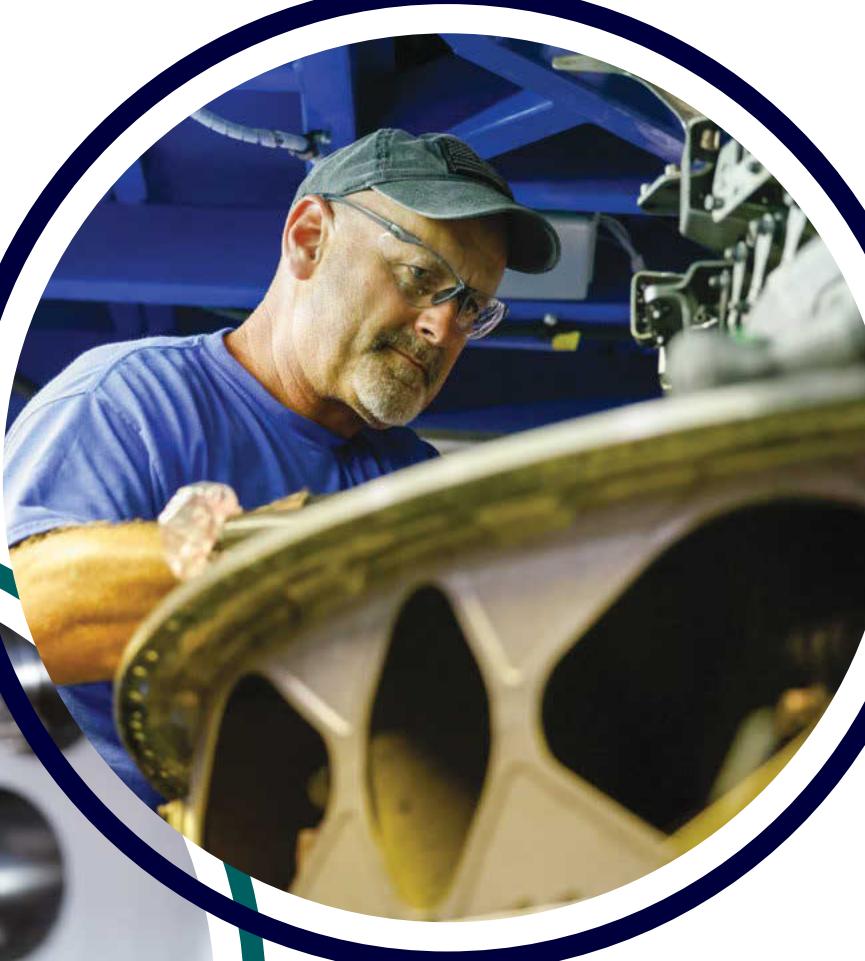


2022
SUSTAINABILITY
REPORT

**A Transformative
Era of Action**



Building a World that Works for Tomorrow

Our Commitment

We build the technology that enables a more sustainable tomorrow.

Energy Transition

~30%

of the world's electricity generated with the help of GE technology

Future of Flight

3 out of 4

commercial flights powered by GE or partner¹ engines

Global R&D

We invest in R&D to build a world that works for tomorrow:

\$4.2B

in 2022

GE company-wide (inclusive of GE HealthCare), customer and partner funded.

¹ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines; Engine Alliance is a 50-50 joint company between GE and Pratt & Whitney.

² CFM International is a 50-50 joint company between GE and Safran Aircraft Engines. RISE is a registered trademark of CFM.



United States

Lowering emissions with carbon capture technology

The U.S. Department of Energy awarded \$5.7 million to GE Vernova to lead a carbon capture technology integration project targeting a 95% reduction of carbon emissions. The study will serve as a template for lowering carbon emissions for other 7F gas power plants worldwide.

[Learn more ▶](#)



United States

World's first for the future of hybrid electric flight

GE Aerospace is the first to test a megawatt-class and multi-kilovolt hybrid electric propulsion system in altitude conditions that simulate single-aisle commercial flight. It is an important step in GE's work with NASA and Boeing to develop a hybrid electric propulsion system for flight tests later this decade.

[Learn more ▶](#)



Ukraine

Emergency power when and where it's most needed

GE Vernova provided crucial support to Ukraine during the ongoing war, working with the United States Agency for International Development and Tetra Tech by delivering a GE TM2500 aeroderivative gas turbine. This mobile gas generator can power over 100,000 Ukrainian homes and can be trucked to a location within weeks.

[Learn more ▶](#)

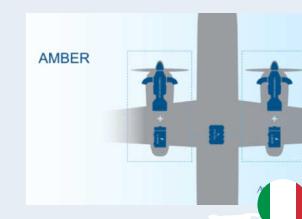


Poland

Supporting Poland's decarbonization targets

GE's 9HA.02 heavy-duty gas turbine will power Ostroleka C combined cycle power plant in northeast Poland. The flexible and efficient natural gas fired plant will enable Poland to increase its power supply security while continuing to phase out coal and expand the deployment of renewable and nuclear energy resources.

[Learn more ▶](#)



Italy

New European hybrid electric technology demonstrator

Avio Aero launched a new hybrid electric technology demonstration program, called AMBER, that supports efforts to make air transport more fuel efficient by reducing CO₂ emissions. The program is funded by the Clean Aviation Joint Undertaking, a public-private partnership between the European Commission and the European aeronautics industry. The demonstrator will study integration of hybrid electric components with fuel cells for rig testing in the mid-2020s using Avio Aero's advanced Catalyst turboprop engine.

[Learn more ▶](#)



Greece

Digital twin technology for reliable energy

GE Digital's Asset Performance Management Reliability application has been selected by the first independent energy producer in Greece, ELPEDISON S.A., to improve the reliability of its combined cycle fleet. This makes ELPEDISON the country's first energy producer to cover an entire combined cycle plant with digital twin technology.

[Learn more ▶](#)



United States & France

CFM International RISE² Program

As part of CFM International's Revolutionary Innovation for Sustainable Engines (RISE)² Program, plans were announced to flight test hydrogen combustion and open fan technologies with Airbus in the mid-2020s. The CFM International RISE Program will demonstrate and mature a range of new, disruptive technologies for future engines targeting at least 20% lower fuel consumption, which translates to 20% fewer carbon dioxide (CO₂) emissions compared to today's engines.

[Learn more ▶](#)



Puerto Rico

Improving grid resiliency

GE Research, along with GE's Renewable Energy and Digital businesses, are working with the National Renewable Energy Laboratory, LUMA Energy and Sandia National Laboratories to develop and demonstrate an automated power system with sensors, software, distributed solar and storage, and other features that would enable grid operators to rapidly restore electricity following severe weather events.

[Learn more ▶](#)



Egypt

A hydrogen first for Africa

GE Vernova successfully operated a GE LM6000 aeroderivative gas turbine on hydrogen-natural gas blended fuel at the Sharm El Sheikh Power Plant during the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 27). In less than five months, the project overcame logistical and operational challenges—getting hydrogen to the plant and building the infrastructure for hydrogen distribution and blending at the site—all with a commitment to safety.

[Learn more ▶](#)



United Arab Emirates

A milestone for 100% Sustainable Aviation Fuel

Emirates operated the first demonstration flight in the Middle East using 100% Sustainable Aviation Fuel (SAF) in one of the two GE90 engines powering a Boeing 777-300ER. The flight supported collective industry efforts to help enable a future of 100% SAF flying and help advance the UAE's sustainability objectives.

[Learn more ▶](#)



China

Pumped hydro storage

Supported by four GE 300 megawatt (MW) pumped storage turbines, a new hydro power plant in Jinchai is now online and providing 1.2 gigawatt (GW) of power. The sustainable giant energy storage system will save up to 120,000 tons of coal and reduce 240,000 tons of CO₂ emissions every year. Worldwide, more than 30% of hydro storage plants are equipped with GE technology.

[Learn more ▶](#)



Australia

Identifying inefficiencies at 30,000 feet

Qantas Airlines, which operates Australia's largest commercial fleet, announced plans to implement GE Digital's Airspace Insight solution. By using this first-of-its-kind tool, which aggregates data from air traffic control (ATC), airlines, airports, airspace designers and communities, Qantas can better understand what is happening in their airspace from both a safety and efficiency perspective.

[Learn more ▶](#)



FORWARD-LOOKING STATEMENTS

This report contains "forward-looking statements"—that is, statements related to future events that by their nature address matters that are, to different degrees, uncertain. For details on the uncertainties that may cause our actual future results to be materially different than those expressed in our forward-looking statements, see <https://www.ge.com/investor-relations/important-forward-looking-statement-information>, as well as our annual reports on Form 10-K and quarterly reports on Form 10-Q. We do not undertake to update our forward-looking statements.

NON-GAAP FINANCIAL MEASURES

In this report, we sometimes use information derived from consolidated financial data but not presented in our financial statements prepared in accordance with U.S. generally accepted accounting principles (GAAP). Certain of these data are considered "non-GAAP financial measures" under the U.S. Securities and Exchange Commission rules. These non-GAAP financial measures supplement our GAAP disclosures and should not be considered an alternative to the GAAP measure. The reasons we use these non-GAAP financial measures and the reconciliations to their most directly comparable GAAP financial measures are included in our annual reports on Form 10-K, our quarterly reports on Form 10-Q and our earnings releases.

FACING PAGE

GE's next-generation 3.0-3.4 MW onshore wind turbine, designed specifically for the North America region.

COVER

Michael Whalen, Development Assembly Mechanic, GE Aerospace; Will Martin, Edison Engineering Development Program, GE Vernova; and Alejandra Aragon Gallegos, QA Site Leader, GE HealthCare.



Dear Fellow Stakeholders,

2022 marked the beginning of a new era for GE. One where we are unleashing our full potential as three independent industry leaders across energy, flight and health. Our ~172,000³ employees 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. With a commitment to embedding lean more deeply, and embracing a culture of humility, transparency and focus, we are living our purpose every day of rising to the challenge of building a world that works.

We successfully launched GE HealthCare and are preparing for the separation of GE Vernova, our portfolio of energy businesses, and GE Aerospace sometime early in 2024. We did this while navigating inflationary pressure, geopolitical conflict and global supply chain challenges. And in the spirit of kaizen, "change to make it better," we accelerated a culture of continuous improvement that ultimately allows us to better serve our customers.

³ On January 3, 2023, GE completed the planned separation of its healthcare business, launching GE HealthCare Technologies Inc. (GE HealthCare). As of December 31, 2022, GE had ~123,000 employees excluding GE HealthCare employees who are now part of the standalone company.

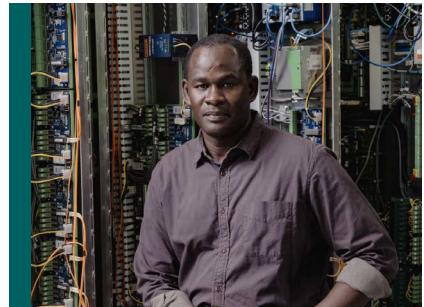
WE RISE TO THE CHALLENGE OF BUILDING A WORLD THAT WORKS

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

H. Lawrence Culp, Jr.

Chairman of the Board and Chief Executive Officer, GE
Chief Executive Officer, GE Aerospace

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.



Ibrahima Ndiaye is helping to modernize the electrical grid at GE Research's transformer lab in Niskayuna, New York.

These are important missions that will have a lasting impact on our planet. We are focused on improving our impact on our people, communities and planet. Respecting human rights around the world has long been a part of our culture of unyielding integrity and is embedded in our environmental, social and governance priorities. We know the actions we are taking today within GE Vernova and GE Aerospace support our climate and sustainability goals over the near and long term. In this report, you'll find more detailed discussions

⁴ Including GE and its joint venture partners.

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

on those actions, including letters from Scott Strazik and myself addressing sustainability within GE Vernova and GE Aerospace, respectively.

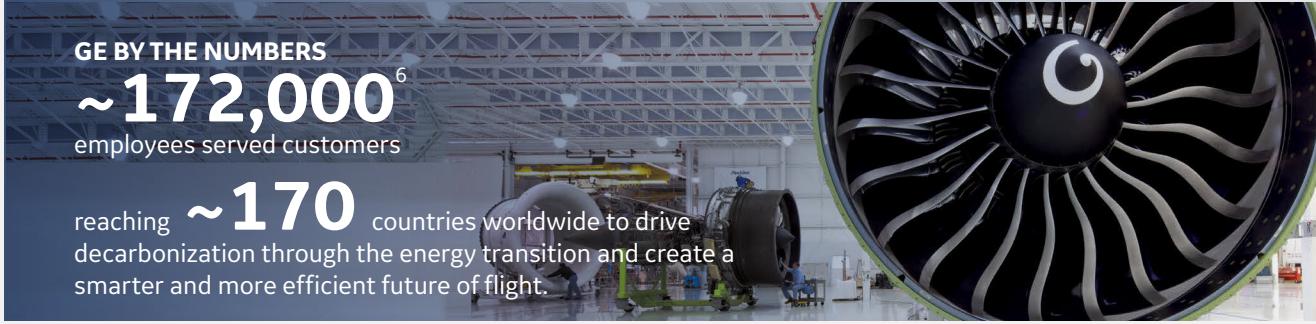
It all starts with our unique ability to innovate new technology the world needs to address the most pressing sustainability challenges. At GE Vernova, our technology helps generate approximately 30% of the world's electricity and we have a meaningful role to help solve the trilemma of delivering more sustainable, reliable and affordable energy. We're working with customers like Kindle Energy in Louisiana to transition to hydrogen as a fuel source for power turbines traditionally powered by natural gas, and with countries like Vietnam to improve the reliability and stability of the electrical grid to support renewable sources of energy. We're bringing the world's only 12+ megawatt wind turbine with three years of operating experience—the Haliade-X—to important new projects like the Dogger Bank offshore wind farm off the coast of England. We're deploying advanced nuclear technologies like our BWRX-300 small modular reactor, which produces no carbon during operation, in key markets including North America and Europe. And we're modernizing electrical grids for clean energy integration, using our GridOS®, the world's first software designed for grid orchestration.

At GE Aerospace, nearly 3 billion people flew with our technology under wing in 2022⁴. We are continuing our efforts to support use of Sustainable Aviation Fuel (SAF), which is vital to enabling the aviation industry to meet its decarbonization goals. The revolutionary CFM RISE⁵ technology demonstration program, in

GE BY THE NUMBERS

~172,000⁶
employees served customers

reaching **~170** countries worldwide to drive decarbonization through the energy transition and create a smarter and more efficient future of flight.



partnership with Safran, is developing a new engine architecture and advanced materials with an aim to reduce fuel consumption and CO₂ emissions by more than 20% compared with today's most efficient engines. We're also working with NASA and Boeing to mature and fly a megawatt-class hybrid electric propulsion system, and announced new flight test programs for open fan and for a hydrogen combustion engine with Airbus. And our Avio Aero team will lead a European project to test a hybrid electric motor powered by hydrogen fuel cells.



GE Aerospace's Tatum Ross works on a Passport engine in Evendale, Ohio.

The GE team is excited for the path ahead. GE HealthCare is already well along its journey, and GE Vernova and GE Aerospace will follow sometime early in 2024. I am confident that we will achieve our full potential, thanks to our people. Our teams are motivated by the respective missions of each business, precisely because they are so important to creating a sustainable future for the world.



H. LAWRENCE CULP, JR.

Chairman of the Board and Chief Executive Officer, GE
Chief Executive Officer, GE Aerospace



GE Board Member and former U.S. Secretary of Defense Ash Carter sadly passed away last fall. We miss him every day and again express our deepest sympathies to his wife and family. Ash once said to me, "I like the ethos of GE," and how GE sits on the same side of the table with customers when it comes to technology and efficient production. I couldn't agree more. We approach our work with our customers as "one team with one fight," as Ash would describe it. That has been true for more than 130 years, and we will carry that ethos into our future.

⁶ 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.

⁷ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines; Engine Alliance is a 50-50 joint company between GE and Pratt & Whitney.



GE VENOVA

We are united by a single, urgent purpose to help electrify and decarbonize the planet: because together, we have the energy to change the world.



We have equipped **90%** of the world's power transmission utilities with our technology.



GE Aerospace

We invent the future of flight, lift people up and bring them home safely.



Every **2** seconds a GE or partner⁷ powered aircraft takes off.

2022: A Transformative Era of Action

As someone who has focused their career on the environment, energy, climate and sustainability for almost 30 years, I've never experienced so much consensus from governments, companies and NGOs around one common theme—action.

2022 marked a tipping point toward accelerating action. Throughout the year, we've seen three key transformations that are helping to solve some of the world's most pressing sustainability challenges. And GE's own transformation is perfectly timed and aligned to ensure success.

First, the relationship between governments and companies is rapidly reconfiguring toward partnership of shared goals. One key catalyst: the United States' passage of its first climate change law—the Inflation Reduction Act—is one of the most impactful energy policies in decades and is bringing the government and companies together to solve for climate change, energy security and supply chain together. Another is the European Union's RePowerEU package, which is helping address the energy market disruption caused by Russia's invasion and promote energy security while accelerating the energy transition. Importantly, this is not just a U.S. and Europe transformation. We are rapidly expanding our engagement with governments—across the Middle East, South America, Africa and Asia—to help build a clean energy supply chain across the communities in which we operate.

The work our GE Vernova team has done together to provide emergency power to Ukraine, documented on page 14, is perhaps the best example of a public-private partnership I've seen.

At GE Aerospace, we're working with the European Commission's Clean Aviation program and the U.S. Federal Aviation Administration's Continuous Lower Energy, Emissions and Noise (CLEEN) program to innovate jet engine technologies and help decarbonize the aviation industry.

Second, the urgency of electrification and energy security is creating additional incentives to act on climate change. In the last 12 months, we've seen more severe weather events threatening energy reliability, risks from cybersecurity, growing variability from renewable energy and the need to harden the grid so that other sectors can decarbonize through electrification.

All these factors have ignited a sense of urgency of acting today on both power generation and grid modernization. While doing so within the context of electrification, these investments bring equal benefits to decarbonization and climate change goals. Thus, we are increasingly seeing action that solves both climate change and the energy trilemma—growing access to more sustainable, reliable and affordable electricity for the nearly 775 million people who lack access. We launched GridOS®, the world's first grid orchestration software, which is designed to enable secure and reliable grid management while delivering the resiliency and flexibility needed by utilities worldwide.

Third, we've seen a transformation and increasingly unified global action plan for climate change. For example, countries like Egypt and the United Arab Emirates (UAE) are now putting their climate commitments front and center in their economic plans. They are aggressively pursuing climate change investments as ways to



ROGER MARTELLA
Chief Sustainability Officer

advance their economies and inspire a new generation of diverse leaders and workforce. We were honored to work in Egypt to run a gas turbine on a hydrogen blend for the first time for the African continent in 2022, and we're prioritizing our partnership with the UAE, which I believe will emerge in 2023 as one of the world's leaders on innovating technology to decarbonize industrial and energy sectors. In addition, members of Air Transport Action Group, including GE Aerospace, previously adopted a goal of net zero CO₂ emissions by 2050, confirming the aviation industry's support of the Paris Climate Agreement. We want to enable the world to be invested both in cleaner and more affordable energy, and the economic benefits with it.

As I reflect on these transformations, I feel fortunate that GE's most significant transformation is aligning at this pivotal time.

With our announcement in 2021 to launch three companies focused on critical, growing sectors in energy, aerospace and healthcare, we used last year to the fullest—preparing each company to independently continue and build upon the legacy of GE's established ESG program, including our climate commitments and ambitions. All GE companies operate from the principle that sustainability is a business imperative and a necessary condition for long-term growth and success. That includes GE Vernova and GE Aerospace, which are, respectively, uniquely positioned to lead the energy transition and the future of flight, and GE HealthCare, which successfully completed its separation in January 2023 and will release its own sustainability report detailing and further developing its own ESG strategy and goals.

I am already a witness to how each of our three businesses are more strongly positioned to serve these three critical areas of energy, aviation and healthcare through focus. And, importantly, I'm confident in their success both for their shareholders as a business and for sustainability in innovating the solutions the world most needs to accelerate action.

2022 marked the beginning of a transformative era not only for sustainability, but also for GE. One where we are unleashing our full potential as three independent industry leaders. With a continued commitment to our sustainability priorities and innovation, and technology as our North Star, I am optimistic about the path to improve our impacts on our people, communities and planet.

ROGER MARTELLA
Chief Sustainability Officer

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Our Sustainability Priorities

Throughout our more than 130-year history, GE has held a larger purpose of innovating technology to lift the quality of life for people around the globe—a core driver of sustainability. Sustainability priorities are woven into all that we do, including our business strategy, policies, leadership engagement, operating mechanisms, commitments and, ultimately, our products. From ensuring more people have access to more sustainable, reliable and affordable energy, to helping people thrive by staying connected to family, friends and economic opportunities, we are committed to making a substantial impact on people and the planet for the better.

2022 marked the beginning of a new era for GE. One where we are unleashing our full potential as three independent industry leaders committed to energy, flight and health. Our mission to succeed in driving decarbonization through the energy transition and creating a smarter and more efficient future of flight is governed by core sustainability priorities built first and foremost on GE's unique culture of integrity in everything we do. As the world changes, we continuously adapt and improve our programs to ensure we succeed in these priorities.

In the spirit of humility, we continuously engage with thought leaders and experts in various fields to learn from them and enhance our program. GE's strong foundation of integrity and lean-oriented culture frame how we make continuous improvements for people, our communities and the planet. As our ~172,000⁸ diverse employees share a common mission to build a world that works, we are focused together on these priorities.

The following pages highlight how our products and innovative technologies work to build a more sustainable world and how our foundational culture of integrity, forward-looking strategy and robust sustainability programs help bring these priorities to life.



⁸ On January 3, 2023, GE completed the planned separation of its healthcare business, launching GE HealthCare Technologies Inc. (GE HealthCare). As of December 31, 2022, GE had ~123,000 employees excluding GE HealthCare employees who are now part of the standalone company.

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.



3 GOOD HEALTH AND WELL-BEING



On January 3, 2023, GE completed the planned separation of its healthcare business, launching GE HealthCare Technologies Inc. (GE HealthCare). As an independent company, GE HealthCare embarks on its important mission to create a world where healthcare has no limits.

Across GE, we remain committed to protecting the health and safety of our workforce and those doing work on our behalf across the globe.

Through our global well-being program, HealthAhead, we support GE employees and their families in optimizing their health and well-being in diverse ways that are reflective of their local cultures. In recognition of our efforts to make the health and well-being of our employees one of our top priorities, we received the 2022 Best Employers: Excellence in Health & Well-being Award from the Business Group on Health. We were also one of four employers honored with the Excellence in Global Health & Well-being Award for demonstrating a commitment to equity reflected in our standard benefits offered to our global workforce.

We have maintained appropriate COVID-19 precautions and procedures throughout the pandemic to ensure the health and safety of our employees.

The GE Foundation's Safe Surgery 2020 program and its partners continue to make an impact in Africa and Southeast Asia. Although the \$25 million commitment concluded in 2020, the program continues to increase medical oxygen accessibility to patients, supports anesthesia training across East Africa, expands medical tele-education and tele-mentoring for in-service training, and strengthens health facilities through biomedical technician training.

Business and Priority Alignment

- Advancing Diversity, Equity and Inclusion
- Lifting Our Communities

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5 GENDER EQUALITY



At GE, our diversity, equity and inclusion (DEI) focus is rooted in the belief that diverse teams and perspectives are essential to building a world that works. By working together, we can foster an inclusive culture that ensures every employee feels accepted, respected and a sense of belonging. Gender equality is a critical component of GE's commitment to providing a safe, inclusive and respectful workplace. We continue to provide benefits that support our gender diverse workforce, including flexible work policies, parental leave and other family benefits. While we have improved gender pay equity over the past year, our goal remains 100% pay equity in each of our businesses.

Our philanthropic efforts also focus on advancing gender equality by supporting women and underrepresented populations in science, technology, engineering and math (STEM) fields. GE is honored to be a founding partner of the Society of Women Engineers (SWE) Corporate Partnership Council for 20 years, and several GE senior leaders serve in leadership positions at SWE and on the Women of Color in Engineering Collaborative (WCEC). Many GE employees mentor new talent or advance their own education and networking through SWE, which also provides scholarship support. Together, SWE and GE are building a strong pipeline of female talent that will innovate the future with diverse experiences and perspectives.

Similarly, in 2022, GE helped to empower young people by learning about STEM opportunities during two events in the Middle East, North Africa and Turkey (MENAT) region. Each event gave students a first-hand look at GE's technology, sustainability initiatives and STEM careers. In addition, students worked with GE employees to think through and identify innovative solutions around sustainability-related issues and topics. Events such as these often lead to GE mentoring of students, empowering their passion to work in careers that help people and the planet.

Business and Priority Alignment

- Safety
- Lifting Our Communities

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7**AFFORDABLE AND CLEAN ENERGY****8****DECENT WORK AND ECONOMIC GROWTH**

As a company whose technology helps generate approximately 30% of the world's electricity, we are committed to decarbonizing the energy sector while increasing access to more sustainable, reliable and affordable electricity. We are committed to electrification and decarbonization in parallel—growing access to electricity, particularly for the nearly 775 million people without access, while decarbonizing the energy, transportation and industrial sectors. With some of the most innovative onshore and offshore wind turbines, most efficient gas turbines, as well as advanced technology to modernize and digitize electrical grids, GE is uniquely positioned to collaborate internationally in a just transition to a clean energy economy. As we are helping our customers to decarbonize smartly and efficiently, we are ensuring we become carbon neutral in our own Scope 1 and Scope 2 greenhouse gas (GHG) emissions by 2030, en route to net zero by 2050 in our own operations as well as the Scope 3 emissions from the use of our sold products.

As part of GE Vernova's commitment to helping our customers deliver more affordable and cleaner energy, we've invested in the GT26 High Efficiency (HE) Upgrade to provide up to a 2% combined cycle efficiency improvement. The upgrade lowers the fuel cost per MW and reduces CO₂ by 5%, which is equivalent to taking 16,500 cars off the road. The upgrade also increases the capability of the GT26 to burn up to 40% hydrogen fuel, providing future potential to further reduce the carbon footprint.

Business and Priority Alignment

- Energy Transition (GE Vernova)
- Environmental Stewardship

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86 GE's Ambition To Be a Net Zero Company

We believe there is no such thing as sustainable economic growth without decent work. We treat everyone affected by our businesses and value chain with fairness and dignity. In addition to strict prohibitions on child, prison and forced labor, we have built strong and lasting relationships with our suppliers to ensure an ethical supply chain.

GE subscribes to all prevailing work laws internationally regarding minimum wages. GE adopts the Employer Pays Principles and prohibits actions associated with the most common forms of modern slavery. We enforce compliance on working conditions at our work sites and conduct audits at supplier manufacturing sites through our Supplier Responsibility Governance program.

