

# A Transformative Era of Action

*“It all starts with our unique ability to innovate new technology the world needs to address the most pressing sustainability challenges.”*

2022 marked the beginning of a new era for GE. Our ~172,000 employees<sup>1</sup> served customers in ~170 countries to drive decarbonization through the energy transition, create a smarter and more efficient future of flight, and enable precision care.

We successfully launched GE HealthCare and are preparing for the separation of GE Vernova, our portfolio of energy businesses, and GE Aerospace sometime in early 2024. At GE Vernova, our technology helps generate approximately 30% of the world’s electricity and we have a meaningful role to play in the energy transition. At GE Aerospace, nearly 3 billion people flew with our technology under wing in 2022<sup>2</sup>, and every two seconds a GE or partner<sup>2</sup> power aircraft takes off.

The GE team is excited for the path ahead. In launching these three independent public companies, we are advancing our commitment to sustainability and to GE’s more than 130-year legacy of lifting up the quality of life for people around the world. By sharpening our focus on the specific missions of each business, we gain more opportunity for GE Vernova to electrify and decarbonize the world, for GE Aerospace to invent the future of flight, and for the newly independent GE HealthCare to create a world where healthcare has no limits.

Read the full report at [www.ge.com/sustainability](http://www.ge.com/sustainability). TCFD, SASB and GRI indices can be found [here](#).



**H. LAWRENCE CULP, JR.**  
Chairman of the Board and Chief Executive Officer, GE  
Chief Executive Officer, GE Aerospace

## Our Sustainability Priorities



## Progressing Our Efforts and Improving Programs

### CLIMATE CHANGE:

- Progress toward **2030 carbon neutrality** commitment: **28% reduction** vs. 2019 (Scope 1 & 2 emissions)
- Updated progress on technology roadmaps for **2050 net zero ambition for Scope 3 emissions from use of sold products**
- More detailed report on **policy engagement and thought leadership on climate action**, including GE’s advocacy in support of clean energy tax credits and corporate leadership at COP27

**PRODUCT SAFETY & QUALITY:** Added detail about **product safety and quality programs and initiatives** in pursuit of SQDC—safety, quality, delivery and cost

**PRODUCT STEWARDSHIP:** Highlight progress towards achieving product stewardship goals while continuing to assess how to strengthen our efforts going forward

**DIVERSITY & INCLUSION, HUMAN RIGHTS:** Integrated into Sustainability Report following release of separate 2021 reports

## Our Global Reach

### ENERGY TRANSITION



~30%  
of the world’s electricity  
generated with help of GE technology

### FUTURE OF FLIGHT



3 out of 4  
commercial flights  
powered by GE or partner<sup>2</sup> engines

Invested **\$4.2B<sup>3</sup>**  
in 2022 **Global R&D**  
~172,000<sup>1</sup>  
employees globally  
Customers in  
~170 countries

<sup>1</sup> On January 3, 2023, GE completed the planned separation of its healthcare business, launching GE HealthCare. As of December 31, 2022, GE had ~123,000 employees excluding GE HealthCare employees who are now part of the standalone company.

<sup>2</sup> Includes equipment made by CFM & Engine Alliance Joint Ventures. CFM is a 50/50 Joint Venture between GE & Safran Aircraft Engines; Engine Alliance is a 50/50 Joint Venture between GE & Pratt & Whitney.

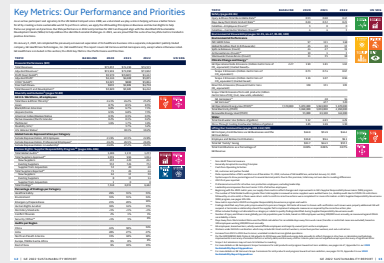
<sup>3</sup> GE company-wide (inclusive of GE HealthCare), customer and partner funded.

# Continuous Improvement in 2022

## KEY METRICS: 2022 PERFORMANCE AND PRIORITIES

Our ESG performance and priorities demonstrate our alignment with the UN Sustainable Development Goals (SDGs) to help address identified societal challenges. In our [2022 Sustainability Report](#), we share three years of metrics in financial performance, diversity and inclusion, human rights, safety, environmental stewardship and lifting our communities. In 2022, we are proud that the suite of our key ESG metrics trended in positive directions.

