s position as an employer and business of choice, and addressing local stakeholder issues in our communities, all while reinforcing our commitment to DE&I.

In 2021, we established an annual Education Equity Goal to dedicate a minimum of 50% of our education funding to resources or programs that support social justice through DE&I. Student populations include women and racial groups who are underrepresented in STEM, people with disabilities, LGBTQ+ individuals, low-income groups and those experiencing homelessness. In 2022, we exceeded our goal by contributing 83% of our funding to support education equity. We also set a goal in 2021 to provide 5 million meals to people in need by 2030. In 2022, we reassessed that goal and doubled it to 10 million meals. In 2022, the company and our employees donated approximately 4.2 million meals.

SOCIAL VALUE GENERATED

$16.9 million
Company Giving*

$16.5 million
Foundation

$4.0 million
Employees

$2.3 million
Employee Volunteerism

$0.8 million
In-Kind/Non-Cash

* In addition, Northrop Grumman donated $15 million to the Northrop Grumman Foundation.
Adapting in the face of global climate change is one of greatest challenges facing our planet. Good thing some of the best problem-solvers work at Northrop Grumman. Whether we are managing our footprint, applying our visionary minds to the climate needs of customers or innovating for global ecosystem protection, we discover new performance opportunities when we consider our planet. Taking action to meet a moment of need is what we do best at Northrop Grumman, and our actions as environmental stewards give us a meaningful opportunity to have an enduring, positive impact on the future of our natural world.

**Our Approach to Environmental Action**

The impact of climate change on the planet’s ecosystems is something that affects us all. As we pioneer leading technologies, we recognize that we have an important role to play in ensuring a sustainable future for our business and stakeholders.

In 2022, we published our first TCFD Report, with an updated report to be published in early 2023. We continued to build on our long history of environmental sustainability by establishing our Next Generation Environmental Sustainability Goals, including our commitment to achieving Net Zero operations by 2035. We established an interim target of 50% reduction in GHG emissions by 2030 from a 2019 baseline year, as well as a goal to source 50% of our total electricity from renewable sources by 2030.

We will realize these reductions through a multifaceted strategy which will focus on:

- Sourcing renewable energy
- Identifying and implementing energy efficiency solutions across our sites
- Engraining resource conservation and efficiency into operations decisions

We continue to pursue other avenues for emissions reductions through electrification, alternative fuels and energy monitoring. In 2022, we sourced 10.0% of electricity from renewable sources, and we are exploring a mix of onsite and offsite renewable energy opportunities across our portfolio.

**Environmental Remediation & Conservation**

Biodiversity is critical to the stability of natural resources and provides resilience in the face of climate-related events. Northrop Grumman is invested in doing our part to protect and conserve critical habitats around the world. Through our Technology for Conservation (T4C) initiative, Northrop Grumman engineers work with conservation partners to help tackle some of the toughest challenges facing ecosystems and wildlife. T4C teams develop innovative technologies that scientists need to collect data in harsh or remote conditions. In 2022, engagement in T4C grew from 17 sites to 71 sites.

Northrop Grumman is committed to safe, effective and sustainable environmental remediation of land at our legacy sites. Our remediation team works in close coordination with federal, state and local regulators and stakeholders and in accordance with scientifically sound approaches. We have a longstanding record of leveraging our R&D innovations to provide effective and lasting solutions in lieu of more traditional, resource-intensive practices. We work to return our sites to beneficial use in our communities and conserve our environment for generations to come. In 2022, we remained dedicated to meeting our annual planned remediation obligations and were able to make significant progress on key projects.
2022 Environmental Performance Highlights

Enhancing Operations and Management

Environmental stewardship is at the heart of our operations and management approach. At Northrop Grumman, we are continuously exploring how our business processes can be more environmentally sustainable. We strive for continual improvement through our environmental programs and the implementation of our Environment, Health and Safety policy and associated procedures, which help reduce risk and maintain compliance with applicable laws, regulations and company-established directives. By placing sustainability and sound environmental management practices at the forefront of all that we do, we find new ways to define possible within our footprint.

GHG

3,250 MT CO2e

Implemented 64 GHG and energy reduction projects, expected to reduce 3,250 MT of CO2e annually

WASTE

600 tons total

Implemented 21 solid waste projects across the company, estimated to divert 600 tons from landfill annually

WATER

15M Gallons

Implemented 11 water conservation projects across the company, expected to conserve over 15 million gallons annually

SCOPE 1 & SCOPE 2 EMISSIONS (TOTAL MT CO2e)

SOLID WASTE SENT TO LANDFILL/INCINERATION (TONS)

TOTAL POTABLE WATER WITHDRAWALS (MILLION GALLONS)

10% of electricity sourced from renewable sources

$2.7 million of funding allocated across the company for environmental footprint projects and initiatives

46% of sites included in the EH&S compliance program completed site-level EH&S compliance reviews
At Northrop Grumman, we utilize our experiences and the tools around us to deliver the highest quality products and capabilities to our customers today — and anticipate their needs for tomorrow. By developing cutting-edge technologies and conducting pioneering research that outpaces the speed of need, we’re making a difference to our customers and communities. Through our products, we are making lasting, positive impacts for our industry that the world never thought possible.