The decent work of today begins with training for the jobs of tomorrow. We believe STEM careers, especially in energy and transportation, are helping to solve global challenges like climate change while also lifting up communities through economic opportunities. That is why GE continues to support educational advancements, mentoring and community assistance for students and communities at home and abroad.

One key example of this support is the Advanced Manufacturing Training Expansion Program (AMTEP). Launched in 2019 with funding through 2025, the goal of AMTEP is to triple the training footprint by reaching more than 900 high school students and adult learners and building a more diverse, sustainable, ready-to-work pipeline across Massachusetts' North Shore. We are committed to providing high school students and adult learners with the training and resources they need to succeed in STEM careers.

Business and Priority Alignment

- Energy Transition (GE Vernova)
- Human Rights
- Future of Flight (GE Aerospace)
- Safety

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105 Our Commitments: Ethical Supply Chain

9**INDUSTRY, INNOVATION AND INFRASTRUCTURE**

From the beginning, research has played a critical role in our business strategy. We continue to develop technologies that have raised the quality of life for people around the world. Today we are focused on innovating technologies that will propel the global energy transition and future of flight.

For example, GE Research launched a new Technology Incubation team at its Niskayuna, New York, research campus to enhance our green innovation commercialization efforts in the private sector. The CAGE (Climate Action@GE) Lab is developing unique systems for post-combustion carbon capture and direct air capture (DAC), which remove carbon from flue gas and the air, respectively. The goal is to enable an economical, large-scale solution for helping customers and companies decarbonize. Looking to the future of flight, GE Research's hybrid electric aviation team is partnering with the Advanced Research Projects Agency for Energy (ARPA-E) on three projects to develop the powertrain, power generation system and cabling to enable a carbon neutral hybrid electric propulsion system that is suitable for supporting a 150-200 seat narrow body commercial airplane.

Our innovation doesn't end with creating breakthrough technologies. Our programs for redeveloping brownfields, Superfund and other contaminated sites are also creating the infrastructure of tomorrow by helping to turn idle properties into new hubs of economic growth, job creation, needed housing and more. For example, as part of GE's former Lighting manufacturing business, we leased a site near Yogyakarta, Indonesia, from the Sambirejo Village Administration for solid waste storage (i.e., broken glass from lamp manufacturing). Following GE's exit from the site, we worked closely with regulators and the village to incorporate the construction of a soccer pitch into the final site restoration plans.

Business and Priority Alignment

- Energy Transition (GE Vernova)
- Future of Flight (GE Aerospace)
- Environmental Stewardship

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10**REDUCED INEQUALITIES**

GE's respectful workplace policies are the foundation of our commitment to a diverse workforce and inclusive workplace. Through our membership with the Leadership Group for Responsible Recruitment, we also adopted the Employer Pay Principle to remove inequities and help prevent exploitation of vulnerable worker populations.

We believe education is a significant driver of economic inclusion and continue to partner with multiple organizations to provide STEM training and education to diverse communities around the world. With a focus on increasing the diversity of young people in engineering, the GE Foundation's Next Engineers program facilitated more than 8,300 student engagements in 2021 and 2022.

The GE Foundation's Developing Health Globally (DHG) program continues to provide benefits to underserved communities, helping to reduce global health inequalities. Since its launch in 2004, DHG has invested \$145 million to train more than 2,000 healthcare workers in many disciplines, including biomedical technicians across 16 countries.

Business and Priority Alignment

- Lifting Our Communities
- Human Rights

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[GE 2021 Diversity Report](#)

11**SUSTAINABLE CITIES AND COMMUNITIES**

As cities and communities around the world decarbonize, GE's diverse energy offerings help provide utilities, power producers, grid operators and policymakers with the technology and services they need to meet their climate and sustainability goals. We continue to advance our environmental, health, safety and other sustainability goals in the cities and communities in which our employees and customers live and work, while at the same time providing job opportunities that support community development.

For example, GE Research, along with GE's Renewable Energy and Digital businesses, are working with the National Renewable Energy Laboratory, LUMA Energy and Sandia National Laboratories to develop and demonstrate an automated power system with sensors, software, distributed solar and storage, and other features that would enable communities in Puerto Rico to rapidly restore electricity following severe weather events.

In 2023, GE launched GridOS®, the world's first end-to-end software portfolio designed to help create the clean energy grid of the future. The platform and application suite enable secure and reliable grid management while delivering the resiliency and flexibility needed by utilities worldwide.

Business and Priority Alignment

- Energy Transition (GE Vernova)
- Environmental Stewardship

Learn More

- 20** Innovation: Energy Transition
50 Our Process: How GE Operates to Succeed in Our Mission
97 Our Commitment: Product Stewardship
101 Environmental Justice and Brownfields

12**RESPONSIBLE CONSUMPTION AND PRODUCTION**

In 2021, we developed product stewardship and circularity goals to take responsibility for the impacts of our products across their full lifecycle. Over the last year, new Life Cycle Assessments (LCAs) were conducted and more than 100 personnel in over a dozen different functions assessed the progress of existing circularity and product stewardship initiatives and drafted objectives and roadmaps to further incorporate circularity and stewardship steps into the business strategy.

For example, as part of the ZEBRA (Zero wastE Blade ReseArch) consortium, LM Wind Power produced its first 100% recyclable blade at the Ponferrada plant in Spain in early 2022. The 62-meter blade was built using a unique thermoplastic resin. The resin can be readily utilized in other industries as material compounds and can also be depolymerized and reused in the production of new blades.

Business and Priority Alignment

- Product Stewardship

Learn More

- 97** Our Commitments: Product Stewardship
101 Environmental Justice and Brownfields

13

CLIMATE ACTION



16

PEACE, JUSTICE AND STRONG INSTITUTIONS



We continue to make progress toward our goal of achieving carbon neutrality within our own operations (i.e., Scope 1 and 2 emissions) by 2030. Our businesses continue to make 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. We are also progressing on our ambition to be net zero by 2050, including for the Scope 3 emissions associated with the use of our sold products. We continue to provide updates on the path to our net zero ambition across GE Vernova and GE Aerospace.

At the same time, we continue to play an important role globally in helping our customers reach their climate and sustainability goals while working with partners to electrify and decarbonize as part of the global transition to a clean energy economy. Throughout 2022, we continued to engage in the public domain to advance thought leadership on how the energy sector can achieve climate goals in line with the Paris Climate Agreement (including participating in COP27) and to help formulate and support policies that advance a just transition and sustainability goals globally.

Business and Priority Alignment

- Energy Transition (GE Vernova)
- Future of Flight (GE Aerospace)
- Environmental Stewardship

Learn More

20 Innovation: Energy Transition

32,44 Scope 3

86 Our Commitments: Climate Change

17

PARTNERSHIPS FOR THE GOALS



We promote respect for fundamental human rights as outlined in our Human Rights Statement of Principles and the principles contained in the Universal Declaration of Human Rights. We released our GE Human Rights Report in 2022 to provide greater transparency into how we run our Human Rights program, from our suite of governance documents to our Supplier Due Diligence program. Our human rights and respectful workplace policies extend from our own employees to those of our suppliers and to the communities affected by our operations and business relationships. We treat everyone affected by our business and value chain—including employees, suppliers and their workers, customers and communities—with fairness and dignity.

We believe access to more sustainable, reliable and affordable energy helps to strengthen infrastructure and promotes stable prosperous societies. For example, half of India's new wind energy generation capacity in 2022 was powered by GE's locally developed and manufactured 2.7-132 wind turbine that is ideal for India's low wind speed regime. A major portion of the additional 900 MW was set up to help industries in their decarbonization journey and has the potential to generate enough electricity to power over 290,000 Indian households. The 2.7-132 turbine was developed by engineers at our John F. Welch Technology Center in Bengaluru, and is manufactured at GE's multimodal factory in Pune in western India, with blades being manufactured at LM factories located in the states of Gujarat and Karnataka.

Business and Priority Alignment

- Human Rights
- Culture of Integrity

Learn More

63 Culture of Integrity

104 Our Commitments: Human Rights

2021 GE Human Rights Report

Business and Priority Alignment

- Energy Transition (GE Vernova)
- Future of Flight (GE Aerospace)
- Human Rights
- Environmental Stewardship

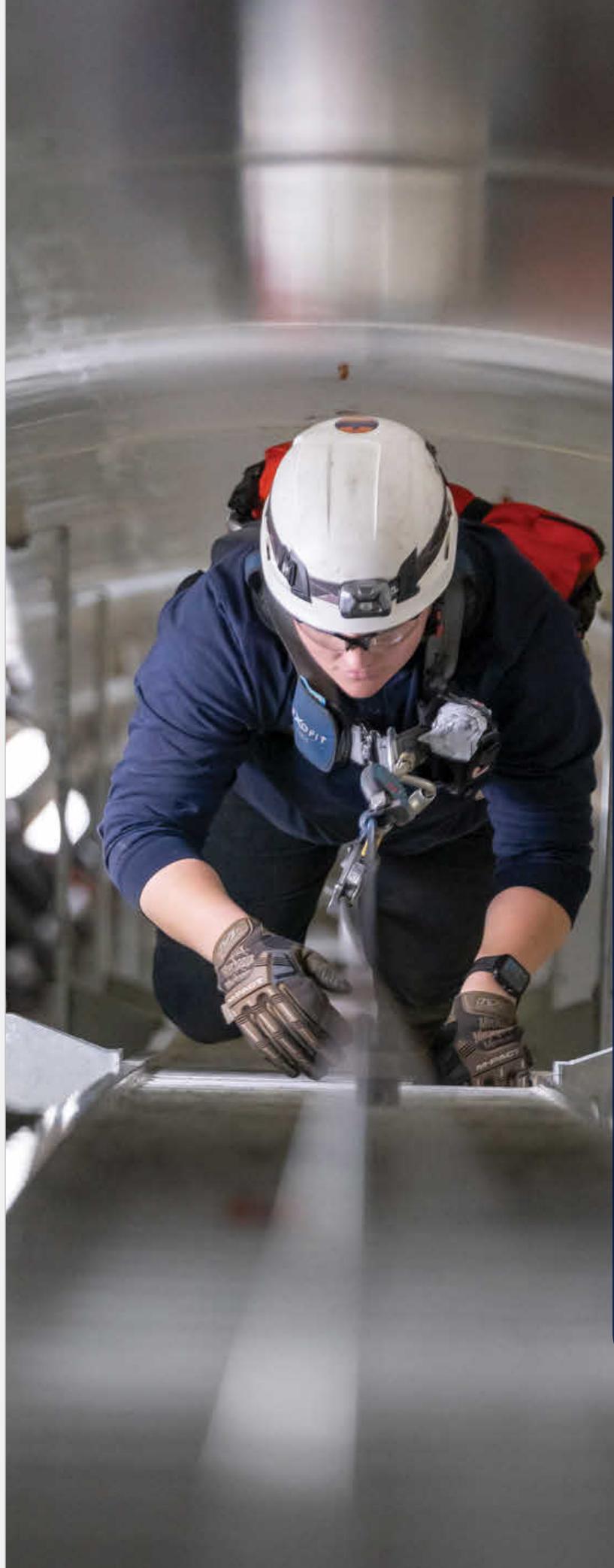
Learn More

86 Our Commitments: Climate Change

104 Our Commitments: Human Rights

2021 GE Human Rights Report

⁹ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines.



About This Report

This report covers the environmental, social and governance (ESG) activities of GE, primarily for 2022. In certain places, it also describes how we are propelling GE into a new era as we progress our plans to launch GE Vernova, our portfolio of energy businesses, and GE Aerospace as industry-leading, global, investment-grade public companies. This report allows us an opportunity to deepen existing conversations with our stakeholders about our sustainability programs.

In addition to the UN SDGs, we have considered three key sustainability reporting frameworks as we developed this report: (1) the Task Force on Climate-related Financial Disclosures (TCFD) framework, (2) industry-specific standards from the Sustainability Accounting Standards Board (SASB) and (3) the Global Reporting Initiative (GRI) Standards (Core). TCFD, SASB and GRI indices can be found [here](#).

GE's Greenhouse Gas (GHG) Inventory follows the World Resources Institute/World Business Council for Sustainable Development (WRI/WBCSD) Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition (the Protocol). GE utilizes the Protocol for all definitions, assumptions and calculations discussed in this document unless explicitly stated otherwise, reporting under the "operational control" approach. To learn more about our Greenhouse Gas Inventory and Energy Inventory process methodology, see Appendix I in our [2022 Sustainability Report Appendices](#).

As described below on page 51, the GE Board of Directors (Board) exercises oversight and provides direction on GE's sustainability strategy, and the Governance & Public Affairs Committee in coordination with the Audit Committee oversees external reporting on sustainability matters, including this report. While the contents within this report have not been externally assured, both internal and independent external resources have reviewed the information and data within for quality, completeness and accuracy.

On January 3, 2023, GE completed the previously announced separation of its healthcare business into a separate, independent publicly traded company, GE HealthCare Technologies, Inc. (GE HealthCare). This report covers GE Vernova and GE Aerospace only, except where otherwise noted. GE HealthCare will be releasing its own 2022 sustainability report.

Key Metrics: Our Performance and Priorities

As an active participant and signatory to the UN Global Compact since 2008, we understand we play a role in helping achieve a better future for all by creating a more sustainable world. To put this in action, we apply the UN Guiding Principles on Business and Human Rights to help frame our program and practices. Our ESG performance in 2022 and priorities for 2023 and beyond align with the identified UN Sustainable Development Goals (SDGs) to help address the identified societal challenges. In 2022, we are proud the suite of our key ESG metrics trended in positive directions.

On January 3, 2023, GE completed the previously announced separation of its healthcare business into a separate, independent publicly traded company, GE HealthCare Technologies, Inc. (GE HealthCare). This report covers GE Vernova and GE Aerospace only, except where otherwise noted. GE HealthCare is included in this section, the 2022 Key Metrics: Our Performance and Priorities.

TOPIC	BASELINE	2020	2021	2022	UN SDG
Financial Performance (\$M)					
Total Revenues	\$75,833	\$74,196	\$76,555		
Adjusted Revenues ¹	\$72,969	\$71,090	\$73,602		
Profit (loss) (GAAP ²)	\$5,970	(\$3,683)	\$1,412		
Adjusted Profit ¹	\$2,246	\$4,608	\$5,835		
CFOA ³ (GAAP ²)	\$1,025	\$888	\$5,864		
Free Cash Flows ¹	\$635	\$1,889	\$4,758		
Total Research and Development ⁴	\$3,820	\$3,685	\$4,242		
Diversity and Inclusion⁵ (pages 72-80)					
GE U.S. Workforce, all employees					
Total Race & Ethnic Minority ⁶	24.1%	24.2%	25.2%		
Asian	8.7%	8.5%	8.5%		
Black/African American	6.8%	6.7%	7.1%		
Hispanic/Latinx	6.5%	6.8%	7.3%		
American Indian/Alaskan Native	0.3%	0.3%	0.3%		
Native Hawaiian/Pacific Islander	0.2%	0.1%	0.2%		
Multiracial	1.6%	1.7%	1.9%		
Disability (U.S.) ⁷	3.7%	3.2%			
U.S. Veteran Status ⁷	10.1%	10.2%			
Global Female Representation per Category					
Female Representation, All Employees	21.9%	22.3%	22.8%		
Female Representation, Professional Employees ⁸	26.2%	26.5%	26.9%		
Female Representation in Leadership ⁹	26.0%	27.2%	29.5%		
Human Rights: Supplier Responsibility Program¹⁰ (pages 104-106)					
Total Global Audits ¹¹	1,286	1,115	1,233		
Total Suppliers Approved ¹²	1,039	966	1,014		
New Suppliers	433	220	222		
Existing Suppliers	553	726	772		
Supplier from Acquisition	53	20	20		
Total Suppliers Rejected ¹²	71	26	44		
New Suppliers	62	13	30		
Existing Suppliers	8	13	14		
Supplier from Acquisition	1	0	0		
Total Findings ¹³	7,348	6,031	6,482		
Percentage of Findings per Category					
Health & Safety	29%	31%	31%		
Environment	31%	31%	34%		
Emergency Preparedness	21%	20%	16%		
Human Rights & Labor	16%	14%	13%		
Dormitory Standards	<1%	<1%	<1%		
Conflict Minerals	2%	1%	1%		
Security / Other ¹⁴	<1%	3%	6%		
Audits per Region					
China	41%	38%	34%		
India	28%	27%	27%		
North and South America	13%	18%	18%		
Europe, Middle East & Africa	9%	8%	8%		
Rest of Asia	9%	10%	13%		

TOPIC	BASELINE	2020	2021	2022	UN SDG
Safety (pages 82-84)					
Environmental Stewardship (pages 32-35, 44-47, 85-88, 100)					
Injury & Illness Total Recordable Rate ¹⁵		0.53	0.60	0.47	
Days Away from Work Incident Rate ¹⁶		0.29	0.32	0.21	
Fatalities—Employees (Count) ¹⁷		3	0	0	
Fatalities—Contractor Workers (Count) ¹⁸		4	4	3	
Environmental Performance					
ISO 14001 Sites		97	111	148	
Global Penalties Paid (in \$ thousands)		25	63	13	
Spills & Releases (Count)		24	27	19	
Air Exceedances (Count) ¹⁹		10	1	3	
Wastewater Exceedances (Count)		11	35	18	
Climate Change and Energy²⁰					
GE Operational GHG Emissions (million metric tons of CO ₂ equivalent) (market based) ²¹	2.27	1.90	1.81	1.63	
Scope 1 Emissions (million metric tons of CO ₂ equivalent)		0.73	0.74	0.67	
Scope 2 Emissions (million metric tons of CO ₂ equivalent) (market based)		1.16	1.07	0.96	
Direct SF ₆ Emissions (thousand metric tons CO ₂ equivalent)		138	131	105	
Scope 3 Net Emissions from sold products (million metric tons of CO ₂) (net, new units, absolute)		28	34		
GE Aerospace ²²					
GE Vernova ²³		477	320		
GE Operational Energy Use (MWh) ²⁰	7,370,000	5,870,000	5,990,000	5,670,000	
Total Electricity (MWh)		3,040,000	3,030,000	2,950,000	
Renewable Energy Used (MWh)		53,000	63,100	141,000	
Water					
Total Freshwater Use (billions of gallons)		5.12	4.93	4.29	
Once-Through Cooling Freshwater (billions of gallons)		1.85	1.69	1.30	
Lifting Our Communities (pages 108-116) (\$M)					
GE Company Contributions via GE Businesses and the GE Foundation		\$44.9	\$34.9	\$44.2	
Employee and Retiree Contributions		\$16.8	\$9.4	\$9.1	
Total GE "Family" Giving		\$61.7	\$44.3	\$53.3	
Total Contributions as a Percentage of GE Revenue		0.08%	0.06%	0.07%	
Notes:					
1 Non-GAAP financial measure.					
2 Generally Accepted Accounting Principles.					
3 Cash from Operating Activities.					
4 GE, customer and partner funded.					
5 Data representative of GE's workforce as of December 31, 2022, inclusive of GE HealthCare, extracted January 12, 2023.					
6 System exports show percentages out to several decimal points. Due to this precision, totals may not sum due to rounding differences.					
7 2021 first year reported.					
8 Professional accounts for all active non-production employees, excluding leadership.					
9 Leadership encompasses the most senior 1.5% of all active employees.					
10 Beginning with the 2020 metric year, our supply chain metrics reflect changes and improvements in GE's Supplier Responsibility Governance (SRG) program.					
11 The number of Total Global Audits is greater than total suppliers reviewed as some suppliers were audited twice (i.e., desktop audit due to COVID-19 restrictions followed by on-site visits) or there were return visits to confirm corrective actions were completed. For more information on GE's Supplier Responsibility Governance (SRG) program, see pages 105-106.					
12 New metric reported in 2020 from Supplier Responsibility Governance program and audits.					
13 Findings identified vary from policy improvements to process changes. GE tracks all issues to closure with verification such issues were properly addressed. GE will suspend or terminate a relationship should the supplier fail to implement adequate measures as required by the corrective action plan.					
14 Other includes findings not allocated to a category or relate to quality findings identified during Supplier Responsibility Governance audit.					
15 Number of injury and illness cases globally per risk population year to date, based on 100 employees working 200,000 hours annually, as measured against OSHA recordability criteria.					
16 Days Away from Work Incident Rate uses the OSHA calculation for recordable days away from work cases (transfer or restricted cases are excluded), based on 100 employees working 200,000 hours annually.					
17 GE employees, leased workers, wholly owned affiliate employees and majority-owned, joint-venture employees.					
18 Workers under GE EHS coordination which may include GE-hired contract workers, consortium partner workers and sub-contractors.					
19 Increase from 2021 to 2022 due to minor, unrelated incidents across global operations.					
20 Per the WRI/WBCSD GHG Protocol, GE adjusts its 2019 base year GHG and energy data annually to reflect changes in structure or calculation methodology, improvements in accuracy of emission factors or activity data, and discovery of error. Interim years are not adjusted except upon discovery of significant error.					
21 Scope 1 and 2 emissions may not sum to total due to rounding.					
22 For more details on GE Aerospace's Scope 3 emissions for sold products and progress toward net zero ambition, see pages 44-47, Appendix II in our 2022 Sustainability Report Appendices .					
23 For more details on GE Vernova's Scope 3 emissions for sold products and progress toward net zero ambition, see pages 32-35, Appendix II in our 2022 Sustainability Report Appendices .					

Ukraine

GE's Commitment to the People of Ukraine



A GE TM2500 aeroderivative gas turbine is delivered to Ukraine to provide emergency power.

The resolve and courage of the Ukrainian people are an inspiration to the world. As a GE team, we proudly stand with our employees, our customers and all those impacted by the crisis.

SUPPORTING THE UKRAINIAN GRID

Aligning with our efforts to assist in maintaining and rebuilding Ukraine's electric grid, a GE TM2500 aeroderivative gas turbine was shipped to Ukraine from Arizona on a Ukrainian Antonov cargo plane. The portable turbine was purchased by USAID, the United States government's humanitarian and foreign aid agency, to help support emergency power needs in the country.

The mobile gas generator can generate enough electricity to power the equivalent of more than 100,000 Ukrainian homes and can be trucked to a location and attached to a damaged power plant, or hooked directly into the electrical grid, within a few weeks. This effort was made possible by a partnership between Ukraine and the U.S., and GE was fortunate to contribute to this crucial cause. [Learn more ▶](#)



Ukrainian Minister of Energy German Galuschenko (right) with GE Chief Sustainability Officer Roger Martella at the Partnership for Transatlantic Energy and Climate Cooperation.

SUPPORTING EUROPE AND EUROPEAN CUSTOMERS

While the war in Ukraine is first and foremost a humanitarian catastrophe for the people in Ukraine, the Russian invasion has also caused an energy crisis, particularly in Europe. In May 2022, the European Union introduced the RePowerEU package to help address the energy market disruption caused by Russia's invasion. The package is focused on saving energy, diversifying energy supply, accelerating clean energy rollout, and investment and reform measures to achieve independence from Russian fossil fuels by 2027.

GE supported its customers and other European stakeholders on this significant shift. For example:

- Our Grid Solutions business unveiled innovative technology at the 2022 CIGRE Biennial Session in Paris, France, to showcase how we are helping address the biggest challenges facing the grid, specifically modernization, decarbonization, digitization and electrification. [Learn more ▶](#)
- GE researchers developed a cutting-edge artificial intelligence/machine learning tool that could save the global wind industry billions of dollars in logistics costs over the next decade. [Learn more ▶](#)
- Our Gas Power team worked with countries like Germany to evaluate current power market design and associated risks against climate target and energy security objectives. [Learn more ▶](#)

SUPPORTING UKRAINIAN COMMUNITIES

The GE family has also provided philanthropic support to the people of Ukraine, which includes more than \$6 million in medical equipment, humanitarian support and contributions.

Early in the conflict, GE HealthCare donated \$4 million in healthcare equipment, including handheld ultrasound devices, mobile X-ray units, ventilators and patient monitors. In November 2022, GE HealthCare announced an additional \$1 million donation of life-saving ultrasound and monitoring equipment to Ukraine. [Learn more ▶](#)

Through the GE Foundation, an independent charitable organization funded by GE, we made a \$500,000 donation to two organizations to bring immediate and long-term support to refugees and relief organizations on the ground, including \$400,000 to the International Rescue Committee and \$100,000 to Airlink. [Learn more ▶](#)

Additionally, the GE Foundation's Matching Gifts program enabled employees to contribute to relief efforts, doubling their support by matching their donations 1-to-1. As of May 2023, these funds increased our impact by nearly \$520,000 including employee donations and matching gifts.

SUPPORTING UKRAINIAN REFUGEES

Under an intensive six-month Ukraine Refugee Support program, GE offered cost reimbursements and paid time off to employees who opened their homes to refugees and helped provide necessities such as food, medicine and clothing. Approximately 360 GE employees made use of the program, amounting to more than \$300,000 in reimbursements.

GE VOLUNTEERS OPEN HEARTS AND HOMES TO UKRAINIANS

GE employees across Europe have come together to establish a network of volunteers and design creative ways to help with the ongoing humanitarian crisis. They've gathered donations of food and hygiene products, supported local charities and even hosted Ukrainian families in their own homes. [Learn more ▶](#)



PART I | OUR INNOVATION AND TECHNOLOGY

Propelling GE into a New Era

For 130 years, people have counted on GE to "find out what the world needs... and try to invent it," as our founder Thomas Edison famously said. This has never been more important.

From the first commercially viable lightbulb to the Haliade-X, the first offshore wind turbine certified at 14.7 MW, and the GE9X, the world's largest and most powerful aircraft engine, GE has pioneered technologies spurring world-transforming changes and improving the lives of billions.

2022 marked the beginning of a new era for GE. One where we are unleashing our full potential as three independent industry leaders committed to innovation and technology as our North Star. Our employees serve customers and communities in ~170 countries and are passionate about solving the world's most pressing sustainability challenges in energy and flight.

This is the impact of GE—every day our people rise to the challenge of building a world that works—driving decarbonization through the energy transition and creating a smarter and more efficient future of flight.