Read our summarized performance and priorities [here](#).



## CLIMATE POLICY ENGAGEMENT

GE's efforts on climate change and the energy transition start with our strong support for the Paris Climate Agreement commitments and other ambitious targets to reduce emissions. Throughout 2022, we engaged in the public domain to advance thought leadership on how to achieve climate goals for the energy sector through strong policy, technology and investments. The past year was a landmark for stronger emphasis on action and partnership. Following on the heels of the successful COP27 in Egypt—referred to as the implementation summit—GE was part of the launch of the Corporate Coalition for Innovation & Technology toward Net Zero (CCITNZ). Back at home, GE strongly advocated for the inclusion of multiple provisions in the Inflation Reduction Act, including clean energy tax credits to ensure success in decarbonization efforts and continued U.S. leadership in energy manufacturing and jobs—both today and in the future. Our heightened engagement is continuing throughout 2023 to help formulate and support policies that advance a just transition and sustainability goals globally. [Read more](#) ▶

## PRODUCT SAFETY AND QUALITY

Lean is foundational to how we work at GE. Safety, quality, delivery and cost (SQDC)—in that order—help us deliver for our customers and build a world that works. These are not simply four metrics that we report on regularly, but instead are our desired set of shared instincts. At no point will an improvement in quality, delivery or cost be done at the expense of safety. All of the GE businesses are committed to creating safe and effective products that meet the needs of our customers and are doing this through continuously working to improve product quality. [Read more](#) ▶

# Innovating Solutions for the World's Most Pressing Challenges

## Decarbonization and Electrification



Climate change is an urgent global priority. At the same time, energy demand is increasing, the importance of energy security is elevating and nearly 775 million people are without access to reliable power. As a company whose technology helps generate approximately 30% of the world's electricity, we have a responsibility to lead the industry's decarbonization efforts and meet the rising global demand for more sustainable, reliable and affordable energy.

GE Vernova is committed to building and delivering state-of-the-art technology to reduce emissions today while investing in breakthrough technologies for a lower carbon future.

Our energy businesses provide powerful, integrated solutions with the most innovative onshore and offshore wind turbines, most efficient gas turbines, as well as advanced technology to modernize and digitize electrical grids. Beyond delivering technology the world needs today, we are equally focused on the important role of building the breakthrough technologies the world will need in the future, including small modular nuclear reactors, carbon capture, utilization and sequestration (CCUS), and low and zero carbon fuels, such as hydrogen, for new and existing gas plants.

## Future of Flight



GE Aerospace is helping define flight for the next generation with industry-leading technology to reduce GHG emissions.

Advancements in aerodynamics, engine architecture, and materials technology for GE and CFM International<sup>5</sup> product lines have resulted in today's aircraft engines consuming 40% less fuel and emitting 40% less CO<sub>2</sub> than engines manufactured in the 1970s and 1980s.

We are currently developing the next suite of engine technologies—including advanced architectures such as open fan, hybrid electric and electric propulsion concepts, and advanced thermal management concepts—that

offer the potential to achieve at least a 20% additional improvement in fuel efficiency compared to today's state-of-the-art, single-aisle aircraft engines. For example, GE Aerospace and Safran unveiled a bold technology development program in June 2021 called the CFM RISE<sup>5</sup> (Revolutionary Innovation for Sustainable Engines) Program, which will demonstrate and mature a range of new, disruptive technologies for future engines that could enter service by the mid-2030s. GE Aerospace is also supporting industry initiatives to approve and adopt 100% Sustainable Aviation Fuel (SAF) and is partnering on a flight demonstration program to test zero carbon hydrogen fuel combustion.

<sup>5</sup> CFM International is a 50-50 joint company between GE and Safran Aircraft Engines. RISE is a registered trademark of CFM.

# Driving Progress on Climate

## CARBON NEUTRAL 2030 COMMITMENT

Having met our 2020 emissions reduction targets ahead of schedule, we set a new goal to achieve carbon neutrality within our own operations (i.e., Scope 1 and 2 emissions) by 2030. To achieve this goal, our businesses are making operational investments in energy efficiency, reducing emissions from the grid through smart power sourcing and using lean practices to eliminate energy waste. As of 2022, Scope 1 and 2 greenhouse gas emissions are down 28% compared to the 2019 baseline. While we are focused on driving absolute reductions to achieve carbon neutrality, where necessary, we will balance remaining emissions with carbon offsets. GE internally tracks progress to established targets versus a 2019 baseline.