**Ushering in a Digital Transformation**

As the defense industry gains momentum on its digital transformation journey, Northrop Grumman continues leading the way. We are demonstrating the value of implementing digital solutions across the enterprise to facilitate access to data and employ collaboration tools in new and innovative ways. We are realizing unprecedented success in accelerating design, testing and deployment cycles faster than ever before to meet the rapidly evolving needs and expectations of our customers.

In addition to adding value for our customers, digital transformation has also opened doors to broader workforce inclusion and efficiency. We now have more remote and hybrid career options empowering our teams to connect and collaborate globally through integrated business systems and secure virtual operations. These factors, combined with the transition to a dashboard-driven digital culture, contribute to an even smaller carbon footprint by diminishing travel demands and reducing paper and other waste, while also increasing communication and efficiency.

**Product Quality**

Our culture of continuous improvement propels our teams to find new ways to push the boundaries of technology and research, pioneering advancements with proven best practices to deliver industry-leading product innovations. Adaptive trainings enable our engineers to assess the impact of decisions on the overall product systems at every stage of the development process, and their experience and dedication help us deliver safe, high-quality solutions to our customers. From observation to implementation, our processes emphasize customer satisfaction, quality and product safety as we develop our products. As a result of our dedication to quality, Northrop Grumman chair, CEO and president Kathy Warden was recognized as a recipient of the 2022 Deming Cup for Operational Excellence Award by Columbia Business School.

**Product Stewardship**

Northrop Grumman is committed to delivering thoughtfully designed, high-quality products that meet the mission of our customers efficiently and effectively. By maintaining strong lines of communication with our customers, partners and suppliers, we look to better understand the needs and expectations of our stakeholders and align on shared goals and initiatives, such as sustainability, which has become an increasingly prominent priority to our customers and partners. In 2022, we launched a new sustainability goal to build a product stewardship program in collaboration with key customers which is focused on material efficiency, product design and life cycle assessment. While manufacturing efficient, sophisticated and durable products has always been a core practice for our company, the intent of this new goal is to leverage the “systems thinking” that underpins our strong manufacturing and design processes to examine product environmental impacts and opportunities through a sustainability lens.
Research & Development

Exploration and experimentation through R&D are necessary for the long-term growth of our business. Our R&D portfolio encourages innovation at every level of our organization and empowers our technologists and researchers to deploy innovations within and across each of our business departments. Departments gain new insights into the nature, direction and technology of our portfolio. Company-wide, our R&D management approach fosters data-driven decision making across our technology investments. In 2022, we invested $1.2 billion in company-sponsored R&D. Our approach to R&D ensures continued success of the most complex missions our nation and its allies will face going forward.

We remain committed to fulfilling the needs of our customers by focusing on the advancement of critical technology and in 2022, we prioritized areas that are vital to national security. We developed technologies with open architectures that significantly enhance our customers’ situational awareness and their ability to realize its vision of information advantage and decision superiority. Re-establishing microchip manufacturing in the U.S. is another active focus area for our team. Through strategic efforts, we are engaging with the most advanced semiconductor technologies available in the country to strengthen our domestic supply chain. We also align our technology priorities with our strategic university partners. We are committed to maturing technical talent through our partnerships with universities across the country focused on critical technology areas.

NORTHROP GRUMMAN TECHNOLOGY PRIORITIES BROADLY ALIGN WITH CUSTOMER TECHNOLOGY VISION

Network Systems  Future G Wireless  AI / Autonomy

Quantum Science  Microelectronics  Space

Directed Energy  Human-Machine  Materials

Advanced Computing  Hypersonics  Sensing & Cyber
Forward Looking Statement

Statements in this report contain or may contain statements that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “will,” “expect,” “anticipate,” “commit,” “intend,” “may,” “could,” “should,” “plan,” “project,” “forecast,” “believe,” “estimate,” “outlook,” “trends,” “goals” and similar expressions generally identify these forward-looking statements. These forward-looking statements speak only as of the date when made, and the company undertakes no obligation to publicly update or revise any forward-looking statements after the date of this release, except as required by applicable law. Forward-looking statements are not guarantees of future performance and inherently involve a wide range of risks and uncertainties that are difficult to predict. A discussion of these risks and uncertainties is contained in the company’s filings with the SEC.