Tackling the World's Challenges for more than 130 Years

GE INNOVATION TIMELINE: TACKLING THE WORLD'S CHALLENGES FOR MORE THAN 130 YEARS											
ENABLING A BETTER QUALITY OF LIFE				INNOVATING TECHNOLOGIES AND REDEFINING WHAT'S POSSIBLE				BUILDING A MORE SUSTAINABLE TOMORROW			
• 1879 First commercially practical incandescent lamp Edison invents the first commercially practical incandescent lamp.	• 1910 First electric range GE improves life in the kitchen with the first electric range.	• 1942 First U.S. jet engine, the I-A GE builds the first U.S. jet engine, the I-A, which is used to power America's first successful jet aircraft for military use, the Bell XP-59 Airacomet.	• 1942 First U.S. licensed nuclear reactor GE reactor becomes first privately owned and operated nuclear power plant to deliver electricity to the grid in Vallecitos, California.	• 1957 First U.S. licensed nuclear reactor GE supplies a variety of technologies for the first landing on the moon, including engineering support, test facilities and the silicone for Neil Armstrong's boots.	• 1969 Technologies for first moon landing GE builds the Mars Observer for NASA, which will study Martian geology and climate while mapping the planet's surface.	• 1969 Mars Observer GE builds the Mars Observer for NASA, which will study Martian geology and climate while mapping the planet's surface.	• 1992 GE90 aircraft engine GE introduces the GE90, the first certified jet engine to include components made of lightweight carbon fiber composites. The use of composites substantially reduces engine weight and enables higher standards for fuel burn and emissions.	• 2002 Wind power business GE continues its focus on sustainable energy by entering the wind power business.	• 2002 Wind power business GE continues its focus on sustainable energy by entering the wind power business.	• 2015 HA turbine GE introduces HA, the world's largest and most efficient heavy duty gas turbine. The turbine offers industry-leading operational flexibility and builds upon the legacy of jet engine technology pioneered at GE Research during the early 20 th century.	• 2015 HA turbine GE introduces HA, the world's largest and most efficient heavy duty gas turbine. The turbine offers industry-leading operational flexibility and builds upon the legacy of jet engine technology pioneered at GE Research during the early 20 th century.
• 1896 X-ray machine A rich tradition of GE breakthroughs in medical imaging begins with the demonstration of stereoscopic Roentgen pictures.	• 1927 First home television reception The first home television reception takes place in Schenectady, New York, with a signal from GE's radio broadcast station.	• 1962 World's first LED Building on Robert Hall's solid state laser, Nick Holonyak Jr. demonstrates the world's first light emitting diode (LED) at GE Research in Niskayuna, New York. LEDs enable solid state lighting, which uses 85% less electricity than conventional lighting.	• 1983 MRI GE scientists develop the SIGNA 1.0 Magnetic Resonance Imaging (MRI) System, which produces images of soft tissues difficult to image by X-ray methods.	• 1995 Vscan Vscan, a handheld, pocket-sized ultrasound technology, helps doctors deliver expanded care to more people, including in rural regions.	• 1995 Vscan Vscan, a handheld, pocket-sized ultrasound technology, helps doctors deliver expanded care to more people, including in rural regions.	• 2009 CFM LEAP aircraft engine The CFM LEAP ¹ engine application for single-aisle aircraft entered service with the first ceramic matrix composites and 3-D printed parts in the hot section of a commercial aircraft engine. The engine's unique design and materials make it 15% more fuel efficient than its predecessor. It is also quieter and produces fewer emissions.	• 2009 CFM LEAP aircraft engine The CFM LEAP ¹ engine application for single-aisle aircraft entered service with the first ceramic matrix composites and 3-D printed parts in the hot section of a commercial aircraft engine. The engine's unique design and materials make it 15% more fuel efficient than its predecessor. It is also quieter and produces fewer emissions.	• 2016 Clinical Command Center GE launches the first artificial intelligence (AI) powered, real-time optimization system at The Johns Hopkins Hospital. In 2020, the system's efficiency benefit at Tampa General Hospital was equivalent to taking 3,900 cars off the road.	• 2016 Clinical Command Center GE launches the first artificial intelligence (AI) powered, real-time optimization system at The Johns Hopkins Hospital. In 2020, the system's efficiency benefit at Tampa General Hospital was equivalent to taking 3,900 cars off the road.	• 2018 Leading nuclear redesign GE Hitachi Nuclear Energy is selected by the U.S. Department of Energy to lead a team simplifying nuclear reactor design, reducing plant construction costs and lowering operations and maintenance costs for the BWRX-300, a 300 megawatt electric (MWe) small modular reactor.	• 2018 Leading nuclear redesign GE Hitachi Nuclear Energy is selected by the U.S. Department of Energy to lead a team simplifying nuclear reactor design, reducing plant construction costs and lowering operations and maintenance costs for the BWRX-300, a 300 megawatt electric (MWe) small modular reactor.
• 2020 GE9X aircraft engine With some of GE's most advanced engine technologies, the GE9X is certified and designed to deliver up to 10% greater fuel efficiency than its predecessor, with nitrogen oxide (NO _x) emissions 55% below current regulatory requirements.	• 2020 Onshore wind GE introduced its next-generation 3.4 MW onshore wind turbine. Designed specifically for North America, it delivers high-capacity factor with balance of plant simplicity, improved logistics and reliable, bankable performance.	• 2022 GridOS® Orchestration Software GE launched GridOS®, the world's first end-to-end software portfolio designed to help create the clean energy grid of the future. The platform and application suite enables secure and reliable grid management while delivering the resiliency and flexibility needed by utilities worldwide.	• 2023 World-first grid orchestration software GE launched GridOS®, the world's first end-to-end software portfolio designed to help create the clean energy grid of the future. The platform and application suite enables secure and reliable grid management while delivering the resiliency and flexibility needed by utilities worldwide.								

¹ The LEAP engine is a product of CFM International, a 50-50 joint company between GE and Safran Aircraft Engines. LEAP is a registered trademark of CFM International.

Innovating Solutions for the World's Most Pressing Challenges



Electrification and Decarbonization

Climate change is an urgent global priority. At the same time, energy demand is increasing, the importance of energy security is elevated, 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 help solve the trilemma of delivering more sustainable, reliable and affordable energy.

GE Vernova is committed to building and delivering state-of-the-art technology to help 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.

Unless otherwise noted, statistical references to "GE Vernova" refers to the sum of data and information from GE's Renewable Energy & Power reporting segments, without giving effect to eliminations and corporate adjustments. On a stand-alone basis, GE Vernova will include GE's portfolio of energy businesses and its Digital business.

¹ GE, customer and partner funded.

² Jointly developed with TerraPower.

RENEWABLE ENERGY

MISSION Making renewable power sources more affordable, reliable and accessible for the benefit of people everywhere

UNITS Onshore Wind, Offshore Wind, Grid Solutions Equipment and Services, Hydro Solutions, Hybrids Solutions

INSTALLED BASE ~54,000 wind turbines and 7,500+ hydro units equipped with GE technology, representing 400+ GW of renewable energy

EMPLOYEES ~36,000

2022 REVENUE \$12,977M

2022 R&D¹ \$540M

TECHNOLOGY SPOTLIGHT The first commercial scale offshore wind installation in the U.S., Vineyard Wind 1, will be powered by GE's Haliade-X turbines, the only 12+ MW offshore wind turbine that has been operating for over three years and is helping accelerate offshore wind growth in North America and Europe. GE's newest 3.4 MW onshore wind platform offers next generation innovation, ease of installation and reliability to bring more renewable energy to more places. GE's state-of-the-art high voltage direct current (HVDC) transmission system will transmit power from the Sofia Offshore Wind Farm, one of the world's largest offshore wind farm projects, which will generate enough renewable energy to meet the electricity needs of almost 1.2 million average U.K. homes once operational. GE's pumped storage solutions represent more than 30% of the world's pumped storage plants and more than 6,000 MW of projects are under development around the globe to create a path for more sustainable, reliable and cleaner energy generation.

POWER

MISSION Powering lives and making electricity more affordable, reliable, accessible and more sustainable

UNITS Gas Power, Steam Power, Power Conversion, Nuclear & Other

INSTALLED BASE ~7,000 gas turbines, representing 800+ GW of gas power; 41 nuclear power plants worldwide representing 40 GW carbon free power generation; over 1,200 hybrid and electric ship power systems

EMPLOYEES ~32,000

2022 REVENUE \$16,262M

2022 R&D¹ \$383M

TECHNOLOGY SPOTLIGHT World-record setting HA and Aeroderivative turbines are the most efficient gas turbines and key force multiplier to accelerate decarbonization. Leading Arabelle™ steam turbines in 53 GW of existing nuclear fleet generate 2% more power output than traditional configuration with 99.96% reliability. Developing advanced nuclear technology, like the BWRX-300 small modular reactor and Natrium™, will provide carbon free electricity during operation, dependable base load and flexible capacity helping customers meet energy security and decarbonization goals.

AEROSPACE

MISSION Providing customers with engines, components, avionics and systems for commercial, military, business and general aviation aircraft, and a global service network to support these offerings

UNITS Commercial Engines and Services, Military, Systems & Other

INSTALLED BASE ~40,900 commercial aircraft engines³ and ~26,100 military aircraft engines

EMPLOYEES ~45,000

2022 REVENUE \$26,050M

2022 R&D¹ \$1,965M

TECHNOLOGY SPOTLIGHT The world's largest and most powerful aircraft engine, the GE9X, is also the most efficient engine we have ever built on a per-pounds-of-thrust basis. The culmination of our renewed commercial engine product line, the GE9X is designed to deliver up to 10% greater fuel efficiency than its predecessor, with emissions of nitrogen oxides (NOx) 55% below current regulatory requirements. The CFM LEAP⁴ engine for single-aisle aircraft features the first ceramic matrix composites (CMCs) and 3-D printed parts in the hot section of a commercial aircraft engine. The engine's unique design and materials make it 15% more fuel efficient and produce 15% fewer emissions than its predecessor.



GE9X jet engine on GE Aerospace's flying test platform.



GE Aerospace

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 International⁵ product lines have resulted in today's aircraft engines consuming 40% less fuel and emitting 40% less CO₂ than engines manufactured in the 1970s and 1980s. However, we cannot be satisfied with the pace of progress from the past.

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 RISE⁶ (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.

³ Including GE and its joint venture partners.

⁴ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines. LEAP is a registered trademark of CFM International.

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

⁶ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines. RISE is a registered trademark of CFM International.

LEADING THE ENERGY TRANSITION

Electrification and Decarbonization

GE's portfolio of energy businesses, now called GE Vernova, is helping the energy sector solve for the energy trilemma of sustainability, reliability and affordability. As a company whose technology helps generate approximately 30% of the world's electricity, we have a meaningful role to play in the energy transition and a strategic imperative to electrify and decarbonize the world. In 2023, there is tangible momentum to solve climate change and propel the energy transition forward. In the United States, the passage of the Inflation Reduction Act (IRA) and the Infrastructure Investment and Jobs Act (IIJA) provides policy support and tax credits designed to accelerate the energy transition and energy security.

As we work to decarbonize the energy sector with urgency, 2022 elevated the importance of energy security with unexpected and painful clarity. From extreme weather events globally, the Russian invasion of Ukraine and global economic retrenchment, energy security has emerged to join aspects of the energy trilemma as the most critical elements for successful energy ecosystems.

At GE Vernova, we see the goals of decarbonization and electrification as mutually inclusive. Any progress in advancing the energy transition and combatting climate change must also advance energy security at the same time.

These policy and secular industry tailwinds will unlock a massive ramp of investment and execution, beginning now and increasing in the coming decade of action—and GE is uniquely positioned to work with our customers to lead this effort.

GE believes the energy transition will require increased decarbonization and electrification of the power generation sector—lowering the carbon intensity of electricity itself as other sectors such as heavy industry, transportation and buildings look to the grid to achieve their decarbonization goals. Gains in lower carbon power generation from wind, solar, nuclear, sequestered or hydrogen-powered gas turbines, hydroelectric power or other sources also rely on proper investment in the grid system to ensure we are locking in progress toward both goals. This electrification imperative is elevating the importance of investment in the electricity grid system itself, including both hardware and software enhancements, to deal with added stresses and opportunities to manage the variability of more renewable electrons, growing threats to the grid and increasing energy demand worldwide.

GE Vernova is being built as a company to lead the energy transition and is on track to separate from GE sometime in early 2024. GE Vernova will be guided by its purpose statement—the energy to change the world—and is on the front lines of combatting climate change. GE Vernova will lead this effort through a dedicated board of directors, focused investor base and unified R&D mission. As a company, GE Vernova's businesses will include Power, Wind and Electrification, which will include our Digital business, reflecting the macrotrends present in our industry and our broader conviction that the energy transition will require a diverse suite of technologies and solutions.

Within Power, our focus will be on delivering the reliable, dispatchable and increasingly sustainable electricity the world requires across our Gas Power, Hydro Power, GE Hitachi Nuclear Energy and Steam Power businesses. These businesses support technologies that provide a sizable percentage of the world's dispatchable electricity capacity today and will continue to focus on decarbonizing and meeting the rapidly growing demand for electricity—expected to double by 2050. Importantly, these businesses include critical energy transition breakthroughs we must realize, from small modular nuclear reactors and hydrogen fuels, to carbon capture and gas turbine efficiency upgrades. Retooling and retrofitting thousands of power plants to provide reliable, lower-emitting electricity will require years of dedicated effort to extend the lives of these essential assets.



SCOTT STRAZIK
CEO, GE Vernova

Our Technologies Today

As a company whose equipment helps generate approximately 30% of the world's electricity, we take seriously our role to lead the industry's decarbonization progress and help solve the trilemma of delivering more sustainable, reliable and affordable energy.

THE ENERGY TRILEMMA

Reliable
(Resilient & Secure)



Affordable **Sustainable**

Our energy businesses provide powerful, integrated solutions with some of the most innovative onshore and offshore wind and hydropower turbines, most efficient gas turbines, as well as advanced technology to modernize and digitize electrical grids. We strongly support the Paris Agreement commitments and other ambitious targets to reduce energy sector emissions. At GE, we are leading by example. We are making progress to become carbon neutral in our own operations by 2030 (Scope 1 and Scope 2 emissions) and we set a further ambition for GE to be a net zero company by 2050 for the Scope 3 emissions from the use of sold products. For more information on the steps we are taking, see pages 86-88.

Our Ambition to Achieve Deep Decarbonization While Strengthening Power. We Can Succeed with These Mutually Achievable Goals.

RAPIDLY REDUCE EMISSIONS

Drive energy sector emissions down as quickly as possible by:



Accelerating renewables to the fullest, fastest extent.

Utilizing gas with methane controls as a force multiplier for renewables.

Innovating hydrogen and carbon capture to decarbonize gas.

Developing small modular reactor and other breakthrough technologies.



INCREASE GRID RESILIENCE:
Decarbonizing energy and increasing grid resilience are mutually achievable through physical and digital solutions that:

- Enable more renewable deployment.
- Increase resilience from growing threats.
- Provide near-term jobs, economic opportunity.

GE's products and services are crucial to helping the world decarbonize. As utilities, power producers, grid operators and policymakers around the world set their own decarbonization goals for the power sector, GE's diverse offerings will help them achieve their targets. To that end, we are helping to reduce emissions today and driving deeper decarbonization by:

- **Deploying renewables as fast as possible.** We offer one of the broadest renewable energy portfolios in the industry and help grow capacity as rapidly as possible by continuing to bring down the cost of onshore and offshore wind energy and leveraging our offerings in battery storage and hydropower.
- **Accelerating emissions reductions with state-of-the-art gas turbines.** We look to the most efficient gas turbine technology—with strong methane controls on upstream development—as providing a solid foundation that becomes a force multiplier for building a renewable energy infrastructure and a destination technology for certain markets in the energy transition.
- **Supporting the existing global nuclear fleet.** With innovative digital solutions and technology upgrades, we are increasing carbon free output while reducing costs.
- **Modernizing, decarbonizing and digitizing the grid.** We are modernizing the physical grid to enable the integration of more renewable energy, while meeting increased demand. We are also reinforcing the network to withstand the growing threat of more severe weather and cyber risks. Our software is also essential to building a modern and clean energy grid. For example, GridOS®—the world's first grid software portfolio designed for grid orchestration—integrates energy data, network modeling and AI-driven analytics together across the grid to power a suite of composable applications that enable secure and reliable orchestration of electrons from generation through consumption.
- **Innovating breakthrough technologies.** GE is working with customers and partners to innovate a wide range of breakthrough technologies for a lower carbon future, including hydrogen as a fuel, carbon capture and sequestration systems, and small modular nuclear reactors to accelerate the energy transition.

GE's energy businesses work together toward meeting the world's energy demand with less carbon intensity over time.

- **Power** includes Gas Power, Hydro Power, Nuclear and Steam Power. Gas Power is engineering advanced, efficient natural-gas-powered technologies and services, along with decarbonization solutions that will help electrify a lower carbon future. Hydro Power offers advanced technologies that harness the power of water to deliver reliable power to the world's largest economies and remote communities. Nuclear is one of the world's leading providers of advanced reactor technology, fuel and nuclear services. Steam Power is delivering a broad portfolio of technologies and services that help nuclear, industrial and coal power plants deliver reliable power as they transition to a lower carbon future.
- **Wind** includes Offshore Wind, Onshore Wind and Wind Turbine Blades. Offshore Wind is one of the world's leading offshore wind energy and services provider, with proven performance up to 14MW. Onshore Wind is harnessing onshore wind energy potential with a comprehensive family of smart, modular turbines that are uniquely suited for a variety of wind environments. LM Wind Power is an industry-leading designer and manufacturer of advanced, high-quality, reliable rotor blades for onshore and offshore wind turbines with a global manufacturing footprint and blade services solutions.
- **Electrification** includes Grid Solutions, Power Conversion and Solar & Storage Solutions. Grid Solutions is a global provider to power utilities and industries for the critical equipment, systems and services they need to bring power reliably and efficiently from the point of generation to the point of consumption. Power Conversion is applying the science and systems of power conversion to help drive the electric transformation of the world's energy infrastructure. Solar & Storage Solutions is integrating innovative technologies in renewable generation and energy storage to deliver flexible, reliable and intelligent solutions to enable the energy transition.
- **Digital** is enabling the digital transformation with software that accelerates grid modernization and decarbonization across the energy ecosystem—from where power is created to where it is consumed.

POWER HIGHLIGHTS



SUPPORTING EMERGENCY POWER AND LOWERING EMISSIONS EVEN DURING EXTREME WEATHER EVENTS

GE Vernova's portable aeroderivative gas turbines offer a range of possibilities to address growing energy security needs and risks to grid reliability. They can run on natural gas or diesel, as well as Sustainable Aviation Fuel blends.

Six GE Vernova LM2500XPRESS aeroderivative gas turbines are expected to provide nearly 200 MW of fast emergency power to the Electricity Supply Board's existing North Wall Power Plant in Dublin, Ireland. The temporary reserve power plant will provide backup power for the next three years' winter seasons (2023–2026). [Learn more ▶](#)



DRIVING THE COAL-TO-GAS TRANSITION TO REDUCE CO₂ EMISSIONS

Powered by two new GE Vernova 7HA.02 gas turbines and two GE Vernova H65 generators, Tampa Electric Company (TECO) completed the first phase of its coal-to-gas modernization strategy at the Big Bend Power station in Florida. By replacing existing 50-year-old, coal fired units at the 1,090 MW power plant and switching to natural gas, Big Bend Power Station's CO₂ emissions will be reduced by 67% per MWh of electricity generated, and lower emissions levels for other pollutants such as mercury, nitrogen oxides, sulfur oxides and particulate matter. [Learn more ▶](#)



DELIVERING MORE AFFORDABLE AND CLEANER ENERGY

As part of GE Vernova's commitment to helping our customers deliver more affordable and cleaner energy, we've invested in the GT26 High Efficiency (HE) Upgrade to provide up to a 2% combined cycle efficiency improvement. The upgrade lowers the fuel cost per MW and reduces CO₂ by 5%, which is equivalent to taking 16,500 cars off the road. The upgrade also increases the capability of the GT26 to burn up to 40% hydrogen fuel, providing future potential to further reduce the carbon footprint. [Learn more ▶](#)



ENABLING RENEWABLES INTEGRATION WHILE MAINTAINING STABLE POWER

The 1,260 MW Dania Beach Clean Energy Center is powered by two of GE Vernova's 7HA.03 gas turbines, the largest, most efficient and flexible 60 hertz gas turbine currently in operation globally. Dania Beach Clean Energy Center replaced an aging power plant and now produces the equivalent electricity needed to power ~250,000 South Florida homes with around-the-clock power, reducing emissions by 70% compared to the previous plant, and helping enable Florida Power & Light Company (FPL) to continue America's largest solar expansion. [Learn more ▶](#)

WIND HIGHLIGHTS



HALIADE™-X OFFSHORE WIND TURBINES

GE Vernova has invested more than \$400 million to develop its offshore wind turbine. Our Haliade-X prototype in the Netherlands has been operating for over three years and is the first turbine to receive a full type certificate at 14.7 MW. [Learn more ▶](#)

The ability to produce more power from a single turbine means fewer turbines need to be installed at each wind farm. The Haliade-X 14 MW will make its commercial debut at the Dogger Bank C offshore wind farm, more than 130 kilometers off the northeast coast of England. The Haliade-X is also the only 12+ MW offshore wind turbine that has been operating for over three years, giving us tangible experience operating the turbine in different conditions at different output levels. [Learn more ▶](#)

In December 2022, we signed a strategic partnership agreement with Hyundai Electric to work together to serve the South Korean offshore wind market. Under the terms of the agreement, Hyundai Electric will serve as a manufacturing associate to help localize assembly of the Haliade-X offshore wind turbines and generators in South Korea. The agreement will enhance our ability to serve local customers, create significant local economic benefits, and establish a local supply chain ideally suited to serve the growing offshore wind market in South Korea and potentially beyond in the Asia Pacific region (APAC). [Learn more ▶](#)



ONSHORE WIND

GE Vernova's newest onshore wind turbine was introduced in 2022. Designed specifically for the North America region, the 3.4 MW turbine is based on GE Vernova's bestselling 2 MW platform, which recently surpassed 30 GW of installed base globally. Offering next generation innovation, the turbine brings continued reliability and utilizes GE Vernova's revolutionary two-piece blade, designed to improve logistics and installation. From siting to execution to operations, this turbine is designed to offer customers continued quality and stability, helping them capture even more wind energy while also improving wind farm economics. [Learn more ▶](#)

ELECTRIFICATION HIGHLIGHTS



GE'S ROLE IN CONNECTING RENEWABLE ENERGY TO THE GRID

GE Vernova's Grid Solutions business and BOND Civil & Utility Construction have been awarded a contract from Empire Offshore Wind, a joint venture between Equinor and bp, to supply a state-of-the-art digital onshore substation and high voltage electrical systems for the offshore substation for Empire Wind 1, one of New York's first offshore wind farm projects. Once operational, the wind farm will power more than 500,000 New York homes. [Learn more ▶](#)



HELPING IMPROVE GRID STABILITY IN GERMANY

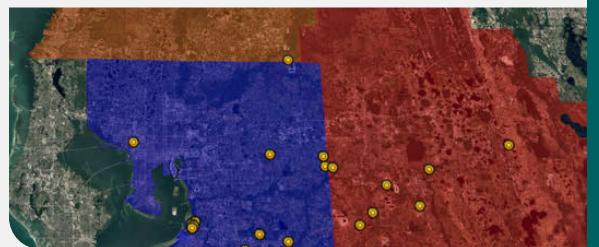
GE Vernova's Static Synchronous Compensator (STATCOM) technology will improve grid stability in Germany following an order from transmission system operator, 50Hertz Transmission GmbH, for one of their substations in Bad Lauchstädt. This technology provides grid operators with reactive power compensation and an improved range of operational voltage, reducing the risk of grid disruptions. [Learn more ▶](#)



POWERING FORWARD TO BRING U.S. LNG TO THE GLOBAL MARKET

GE Vernova's Grid Solutions and Power Conversion businesses will supply technology to energy technology company Baker Hughes for Venture Global's Plaquemines liquefied natural gas (LNG) export facility. GE Vernova's technology will power the overall liquefaction system Baker Hughes is providing for the Plaquemines export facility, Venture Global's second project to bring U.S. LNG to the global market. [Learn more ▶](#)

DIGITAL HIGHLIGHTS



TAMPA ELECTRIC ACHIEVING EMISSIONS REDUCTIONS GOALS WITH SOFTWARE

For Tampa Electric Company (TECO) to achieve its emissions reductions goals by 2025, solar is going to need to play a major role. The utility serves a region without resources like wind or nuclear energy, making solar the primary energy resource for achieving lower emissions in the future. The Asset Performance Management (APM) software from GE Vernova's Digital business provides TECO with data on the status of all their solar plants. It also allows TECO to prepare for weather events that may impact solar generation, like cold fronts and cloud cover. In addition, APM helps inform facility maintenance timetables and equipment availability across the utility's fleet of utility-scale solar plants, resulting in less uncertainty and more reliability. [Learn more ▶](#)



TRANSFORMING SORGENIA'S APPROACH TO MAINTENANCE

The leading digital energy company in Sorgenia, Italy, uses our Asset Performance Management Reliability application deployed in the cloud to maximize the reliability and efficiency of its state-of-the-art, combined-cycle gas turbine power plants. According to the company, the software has given them insights to better plan maintenance around annual outages, specifically at their Termoli and Modugno plants. Doing so allows them to avoid unnecessary downtime on critical assets such as heat recover steam generators or condensers, which in turn allows them to operate at higher efficiency and satisfy their more than 450,000 customers' need for electricity. [Learn more ▶](#)

HELPING UTILITIES ACCELERATE GRID MODERNIZATION

Our Digital business signed a multiyear strategic collaboration agreement with Amazon Web Services, Inc. (AWS) aimed at helping utilities accelerate grid modernization. Through this collaboration, we plan to deliver intelligent grid orchestration solutions to help utilities digitally transform, modernize the power grid and accelerate the energy transition. With GridOS®, our new grid operating software portfolio, we are working with AWS to enable cloud solutions designed to be secure, quick to deploy, and reduce operational and infrastructure costs for energy organizations. New Zealand-based Vector Limited has successfully deployed our Advanced Distribution Management Solution (ADMS) on Amazon Web Services Outposts. [Learn more ▶](#)



Thought Leadership in the Energy Transition

DRIVING THE FUTURE DOCUMENTARY

In 2022, we introduced a new three-part video series on the role hydropower plays in the energy transition called Driving the Future. For a look at what we are already doing with hydropower, renowned Swiss adventurer and clean energy advocate, Bertrand Piccard, teams with science journalist, Sam Pauly, to set out on an epic 1,000 kilometer journey across Switzerland. The duo travel the whole way using only electric vehicles and visit several of the hydropower plants that produce the country's green electricity. This isn't simply a story about zero carbon vehicles and hydropower; it's about reimagining the way we live, travel and consume, applying existing technology and accelerating the energy transition so we can overcome humanity's greatest challenge. Bertrand and Sam's Swiss adventure proves the potential of this approach. As Bertrand puts it, "change is needed, and the solutions are already in our hands—the race is on!" [Watch here ▶](#)



ACCELERATOR HIGHLIGHTS

GE ENERGY FINANCIAL SERVICES: PUTTING ITS MONEY IN ITS MISSION AS A LEADING INVESTOR IN WIND POWER PROJECTS THAT HELP DECARBONIZE THE GRID

Achieving 2050 net zero goals cannot be done without simultaneous electrification and decarbonization. For example, zero carbon emitting electric vehicles and heat pumps can have a reduced impact if they are powered by fossil fuel electricity sources. To accelerate progress, we must lead by bringing more renewable energy generation sources online as fast and as feasible as possible.