[Read more about GE's Scope 1 and 2 emissions ►](#)



Scope 1 & 2 reduction  
(vs. 2019 baseline)

### GE VERNOVA

GE Vernova is working toward GE's carbon neutral commitment. For example, our Wind businesses are focused on: (1) reducing emissions and optimizing energy use in global manufacturing facilities worldwide through the installation of newer, more efficient equipment or by changing processes to emit less or require less energy overall, and (2) pursuing on-site renewable energy opportunities and signing Power Purchase Agreements (PPAs) from new renewable energy assets. In 2022, our Gas Power business used a lean approach to cut energy consumption from lighting, HVAC, compressed air, welding, large equipment, transport and waste management across 24 sites, resulting in a combined savings of 43 million kWh of energy.

### GE AEROSPACE

GE Aerospace's strategy to meet its 2030 carbon neutral commitment is focused on: (1) energy-efficient infrastructure investments and optimization; (2) using lean practices to identify and reduce waste energy; and (3) exploring the use of Sustainable Aviation Fuel (SAF) and other low carbon fuels at engine testing operations. In 2022, GE Aerospace identified opportunities to improve energy efficiency at 18 of its major sites and is creating a long-term roadmap to meet our carbon neutral commitment.

## NET ZERO 2050 AMBITION

In 2021, we articulated GE's ambition to be a net zero company by 2050, including not just GE's own operations but also the Scope 3 emissions associated with the use of our sold products. We are collaborating closely with our customers, suppliers, policymakers and other companies to turn net zero engineering challenges into business opportunities. We have several principles guiding the approach to our net zero ambitions:

### OUR NET ZERO PRINCIPLES

- **Credibility.** Knowing this path will take decades, we prioritize credibility first and foremost with our stakeholders to share what we objectively know and don't know. This also means as we get better and more credible information, we will share that with our stakeholders.
- **Continuous learning.** Our analysis is based on how we see things today. We are committed to continuous learning to enable more insights and opportunities to make a difference, and we expect to make progress over time.
- **Collaboration.** We know no one company can solve these issues alone. With GE's spirit of humility, we welcome continued collaborations with our customers, investors, regulators and peers to achieve success toward our goals.
- **Commitment to innovation and technology.** Simply stated, GE's role in the sector's path toward net zero is to deliver state-of-the-art technology today to make progress while innovating the breakthrough technologies for tomorrow.

Applying these principles, we made progress in 2022 and provide updates toward the net zero ambition. [Read more about GE's Scope 3 emissions ►](#)

### GE VERNOVA

2020-2030	2030-2050
Driving continued progress this decade.	Innovating for the future.
<b>2022 PROGRESS</b>	
<ul style="list-style-type: none"> <li>Haliade-X offshore wind turbine receives full type certification. <a href="#">Learn more on page 23 ►</a></li> <li>GE's newest 3.4 MW onshore wind turbine launched for North America. <a href="#">Learn more on page 23 ►</a></li> <li>GE's LM6000 aeroderivative gas turbine operates on hydrogen-natural gas blend during COP27 in Egypt. <a href="#">Learn more on page 29 ►</a></li> <li>GE and Technip Energies began development of front-end engineering design (FEED) study for a carbon capture solution. <a href="#">Learn more on page 30 ►</a></li> <li>GridOS<sup>5</sup> launched as world's first software portfolio designed for grid orchestration. <a href="#">Learn more on page 24 ►</a></li> </ul>	<ul style="list-style-type: none"> <li>GE receives U.S. Department of Energy carbon capture grant targeting 95% emissions reduction. <a href="#">Learn more on page 26 ►</a></li> <li>GE Hitachi receives memoranda of understanding or other agreements for its BWRX-300 small modular reactor in Canada, Czech Republic, Estonia, Poland, U.K., U.S. and Sweden. <a href="#">Learn more on page 28 ►</a></li> <li>GE awarded U.S. Department of Energy grants to accelerate the path towards 100% hydrogen combustion in gas turbines. <a href="#">Learn more on page 26 ►</a></li> </ul>