Beginning in 2006, GE Energy Financial Services (EFS), GE's energy investment franchise, was at the forefront of growing a very nascent wind industry and built a track record of investing more than \$19 billion in renewable energy projects globally. This includes the delivery of over 125 million MWh of carbon free electricity from wind power to the U.S. grid, measured through earned production tax credits⁷, which now powers the equivalent of 735,000 homes per year.⁸

EFS is a leading tax equity investor in U.S. wind power with a portfolio today of over \$1 billion, including 2022 investments that are estimated to generate over 5.7 million MWh⁸ of carbon free electricity. It is through activity like this that the wind industry collectively grows, expands and evolves. Each carbon free MWh generated by our investments helps create a cleaner electrical grid to be used by and for the benefit of all people. EFS has been and continues to be focused on this shared customer goal through its investment activity supporting the development, construction and operation of wind power generation projects.

The passage of the Inflation Reduction Act is expected to result in an imbalance in supply and demand for tax equity, which we view as a barrier to growing the renewable energy industry and accelerating decarbonization efforts. EFS is working to bridge the financing gap for customers through direct investments, strategic partnerships and relationships that enable the financing and successful commercialization of renewable energy projects.

GE ENERGY CONSULTING

GE's power systems experts work with our customers to help solve some of the world's toughest technical and economic problems, enabling technology integration and shaping the energy transition. With our cross-company resources, GE Energy Consulting is able to serve a diverse global client base with a strong local presence. From decarbonization planning and renewable technology integration, to energy investments and grid stability studies, our dedicated team of resources from across GE Vernova dive into the current and future challenges of our energy infrastructure, the implications of renewable penetration and the latest energy supply and delivery technologies. [Learn more ▶](#)

One recent example is the "Small Clean Power Plant Adaptation Study" for the New York Power Authority (NYPA). GE Energy Consulting and the Energy and Environmental Economics, Inc. (E3) examined the potential for battery storage development at NYPA's Small Clean Power Plant (SCPP) sites. The analysis builds off a growing body of literature that has examined opportunities to replace peaker plants with battery storage and detailed a first-of-its-kind approach to examining storage replacement opportunities over time as New York makes progress towards achieving the state's Climate Act requirements. [Learn more ▶](#)

Since inception,
EFS has invested over
**\$19
billion**
in renewables globally.



CUTTING CARBON PODCAST

One of the most dynamic and informative conversations taking place on climate change technology is GE's Cutting Carbon podcast where co-hosts Dr. Jeffrey Goldmeer and Brian Gutknecht talk through the factors at play today as well as the journey ahead. The award-winning podcast sits on the iHeartRadio's list of top podcasts in the "climate" category and has reached nearly 100,000 downloads since its inception.

In 2020, we launched the podcast with our first four seasons focusing on climate change and the basics of decarbonization⁹, the pathways to decarbonize gas, complementary technologies contributing to the energy transition and how regions around the world are driving decarbonization.

In December 2022, we launched season six to dive deeper into the energy transition landscape, examining the critical role infrastructure plays in supporting and sustaining innovative technologies. Over the course of the season, the team talked through Independent System Operators (ISOs) being the air traffic controllers of the power generation world, took a look back to move forward with lessons learned over the years from the digital grid, explored the world's largest source of energy storage with pumped hydro, learned how captured carbon makes its

way to a storable location, recognized the important role water plays in our energy systems, and tied it all together by examining the relationship between government policy and the energy industry. [Listen here ▶](#)

⁷ Certain renewables projects qualify for federal income tax credits that are calculated based on electricity production measured in kWh; as evidenced by our tax filings, EFS has earned production tax credits for its investments over the years for 125 million MWh.

⁸ Based on average U.S. home usage of 10,632 kWh per year (Source: US Energy Information Administration).

Innovating Breakthrough Technologies

GE Vernova has one of the most important roles to play in delivering the technology the world needs to make progress today to reduce greenhouse gas emissions while simultaneously innovating breakthrough technologies to succeed in the energy transition. The achievement of deep decarbonization goals over the coming decades is likely to depend in part on technologies which are still being developed and have yet to be deployed or widely adopted. Together with our partners, we are working on hydrogen as a fuel, carbon capture and sequestration, advanced nuclear power and additive manufacturing. GE's history of innovation has prepared us to support the global energy transition in ways that are as equitable as they are efficient.

DECARBONIZING GAS TURBINES THROUGH HYDROGEN AND CARBON CAPTURE AND SEQUESTRATION

GE Vernova is investing today in innovation to decarbonize gas turbines in the future. Decarbonizing a gas turbine requires the supply of a low carbon fuel (e.g., hydrogen) and/or the capturing of carbon from the exhaust for transport offsite. GE Vernova is investing in both decarbonization pathways to ensure we have multiple solutions for our customers and the world to fulfill carbon reduction commitments.

Our HA turbines can already work with up to 50% hydrogen/natural gas mix. We have more than 120 gas turbines worldwide using hydrogen blends for power generation with about 8.5 million operating hours in aggregate. Work is underway to extend the capability to 100% hydrogen in these machines by the end of the decade. There is significant and growing interest in hydrogen as a substitute for fossil fuels, driven by decarbonization goals. In 2022, we were awarded multiple funding grants from the U.S. Department of Energy (DOE) to accelerate the path towards 100% hydrogen combustion in gas turbines. In May 2022, we were awarded two projects totaling more than \$12 million to develop and test key components required for high hydrogen combustion. In July 2022, DOE's Advanced Research Projects Agency for Energy (ARPA-E) recognized the value of developing alternative methods to boost the efficiency of gas turbines powered by fuel blends with high percentage of hydrogen by awarding GE \$4.2 million. In October 2022, we were awarded \$6.6 million to develop breakthrough technologies to help achieve 100% hydrogen combustion in GE Vernova's F-Class gas turbines.

Renewable energy, such as low-cost wind power, will play a major role in the supply of green hydrogen which could ultimately rival renewable energy demand for power applications. Our Wind



7HA gas turbine compressor.

businesses have the hybrid optimization capabilities and wind power domain expertise needed to tailor power output and ensure efficient utilization of the electrolyzer assets, playing a key role in this significant emerging market.

In addition, GE Vernova is in close collaboration with multiple strategic partners on the development and execution of a gas turbine carbon capture and sequestration system. GE Vernova is currently working on multiple studies to optimize the integration of these existing technologies focusing on affordability, reliability and flexibility, and a small footprint to deliver this critical technology to the market. 2022 was a critical year on this journey as the U.S. DOE Office of Fossil Energy and Carbon Management awarded us additional funding focused on carbon capture, utilization and storage (CCUS) for power generation applications.

GE'S HYDROGEN TRACK RECORD



¹⁰ GE H₂ statistics as of September 2021, inclusive of both heavy-duty and aeroderivative gas turbines.

HYDROGEN: Developing 100% hydrogen fuelstream

COLLABORATING WITH SHELL ON LNG DECARBONIZATION PATHWAY



With global liquefied natural gas (LNG) demand projected to almost double by 2040, GE Vernova's Gas Power business is collaborating with Shell Global Solutions to develop potential lower carbon solutions aiming to reduce the carbon intensity of Shell's LNG projects around the world. Together, we will work to accelerate the deployment of pragmatic and impactful solutions towards high hydrogen capabilities in Shell's gas turbine fleet resulting in a significant reduction of carbon emissions and water utilization globally. [Learn more ▶](#)

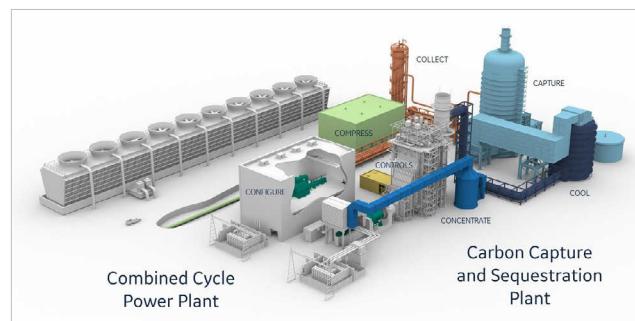
SUPPORTING LOUISIANA'S ENERGY TRANSITION WITH HYDROGEN CAPABILITIES



Following the successful commercial operation launch of Dania Beach Energy Center, Kindle Energy, LLC, has ordered GE Vernova's 7HA.03 combined cycle gas turbine to equip its Magnolia plant in Louisiana. This turbine will be initially fueled by natural gas, with capabilities to use up to 50% hydrogen as it becomes more available in the area. Upon completion, the Magnolia plant is expected to be the most efficient plant in the Midcontinent Independent System Operator (MISO) South system. [Learn more ▶](#)

CARBON CAPTURE, UTILIZATION AND STORAGE (CCUS): Carbon capture provides pathway to lowering carbon emissions from power generation

In 2022, our Gas Power business signed various memoranda of understanding (MoUs) with leading utilities and organizations across the world to develop and lead a carbon capture roadmap.



Our Gas Power business and Korea's leading engineering, procurement and construction (EPC) company, DL E&C Co. Ltd. and its subsidiary, CARBONCO, a company specialized in decarbonization, agreed to jointly explore a roadmap for carbon capture technology integration with natural gas combined cycle plants in Asia and Oceania, powered by GE Vernova's technology. [Learn more ▶](#)



QatarEnergy and our Gas Power business will collaborate on developing a carbon capture roadmap for the energy sector in Qatar. The focus of the MoU is to explore the feasibility of developing a world-scale carbon hub at Ras Laffan Industrial City, which as of today, is home to more than 80 GE gas turbines. [Learn more ▶](#)

ADVANCED NUCLEAR: Providing carbon free electricity during generation

Nuclear power is critical to decarbonizing the energy sector and achieving the net zero carbon emission goals of the Paris Climate Agreement. We are investing in advanced nuclear technologies like GE Hitachi's BWRX-300 small modular reactor (SMR) and Natrium™ to provide carbon free, flexible, dispatchable electricity during generation.



The BWRX-300 SMR is a key pillar of GE Vernova's energy transition leadership. The BWRX-300 produces no carbon during operation and has been designed to achieve construction and operating costs that are substantially lower than traditional nuclear power generation technologies. Moreover, the BWRX-300 is 10% the size and complexity of a large nuclear project, offering a smaller physical footprint and ability to be sited in more locations. The BWRX-300 can be constructed in 24–36 months utilizing modular and open-top construction techniques proven in Japan. A single SMR has the capability to power approximately 300,000 U.S. homes with a power plant footprint that's smaller than the size of a U.S. football field. Initial deployments are planned in Canada, with construction that could be completed in late 2028, and in Poland in the early 2030s. GE Hitachi has memoranda of understanding or other agreements in place with companies in Canada, Czech Republic, Estonia, Poland, U.K., U.S. and Sweden.

In partnership with TerraPower, GE Hitachi is also developing Natrium™, a cost-competitive, sodium fast reactor coupled with a molten salt-based integrated energy storage system. This innovative addition allows a Natrium™ plant to integrate seamlessly with renewable resources and could lead to faster, more cost-effective decarbonization of electricity generation. Kemmerer, Wyoming, was selected as the preferred site for the Natrium™ reactor demonstration project. [Learn more ▶](#)

BWRX-300 A KEY PILLAR OF GE'S ENERGY TRANSITION LEADERSHIP

GE Hitachi joined three key customers—Tennessee Valley Authority, Ontario Power Generation and Synthos Green Energy—to announce an unprecedented public-private partnership to advance the global deployment of its BWRX-300 small modular reactor. GE Hitachi is committed to standard design development and anticipates a total investment of around \$400 million associated with the development. [Learn more ▶](#)

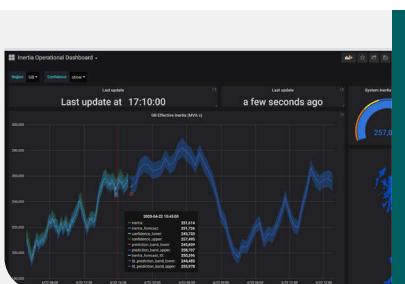


OTHER BREAKTHROUGH TECHNOLOGIES



100% RECYCLABLE BLADE PRODUCED AND TESTED

As part of the ZEBRA (Zero wastE Blade ReseArch) consortium, LM Wind Power produced its first 100% recyclable blade at the Ponferrada, Spain, plant in early 2022. The 62-meter blade was built using a unique thermoplastic resin, creating high value for the end-of-life thermoplastic composite blade material. It can be readily utilized in other industries as material compounds, and can also be depolymerized and the resin reused in the production of new blades. The prototype also passed tests at LM Wind Power's in-house facilities in Denmark. [Learn more ▶](#)



EFFECTIVE INERTIA METERING & FORECASTING FOR GREAT BRITAIN'S ELECTRICITY NETWORK

National Grid Electricity System Operator (ESO) has deployed GE Digital's ground-breaking Metering & Forecasting solution in production across Great Britain's electricity network. Inertia is a critical factor as it keeps a grid running when a generator suddenly disconnects, buying time for other generators to ramp up. Since inertia can be expensive and carbon intensive, operators need to be confident they've got enough while considering the cost to billpayers and emissions. Our Digital business' machine learning-based Inertia Forecasting informs short-term operational decisions and long-term investment assessments. [Learn more ▶](#)



HYDROPOWER UNDERWATER TURBINE INSPECTION

Our pioneering underwater inspection technology achieves results comparable to dry visual inspection without confined space work and dewatering. The remotely operated vehicle (ROV) deploys sensors to previously inaccessible areas. Experts review the information in real time to ensure proper inspection of all critical surfaces. This technology requires less risk for employees, less resources to deploy and less downtime for inspections.

[Learn more ▶](#)



Our Global Impact on the Energy Transition

GE Vernova believes that access to more sustainable, reliable and affordable energy is essential for all people globally. As the demand for energy grows and the importance of energy security is elevated, GE is committed to pursuing technological innovations to support decarbonization and increased reliability and accessibility. Over time, the carbon emissions per unit of power provided from our power generation portfolio has decreased. We are also actively working with governments to help countries achieve their climate goals, which we do through a combination of renewable and gas-based projects. Through this experience, we know there is no one-size-fits-all solution for the world. Here are some of the ways we are driving decarbonization around the globe through solutions tailored for diverse environments.

EGYPT

The following activities occurred during the 27th Conference of the Partners to the United Nations Framework Convention on Climate Change, also known as COP27, in Sharm El Sheikh, Egypt.



GE Vernova's Gas Power business successfully operated a GE LM6000 aeroderivative gas turbine on hydrogen–natural gas blended fuel at the Sharm El Sheikh Power Plant during COP27. In less than five months, the project overcame logistical and operational challenges—getting hydrogen to the plant and building the infrastructure for hydrogen distribution and blending at the site—all with a commitment to safety. [Learn more ▶](#)



GE Vernova signed an MoU with Egyptian Natural Gas Holding Company (EGAS) and Seasplit Technologies for the industrial decarbonization of the Gulf of Suez. The three organizations plan to evaluate the technical and economic feasibility of developing 1.5 gigawatts (GW) of offshore wind power in the Gulf of Suez and intend to explore how strategic companies in Egypt's petroleum sector can participate in the project's delivery. [Learn more ▶](#)



UNITED ARAB EMIRATES



Emirates Global Aluminium (EGA), the largest industrial company in the United Arab Emirates (UAE) outside oil and gas, and our Gas Power business signed an agreement to upgrade four existing 9F gas turbines at EGA's Al Taweeq power plant, reducing greenhouse gas emissions intensity and contributing to the achievement of the UAE's Net Zero by 2050 Strategic Initiative. [Learn more ▶](#)

In early 2022, our Digital business joined forces with other energy transition leaders—Baker Hughes, Bechtel, Enppi, HSBC, the National Bank of Egypt and Petrojet—to support Egypt's decarbonization initiatives, specifically decarbonization of select operating downstream facilities in the country. [Learn more ▶](#) The Bechtel-led Coalition for Decarbonization announced at COP27 in November that it had been awarded a feasibility study contract by Egyptian LNG. The study will assess implementation of a zero-flaring system at the Egyptian LNG export terminal in Idku and aims to reduce greenhouse gas emissions and optimize fuel consumption. [Learn more ▶](#)

CANADA



GE Hitachi Nuclear Energy has partnered with Ontario Power Generation (OPG) to construct North America's first small modular reactor at the utility's Darlington New Nuclear Project site. Construction of a BWRX-300 small modular reactor will help OPG meet Ontario's growing energy needs as electrification and a growing economy drive demand. [Learn more ▶](#)

UNITED KINGDOM



GE's footprint in the U.K. consists of ~40,000 MW of power and we are uniquely positioned to support the country's net zero Ten Point Plan.

Our Gas Power business and Technip Energies completed a front-end engineering design (FEED) study for a first-of-a-kind large amine-based, post-combustion carbon capture at scale solution to integrate with a proposed H-Class natural gas fired power plant at the Net Zero Teesside (NZT) Power project and the Northern Endurance Partnership's (NEP) carbon compression infrastructure in Teesside, England. [Learn more ▶](#)



GE Vernova commenced its hydrogen plant readiness assessment of Grain power station in Kent, England, the newest combined-cycle gas turbine (CCGT) power station in Uniper's U.K. portfolio. The project explores solutions to enable operations using blends of natural gas and hydrogen, with hydrogen accounting for up to 40% of volume, targeting the decarbonization of Grain's 1,365 MW gas-fired power plant with GE Vernova technology in the next decade. This effort will play a part in helping the U.K. reach its target of achieving net zero GHG emissions by 2050. [Learn more ▶](#)

As one of the largest global players in offshore wind, the U.K. is building the world's largest offshore wind farm in three phases—Dogger Bank A, B and C—more than 130 kilometers off the northeast coast of England. GE Vernova will provide 190 Haliade-X 13 MW turbines for Dogger Bank A and B, and 87 Haliade-X 14 MW turbines for Dogger Bank C. When complete, the wind farm will be capable of producing 3.6 GW of electricity, enough to power 6 million homes. [Learn more ▶](#)

LM Wind Power's Gaspe facility in Canada rolled out its 13,000th wind turbine blade in May 2022. These blades, generating over 9,000 MW, will help save nearly 23 million tons of CO₂ emissions from being released into the environment.

[Learn more ▶](#)

BRAZIL



GE is supporting Brazil's energy transition and our technology helps generate approximately 30% of the energy produced in the country. 274 MW are produced by our onshore wind turbines.



GE Vernova's 7HA.02 gas turbine will power Eneva's new Azulão reserve power plant, delivering up to 350 MW of reliable reserve power to help stabilize the grid and support renewable growth in Brazil. [Learn more ▶](#)



GE Vernova's Hydro Solutions and Grid Solutions businesses have jointly signed a contract to technologically upgrade the Itaipu hydropower plant in Brazil and Paraguay, the second largest in the world with an installed capacity of 14 GW, located on the Paraná River between the two countries. The upgrade includes equipment and systems of all 20 power generating units as well as the improvement of the hydropower plant's measurement, protection, control, regulation and monitoring systems. In total, Itaipu Binacional covers an average 8.4% of Brazilian and 85.6% of Paraguayan Binacional electricity consumption. [Learn more ▶](#)

SPAIN



Over the past two years, GE has installed 1.1 GW of wind power in Spain and has a total installed base of nearly 5 GW across the country.

BLADE RECYCLING IN SPAIN

LM Wind Power joined a consortium of companies, including GE Vernova's Wind business, developing a blade recycling project in Spain. The company will supply surplus fiberglass generated during blade manufacturing at its Ponferrada and Castellón facilities so it can be recycled, consistent with its vision of producing zero waste blades by 2030. [Learn more ▶](#)

GE Vernova's Wind business signed a long-term Power Purchase Agreement (PPA) with Forestalia to purchase electricity from the El Coto wind farm, which will generate enough power to support more than 60% of its operations in Europe. The 12-year PPA will reduce our emissions by ~13,000 tCO₂e annually. The wind farm will begin operation in summer 2023. [Learn more ▶](#)

We also signed an agreement with Alfanar to supply and install 15 wind turbines at a cluster of wind farms located in the Navarre region of Spain. Upon completion in 2023, our 3.X-4.0 MW turbines with 137-meter rotors will provide 53 MW of clean and affordable energy to the region. [Learn more ▶](#)

Our Collaborations

GE has a long history of working collaboratively across the energy industry to achieve real and long-standing positive outcomes for our customers, the industries we serve and our planet. We are prioritizing partnerships across all our stakeholders—customers, investors, governments, NGOs and our competitors—to ensure the necessary progress is accomplished for sustainability across the energy ecosystem.

APPALACHIAN ENERGY FUTURE ALLIANCE

In February 2022, GE Vernova's Gas Power business joined the Appalachian Energy Future alliance—along with EQT Corporation, Equinor, Marathon Petroleum (including its affiliate MPLX), Mitsubishi Power, Shell Polymers and U. S. Steel—that will play an important leadership role in decarbonizing the industrial base in the Northern Appalachian Region of the United States. [Learn more ▶](#)

CLEAN ENERGY TECHNOLOGY CONSORTIUM AT PRINCETON UNIVERSITY

In 2022, GE, Google, ClearPath, Breakthrough Energy and the Zero-Carbon Technology Consortium, aligned with the E-filiates partnership program at Princeton's Andlinger Center for Energy and the Environment, formed a new coalition to support ongoing research such as long-duration energy storage, flexible geothermal energy systems, carbon capture and sequestration, and commercial fusion power plants. [Learn more ▶](#)

DEVELOPING A SUSTAINABLE SUPPLY CHAIN FOR WIND TURBINE BLADES

To strengthen its ability to drive sustainable progress across its supply chain, LM Wind Power partnered with EcoVadis, a leading global company in business sustainability ratings and performance, to conduct individual sustainability performance assessments of its supply chain. [Learn more ▶](#)

INDIA



Half of India's new wind energy generation capacity in 2022 was powered by GE's locally developed and manufactured 2.7-132 wind turbine that is ideal for India's low wind speed regime. A major portion of the additional 900 MW was set up to help industries in their decarbonization journey and has the potential to generate enough electricity to power over 290,000 Indian households.

The 2.7-132 turbine was developed by engineers at our John F. Welch Technology Center in Bengaluru, and is manufactured at GE's multi-modal factory in Pune in western India, with blades being manufactured at LM factories located in the states of Gujarat and Karnataka.

POWERING OUR INDIAN OPERATIONS WITH RENEWABLE ELECTRICITY

LM Wind Power secured a PPA to source nearly 50% of the electrical energy required for its plant in Vadodara, India, from a hybrid solar and wind system. The agreement is for a 15-year period and will save nearly 13% of the total energy cost annually.

In June 2022, GE Energy Financial Services closed the acquisition of a 49% stake in Continuum's 148.5 MW Morjar onshore wind project in Gujarat, India. [Learn more ▶](#)

In September 2022, our Wind business announced orders from Continuum Green Energy Limited to supply, install and commission 81 units of its 2.7-132 onshore wind turbines for the 218.70 MW wind power projects across Tamil Nadu and Madhya Pradesh, India. [Learn more ▶](#)

GE Vernova's¹¹ Actions Toward Its 2050 Scope 3 Net Zero Ambition

In the preceding pages, GE Vernova highlights the technology it is delivering today and investments for the breakthrough technologies of tomorrow. As these pages show, GE's investments toward decarbonization technologies are uniquely diverse. GE is innovating these technologies both for our customers and for the planet as we work to play a leadership role in the power sector, meeting its 2050 net zero goals.

In 2021, GE announced an ambition to be a net zero company for its sold products by 2050, which is the most impactful and relevant emissions category given the nature of our businesses. Working with external advisors and experts, we further refined our focus to power turbines and aircraft engines, which account for the majority of GE's greenhouse gas emissions across all reporting scopes. By focusing on the key levers we have as a company to impact the energy transition, we will more effectively deliver the type of technology innovations and breakthroughs our customers are relying on to achieve their own net zero ambitions.

In working to lead the development of technology for the power sector, we are informed by the role of GE Vernova for sustainable development and broader industry trends. Addressing the urgent need to decarbonize the global energy system is at the same time a huge challenge and opportunity. Energy is the lifeblood of safer, longer lives, economic growth and human prosperity. The International Energy Agency (IEA) projects the global population will grow by approximately 2 billion people by 2050. Yet even today, nearly 775 million people globally do not have access to sustainable, reliable and affordable energy.

GE is proud to play a critical role in providing more sustainable, reliable and affordable energy globally, a core United Nations Sustainable Development Goal (SDG). As described on the pages above, GE's equipment generates approximately 30% of the world's electricity, and 90% of the world's power transmission utilities use GE technology. With diversified technology in the wind, power, electrification and digital sectors, GE Vernova is committed to achieving the goal of decarbonizing the energy sector globally while growing access and resiliency to more sustainable, reliable and affordable electricity. These efforts collectively advance progress toward affordable and clean energy (SDG 7), sustainable cities (SDG 11) and climate action (SDG 13).



Saleh Khayyat
during a 9F
outage in Saudi
Arabia.

Applying these principles, we consider three pathways toward the net zero ambition:

ACTIONS PRE-2020	2020-2030	2030-2050
Building on substantial contributions from past action. Our efforts toward decarbonization began well before 2021. GE has long innovated its products to drive efficiencies and reduce CO ₂ emissions by delivering state-of-the-art products. Our past efforts since 2010 lay a strong foundation for the progress forward.	Driving continued progress this decade. We are prioritizing the 2020s as a decade of action, with a focus on innovating the technology solutions needed to achieve net zero emissions in 2050. This will take several forms, including advancing technology with the potential to further reduce carbon emissions and carbon intensity in this decade and beyond.	Innovating for the future. While we are optimistic about the role of GE Vernova's technologies to make progress through 2030, we know they will not be enough to achieve 2050 net zero ambitions. We are investing today to innovate the next generation of breakthrough technologies to achieve the step changes that will be needed for the power sector.

¹¹ For more information on GE Vernova's Scope 3 Use of Sold Products Methodology, see Appendix II in our [2022 Sustainability Report Appendices](#).

1. BUILDING ON SUBSTANTIAL CONTRIBUTIONS FROM PAST ACTION

The IEA forecasts global electricity consumption will grow by 50% between now and 2040. Electricity and heat contribute around 40% of global CO₂ emissions associated with human activities and this will need to be drastically reduced in order to hit the global target of net zero emissions by 2050. With this challenge becoming clear, global regulators and industry experts are now starting to paint a picture of what the future energy mix will need to look like with fossil fuels and, in particular, natural gas still needing to play a role to support the transition, alongside a huge growth in the clean energy and renewables sector as well as decarbonization technologies. In its 2022 Energy Outlook, the IEA calls this decade critical for "delivering a more secure, sustainable and affordable energy system," calling for investments in clean electricity and electrification along with expanded and modernized grids, offering clear and cost-effective opportunities to cut emissions more rapidly while bringing electricity costs down from their current highs.

GE technologies are contributing to many of the efforts that have driven the decarbonization of energy to date, and they are crucial to reducing the sectors' carbon intensity that is needed in the short term, as we invest in and build the longer term mix of lower carbon energy, cleaner fuels and renewable electricity needed for the net zero future.

OUR NET ZERO PRINCIPLES

As one of the world's leading companies in the energy sector, we know the challenge is complex and we have to be nimble and committed as a company and with our partners to innovate the technology to succeed over the years and decades to come. We have several principles that are guiding our approach to our net zero ambitions:

- 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. We summarize several of these key collaborations on page 31.
- Commitment to innovation and technology.** Simply stated, GE Vernova'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. Below, we synthesize the previous pages regarding how we see various technologies contributing toward this pathway.

2. DRIVING CONTINUED PROGRESS THIS DECADE

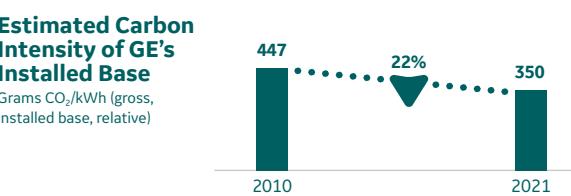
As described above, GE Vernova has a two-fold goal for the energy sector: (1) to decarbonize the energy sector globally through a combination of renewable energy, gas power and grid modernization while (2) growing resilient access to more sustainable, reliable and affordable energy for everyone. This challenge takes on greater significance knowing the power sector will be a key enabler for decarbonizing other economic sectors (e.g., transportation, buildings). GE's 2022 Scope 3 emissions from its power turbines are estimated on the accompanying chart.

In this decade, GE will focus on reducing Scope 3 emissions in several ways. GE's **coal exit** and **wind growth** are key near-term influencers toward lowered Scope 3 emissions. Over the decade, greater deployment of gas plant pre-combustion decarbonization technologies (**hydrogen or renewable natural gas blending**) and post-combustion **carbon capture technologies** (including retrofits of existing plants) could also support progress. Our projected timeline for the deployment of technologies this decade is shown on the accompanying chart and the ways we are supporting these technologies are described in the preceding pages of the Sustainability Report.

GE will continue its investments in **onshore and offshore wind** to improve capacity factors and to expand manufacturing capacity to support robust demand growth for renewables. The Haliade-X, the world's largest offshore turbine in operation, is designed for growth from its current 14 MW 220-meter rotor to as much as 17 MW 250-meter rotor, resulting in a 7% capacity factor improvement. GE's newest 3.4 MW onshore wind turbine was introduced in 2022. Designed specifically for the North America region, the turbine is based on GE's bestselling 2 MW platform, which recently surpassed 30 GW of installed base globally. Investments in **grid hardware and software** will also enable higher renewable penetrations without

technology. At the same time, GE has accumulated more than 1.3 million operating hours on its world-record efficiency H-class gas turbines (with nearly one-third of the carbon emissions of a coal plant). Advanced gas path upgrades deployed to GE's existing F-class fleet over the past three years reduced roughly 2 million tons of CO₂ emissions.

Gas plants play a vital role balancing variable renewables with dispatchable flexible power, preserving system resilience. Converting to **hydrogen fuel** reduces carbon emissions and GE leads the industry in hydrogen and hydrogen-like combustion experience (8 million hours across more than 100 units).



sacrificing required resilience and grid stability. GE is continuing investments in the grid of the future to orchestrate variability of renewable resource, address bi-directional flow of electricity from distributed resources, augment traditional forms of system inertia, and enable controllable loads such as EV charging or heat pumps to balance supply and demand. These investments will increase the potential for higher penetration of renewables on the grid and improve the carbon intensity of the power sector.

GE continued progress with several significant milestones in 2022. Having worked through its backlog, GE had no sales for coal fired steam turbines in 2022, ending GE's participation in any new coal plants globally. GE and Technip Energies began development of their front-end engineering design (FEED) study for a first-of-a-kind large amine-based, post-combustion carbon capture at scale solution to integrate with a proposed H-Class natural gas fired power plant at Teesside, England. During COP27, in a demonstration project at a thermal power plant operated by the Egyptian Electricity Holding Company (EEHC), an LM6000 unit ran on a blend of natural gas and hydrogen, marking the first time the turbine has generated power from a hydrogen blend on the African continent.

Use of Sold Products

Estimated lifetime net emissions from new gas turbine and steam turbine products sold million metric tons CO₂

	2019	2021	2022	2030 TARGET
Net emissions million metric tons CO ₂ (net, new units, absolute)	506	477	320	~300-400 (-20-45%)

This follows Greenhouse Gas protocol, Scope 3 use of sold products, category 11 methodology.

3. INNOVATING FOR THE FUTURE

Looking to and beyond 2030, GE is investing today in the breakthrough technologies we believe will be critical to achieve net zero 2050 goals. As described above, GE continues to invest in technology to support the energy transition toward lower greenhouse gas emissions without sacrificing the required grid resilience that consumers demand. Continued growth in renewables will play a major role, while the world will also require decarbonized dispatchable and flexible plants and hybrid/storage solutions to address variability of renewables.

Small Modular Nuclear Reactors

GE secured its launch order for its first **small modular reactor** technology, the BWRX-300, with Ontario Power Generation at its Darlington site with plans to be operational by 2028, as detailed on page 28. This technology will be available in small scalable blocks that use modularity and simplicity of design to take out significant cost and cycle time.

Hydrogen

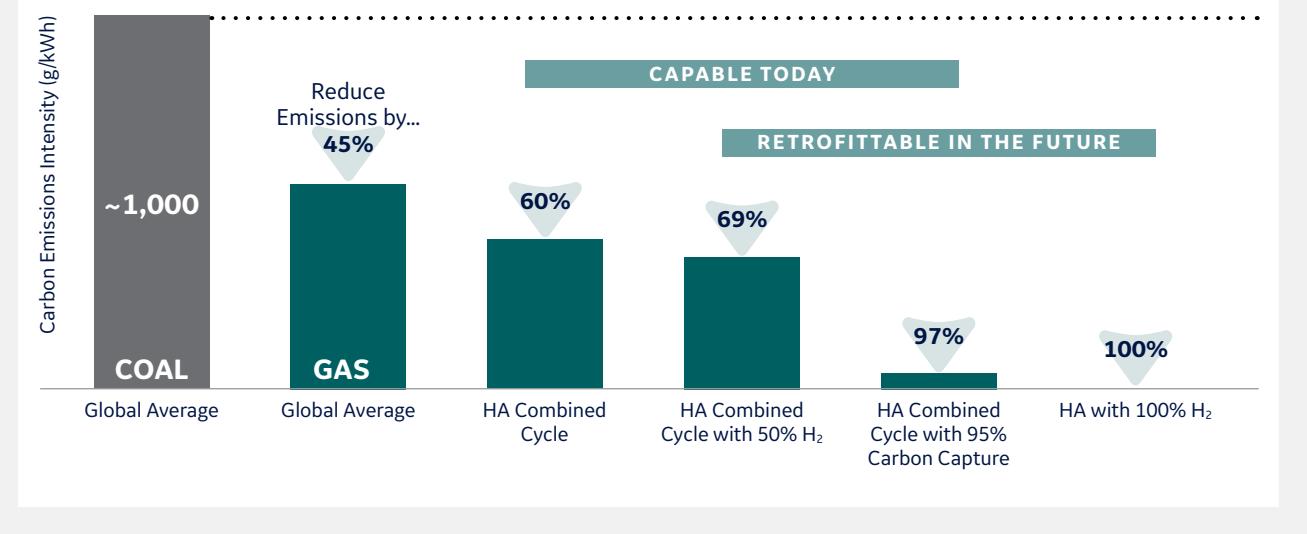
GE leads in **hydrogen** combustion experience and capability today and will continue to expand capability for increasing blends with a goal of a 100% hydrogen-capable (and hence zero carbon power generation) product portfolio across its catalog by 2030; learn more on page 27.

Carbon Capture

We also see a need for **carbon capture technology** to be deployed across new and existing gas plants. GE is participating today in multiple feed studies to integrate carbon capture technology into a flexible gas combined cycle plant. There are significant capital costs, operating costs and physical space reductions under development with the potential to improve carbon capture deployment economics. In parallel, GE will continue active advocacy efforts with policy makers to ensure sensible regulations and enabling incentives are prioritized. GE anticipates to be actively constructing its first integrated carbon capture combined cycle system by 2025.

As these pages show, GE Vernova believes a diverse suite of technologies and innovation will be key to decarbonizing the energy sector while growing resiliency. Our investments include renewable energy in the onshore and offshore wind sectors and grid modernization technology, all of which will contribute to net zero. Our Scope 3 focus is on reducing fossil fuel emissions through coal-to-gas switching and decarbonizing gas turbines pre-combustion with hydrogen and post-combustion with carbon capture.

Pathway to Low or Near Zero Carbon with Gas Turbines



	STRATEGIC GOAL	INDICATIVE TIMING	BASIS FOR INDICATIVE TIMING
Post-combustion carbon capture (pages 26-28)	Gas plant integrated capture projects under construction	2025	GE actively engaged in multiple feed studies for carbon capture projects in Europe and North America with construction to commence by 2025.
Small modular nuclear reactors (page 28)	First X-300 operational	2028	GE's fleet leader for Ontario Power Generation working toward commencement operation in 2028.
Hydrogen gas turbines (page 27)	100% H ₂ -capable catalog	2030	GE currently has 100% H ₂ -capability across some of its gas turbine offerings and is expanding capability with industry-leading, efficient HA gas turbines to 100% by 2030 to meet customer needs to future-proof investments as hydrogen becomes available.

GE VERNONA: PATH TO NET ZERO AMBITION¹²

ACTIONS PRE-2020	2020-2030	2030-2050
Building on substantial contributions from past action.	Driving continued progress this decade.	Innovating for the future.
CONTRIBUTING FACTORS		
Coal-to-gas switching with more than 50% fewer carbon emissions Onshore wind growth and capacity factor improvement (rotor diameter, height) Hydro/nuclear build and repowering World-record gas combined cycle plant efficiencies Advanced gas path upgrades reducing carbon emissions from installed gas turbines	Coal exit (new build) Offshore and onshore wind growth and capacity factor improvement Hydrogen or renewable natural gas blending Flexibility retrofits of existing plants to reduce emissions while balancing variable renewables LM6000 Hybrid EGT integrates battery storage with gas turbine, enabling contingency (spinning) reserve without fuel burn and emissions demand events Advanced transmission and distribution hardware/software to move renewables and ensure system resilience	Post-combustion carbon capture improvements in cost, space and operating expense Small modular nuclear reactors 100% hydrogen gas turbine capability across portfolio
	RESEARCH & DEVELOPMENT TESTING COMMERCIALIZATION BREAKTHROUGH TECHNOLOGIES TIMELINE	
2022 PROGRESS		
Haliade-X offshore wind turbine receives full type certification. Learn more on page 23▶ GE's newest 3.4 MW onshore wind turbine launched for North America. Learn more on page 23▶ GE's LM6000 aeroderivative gas turbine operates on hydrogen-natural gas blend during COP27 in Egypt. Learn more on page 29▶ GE and Technip Energies began development of front-end engineering design (FEED) study for a carbon capture solution. Learn more on page 30▶ GridOS® launched as world's first software portfolio designed for grid orchestration. Learn more on page 21▶	GE receives U.S. Department of Energy carbon capture grant targeting 95% emissions reduction. Learn more on page 26▶ GE Hitachi receives memoranda of understanding and other agreements for its BWRX-300 small modular reactor in Canada, Czech Republic, Estonia, Poland, U.K., U.S. and Sweden. Learn more on page 28▶ GE awarded U.S. Department of Energy (DOE) grants to accelerate the path towards 100% hydrogen combustion in gas turbines. Learn more on page 26▶	
IMPACTS	TARGET	
13% GE installed base growth during 2010-2021 16% increase in renewables and zero carbon power generation technologies (2010-2021) 22% reduction in carbon intensity of the GE installed base (2010-2021)	20-45% reduction in carbon emissions relative to 2019 levels	GE Vernova will focus, working with other industry participants, on bringing into service breakthrough technologies by the early 2030s to help achieve absolute emission reductions for the power sector's path to net zero.

¹² Lifecycle CO₂ emissions from Scope 3 use of sold product.

Defining Flight for Today, Tomorrow and the Future

With GE Aerospace and partner engines powering three-quarters of the world's commercial flights, our employees are committed to innovating cutting-edge technology and making operational improvements to help meet historic demand while decreasing emissions today and in the future. As our aerospace customers bring families together, accelerate economic activity and reintroduce people to the world, this growth underscores both the necessity of aviation in modern life and the importance of an urgent challenge—delivering on an ambitious goal by the global aviation industry, including GE Aerospace, to achieve net zero CO₂ emissions by 2050.

We bring significant expertise to this challenge. Through advancements in aerodynamics, engine architecture and materials technology, we have made air travel more accessible to more people, while also reducing emissions by 40% compared to engines manufactured in the 1970s and 1980s. Over the last decade, we have introduced new engines in virtually every market segment that offer double-digit fuel efficiency improvements compared to their predecessors.

But these advances alone will not be sufficient to enable the industry to meet its goals. Doing so will require a concerted effort aimed at developing and rolling out technologies that are designed specifically to reduce CO₂ and other emissions. Our industry's progress in this area is in the early stages and, I believe that in the future, we will look back on this time much as we did the onset of the Jet Age, or when we first set our sights on going to the moon—the beginning of an era that defines what is possible.

New eras require transformational technology and the passion of ~45,000 GE Aerospace employees who live our purpose every day—we invent the future of flight, lift people up and bring them home safely. For example, our revolutionary CFM RISE¹³ demonstrator is being developed in conjunction with our joint venture partner Safran. Slated for ground and flight tests in the middle of this decade, RISE¹³ is designed to reduce fuel consumption and CO₂ emissions by more than 20% compared with today's most efficient engines. This feat will be achieved through an open fan architecture, hybrid electric capability, and key materials and manufacturing technologies like ceramic matrix composites (CMCs) and additive manufacturing.



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

Our Avio Aero team is leading a European project to test a hybrid electric motor powered by hydrogen fuel cells, and we continue to develop our capability to support battery and fuel cell energy sources. Even today, all GE and partner engines can run on approved Sustainable Aviation Fuel (SAF) blends, which could lower lifecycle CO₂ emissions by up to 80% compared to convention jet fuel. Scaling production and availability of SAF is critical to enabling the aviation industry to meet its decarbonization goals.

GE Aerospace's position as an industry leader gives us a unique responsibility to chart the future of flight. But we are not doing it alone, nor could we. We benefit from partnerships with peer companies, aircraft manufacturers and government entities, all of which demonstrate the strength of our team and technology portfolio. Last year, we announced a new flight test program for a hydrogen combustion engine and an open fan flight test demonstration with Airbus, and we are working with NASA and Boeing to fly a megawatt-class hybrid electric system this decade.

While the aviation industry's journey to becoming more sustainable and decarbonized will be measured in decades, our consensus on net zero is driving action today. GE Aerospace's transition to a standalone company in 2024 will be an important milestone by sharpening our focus on creating a smarter and more efficient future of flight, thanks to a strong foundation that includes our talented team and advanced technology platform. This is a bold mission, but it is one that is worthy to guide us as we seek to define flight for today, tomorrow and the future.

Our Technologies Today

At GE Aerospace, we never stop innovating. As one of the world's largest suppliers of aircraft engines, systems and services, GE Aerospace continues to lead the industry in developing technologies to reduce CO₂ emissions from flight. To that end, GE spent nearly \$2 billion¹⁴ on aviation research and development in 2022, including emissions-reducing technologies.

This commitment to innovation and investment over decades has led to the following engines, services and software available now to reduce CO₂ emissions from the existing fleet in service.

ENGINES

From the GE9X, which is the culmination of our decade-long commercial product renewal, to the GE Passport and Catalyst business and general aviation engines, to the T901 and T408 turboshafts for military helicopters, we have the industry's broadest array of advanced engines.

Our newest engines are designed to offer better fuel efficiency and lower CO₂ emissions than their predecessors with advances in engine architecture, aerodynamics and advanced materials. Technologies such as ceramic matrix composites and additive manufacturing have led to lighter parts with higher capabilities. As a result, today's commercial aircraft engines consume 40% less fuel compared to engines manufactured in the 1970s and 1980s.

A legacy of innovation for improved fuel efficiency

SINGLE-AISLE AIRCRAFT	TWIN-AISLE AIRCRAFT	LARGE TWIN-AISLE AIRCRAFT	REGIONAL AIRCRAFT	TURBOPROP AIRCRAFT
				
15% DECREASE in fuel consumption from the single-aisle, CFM56-7B to LEAP engine	Up to 15% DECREASE in fuel consumption from the twin-aisle CFM56-7B to GEnx engine	Up to 10% DECREASE in fuel consumption from the large twin-aisle GE90-115B to GE9X engine	Up to 17% DECREASE in fuel consumption from the regional jet CF34-3 to GE's Passport engine	Up to 18% DECREASE in fuel consumption from competing, legacy turboprop engines available today to GE's Catalyst™ engine

SERVICES

Toward a more circular economy, we also consider the lifecycle of our engines. Currently, there are more than 23,000 total repairs in our catalogs to restore worn GE and CFM International¹⁵ engine parts to serviceable conditions. Additionally, GE and CFM International¹⁵ industrialized more than 1,700 repairs in 2022, increasing repair capability. As a result, GE maintenance, repair and overhaul facilities globally repaired approximately 2.3 million engine components in 2022 using these industrialized processes. Additionally, our used serviceable materials business purchases used engines and parts, performs necessary inspections and repairs, and facilitates return of serviceable parts into the aviation industry. When metal parts are no longer repairable, they are recycled when possible.

GE's 360 Foam Wash is an advanced on-wing cleaning technology with a proprietary detergent to help ensure engines continue to operate efficiently. In some cases, GE's 360 Foam Wash has been found to improve engine performance by reducing build-up of deposits in the engine, lowering engine exhaust temperatures and improving engine compressor efficiency. These improvements led to reduced fuel consumption, lower CO₂ emissions and increased engine time on wing. GE's 360 Foam Wash is approved for use on multiple GE engine programs, including models of GE90, GEnx and CF34, as well as Engine Alliance's¹⁶ GP7200 engines.

¹³ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines. RISE is a registered trademark of CFM International.

¹⁴ 2022 GE, customer and partner funded R&D.

¹⁵ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines.

¹⁶ Engine Alliance is a 50-50 joint company between GE and Pratt & Whitney.

100% SAF TESTING TIMELINE

2016 – F414 1 st military jet flight with 100% SAF in at least one engine	2018 – GE90 1 st commercial aircraft flight with 100% SAF ¹⁷	2019 – GE9X Combustor component testing	2021 – LEAP-1A Ground and in-flight emissions testing using 100% SAF in one engine	2021 – LEAP-1B 1 st experimental flight with passengers using 100% SAF in one engine	2022 – Passport Ground testing	2022 – GEnx On-wing ground testing to study emissions	2022 – HF120 Ground testing	2023 – GE90 1 st Middle East demonstration flight using 100% SAF in one engine	2023 – CFM56 Ground testing

ALTERNATIVE FUELS

Sustainable Aviation Fuel—or SAF for short—is jet fuel that can be made from plant-based material, fats, oils and greases, alcohols, waste streams, captured CO₂ and other alternative feedstocks. GE Aerospace has been actively involved in assessing and qualifying SAF since 2007 and works closely with SAF producers, regulators and operators to ensure SAF can be widely adopted for use in aviation. More than 475,000 commercial flights have been operated using SAF blends since 2011, according to industry association Air Transport Action Group. The widespread use of SAF has the potential to dramatically reduce fuel lifecycle carbon emissions up to 80% compared to jet fuel produced from petroleum. SAF made by new approaches that convert captured CO₂ and renewable hydrogen to liquid fuel has the potential to eliminate lifecycle CO₂ emissions.

All GE, CFM International¹⁸ and Engine Alliance¹⁹ engines in service today can operate with approved SAF blends. That's because all approved SAF available today is considered drop-in. Drop-in SAF means the fuel meets current petroleum-based jet fuel requirements. It can be substituted for fossil-based jet fuel without any modifications to engines and airframes, and is therefore compatible with the existing commercial fleet, as well as with other parts of the fuel distribution and storage infrastructure.

Currently, SAF approved for use is a blend of petroleum-based Jet A or Jet A-1 fuel and a SAF component with a maximum blend limit of 50%. One of GE's fuel experts chairs an international task force to develop standardized industry specifications supporting adoption of 100% drop-in SAF, which does not require blending with conventional jet fuel. Drop-in 100% SAF is not yet qualified by ASTM International, an organization that develops technical standards.

SYSTEMS

GE Aerospace's Systems business continues to bring additional efficiencies to aircraft performance. These technologies include power generation, conversion and distribution systems focused on electrification, avionics solutions that optimize flight paths, and more efficient and quieter integrated propeller systems.

FLIGHT MANAGEMENT SYSTEM REDUCES EMISSIONS

GE Aerospace's Flight Management System (FMS) provides increased situational awareness and operational efficiencies on more than 12,000 aircraft worldwide, including models of the Boeing 737 and military aircraft. The FMS is designed to allow an airplane to fly at higher altitudes over longer routes and allows for an optimized descent that is a more gradual approach to the airport than a stair-step approach. Flying at higher altitudes longer can reduce carbon and noise emissions. GE Aerospace's FMS-optimized descents offer a potential 6-12% fuel savings, reduced CO₂ emissions and roughly 20% lower nitrogen oxide (NO_x) emissions for operators compared to traditional approaches.



7

types of SAF blends are approved for jet engines today

475K

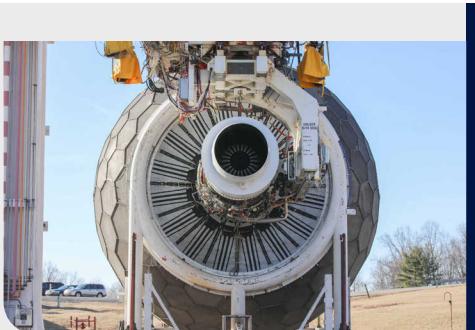
commercial flights worldwide operated using SAF blends since 2011

50%

maximum blend limit of current SAF with conventional jet fuel

PASSPORT, HF120 AND GENX ENGINES SUCCESSFULLY TESTED WITH 100% SAF

As part of GE Aerospace's ongoing efforts to help qualify Sustainable Aviation Fuel, GE completed in 2022 successful testing of its Passport and HF120¹⁷ business aviation engines using 100% SAF. Both engines underwent ground testing at GE Aerospace's Peebles Test Operations in southern Ohio. The purpose of the tests was to assess the performance and operability of the engine technologies with 100% SAF compared to conventional Jet A. Additionally, Boeing and NASA teams conducted emissions ground testing of a GEnx-powered Boeing 787 running 50% drop-in and 100% non-drop-in SAF in 2022. These are just the latest examples of GE Aerospace's 100% SAF testing; F414, GE90, GE9X, LEAP and CFM56 engines have also been tested with 100% SAF.



SOFTWARE

GE Digital has software that can help airlines reduce CO₂ emissions today, using data they already have. Right now, solutions like FlightPulse™ and Airspace Insight help pilots and airlines make data-driven strategic choices about flight routes that save on fuel and avoid releasing excess CO₂ emissions. In years to come, digital solutions will continue to help drive the industry towards a net zero future through new enhancements and features like Fuel Insight, which could allow airline customers to easily identify, track and manage fuel initiatives.

IDENTIFYING INEFFICIENCIES AT 30,000 FEET

It is estimated a typical flight emits 900-1,000 kilograms of excess carbon due to inefficient airspace design and air traffic control practices. When you consider airlines operate tens of thousands of flights per day, increasing efficiencies in airspace usage, flight times and flight routes would make a significant impact on lowering carbon emissions. Qantas Airlines, which operates Australia's largest commercial fleet, announced in 2022 plans to implement GE Digital's Airspace Insight solution. By using this first-of-its-kind tool, which aggregates data from air traffic control (ATC), airlines, airports, airspace designers and communities, Qantas can better understand what is happening in their airspace from both a safety and efficiency perspective.



¹⁷ Tests included 100% SAF in one engine, as well as in both engines. LEAP engines are a product of CFM International, a 50-50 joint company between GE Aerospace and Safran Aircraft Engines. Engine Alliance is a 50-50 joint company between GE and Pratt & Whitney. HF120 engines are a product of GE Honda Aero Engines LLC, a 50-50 joint between GE Aerospace and Honda Aero, Inc.

¹⁸ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines.

¹⁹ Engine Alliance is a 50-50 joint company between GE and Pratt & Whitney.

Our Breakthrough Technologies for the Future

GE Aerospace is already at work today to develop breakthrough technologies for the benefit of us all tomorrow, such as advanced new engine architectures like open fan, hybrid electric propulsion and hydrogen fuel combustion. Since June 2021, three major new technology demonstration programs were launched. Multiple ground and flight tests planned this decade will demonstrate new technologies for use in future commercial aircraft engines that could enter service beginning in the mid-2030s.

CFM RISE



In June 2021, GE Aerospace and Safran launched a bold technology development program. The CFM RISE²⁰ (Revolutionary Innovation for Sustainable Engines) Program will demonstrate and mature a range of new, disruptive technologies for future engines that could enter service by the mid-2030s.

The program goals include reducing fuel consumption and CO₂ emissions by more than 20% compared to today's most efficient engines, as well as ensuring compatibility with alternative energy sources such as Sustainable Aviation Fuel and hydrogen.

Central to the program is achieving state-of-the-art propulsive efficiency for the engine, including advanced architectures such as the open fan. The open fan design is a key enabler to achieving significantly improved fuel efficiency while delivering the same speed and cabin experience as current single-aisle aircraft. The program will also use hybrid electric capability to optimize engine efficiency while enabling electrification of many aircraft systems.

GE Aerospace has continually advanced state-of-the-art open fan systems. In the 1980s, GE successfully flight tested the GE36 engine, an open fan jet engine demonstrating significant fuel savings compared

with conventional ducted front fan engines in the same size class. Since then, GE collaborated with the U.S. Federal Aviation Administration (FAA) through the CLEEN program and with NASA on sub-scale wind tunnel test campaigns demonstrating better fuel efficiency compared to the CFM56-7B engine while achieving sufficient margins to current and anticipated future noise requirements.

Avio Aero, part of the GE Aerospace business based in Italy, contributed to the development and testing of counter rotating open fan architectures under Europe's Clean Sky research program and is continuing to do so as a founding member of Clean Aviation (formerly Clean Sky 2 program). Under Clean Aviation, Avio Aero supported optimization of open fan architectures through design and integration studies conducted with airframers. Avio Aero continues to support and coordinate CFM RISE²⁰ Program technology development among GE Aerospace's European teams.

The open fan engine design being developed through the CFM RISE²⁰ Program has been made simpler and lighter with new approaches such as single-stage rotating carbon fiber composite fan blades and stationary outlet guide vanes.