GE Vernova

### GE AEROSPACE

2020-2030	2030-2050
Driving continued progress this decade.	Innovating for the future.
<b>2022 PROGRESS</b>	
<ul style="list-style-type: none"> <li>Passport, HF120 and GENx engines successfully tested with 100% SAF. <a href="#">Learn more on page 38 ►</a></li> <li>GE Aerospace and customers surpassed 2,000 360 Foam Washes since 2017. <a href="#">Learn more on page 37 ►</a></li> <li>Qantas Airlines implemented GE Digital's Airspace Insight solution. <a href="#">Learn more on page 39 ►</a></li> <li>GE Aerospace unveiled turbine center frame casing, one of largest additively manufactured parts for the aerospace industry. <a href="#">Learn more on page 42 ►</a></li> </ul>	<ul style="list-style-type: none"> <li>Airbus and CFM International<sup>5</sup> announced plans to partner on open fan flight tests in second half of this decade. <a href="#">Learn more on page 41 ►</a></li> <li>GE Aerospace first in the world to test high power, high voltage hybrid electric components in altitude conditions. <a href="#">Learn more on page 41 ►</a></li> <li>Avio Aero launches hybrid electric technology demonstration program with hydrogen fuel cells. <a href="#">Learn more on page 41 ►</a></li> </ul>

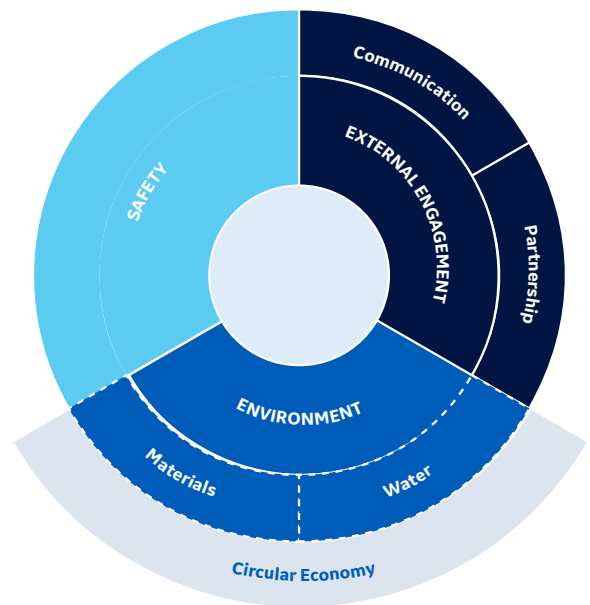
GE Aerospace

<sup>5</sup> CFM International is a 50-50 joint company between GE and Safran Aircraft Engines.

## Product Stewardship

In response to increasing scarcity of resources and the expectations from customers, investors and regulators for producers to take heightened responsibility for the impacts of products across their full lifecycle, GE developed product stewardship and circularity goals in 2021. In 2022, GE businesses made progress toward achieving those goals while continuing to assess how to strengthen our efforts going forward. Over the past year, more than 100 personnel in over a dozen different functions were activated in the businesses to both assess the progress of existing circularity and product stewardship initiatives, and to draft objectives and roadmaps to further incorporate circularity and stewardship steps into the business strategy.

[Read more ▶](#)



## Environmental Justice

GE implements its commitment to environmental justice (EJ) by: (1) committing to ensuring all communities where we operate realize the strongest environmental protection from our activities, regardless of the scope of applicable local regulations, if any; (2) fostering access to more sustainable, reliable and affordable electricity as it is critical to reducing poverty and hunger and promoting access to education and healthcare; and (3) supporting policies to clean up and redevelop idle contaminated properties into new hubs of economic growth and job creation. Beginning in 2019, GE enhanced its Brownfields program to prioritize cleanup and redevelopment of idle contaminated properties in EJ communities. GE committed more than \$40 million to demolish its obsolete structures in EJ neighborhoods and has undertaken environmental investigation and cleanup at more than 45 of our highest priority EJ properties. We are working hand in hand with local governments, private groups, property experts and technical resources to define reuse plans that buttress community goals and catalyze sustainable economic development.

[Read more ▶](#)



### FORT WAYNE, INDIANA – ELECTRIC WORKS – REDEVELOPMENT

From 1892 until January 2015, GE operated the 31-acre Fort Wayne Electric Works Plant. Following an extensive process with local and state stakeholders, the property was sold in 2017 and the new owner has transformed 10 buildings on the campus to support innovative use. The transformational work continues across other portions of the Electric Works campus.