COMPACT ENGINE CORE

Through the CFM RISE Program²⁰, GE Aerospace is also working with NASA to research advanced engine cores for single-aisle aircraft. As part of NASA's Hybrid Thermally Efficient Core (HyTEC) project, GE Aerospace is testing and maturing compact jet engine core designs, including compressor, combustor and high-pressure turbine technologies to improve thermal efficiency. Continued development of ceramic matrix composites (CMCs), an advanced heat-resistant material, is also a key part of the effort to improve fuel efficiency and reduce emissions.

HYBRID ELECTRIC



Hybrid electric propulsion technologies can help improve engine performance—reducing fuel usage and emissions—making more electric engine technologies key to GE Aerospace's efforts to reduce CO₂ emissions for a more sustainable future of flight. Hybrid electric technologies are also highly compatible with Sustainable Aviation Fuel and hydrogen, as well as advanced engine architectures like open fan and new advanced engine core designs.

One of GE Aerospace's hybrid electric technology demonstration programs is in collaboration with NASA through NASA's Electrified

Powertrain Flight Demonstration (EPFD) project. After years of developing individual components of a hybrid electric system—motors, generators and power converters—GE Aerospace is systematically maturing a megawatt-class integrated hybrid electric powertrain to demonstrate flight readiness for commercial aircraft. Plans are to conduct ground and flight tests of the hybrid electric propulsion system by the mid-2020s using a modified Saab 340B testbed and GE's CT7 turboprop engines.

Our Systems business has designed and manufactured power conversion, distribution and control systems for commercial aircraft for over 30 years. GE Aerospace Systems continues to advance these products with technologies such as GE-developed silicon carbide transistors to increase efficiency, power density, thermal performance and reliability. These technologies are integral to the development of GE Aerospace's hybrid electric powertrain demonstrator with NASA, with development work taking place at the Electrical Power Integration System Center (EPISCenter) in Dayton, Ohio, and the Electrical Power Integration Centre in Cheltenham, England. EPISCenter has the capacity to test hybrid or fully electric powertrains with up to 15 megawatts of available power.

HYDROGEN

HYDROGEN COMBUSTION

Along with Safran Aircraft Engines, GE Aerospace announced in February 2022 that CFM International²¹ is collaborating with Airbus on a

hydrogen demonstration program. Plans are underway to develop direct hydrogen combustion engine technologies for ground and flight tests later this decade.

²⁰ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines. RISE is a registered trademark of CFM International.

²¹ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines.



WORLD'S FIRST FOR FUTURE OF MORE ELECTRIC FLIGHT

GE Aerospace is the world's first to test a megawatt-class and multi-kilovolt hybrid electric propulsion system in altitude conditions that simulate single-aisle commercial flight.

The test of the high power, high voltage system—including electric motor/generators, power converters, power transmission and power control systems—successfully demonstrated performance and operation of the components in simulated altitude up to 45,000 feet. This helps validate the architecture of the hybrid electric propulsion systems GE is developing. It's also an important step in GE's technology program with NASA and Boeing to develop a hybrid electric propulsion system for flight tests later this decade and for entry into service in the mid-2030s.

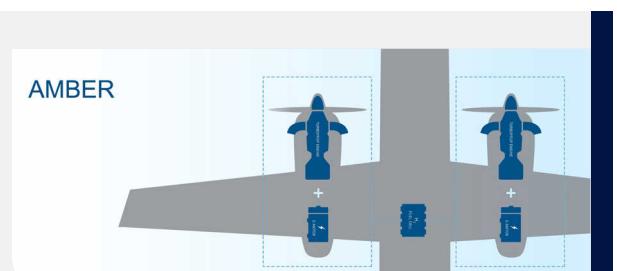
CFM International²¹ will modify a GE Passport engine for testing by designing a new cryogenic fuel delivery system, hydrogen combustor and fuel controls. This is no easy feat, requiring a significant change to the propulsion system to be capable of safely burning liquid hydrogen, which doesn't generate CO₂ emissions during the combustion process.

Efforts to design a new hydrogen combustor engine will draw from GE's more than 8 million hours of operating experience with hydrogen combustion with land-based gas turbines.



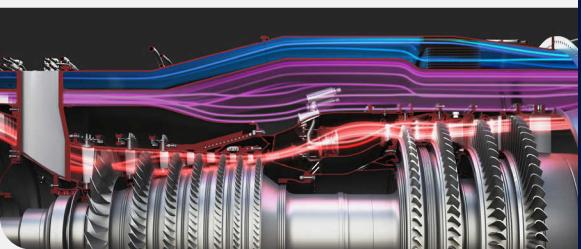
CFM INTERNATIONAL TO PARTNER WITH AIRBUS ON OPEN FAN FLIGHT TESTS

Airbus and CFM International²², a 50-50 joint company between GE and Safran Aircraft Engines, are collaborating to flight test CFM International's cutting-edge open fan engine architecture. The Flight Test Demonstrator aims to mature and accelerate the development of advanced propulsion technologies, as part of CFM's Revolutionary Innovation for Sustainable Engine (RISE)²² demonstration program, on board an Airbus A380. The flight test campaign will be performed in the second half of this decade. Program objectives include enhanced understanding of engine/wing integration and aerodynamic performance, as well as propulsive system efficiency gains.



NEW EUROPEAN HYBRID ELECTRIC TECHNOLOGY DEMONSTRATOR

Avio Aero announced in 2022 the launch of a new hybrid electric technology demonstration program that supports efforts to make air transport more fuel efficient to reduce CO₂ emissions. The Clean Aviation Joint Undertaking awarded approximately 34 million euro over four years to a consortium led by Avio Aero for the AMBER demonstrator. Plans are to mature, integrate and validate key technologies necessary for a megawatt-class, hybrid electric propulsion system powered by hydrogen fuel cells. The AMBER demonstrator will study integration of hybrid electric components—including a motor/generator, power converters and power transmission systems—with fuel cells for rig testing in the mid-2020s using Avio Aero's advanced Catalyst turboprop engine.



ADAPTIVE CYCLE ENGINES PROVE REVOLUTIONARY GAINS FOR FIGHTER AIRCRAFT

In 2022, the U.S. Air Force and GE successfully concluded the major contractual testing milestones for the XA100 adaptive cycle engine. These tests proved the capabilities of the engine to provide 25% better fuel efficiency and 25% lower CO₂ emissions than current production engines in fifth generation fighter aircraft. The adaptive cycle technologies, developed under the Air Force's Adaptive Engine Transition Program (AETP), allow the engine to flex in flight between high-thrust mode for maximum power and a high-efficiency mode for optimum fuel savings and loiter time.

²² CFM International is a 50-50 joint company between GE and Safran Aircraft Engines. RISE is a registered trademark of CFM International.

GE ADDITIVE: DRIVING SUSTAINABILITY THROUGH TRANSFORMATIVE TECHNOLOGY

Additive manufacturing—often referred to as 3D printing—is a transformative technology that has the potential to contribute solutions to many of our major societal challenges, such as climate change, digitalization and decreasing natural resources.

GE Additive, a subsidiary of GE Aerospace, was formed in September 2016 to meet market demand and build on GE's decades of advanced manufacturing and materials science knowledge, additive R&D and GE Aerospace's learnings as an early adopter of additive technology. Today, GE Additive is a leader in metal additive technology with a diverse customer base spanning multiple industries and with a particular strength in highly regulated sectors with complex supply chains, such as aerospace and defense, medical and automotive.

Since the late 1980s, metal additive manufacturing has been mostly used for tooling and concept modeling in automotive, medical and aerospace industries. In the 2010s, research in corporate R&D labs and federal agencies drove breakthrough applications of the technologies and, by 2015, GE Aerospace had gained FAA certification for the first additively manufactured production part.

Employing new manufacturing technology, engineers dreamt up part geometries with complexity only buildable by additive manufacturing. These designs were then transmitted to 3D printers full of metal powder. The printers' lasers or electronic beams heated up and melted particles together in thin layers, gradually forming structures never before built.



CLEAN AVIATION PROGRAM: ADDITIVE TURBINE CENTER FRAME

The European Commission and European aerospace industry-funded Clean Aviation (formerly Clean Sky 2 program) brings together industry subject matter experts and academic research bodies to integrate, demonstrate and validate technologies capable of reducing CO₂ emissions, as well as nitrogen oxide (NO_x) and noise emissions by up to 30% compared to 2014 state-of-the-art aircraft.

GE Aerospace's Advanced Technology team in Munich, Germany, led an industry-academic consortium for a Turbine Technology Project (TURN) that designed and 3D printed a large, yet lightweight, high performance turbine center frame casing. The casing unveiled in 2022 is one of largest additively manufactured parts produced for the aerospace industry, with the following results:

- 150 parts consolidated into a single component.
- Reduced part weight by ~30%.
- Reduced manufacturing lead time ~75% from nine months to two and a half months.
- Performance benefit of 0.2% in specific fuel consumption.

[Learn more ▶](#)



LOWERING EMISSIONS WITH ADDITIVE MANUFACTURING

The Province of Québec in Canada provides excellent conditions to produce the metal alloy powders used in industrial 3D printers. AP&C—a GE Additive business—based in Montréal, Canada, sits at the heart of this region and is a major manufacturer of the titanium, nickel and aluminum powders used by the additive manufacturing industry.

The combination of Hydro-Québec supplying more than 98% of power from renewable sources to the grid and AP&C's energy efficient, proprietary technology using plasma torches means that, by kilogram, the advanced atomization process—from raw titanium feedstock to the final metal powders supplied to customers—has a lower carbon footprint compared to conventional manufacturing techniques.

Because additive manufacturing only uses the metal needed to create parts, waste can be significantly reduced. This makes the buy-to-fly ratio of metal 3D printing lower than conventional, subtractive manufacturing.

And once in the additive value chain, the metal powders used in 3D printers can be safely retrieved, sieved and reused, before being eventually recycled. Some advanced additive manufacturing have managed to create virtually zero metal powder waste at their facilities.

[Learn more ▶](#)

Our Collaborations

GE Aerospace supports aviation industry efforts to decarbonize, which requires a holistic, global approach. Meeting the industry's goal of net zero CO₂ emissions from flight by 2050 requires deploying revolutionary technologies to reduce emissions and to advocate for increased use and availability of alternative fuels, such as Sustainable Aviation Fuel (SAF).

GOVERNMENTS ADOPT NET ZERO GOAL FOR GLOBAL AVIATION

Following similar aviation industry targets, International Civil Aviation Organization (ICAO) member states in 2022 adopted a collective long-term global aspirational goal of net zero CO₂ emissions by 2050. The milestone agreement signaled government backing for the industry's sustainability ambitions. Members of Air Transport Action Group (ATAG), including GE Aerospace, previously adopted a goal of net zero CO₂ emissions by 2050, confirming the aviation industry's vision to reduce CO₂ emissions in support of the Paris Climate Agreement goal to limit global warming to 1.5 degrees Celsius.

GE and CFM International²³ are funding members with representation on the Board of Directors of ATAG. GE Aerospace is also a member of the U.S. Aerospace Industries Association, which has a similar target for commercial aviation manufacturers to work with airline customers and governments globally to achieve net zero carbon emissions by 2050.

The European Commission is also on an ambitious trajectory to reduce CO₂ emissions from flight. While governments work on legislative proposals, the European aviation industry issued Destination 2050, a report supported by GE Aerospace, announcing a pathway to net zero CO₂ emissions by 2050 and a 55% reduction by 2030 compared to 1990 levels.

GE AEROSPACE NOW AN AVIATOR MEMBER OF SUSTAINABLE AVIATION BUYERS ALLIANCE

Sustainable Aviation Buyers Alliance (SABA) is a nonprofit organization accelerating the path to net zero aviation by driving investment in, and adoption of, high-integrity Sustainable Aviation Fuel and supporting companies, airlines and freight customers in achieving their climate goals. GE Aerospace joined in 2022 in another example of how the company is engaged across the SAF ecosystem. GE Aerospace also helps qualify alternative jet fuels for safe operation in GE jet engines, leads standards-setting committees for 100% drop-in SAF through ASTM International, and is a member of The Roundtable on Sustainable Biomaterials, which is helping standardize criteria for SAF feedstock. By joining SABA, GE Aerospace could help support a growing marketplace for SAF.

UNITED AIRLINES VENTURES SUSTAINABLE FLIGHT FUND

GE Aerospace was proud to join United Airlines and inaugural corporate partners to launch a first-of-its-kind venture capital fund—Called the United Airlines Ventures Sustainable Flight Fund—and accelerate the research, production and technologies associated with Sustainable Aviation Fuel. SAF will be critical for the aviation industry to meet net zero CO₂ emissions by 2050. Today, all GE, CFM International²³ and Engine Alliance²⁴ engines in service can operate with approved SAF blends. One of our fuel experts chairs an international task force to develop standardized industry specifications supporting adoption of 100% drop-in SAF, which does not require blending with conventional jet fuel.

AVIO AERO MEMBER OF CLEAN AVIATION

Avio Aero, part of the GE Aerospace business, has been a member of Clean Aviation (formerly Clean Sky 2 Program) since its founding in 2008. Currently, Avio Aero is on Clean Aviation's governing board. The public-private partnership with the European Commission is the largest R&D program devoted to decarbonizing Europe's aviation industry. Avio Aero has developed innovative propulsion technologies through the program, such as how to reduce CO₂, NO_x and noise emissions from turboprop aircraft and engines. In the new Clean Aviation course, Avio Aero is coordinating the AMBER hybrid electric demonstrator and the HYDEA project to develop a hydrogen combustion engine. Avio Aero is also associated with the OFELIA project, coordinated by Safran Aircraft Engines, to demonstrate open fan architecture in flight tests.

U.S. FAA CLEEN PROGRAM

GE Aerospace is advancing groundbreaking work to develop noise and emissions reducing technologies for aircraft engines under a research partnership with the U.S. Federal Aviation Administration (FAA).

GE and the FAA are investing nearly \$55 million over five years to accelerate development of a series of technologies for more sustainable aviation, including open fan engine architecture, electrification, noise-lowering technologies, as well as ongoing research into alternative jet fuels through the FAA's Continuous Lower Energy, Emissions and Noise (CLEEN) program. GE Aerospace has received three CLEEN awards since 2010.

²³ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines.

²⁴ Engine Alliance is a 50-50 joint company between GE and Pratt & Whitney.

GE Aerospace's²⁵ Actions Toward Its 2050 Scope 3 Net Zero Ambition

In the preceding pages, GE Aerospace identifies the technology it is delivering today and GE Aerospace's investments for the breakthrough technologies of tomorrow. As these pages show, GE Aerospace's investments toward decarbonization technologies are uniquely diverse. GE Aerospace is innovating these technologies for our customers as we work to play a leadership role in the aviation sector meeting its 2050 net zero goals.

In 2021, GE announced an ambition to be a net zero company by 2050 for its sold products, which is the most impactful and relevant emissions category given the nature of our businesses. By focusing GE Aerospace efforts on reducing Scope 3 use of sold products emissions, we will more effectively deliver the type of technology breakthroughs our customers are relying on to achieve their own net zero ambitions.

In working to lead the development of technology for the aviation sector, we are informed by the role of aviation for sustainable development and broader industry trends. Aviation and the ability to travel are essential to sustainable development and building a world that works. Everyone in the world should have the right to stay connected to family, friends, job opportunities, healthcare and other essential benefits of travel. Access to safer, more sustainable and affordable transportation is essential to lifting the quality of life for all people and promoting equity. The United Nations affirms the essential role of transportation in sustainability through the following Sustainable Development Goals (SDGs): decent work and economic growth (SDG 8), industry, innovation and infrastructure (SDG 9), reduced inequalities (SDG 10), and sustainable cities and communities (SDG 11), among others.

Air travel today is responsible for approximately 2.1% of global CO₂ emissions, according to estimates from Air Transport Action Group (ATAG). However, as global populations and economies continue to grow, aviation industry passenger traffic is forecast to grow around 3% a year through 2050, according to ATAG. In order to meet the goals of the Paris Climate Agreement and reduce aviation sector emissions to the level needed to reach net zero emissions by 2050, there are clearly some big challenges ahead.

Both the International Air Transport Association (IATA) and ATAG's "Waypoint 2050" report highlight the need for a multifaceted approach to reach the target of net zero carbon emissions by 2050. IATA suggests the industry will need to reduce 21.2 gigatons of CO₂ now through 2050 to achieve net zero. Clearly no single solution is capable of delivering this level of CO₂ emissions reduction.

All industry participants—airlines, airports, aerospace equipment manufacturers, fuel providers, governments and others—have a role to play. Aerospace manufacturers are working to provide technology advances to deliver aircraft and engines that generate significantly less CO₂ emissions with capability to operate with both blended and 100% alternate fuels. Airlines and airports might work together to drive improvements

Applying these principles, we consider three pathways toward the net zero ambition:

ACTIONS PRE-2020

Building on substantial contributions from past action. Our efforts toward decarbonization began well before 2021. GE has long innovated its products to drive efficiencies and reduce CO₂ emissions by delivering state-of-the-art products. Our past efforts since 2010 lay a strong foundation for the progress forward.

2020–2030

Driving continued progress this decade. We are prioritizing the 2020s as a decade of action, with a focus on innovating the technology solutions needed to achieve net zero emissions in 2050. This will take several forms, including advancing technology with the potential to further reduce carbon emissions and carbon intensity in this decade and beyond.

2030–2050

Innovating for the future. While we are optimistic about the role of GE's technologies to make progress through 2030, we know they will not be enough to achieve 2050 net zero ambitions. We are investing today to innovate the next generation of breakthrough technologies to achieve the step changes that will be needed for the aviation sector.

²⁵ For more information on GE Aerospace's Scope 3 Use of Sold Products Methodology, see Appendix II in our [2022 Sustainability Report Appendices](#).

like electrification of ground handling operations. Fuel providers, both traditional and new entrants, are investing to develop and bring lower carbon fuels to the marketplace at volume. Governments need to provide the right incentives to drive investment and adoption of new technologies and implement long discussed initiatives like the Single European Sky initiative to streamline air traffic management. Governments and private industry also have key roles to play in supporting development of new infrastructure needed to support alternate fuels.

As described above, at GE Aerospace, we are working on technologies to improve engine fuel efficiency and support the qualification of alternative fuels compatible with GE engines with our unparalleled engineering and innovation know-how. We are also advancing the breakthrough innovations and ideas that will help the whole industry move even faster.

OUR NET ZERO PRINCIPLES

As one of the world's leading companies in the aviation sector, we know the challenge is complex and we have to be nimble and committed as a company and with our partners to innovate the technology to succeed over the years and decades to come. We have several principles that are guiding our approach to our net zero ambitions:

- **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 below 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. We summarize several of these key collaborations on page 43.
- **Commitment to innovation and technology.** Simply stated, GE Aerospace'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. Below, we synthesize the previous pages regarding how we see various technologies contributing toward this pathway.

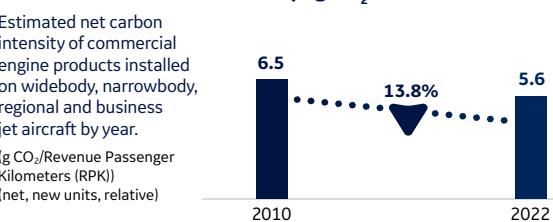
1. BUILDING ON SUBSTANTIAL CONTRIBUTIONS FROM PAST ACTION

GE Aerospace is a leader in the aviation industry's path to net zero CO₂ emissions with evolutionary, state-of-the-art technology today and investments in revolutionary, breakthrough technologies for tomorrow. GE's legacy has been to innovate technology the world needs to improve the efficiency, reliability and safety of civil aviation to lift up the quality of life for people everywhere.

From the GE9X, which is the culmination of our decade-long commercial product renewal, to the GE Passport and Catalyst business and general aviation engines, to the T901 and T408 turboshafts for military helicopters, we have the industry's broadest array of advanced engines offering better fuel efficiency and lower CO₂ emissions than their predecessors with advances in engine architecture, aerodynamics and materials. Ceramic matrix composites (CMCs) are lighter weight than traditional metal alloys and more heat resistant, allowing engines made with CMCS to operate at higher temperatures with less cooling air. Additive manufacturing has led to

lighter weight engine parts with higher capabilities and more complex designs than parts made by conventional manufacturing methods. Including engine technology introduced by GE and CFM International²⁸ in the last decade for commercial aircraft, engines manufactured today consume 40% less fuel and emit 40% less CO₂ compared to engines manufactured in the 1970s.

New Unit—Carbon Intensity (gCO₂/RPK)



development across the supply chain to make SAF more available and affordable compared to conventional jet fuel. For example, GE Aerospace has joined the Roundtable on Sustainable Biomaterials (RSB), an independent, international organization helping develop market policies for SAF and helping ensure SAF feedstock is resourced responsibly. To learn more about our 2022 progress on SAF testing, see page 38.

GE's proprietary **360 FOAM WASH** is an advanced on-wing cleaning technology to help ensure engines continue to operate efficiently. In some cases, GE's 360 Foam Wash has been found to significantly improve engine performance by reducing build-up of deposits in the engine, lowering engine exhaust temperatures and improving engine compressor efficiency. These improvements lead to reduced fuel consumption and lower CO₂ emissions. GE's 360 Foam Wash is approved for use on multiple GE engine programs, including models of GE90, GEnx, and CF34, as well as Engine Alliance's²⁹ GP7200 engines.

Japan Airlines, in 2022, became the first global CF34 engine operator to be licensed for the patented engine cleaning system, which the carrier estimated will save up to 82,000 liters of fuel and up to 285 metric tons of carbon emissions a year by replacing some water washes with foam washes for CF34 engine cleaning.

GE DIGITAL has developed a suite of software applications to help aircraft operators reduce CO₂ emissions and drive operational efficiencies. For example, **FlightPulse®** is a flight analytics tool that helps airline pilots improve safety and operational decision-making, including recommendations for fuel savings. **Fuel Insight** helps airlines identify areas of opportunity to improve their fuel consumption, while **Airspace Insight** offers flight path design and maintenance to assist aircraft operators in ensuring routes are optimally designed to minimize time, fuel and emissions.

Use of Sold Products

Estimated lifetime emissions of commercial engine products installed on widebody, narrowbody, regional and business jet aircraft by year. Based on Greenhouse Gas Protocol, Scope 3 use of sold products, category 11 methodology.

	2019	2021	2022
Net emissions million metric tons CO₂ (net, new units, absolute)	45	28	34

2021 results reflect a notable decrease in aircraft deliveries associated with COVID-19 impacts on the aviation industry and aircraft delivery delays on two aircraft types powered by GE and GE partnership engines. We continued to see some COVID-19 impacts in 2022 on deliveries. We anticipate reported emissions from the use of aircraft will continue to grow in future years for a period of time with the post-pandemic return to flight and expected global growth in aviation passenger traffic. Our roadmap on the following pages identifies the technologies that we believe over time will support pathways to net zero.

²⁶ GE, customer and partner funded.

²⁷ Drop-in SAF is fuel that can be dropped in to today's existing engines, aircraft, and fuel delivery and storage systems without requiring any additional changes.

²⁸ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines.

²⁹ Engine Alliance is a 50-50 joint company between GE and Pratt & Whitney.

3. INNOVATING FOR THE FUTURE

GE Aerospace is investing now in the technology needed to reduce both intensity and absolute emissions toward net zero by 2050. Knowing there is no one-size-fits-all solution, GE Aerospace is investing in a diverse portfolio of future technologies across the aviation sector, and intends to advance technologies in the near, mid and longer term. This is some of the world's most complex technology, and we are focused today on the innovation that's going to be needed for the future. For the technologies below, we are focused on three general phases for their development. Today, we are working in our labs and research centers on the advancement of the concepts and theories. In the middle of this decade, we aspire to start flight testing these technologies. We look to the middle of the 2030s as the likely time for introducing these technologies commercially.

Open fan

The open fan design is one of the advanced engine architectures CFM International³⁰ is exploring through the CFM RISE³¹ (Revolutionary Innovation for Sustainable Engines) Program. GE Aerospace and Safran came together in June 2021 to launch the RISE³¹ Program, targeting more than 20% lower fuel consumption and CO₂ emissions compared to today's most efficient engines. Central to the program is state-of-the-art propulsive efficiency through the open fan design. Since GE Aerospace first debuted an unducted fan in the 1980s, the open fan engine design has been made simpler, lighter and quieter with new approaches such as single-stage rotating carbon fiber composite fan blades and stationary composite outlet guide vanes. To learn more about our 2022 progress on open fan design, see page 40.

³⁰ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines.

³¹ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines. RISE is a registered trademark of CFM International.

Electrification

GE Aerospace has been advancing electrification of aircraft and engine systems for more than a decade. During that time, GE Aerospace engineers matured individual components of a hybrid electric system, including motors, generators and power converters. Now, we will take what has been learned in laboratories and combine these technologies into an integrated electric machine and associated power electronics for ground and flight tests planned for the mid-2020s. Through a \$260 million program with NASA, GE Aerospace is maturing a megawatt-class hybrid electric powertrain to demonstrate flight readiness for single-aisle aircraft using a modified Saab 340B testbed and GE's CT7 turboprop engines. GE Aerospace, in 2022, announced collaborations with Boeing to support the program's flight tests and BAE Systems to design, test and supply energy management components.

Hydrogen

CFM International³⁰ also launched, in 2022, a demonstration program in collaboration with Airbus to ground and flight test a direct combustion engine fueled by hydrogen. CFM International³⁰ will modify the combustor, fuel system and control system of a GE Passport turbofan to run on hydrogen, a fuel which doesn't generate carbon emissions during the combustion process. Efforts to design and validate new combustor technology compatible with hydrogen will draw from GE's more than 8 million hours of operating experience with hydrogen combustion in land-based gas and steam turbines. Revolutionary technologies and alternative fuels both have critical roles to play in meeting the aviation industry's long-term climate goal of net zero carbon emissions by 2050 for commercial flight.

GE AEROSPACE: PATH TO NET ZERO AMBITION³²

ACTIONS PRE-2020	2020-2030	2030-2050
Building on substantial contributions from past action.	Driving continued progress this decade.	Innovating for the future.
CONTRIBUTING FACTORS		
More fuel efficient commercial engine products certified: GE Passport, GEnx, CFM LEAP ³³ , GE9X Fewer part counts, optimized part designs from additive manufacturing vs. conventional manufacturing More heat-resistant ceramic matrix composites vs. metal alloys Lighter-weight, optimized part designs from additive manufacturing vs. conventional manufacturing All GE and joint venture engines can operate on approved Sustainable Aviation Fuel Flight Management System for optimized airport descent	Support 100% Sustainable Aviation Fuel approval and adoption Advocacy and industry partnering for wider SAF availability and adoption 360 Foam Wash adoption Increased deployment of GE Digital, Aviation Software including FlightPulse®, Fuel Insight and Airspace Insight Increased use of additively manufactured and ceramic matrix composite engine parts	Open fan engine design (CFM RISE ³⁴ Program) Electrification of aircraft and engine systems Hydrogen-fueled direct combustion engine Compact engine core Three-stream engine architecture
	RESEARCH & DEVELOPMENT	TESTING
		BREAKTHROUGH TECHNOLOGIES TIMELINE
	2022 PROGRESS	
	Passport, HF120 and GEnx engines successfully tested with 100% SAF. Learn more on page 38 ▶ GE Aerospace and customers surpassed 2,000 360 Foam Washes since 2017. Learn more on page 37 ▶ Qantas Airlines implemented GE Digital's Airspace Insight solution. Learn more on page 39 ▶ GE Aerospace unveiled turbine center frame casing, one of largest additively manufactured parts for the aerospace industry. Learn more on page 42 ▶	Airbus and CFM International ³⁵ announced plans to partner on open fan flight tests in second half of this decade. Learn more on page 41 ▶ GE Aerospace first in the world to test high power, high voltage hybrid electric components in altitude conditions. Learn more on page 41 ▶ Avio Aero launches hybrid electric technology demonstration program with hydrogen fuel cells. Learn more on page 41 ▶
	IMPACTS	
	40% reduction in fuel consumption and CO ₂ emissions compared to engines manufactured in 1970s and 1980s	GE this decade will: <ul style="list-style-type: none"> Advance technologies to lower the carbon intensity of its products. Innovate and test the breakthrough technologies required to achieve the step changes needed for net zero in the future. Prioritize partnerships to succeed in these outcomes.
		GE will focus, working with other industry participants, on bringing into service breakthrough technologies in the mid-2030s to help achieve absolute emission reductions for the aviation sector's path to net zero.

³² Lifecycle CO₂ emissions from Scope 3 use of sold product.

³³ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines. LEAP is a registered trademark of CFM International.

³⁴ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines. RISE is a registered trademark of CFM International.

³⁵ CFM International is a 50-50 joint company of GE Aviation and Safran Aircraft Engines that produces CFM56 and LEAP engines.

Delivering Innovation to Build a More Sustainable World



GE Research is our innovation engine where the solutions to our energy challenges are being developed and shaped today. Our ~1,000 scientists and engineers, including more than 500 Ph.D.s, partner with an expansive innovation network of industry, government and academic partners to achieve our sustainability goals across the energy sector and for the future of flight.

With major research facilities in the U.S. and India, we are the global innovation engine for the GE Vernova and GE Aerospace businesses. Together with our businesses and innovation partners, we're developing the new products and technologies to address our most pressing sustainability needs.

Over the past five years, we have significantly grown our network of external partnerships with the U.S. government. With a portfolio of 237 programs worth \$370 million, we are closely aligned on key research priorities to address climate change and help drive more sustainable air travel.

During the past year, GE Research has created and launched a new Technology Incubation team at its Niskayuna, New York, research campus to enhance our sustainable innovation commercialization efforts in the private sector. A key focus of this team will be to turn high potential technologies under development by GE researchers into the next start-up businesses alongside external investor partners to further our sustainability goals. The team already has identified close to a half dozen potential startups that include a new manufacturing process using 3D printing to make wind turbine components, a revolutionary new method to produce clean, potable drinking water, and cutting-edge developments in cybersecurity to safeguard critical infrastructure like power grids, with dozens of additional projects in the pipeline.

As GE launches more focused, industry leaders in energy and flight, GE Research is working in parallel with these new companies to stand up dedicated advanced research centers to support their innovation objectives more directly. In energy and aerospace specifically, GE researchers are focused on driving key technology advancements to deliver cleaner solutions on the ground and in the skies.

U.S. Department of Energy Secretary Jennifer Granholm and Advanced Research Projects Agency Energy Director Evelyn Wang (center) demo GE's PLUTO robotic system at the 2023 ARPA-E Energy Innovation Summit in Washington, D.C.

MORE ELECTRIC POWER AND PROPULSION

At GE Vernova, teams of scientists and engineers are developing new wind turbine designs and automation of services to accelerate onshore and offshore wind power on the ground. In tandem, they are advancing critical power electronics, controls and digital technologies required to build a 21st century grid that is becoming more renewables intensive.

For GE Aerospace, GE Research has dedicated teams with deep experience in electrical systems and propulsion technologies to support GE Aerospace's initiatives in hybrid electric propulsion to enable more sustainable air travel.

DECARBONIZING THE AIR AND SKIES

We have dedicated research teams for advancing breakthrough concepts in carbon capture, including direct air capture (DAC), and driving carbon free fuel initiatives, such as 100% hydrogen power turbines and nuclear power with the advancement of small modular reactor designs.

Meanwhile in the aerospace sector, GE engineers are complementing their efforts to enable more electric propulsion with the development of technologies to enable net zero carbon fuel alternatives with hydrogen-fueled jet engines and the adoption of Sustainable Aviation Fuel.



NEW CAGE (CLIMATE ACTION@GE) LAB LAUNCHED TO REVOLUTIONIZE CARBON CAPTURE

The CAGE Lab, launched by GE Research in 2021, is at the center of innovative advancements to decarbonize the power sector. It is home to a highly multidisciplinary team of more than 50 scientists and engineers developing unique systems for post-combustion carbon capture and direct air capture (DAC), which remove carbon from flue gas and the air, respectively. This effort has brought together GE's core competencies in thermal management, advanced manufacturing and innovative materials to capture carbon dioxide. The team has been actively testing a demonstration DAC unit in the lab, with a future objective of enabling an economical, large-scale solution for helping customers and companies achieve their decarbonization and climate goals.



RESTORING POWER FASTER FOR UNDERSERVED COMMUNITIES IN PUERTO RICO

GE Research, together with the National Renewable Energy Laboratory (NREL); LUMA Energy, which operates and manages the electrical grid in Puerto Rico; Sandia National Laboratories; and GE's Renewable Energy and Digital businesses have been awarded a three-year, \$4.5 million project from the U.S. Department of Energy to develop and pilot an automated power restoration system in Puerto Rico that would enable a community to rapidly restore electricity following extreme weather events such as a hurricane.

The automated power system will integrate advanced sensors, software, distributed solar and storage, and other features, with the goal of reducing restoration time from weeks and months to hours and days. This system could serve as a model for all communities in quickly restoring electricity to homes and businesses. [Learn more ►](#)



DEVELOPING FUNDAMENTAL BUILDING BLOCKS OF HYBRID ELECTRIC FLIGHT

GE Research's hybrid electric aviation team has been developing the fundamental components to help enable commercial scale hybrid electric flight for two decades. The team is partnering with the Advanced Research Projects Agency for Energy (ARPA-E) on three projects to develop the powertrain, power generation system and cabling to enable a hybrid electric propulsion system that is suitable for supporting a 150-200 seat narrow body commercial airplane. Recently, the lab was awarded a second phase of funding from ARPA-E to continue scaling the development of the powertrain. [Learn more ►](#)



PUSHING PAST PRODUCTION BARRIERS

While GE is principally involved with the end-use applications of Sustainable Aviation Fuel (SAF), we are applying some of our research experience and in-house SAF expertise to find ways to help boost SAF availability and production more broadly for the aviation industry. GE scientists and engineers have ongoing collaborations to explore new feedstock options through technologies like carbon capture. Additionally, an interdisciplinary team of experts was formed in 2022 to study the most promising pathways for addressing critical barriers to increase SAF production in the future.



PART II | OUR PROCESS

How GE Operates to Succeed in Our Mission

At GE, we focus not just on what we do, but how we do it. We are guided by an active and engaged Board of Directors, with leadership that sets the example of a culture of integrity that is core to everything we do.

As we work to unleash our full potential as three independent industry leaders committed to energy, health and flight, we continue to develop and deliver products and services for growth sectors that are critical to building a world that works. A key element of our sustainability strategy is to implement lean management principles across the enterprise to drive continuous improvement for purposeful outcomes. And we continue to invest in our people, one of our most valuable assets.

Independent Board Leadership 2023 leadership¹



THOMAS HORTON
Lead Director



ISABELLA GOREN
CHAIR: Audit Committee



STEPHEN ANGEL
CHAIR: Management Development & Compensation Committee



PAULA ROSPUT REYNOLDS
CHAIR: Governance & Public Affairs Committee

Board Oversight

The Board of Directors (Board) sets the tone from the top for GE's culture. GE's Board has oversight responsibility for management's establishment and execution of corporate strategy. The Board also provides independent risk oversight, with a focus on the most significant risks facing the company. The Board's Governance & Public Affairs Committee (Governance Committee) strives to maintain an independent Board with broad and diverse experience and judgment that is committed to representing the long-term interests of our stakeholders. When assessing Board composition, the Governance Committee considers a wide range of factors including:

- Creating an experienced, qualified Board with high personal integrity and character, and expertise in areas relevant to GE and the company's strategy.
- Enhancing the Board's diversity of backgrounds, specifically attributes such as race, ethnicity, gender, cultural background and professional experience.
- Complying with regulatory requirements and the Board's independence guidelines.

As we progress on our plans to launch GE Aerospace and GE Vernova as independent companies with their own boards of directors, the Governance Committee will seek director candidates whose experiences support each company's future strategy and industry focus, with the goal of creating dedicated boards of directors with deep domain expertise.

The Board recognizes the long-term interests of the company require responsibly addressing the concerns of stakeholders beyond just shareholders, including employees, recruits, customers, suppliers, communities, government officials and the public at large.

The Board oversees the execution of GE's sustainability priorities and initiatives as an integrated part of the company's overall strategy and risk management. Matters related to sustainability often span multiple functional categories and areas of oversight, and therefore involve discussion at the full Board level as well as individual committees.

In that regard, relevant focus areas for the full Board in 2022 included:

- **Energy transition.** Strategy for the energy transition.
- **Climate change.** GE's ambitions, goals and reporting related to greenhouse gas emission reductions from customers' use of sold products.
- **Enterprise risk management.** Primary risks and opportunities across GE's businesses, including risks related to climate change and other sustainability matters.

The Governance Committee also plays an important role in GE's sustainability oversight, and has primary oversight of GE's priorities and external reporting related to sustainability/ESG matters, as well as policies and strategies related to political spending and lobbying, human rights, and environment, health and safety.

Relevant focus areas for the Governance Committee in 2022 included:

- **Safety.** Regular updates on safety programs and performance throughout GE.
- **Climate policy engagement.** Public policy advocacy and lobbying related to climate change and the energy transition.
- **Sustainability programs.** Sustainability programs and performance, and the transition of programs and reporting to each of the three planned independent public companies.

The Audit Committee also has a role in sustainability matters to the extent these topics relate to financial reporting and regulatory requirements, including reporting on these matters in SEC filings and data quality related to this reporting.

Board Oversight of Public Policy and Lobbying

The Governance Committee, composed solely of independent directors, oversees the company's political spending and lobbying activities, including external reporting on such activities. This includes political and campaign contributions as well as any contributions to trade associations and other tax-exempt and similar organizations that may engage in political activity. The Governance Committee is responsible for the following:

- **Policy oversight.** A yearly review of GE's political spending policies and lobbying practices.
- **Budget oversight.** Approval of GE's annual budget for political activities.
- **Reporting.** Reviewing semi-annual updates on political spending, both through company expenditures and through the employee-managed political action committee (GEPAC).

GE currently discloses the names of all trade associations receiving more than \$50,000 from the company, including the portion of the company's payment used for lobbying or political expenditures, as well as any contributions to 501(c)(4)s, beginning with contributions made in 2018. GE's political spending has declined in recent years and, in 2022, GE did not contribute any corporate funds to political campaigns, committees or candidates for public office. In this year's Sustainability Report, we are again providing a description of how GE's climate lobbying activities align with the goals of the Paris Climate Agreement, see pages 89-96.

Board Focus on Climate Change

The energy transition and climate change have been significant areas of focus at the Board level. At its meetings throughout 2022, the Board regularly reviewed climate change-related risks and opportunities across GE's business. The Board is actively engaged with GE leadership on related topics such as the competitive landscape for our businesses amidst climate-related shifts in technology, product and service demand; analysis of potential pathways for decarbonization; customer, shareholder and other stakeholder expectations; the company's decarbonization strategy, including those of the planned independent companies; and reducing the environmental impact of GE's own operations and customers' use of our sold products. For example, the Board discussed and helped shape decisions such as setting a goal for GE to become carbon neutral by 2030 in our own operations; our ambition to be net zero by 2050 for the Scope 3 emissions associated with the use of sold products and subsequent reporting on those emissions; the exit from the new-build coal business; and engagement on climate change policy. This focus is also reflected in the Board's Governance Principles and committee charters, which highlight its role in the oversight of sustainability and climate change-related matters.



Long Ridge Energy Terminal and GE commissioned and demonstrated the first advanced class hydrogen-burning power plant worldwide using GE's HA gas turbine.

Board Oversight: Key Areas Related to Sustainability

FULL BOARD

- Strategy for the energy transition and climate change, including climate-related risks and opportunities
- GE's ambition and goals related to greenhouse gas emission reductions
- Sustainability, including external reporting
- Health and safety of employees and communities
- Enterprise risk management
- Developments in ESG reporting and analysis
- Programs and performance
- Climate change and energy transition policy engagement

AUDIT COMMITTEE

- Regulatory, compliance and litigation risks
- Financial reporting, systems and internal controls
- Cybersecurity
- Enterprise risk management framework
- In coordination with the Governance Committee, oversight of external reporting related to sustainability matters and data quality related to this reporting

GOVERNANCE & PUBLIC AFFAIRS COMMITTEE

- Priorities and external reporting related to sustainability matters
- Corporate governance
- Public policy and government relations activities, including political spending and lobbying activities
- Environmental, health and safety matters
- Human rights
- Support of full Board's oversight on climate change

MANAGEMENT DEVELOPMENT & COMPENSATION COMMITTEE

- Strategies and policies related to human capital management, including diversity, equity and inclusion; workplace environment and culture; talent recruitment and development; engagement and retention
- External reporting related to diversity and pay equity
- Executive compensation, including determination of metrics to include in long and short-term incentive programs

For more information, see [GE's 2023 Proxy Statement](#).



EMPLOYEES

- Regular company or business-wide emails and videos from senior leadership, including InsideESG@GE video blogs for GE employees
- Leadership town halls, discussions and educational webinars, including opportunities for questions and answers
- Open reporting and ombuds system
- Engagement and culture survey
- Performance management system "People, Performance and Growth"



CUSTOMERS

- Meetings with senior executives at the business and corporate level
- Engagement strategy driven by business leadership depending on industry



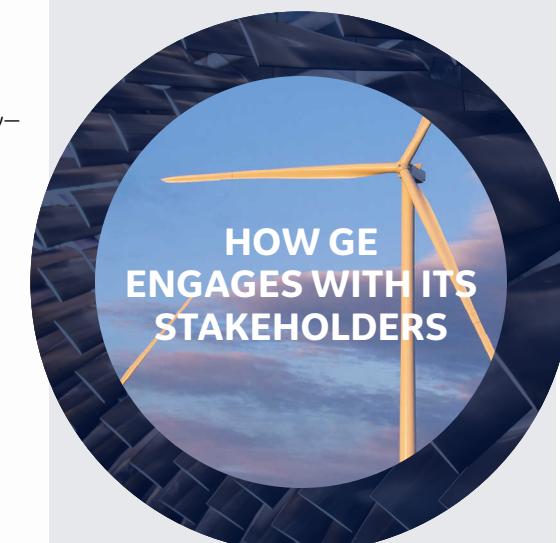
SELECTED MEMBERSHIPS

- Participant in the UN Global Compact
- Founding member of the Global Business Initiative on Human Rights
- Member of the Institute for Human Rights and Business' initiative, Leadership Group for Responsible Recruitment
- Member of the Responsible Minerals Initiative (RMI)
- Board member, Center for Climate and Energy Solutions
- Member, World Business Council for Sustainable Development
- Member, The Global Fight



INVESTORS

- Strong commitment to transparency—communicate strategic, operational and financial results and progress on priorities
- Quarterly earnings conference calls open to investors and available on our website
- Annual investor days
- Participation in sell-side conference presentations
- Annual meeting of shareholders
- Investor relations newsletters and website
- Year-round engagement with shareholders, including on governance and sustainability matters



REGULATORS/GOVERNMENT AGENCIES

- Pursuit of honest broker relationships with government stakeholders to promote collaborative, win-win outcomes on sustainability and environmental issues
- Strong partnership on domestic and global stage in pursuit of climate change and sustainability goals and policies
- Commitment to regulatory compliance and strong performance
- Engagement to support decision makers in sustainability goals, including climate change and decarbonization
- For details on GE activities and partnerships in support of government goals and climate change policies, see pages 89-96.



COMMUNITIES

- GE locations empowered to support charitable organizations based on the needs of the local community
- GE volunteers giving back to the communities where GE people live and work
- The GE Foundation committed to transforming our communities and shaping the diverse workforce of tomorrow by leveraging the power of GE
- Outreach and meaningful participation with local communities and stakeholders on decisions with broader impact



SUPPLIERS

- Commitment to an ethical supply chain program and Supplier Integrity Guide for suppliers
- Communication and training to all suppliers on compliance and integrity expectations
- Onboarding engagement assessment and manufacturing site review
- For direct material suppliers in higher risk countries under the Supplier Responsibility Governance program, more extensive engagement at onboarding, including site audit and continued communication and assessment during their time as a GE supplier
- Access to GE's open reporting and ombuds system

Integrated Approach to Strategy, Risk and Sustainability

OUR COMPANY STRATEGY FOCUSES ON WHAT IS NEEDED TO BUILD A SUSTAINABLE WORLD THAT WORKS.

The energy transition and the future of flight are critical challenges facing our world, and GE has a meaningful role to play in providing global solutions for each. Over the last several years, as we considered opportunities and risks across our businesses and industries, we have sharpened and standardized our focus on the external dynamics—including markets, customers, competitors and changes in the regulatory environment—that form the context of our strategic decisions. And in the spirit of kaizen—continuous improvement—our standardized strategy and risk processes force us to regularly revisit our assumptions and processes so we can adapt as our internal and external environments change. In a world where we will never have perfect information or complete control, our strengthened programs and processes are designed so the company makes decisions in a structured, objective manner, and with an appropriate view for the long term.



CHRIS PEREIRA
Chief Strategy Officer and
Chief Risk Officer

Sustainability is integrated with strategy development and risk management across the company. GE's sustainability lens is used to focus on operations and priorities within each business, and cross-functional committees and teams at the leadership level align strategic priorities and culture.

GE's Enterprise Risk Management Framework

Our enterprise risk management framework informs the process for long-term strategy reviews that each business undertakes annually. Operationally, this framework also informs our delegations of authority and commercial underwriting, which take into account a range of risks such as strategic alignment, supply chain, inflation, cybersecurity, and country and counterparty risk. Our businesses all assess their top risks against a consistent framework each quarter. The process requires the business to:

- Define and identify enterprise risks.
- Prioritize the top risks and opportunities.
- Assess existing action plans to mitigate risk.

The process also requires the business to identify owners at each stage of the process, instilling business ownership throughout the risk assessment process. At the corporate level, the Corporate Risk Working Group—a small group of key functional leaders, as well as the Chief Risk Officer—meets quarterly to assess enterprise-wide risks as well. The Audit Committee oversees GE's enterprise risk management framework and receives a quarterly enterprise risk report from the Chief Risk Officer. GE business leaders also periodically review their risk management programs and top risks with the Audit Committee, and it is the business CEOs—rather than a compliance or legal professional—who lead discussions with the Audit Committee to provide strong business accountability for risk management. In addition, each business CEO meets regularly with the Board to review their strategies and operations. Our Governance Principles and committee charters define the risk areas for which each committee has ongoing oversight responsibility, while the Board, as a whole, focuses on the most significant risks facing the company.

We periodically review a range of actual and projected metrics in assessing these types of risks and opportunities, including new unit equipment sales, power generation by asset type, leveled cost of energy, leveled cost of storage, fuel prices (including natural gas and hydrogen), pricing for mandatory and voluntary carbon offsets or credits, and internal and external modeling. Our consideration of top climate-related risks and opportunities also feeds into our annual long-term strategy review process, during which our businesses evaluate a handful of key questions related to their long-term strategies.

In our strategy development, we seek to build on GE's strengths in both innovating technologies and solutions to continue driving the global energy transition and creating resilience in our businesses' strategies to adapt to potential transition risks from the range of potential pathways for decarbonization and other factors that could significantly affect GE's approach in the decades ahead.

We seek to continuously improve our processes to identify, assess and respond to these types of climate-related opportunities and risks, as this remains central to the strategy for our businesses.



Operationalizing and Improving GE's Sustainability Efforts Through the Sustainability Council

In 2021, GE made a further organizational commitment to elevate its broader sustainability strategy with the appointment of GE's first Chief Sustainability Officer (CSO). This position coordinates efforts by our business leaders, engineers and strategic thinkers to ensure we improve our impacts to our communities, people and planet in measurable and meaningful ways. The CSO also supports efforts for GE's technology and innovation to address the pressing global challenges addressed in this report.

Starting in 2021, GE's Chief Sustainability Officer convened a business-wide Sustainability Council staffed by each GE business and corporate function. Typically, the Sustainability Council met weekly in 2022 and focused internally and externally on three overarching goals:

- Ensuring progress toward delivering on GE's sustainability commitments.
- Improving and installing operational programs to address gaps in GE's sustainability programs.
- Building strong and independent ESG programs and operations for each business prior to their separation from GE so that sustainability is core to the new businesses on day one.

The Sustainability Council partners with a diverse range of external stakeholders to deliver on our commitments, improve our programs and prepare for the separation. These efforts and progress are reflected in this report.

Beyond the Sustainability Council, sustainability at GE is the ultimate team effort, with GE's employees united in realizing the success of our mission. The CSO helps GE accelerate outcomes by promoting

closer collaboration between GE's leaders and governments, policy makers, NGOs, and our investors, communities and peers. The CSO also coordinates efforts to operationalize GE's sustainability efforts by approaching sustainability with the same high expectations of rigor and accountability that we use to run our businesses, using lean principles and, as described in more detail in this report, continuously improving toward our goals.

ESG ISSUES ASSESSMENTS FOR GE AND EACH BUSINESS

In 2021, GE engaged in an ESG issues assessment with our internal and external stakeholders for GE and the Aerospace, HealthCare, Power and Renewable Energy businesses. The results of these assessments are helping to guide ESG and sustainability priorities and strategies with the benefit of input from our employees, customers, investors, NGOs and other stakeholders, and provided an overarching blueprint on how our priorities aligned with our stakeholders' expectations. We share the process and output below.

To build upon this work in 2022, each business provided a quarterly update on progress toward greenhouse gas Scope 1 and 2 reduction goals, detailed on pages 87-88, and ongoing progress on innovating the technology toward Scope 3 goals, detailed on pages 32-35 and 44-47. We further analyzed changes in voluntary ESG frameworks and standards and our stakeholders' expectations. Based on this analysis, our 2022 ESG issues prioritization remains the same as in 2021, with improved operations and programs, as described below, to position the businesses for leadership on these core topics on day one of their independent operations.

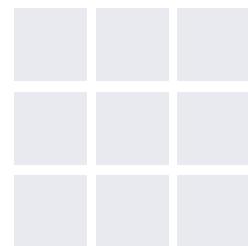
ESG Issues Assessments Overview

GE conducted an assessment to develop a list of priority topics deemed relevant for sustainability strategy for each business unit, followed by interviews with internal and external stakeholders to validate and prioritize topics. Based on the insights gained, an ESG issues matrix was developed and the final list of high priority topics was reviewed against GE reports to identify potential gaps and provide recommendations for future reporting.

1

DEVELOP INITIAL LIST OF KEY TOPICS

Consolidate topics, external reporting frameworks, ESG rating agencies and peers

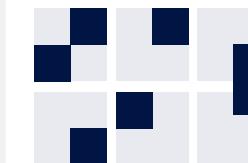


Input: Initial perspective on potential priority topics for GE's industry

2

STAKEHOLDER VALIDATION

Conduct interviews with internal and external stakeholders to identify the most impactful topics to GE's business units



Output: Summary report synthesizing the priority topics, feedback and insights from the activities above

3

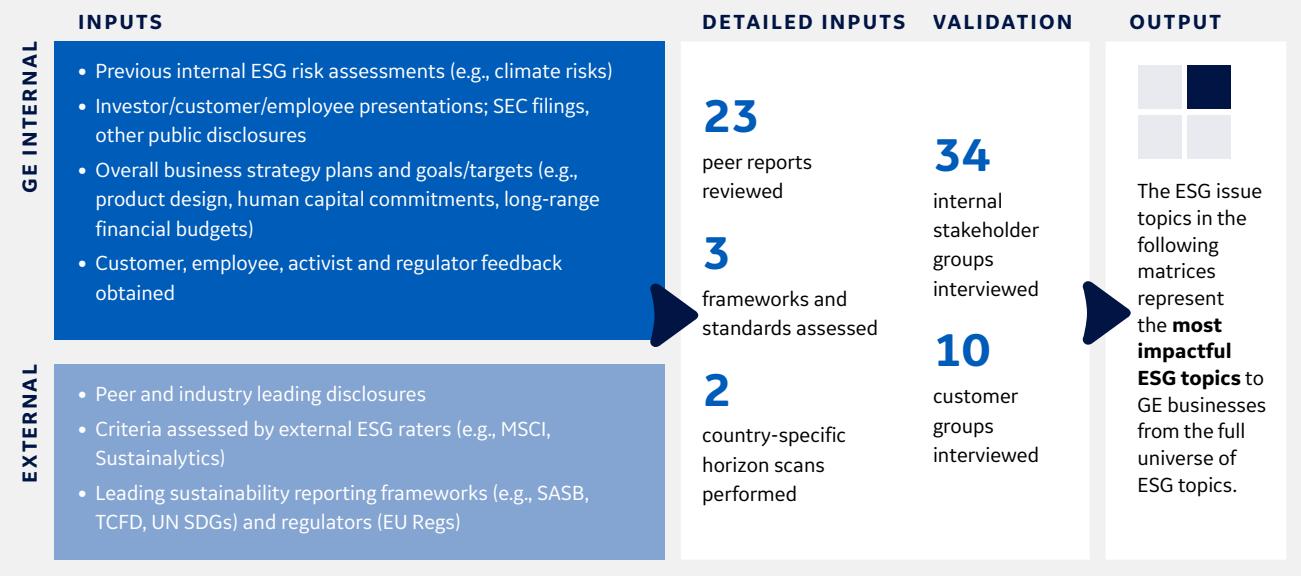
PROVIDE RECOMMENDATIONS

Develop an ESG issues matrix and assess GE's existing reporting against the validated priority issues

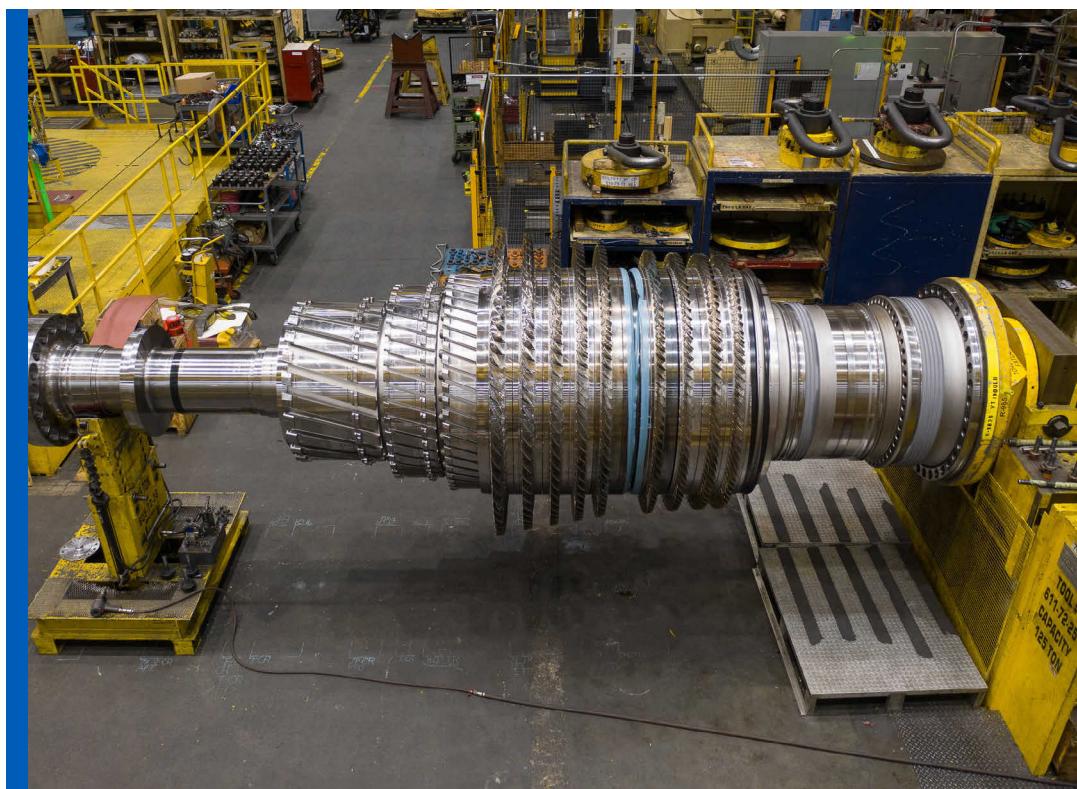


Approach to Identifying and Validating Topics

Across **four business units**, inclusive of corporate, GE used a combination of internal and external research to develop a list of **initial** topics deemed most impactful on its ESG strategy in 2021. This included, but was not limited to, the assessment of **over 20 peer reports** and analysis of key topics from frameworks and standards for **eight different industries**. Interviews with **nearly 80** relevant internal and external stakeholders were used to **refine** and **validate** the initial topics.