## Biodiversity

Biodiversity refers to the variety of plants, animals, habitats and ecosystems across the world. Recent policy developments, such as the Kunming-Montreal Global Biodiversity Framework adopted at the 15th Conference of the Parties for the Convention on Biological Diversity in 2022, are shining a spotlight on the importance of biodiversity conservation. GE understands the health and preservation of biodiversity are fundamental to ensuring a sustainable future for communities, nature and business alike, which is why we are piloting business level biodiversity assessments within selected business segments. This work will help our businesses identify opportunities to protect and enhance biodiversity in the areas in which GE operates. GE has also begun to assess the relevant voluntary frameworks and potential future legislation related to biodiversity. The goal of these early efforts is to broaden business and functional teams' understanding of nature impacts and nature positive solutions.

[Read more ▶](#)



### NATIVE SPECIES RESTORATION Evdale, Ohio

# How Our Strategy and Sustainability Priorities Align with the United Nations Sustainable Development Goals

The United Nations (UN) Sustainable Development Goals (SDGs) are an interlinked agenda of 17 objectives to help nations address our most pressing global challenges, from climate change to inequality. GE continues to play a critical role in advancing sustainability and quality of life. We have been a signatory to the UN Global Compact since 2008, and we see close alignment between 11 of the 17 SDGs and our business strategy and sustainability priorities.

## Our SDG Strategy at a Glance

View our full assessment of our SDG strategy and progress in our [2022 Sustainability Report](#).



## Our Innovation

### LEADING THE ENERGY TRANSITION

7 8 9 11 13 17

We are committed to decarbonizing the energy sector while increasing access to more sustainable, reliable and affordable electricity. As we are helping our customers to decarbonize smartly and efficiently, we are working hard to become carbon neutral in our own Scope 1 and 2 greenhouse gas (GHG) emissions by 2030. As of 2022, Scope 1 and 2 greenhouse gas emissions are down 28% compared to the 2019 baseline. We also articulated our ambition to be net zero by 2050, including not just GE's own operations, but also the Scope 3 emissions associated with the use of our sold products.

### DEVELOPING THE FUTURE OF FLIGHT

8 9 13 17

We are helping define flight for the next generation with industry-leading technology innovation that offers the potential to achieve at least a 20% improvement in fuel efficiency compared to today's state-of-the-art, single-aisle aircraft engines. We are also supporting industry initiatives to approve and adopt 100% Sustainable Aviation Fuel (SAF) and partnering on a flight demonstration program to test zero carbon hydrogen fuel combustion.

## Our Priorities

### SAFETY

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GE's expectations to maintain a safe, healthy work environment extend well beyond our own operations to all places where we work—customer sites, field services, and at our project installation and construction locations—and to all those who work with us and on our behalf.

### HUMAN RIGHTS

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As detailed in our recent Human Rights Report, our suite of governance documents and our Due Diligence program provide the foundation from which we respect and protect the rights of our own workers, those of our suppliers and the communities affected by our operations and business relationships.

### ENVIRONMENTAL STEWARDSHIP

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We collaborate across our value chain, such as customers, governments, suppliers, and employees, to turn net zero and other sustainability challenges into opportunities to advance more sustainable development.

### LIFTING OUR COMMUNITIES

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We put our innovation, technology and resources to work locally, nationally and internationally, partnering to provide advancement, education opportunities, mentoring and community assistance.

## Our Approach

### GOVERNANCE

17

We integrate sustainability across how we operate, from Board oversight to enterprise risk management and strategy development. The success of this integration is informed by our continual engagement with our stakeholders, including employees, customers, investors, suppliers, communities, government officials and the public.

### CULTURE OF INTEGRITY

8 16

We focus not just on what we do, but how we do it—integrity is core to everything we do. *The Spirit and The Letter* contains policies that are foundational to how we meet our sustainability commitments.

### ADVANCING DIVERSITY AND INCLUSION

5

Achieving long-term, sustainable diversity, equity and inclusion (DEI) progress takes work, and our efforts have focused on three strategic pillars—transparency, accountability and community. See our work in action through our employee resource groups and pay equity commitment and our work with communities creating more equitable access to STEM education.