7HA gas turbine compressor in Greenville, South Carolina.



GE Vernova

Operating in the same market and ecosystem, there is an unsurprising overlap between the most impactful ESG issues identified by the stakeholders of GE's Power and Renewable Energy businesses, which will become part of GE Vernova. Climate change remains a core issue to address across the Energy portfolio, and the businesses have a strong position to build from, both operationally and through products and strategy as they join forces as part of one leading energy company to tackle the world's biggest challenge. The ESG issues assessment also confirmed the existing strong emphasis on governance and ethics, and protecting and supporting employees' safety and well-being, are fundamental for the path forward. Those strong cultural pillars will be even more important as we continue to bring leading energy transition

technology forward. Our stakeholders care deeply about how we do that and highlight in their feedback that our emphasis on product design and lifecycle management, as well as product quality and safety, are critical to prioritize across the Renewable Energy and Power businesses. With the evolution of a combined energy business portfolio, we look forward to the opportunity to take a more holistic approach to further strengthen programs in those areas, completely aligning with our ambition to advance our leading role in the energy transition.

RENEWABLE ENERGY

• Human Rights & Community Relations	• Climate Change & Resiliency • Governance & Ethics • Product Design & Lifecycle Management • Product Quality & Safety • Supply Chain Management
• Critical Incident Risk Management • Access, Affordability & Health Equity • Waste & Hazardous Materials Management • Water & Wastewater Management	• Business Model Resilience • Diversity, Equity & Inclusion • Data Security • Talent Management & Engagement

POWER

• Human Rights & Community Relations • Critical Incident Risk Management • Access, Affordability & Health Equity • Waste & Hazardous Materials Management • Water & Wastewater Management	• Climate Change & Resiliency • Governance & Ethics • Product Design & Lifecycle Management • Product Quality & Safety • Supply Chain Management
• Data Security • Talent Management & Engagement	• Business Model Resilience • Health, Safety & Well-being • Access, Affordability & Health Equity • Diversity, Equity & Inclusion • Data Security • Talent Management & Engagement

GE Aerospace

Climate change, governance and ethics, and product quality and safety were the top issues identified by both internal and external stakeholders of GE Aerospace. This strong alignment is not a surprise given the nature of our business and the critical contribution of each element to safe and more sustainable flight. Our commitment to each of these areas can be seen through our current activities. As an example, our commitment to climate change is clearly demonstrated in our commercial portfolio renewal (see page 37), efforts supporting Sustainable Aviation Fuel (see page 38) and our focus on innovative breakthrough technologies (see page 40). This assessment also confirmed our efforts focused on employee safety and well-being, data security, product design and lifecycle management (see page 97), talent management and engagement, and inclusion and diversity (see page 72) are indeed core to our continued success. We have made much progress in each of these areas and remain committed to continuing to strengthen and expand our efforts to accelerate the pace of change in our business.

Corporate

The GE Corporate assessment reinforces that GE's success on its climate change goals—instilling a culture of ethics and compliance, and its safety focus—are top priorities internally and externally where we must lead for success. As described above, we are taking stronger steps to communicate our commitment to product safety and quality, and to advance our programs on product stewardship. We share our stakeholders' interests in securing the highest standards on human rights and a strong priority of diversity and inclusion. Our separate reports detail our efforts and initiatives.

• Climate Change & Resiliency • Governance & Ethics • Product Design & Lifecycle Management • Product Quality & Safety	• Climate Change & Resiliency • Governance & Ethics • Product Quality & Safety • Health, Safety & Well-being
• Data Security • Talent Management & Engagement	• Data Security • Product Design & Lifecycle Management

• Diversity, Equity & Inclusion • Supply Chain Management • Waste & Hazardous Materials Management	• Diversity, Equity & Inclusion • Supply Chain Management • Talent Management & Engagement
• Human Rights & Community Relations • Regulatory Engagement	• Data Security • Talent Management & Engagement • Supply Chain Management

Our Strategy for Continuous Improvement and Eliminating Waste



One of the 15 control centers where kaizen participants gathered to dig into the problem of missed deadlines at Avio Aero's plant in Pomigliano d'Arco, Italy (photo credit: Avio Aero).

Lean continues to be the way we run our businesses and it is becoming more deeply embedded across the organization. A lean mindset focuses on safety, quality, delivery and cost (SQDC)—in that order—and gives us the tools and instincts to make the right decisions and necessary trade-offs. By deeply embedding lean principles and tools, we are creating a problem-solving culture, serving our customers better, and making progress on our pledge to achieve carbon neutrality in our own operations by 2030, including Scope 1 and Scope 2 emissions. Lean continues to generate new opportunities for sustained improvements and waste elimination.

Our teams from a variety of functions—including environment, health, safety, quality, engineering and supply chain—work together regularly with support from GE lean leaders to go to genba, or “where the work is done,” and drive process improvements to eliminate waste. Our teams are able to problem solve at the point of impact, introduce standard work and integrate a more rigorous daily management cadence. All of this work is helping us reduce our carbon footprint and emissions and be more efficient, all while delivering essential, life-enhancing products quickly and efficiently.

GE employees are embracing the opportunity to get better every day with a continuous improvement mindset. This mindset is the business philosophy incorporated into lean management that is at the core of GE’s culture—and it’s evident across the work our employees do each day. For example, at our GE Aerospace site in Greenville, South Carolina, our team performs complex machining operations and detailed inspections on high-pressure turbine blades. With a clear focus on reducing blade delivery lead time, the team knew they could deliver better results, driving them to create standard lines, which in turn improved part flow. This has reduced lead time by more than 10 days, with a clear target for more reduction to come, improving our operations for our customers and reducing inventory.



Going to genba at GE Aerospace in Hooksett, New Hampshire.

“Developing a lean mindset takes many years, but we are gaining ground—removing the waste that holds us back to allow for real breakthroughs.”

Larry Culp
Chairman and CEO, GE
CEO, GE Aerospace



IMPROVING FACTORY ERGONOMICS WITH LEAN

Workers at GE Aerospace’s Lafayette, Indiana, jet engine manufacturing plant were facing a problem. In the CFM International LEAP² engine’s compressor module assembly, technicians had to hand-start 48 nuts using only a quarter-inch socket extension and with limited visibility. This is a tedious process that forced technicians to use repetitive wrist and hand movements.

A cross-functional team used lean to come up with a creative solution. They developed computer-aided design software to draw up a prototype of a gear-driven socket wrench, borrowing on a gear-and-belt concept from another tool in use at the plant. The technicians added a small mirror to the wrench, which would allow them to see into the blind flange of the module and ensure that a nut is installed. The newly designed tool also allowed them to keep their arms, wrists and shoulders in a more neutral position. The new nut assembly tool not only improved operations, it eliminated ergonomic risk factors and prevented injuries.



EMBRACING LEAN TO BOOST PRODUCTIVITY AND ENHANCE SAFETY

The GE Grid Solutions Advanced Manufacturing Facility in Clearwater, Florida, is helping lead a new era of energy by helping to build a cleaner, better future. With hundreds of employees across various buildings, workstations and offices in the 190,000-square-foot facility, the sheer scale and complexity of the plant made it difficult to identify production line inefficiencies, understand root causes and eliminate them.

Clearwater’s managers and operators participated in a weeklong kaizen to identify waste and safety risks on shop floors and to address and implement countermeasures to prevent both from reoccurring. Through genba walks, the team drew up charts that broke down the manufacturing process into individual steps. Through this, they discovered the production time for a specific power-sensing component was unexpectedly long, and operators working this line were overly fatigued, causing safety concerns.

Working together, employees made a series of fixes, small and large—including repositioning workstations, machines and tools to cut out the unnecessary waste, and adding hands-free soldering irons and special safety curtains. These changes provided employees with a clearer line of sight into the day-to-day production flow and output, lowered operational costs and improved safety.

USING LEAN TO REDUCE EMISSION AND ENERGY COSTS

At our Gas Power facility in Schenectady, New York, the GE team builds and services steam turbines and generators for customers around the world. Compressed air is used to power pneumatic motors and other machines that help keep numerous assembly lines and shops running smoothly. However, the largest building on campus, at 1.1 million square feet, was releasing compressed air, and finding the leak in that vast amount of space was no simple task. The team went to genba to identify the source—a powerful air dryer used to keep generator parts dry was malfunctioning. It was purging air at an abnormally high rate, which was wasting compressed air and electricity. The team examined and immediately adjusted the regeneration cycle and consulted experts to replace controls and reprogram the unit. With these improvements, the team expects to lower the building’s energy usage as well as electricity costs. The Schenectady Facilities Operations team does not plan to stop here. They intend to install meters to monitor the air system and find leaks quickly while also identifying other opportunities to reduce energy consumption.

IMPROVING OPERATIONS WITH LEAN

With more than 1,000 employees, Avio Aero’s plant in Pomigliano d’Arco, Italy, provides airfoil and combustor manufacturing and component repair and overhaul services. Pomigliano d’Arco was a flourishing plant, but the pace of production masked problems like missed deadlines. To troubleshoot, the team held a kaizen—which translated from Japanese means to “change for the better.” Site operators, manufacturing specialists, managers and business leaders participating in the kaizen drew maps of the site’s problem-solving processes on a whiteboard, which revealed the main cause of the missed deadlines—cumbersome processes to escalate and eliminate issues on the shop floor. The Avio Aero team instituted new procedures, which eliminated nearly all the delays, down from around half of all orders just two years earlier. It is estimated more than 2,000 supply chain issues have been eliminated over the past two years. Consequently, delinquencies have plummeted and the site is in the 90-100% range in terms of on-time delivery, which promises an uptick in customer satisfaction levels.

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 we are regularly reporting on, 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.

By deeply embedding lean principles and tools, we are creating a problem-solving culture and serving our customers better. At our GE Aerospace site in Greenville, South Carolina, our team performs complex machining operations and detailed inspections on high-pressure turbine blades. With a clear focus on reducing blade delivery lead time, the team created standard lines, which in turn improved part flow. This has reduced lead time by more than 10 days, with a clear target for more reduction to come, improving our operations for our customers and reducing inventory. This is just one of the countless examples of effective utilization of lean across GE.

Our progress on these priorities has made our foundation strong enough to launch three companies. More than a year after this announcement, the logic behind—and our conviction in—our historic transformation has only strengthened. Along the way, the feedback from our customers, investors, employees and other stakeholders has been overwhelmingly positive. Read how lean is making an impact and changing the way each of our businesses work for the better.

GE Vernova: Product Safety and Quality

Safety and quality are paramount in the design, manufacturing, testing, servicing and monitoring of our energy products around the world.

SAFETY CULTURE

Our Product Safety Quality Management System procedure explains the process for internally reporting, resolving, closing and documenting product safety concerns and product safety issues. It provides the overall product safety framework for GE's energy portfolio and aims to eliminate unreasonable safety risks. The procedure aligns to GE's Corporate Environment, Health and Safety policy and is underpinned by internal standards and industry frameworks such as International Organization for Standardization (ISO), American National Standards Institute (ANSI), International Electrotechnical Commission (IEC), Institute of Electrical and Electronics Engineers (IEEE) and, in some cases, U.S. military standards. In addition, we follow internationally accepted hazard assessment principles and tools, as well as risk assessment and risk mitigation techniques. An example of how the quality management and safety policies work in practice is the requirement for reviewing human factors and EHS for all new designs of products and services. Engineers partner with their counterparts in EHS, field services and manufacturing to consider the EHS impacts as well as aspects of serviceability and maintainability of the equipment throughout the product lifecycle. These additional considerations include factors that could potentially influence human performance in the field and impact, for instance, the design of equipment with regard to ergonomics and work station layout, work procedures, training, and communication or coordination of work activities.

At our Wind businesses, the safety of our products, and the people who install and maintain them, is a top priority. All our employees and contractors are empowered to stop work when something appears to be unsafe. The businesses are on a journey to build a world-class safety culture and work in different ways at all levels to ensure employees have the ability and skills to proactively identify future safety risks and develop plans to continue to better integrate safety into our daily work.

Our Onshore Wind business launched two programs geared toward collaborative and practical safe product design, Touch the Turbine and Safety by Design. The Touch the Turbine program aims to enhance turbine field knowledge and awareness for design engineers. By giving more field experiences to engineers, we expect to increase their awareness about the risks that design features and rules can potentially present for the field teams and, in the long term, reduce the injury and illness rate. We are connecting the dots between field teams and engineering with the intent to put human factors back into our design processes, which is key to ensuring the quality of our products and the safety of all team members working in the field. The Safety by Design program's purpose is to reduce injury and illness rates attributable to product design by proposing continuous improvement of turbine design, in addition to the engineering safety proactive and reactive processes. The program is proposing design changes based on ergonomics, safety and human factors recommendations, as well as the improvement of internal design guidelines. Additionally, GE is represented as Chair of the Global Wind Organization (GWO).

GWO is a non-profit body founded by globally leading wind turbine manufacturers and owners. Members strive for an injury free work environment in the wind turbine industry, setting common international standards for safety training and emergency procedures.

Our Gas Power business has established product safety procedures that apply to all Gas Power business entities, products and services to eliminate unreasonable safety risks. General requirements include assuring prompt actions addressing product safety issues, a Product Safety Review Board (PSRB) to oversee the effectiveness of the product safety process, organizations responsible for product design/engineering and plant engineering establishment of a Safety Program Management Team (SPMT). Organizations complete a product safety review for Gas Power designed products to identify inherent hazards of the system, hazard control measures and risk for harm to occur. These reviews are documented in the SAFER database, facilitated by a product safety engineer and reviewed by a chief consulting engineer or designated controlled title holder. To detect product safety concerns for post shipment and installed base equipment, organizations with product service responsibilities establish a process for communicating with Product Safety Engineering any product safety concerns related to Gas Power products and services. The SPMT determines if the concern is a valid product safety issue. For any safety event, the issue is recorded in the SAFER database, actions necessary to resolve the issue are determined, and the issue is tracked to resolution.

COMMITMENT TO QUALITY

In 2021, our Onshore and Offshore Wind businesses launched their Root Cause Analysis Quality Suite, a simplified, standardized and digital approach for root cause analysis allowing us to record and manage the process to correct, identify and remove recurring issues. Another area



ACETONE ELIMINATION TO IMPROVE HEALTH AND SAFETY ACROSS SITES

At LM Wind Power, safety is our priority and this commitment to ensuring safety led us to eliminate the use of acetone at all manufacturing and testing facilities, laboratories and service departments worldwide. Acetone has excellent cleaning performance and was used during various stages of the blade production process.

After careful research and evaluation with favorable outcomes, dibasic ester (DBE), a non-flammable, readily biodegradable and non-corrosive chemical was selected as a replacement and a full-scale rollout followed across the company. Now, acetone is fully substituted and the environment in the facilities has improved significantly.

[Learn more ▶](#)

of focus was supplier quality. We are launching a new Supplier Quality Management Board and a training webinar to improve quality across Renewable Energy.

At our Gas Power business, the Quality Management System (QMS) meets all ISO 9001 Standard requirements and is designed to deliver products and services that meet our customers' expectations. The following four pillars form the basis of our Quality Policy as described below:

- **Zero defect culture.** We protect our customers through a culture that accepts no defects, creates no defects, passes no defects. We deliver with focus, using standard work and lean for quality. We comply with all applicable requirements and regulations.
- **Management of change.** We protect our customers both internal and external by developing a risk-based change management program to identify and mitigate potential nonconformances.
- **Supply base quality.** We partner with our suppliers and empower our employees to innovate, solve problems rapidly with rigor and perform quality stop work when needed to protect our customers.
- **New product introduction.** We deliver products and services right the first time, every time. We continuously improve our processes and systems leveraging past lessons and implementing sustainably.

By keeping laser focus on the customer, meeting our QMS requirements and the four pillars as our true north, while leveraging our lean approach to driving transformational improvements, we will significantly decrease our quality escapes, defects and customer events, not only improving customer experience but also reducing CoPQ (scrap, rework, warranty costs), enabling quality as a competitive advantage driving profitable growth. We continue to strengthen our Stop Work Program by leveraging the safety behaviors into quality.



IMPROVING FLEET AVAILABILITY AT ONSHORE WIND

GE has quickly innovated in the fast-growing onshore wind industry, introducing larger turbines to provide leading performance for customers worldwide. However, like much of the industry, such rapid innovation strains manufacturing and the broader supply chain. In October 2022, we announced we're simplifying and standardizing our onshore wind portfolio into what we call workhorse products, so we and our suppliers can implement more repeatable manufacturing processes, and thereby enhance product quality and reduce cost. In our existing fleet, we're deploying corrective measures, enhancements, and monitor and repair programs to improve fleet availability. We expect to implement the corrective measures over the next couple of years. With fleet availability as our true north, we'll continue to be a leader and deliver for our customers.

GE Aerospace: Product Safety and Quality

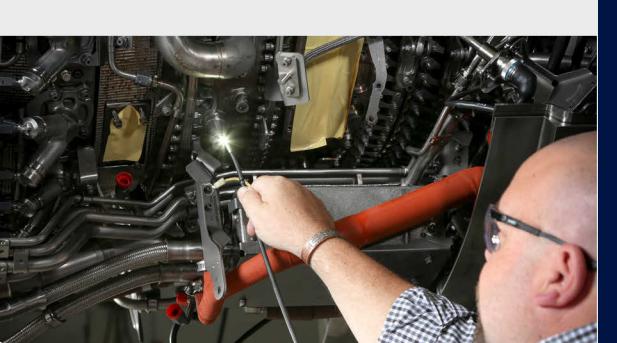
COMMITMENT TO SAFETY

GE Aerospace has a strong product safety focus, including a voluntary Safety Management System (SMS) aligned with the UN's International Civil Aviation Organization (ICAO) SMS framework. GE's SMS was assessed and accepted by the U.S. Federal Aviation Administration (FAA) in December 2017—the first such acceptance granted by the FAA for a design and manufacturing company. GE Aerospace SMS is founded on four key tenets:

- **Policy.** Embedding top-down commitment to safety in policies and review rhythms.
- **Promotion.** Creating a positive safety culture in the workforce through training, education and awareness.
- **Risk management.** Executing independent risk assessments per approved FAA process.
- **Assurance.** Validating effectiveness of risk-control strategies in design, manufacturing, quality and product performance.

DESIGNING FOR PRODUCT SAFETY

Each new engine type developed by GE Aerospace is subjected to rigorous testing throughout the development and certification process. GE Aerospace has developed unique testing capability at the part, module and product levels to ensure new technology we bring to the market meets and exceeds all safety requirements. Our engine testing facilities have the capability to perform rain and hail storm, engine icing and other extreme tests. Our 747 flying test bed aircraft provides the unique opportunity to flight test engines under a wide range of conditions, combined with the ability to gather real-time data via specialized instrumentation.



PRODUCT QUALITY

GE Aerospace operates based on the guiding principle of "safety first, quality always." This principle is embedded in all of our operational rhythms and manufacturing systems. All new aircraft engine component parts are manufactured under a quality system approved by the FAA and certified to meet the most current aviation industry standards in AS9100D.

Underlying both the civil aviation regulatory approval and industry accreditation is the proactive quality framework, a unique strategic approach to driving a quality culture at GE Aerospace designed to:

- Create a zero defect culture by setting processes right on day one and managing change using an advanced product quality planning (APQP) toolkit.
- Measure and mitigate risk using predictive quality analytics (PQA) by focusing on leading indicators to impact voice of the customer.
- Grow our people through a Quality Excellence Program (QEP) with a relentless focus on continuing education.

GE AEROSPACE'S QUALITY EXCELLENCE PROGRAM

As part of our quality focus, GE Aerospace launched a Quality Excellence Program to build domain expertise that is unique to the aviation industry through a combination of training, application and certification, and controlled title holder (CTH) experts.

• LEVEL I – TRAINING

Customized training including Root Cause & Corrective Actions (RCCA), Process Failure Modes and Effects Analysis (PFMEA), Advanced Product Quality Planning and Six Sigma.

• LEVEL II – APPLICATION & CERTIFICATION

Participants move from learners to leaders as they assume leadership roles in projects building on their training and perform product audits. Following completion of Level I training and a portfolio of Level II projects, candidates are eligible for QEP certification after a rigorous review process.

• CONTROLLED TITLE HOLDER (CTH) EXPERTS

Subject matter expert candidates are nominated through our technical talent review process for specific quality domain expertise areas such as manufacturing, regulatory compliance and quality systems. These individuals, following specialized mentoring and demonstrated broad project leadership, comprise our Quality CTH network and lead training, coaching and consulting across the organization.

CULTURE

Leading with Integrity and *The Spirit & The Letter*

Integrity is critical in everything we do. This is reflected in our three Leadership Behaviors—act with humility, lead with transparency and deliver with focus—**always with unyielding integrity**. These behaviors, along with our employee code of conduct, *The Spirit & The Letter*, set the foundation for our compliance program, where we expect our leaders and all our employees to personally drive a culture of integrity everywhere we do business.

Leadership Behaviors

GE's Leadership Behaviors form the foundation of our culture. For us at GE, these are more than just words; they are changing the way we work and signify a meaningful shift in our culture. These Leadership Behaviors are instrumental in driving engagement throughout our businesses, particularly related to lean.

Act with humility

Humility helps us recognize what we do not know. Ask questions, then listen carefully.

- We embrace a culture of respect which values inclusive teams and diverse perspectives.
- We actively listen to internal and external sources.
- We learn from our shortcomings as much as we celebrate our wins.

"Humility to me is all about thinking that the other person is also essential to your success, regardless of their level in the organization. When we truly treat others with respect, actively listen to them and ask for help when needed, we strengthen teamwork and allow people to feel cared about and important."

Poliana Casal
Latin America CFO – GE Power Conversion, a GE Vernova business

Lead with transparency

Transparency makes us call it like we see it, highlighting the good and the bad in equal measure.

- We embrace candor, saying what we think, not what people want to hear.
- We share information so we can solve problems.
- We contribute to each other's development in a constructive way.

"Learning is critical to our success individually and as an organization. Both sides of transparency, willingness to candidly share information and creating an environment where information flows without fear, enable us to learn, grow and improve our performance."

Kim Ravenhall
Executive Director – CFO Aviation Edison Works, GE Aerospace

Deliver with focus

Focus helps us prioritize what we will and will not do.

- We put safety first.
- We prioritize our work, maximizing our impact.
- We measure performance through the lens of our customers.
- We are committed to continuous improvement always in search of a better way.

"Safety and delivery are first principle requirements. Our focus is on including quality and cost, with the same intensity, in the success equation to bring long-term value to our customers and markets served."

Shanon Lutomski
Executive Sourcing, Global Fulfillment & Logistics Operations, Onshore Wind, a GE Vernova business

Culture Survey

In the first quarter of 2023, we conducted our third annual enterprise-wide culture survey to gauge our progress on our Leadership Behaviors, as well as areas such as integrity, safety and lean. While there was expected variability in the results among our businesses related to certain topics, a company-wide view of trends confirmed GE's strong foundation in compliance efforts. In addition, safety questions scored high again this year, yet we are focused on driving further action so our front line feels as strongly about our safety efforts as the overall company, including management as described on pages 82-84. Employees identified progress on personal and career growth, while candor and transparency remain areas of opportunity. We believe listening and gaining these insights drive improvement, in both our business and our culture. This year again, the survey reflected improvements in the results on diversity and inclusion, underscoring our leadership commitment to both.

The Spirit & The Letter

Our integrity anchor is our robust employee code of conduct, *The Spirit & The Letter* (S&L). As the name suggests, this code of conduct is intended to hold our employees to a higher standard above and beyond simply following the letter of the law. We expect our employees and our Board of Directors to comply with the spirit of these policies and our company values. Available for download in 21 languages, the S&L sets forth core employee and manager integrity expectations and summarizes our key company-wide compliance policies. At GE, salaried employees are expected to affirm their commitment to abide by the S&L by completing The Spirit & The Letter Acknowledgement at the time of hiring and then again every year subject to local labor law restrictions. In 2022, 99% of eligible employees completed The Spirit & The Letter Acknowledgement. GE also requires its third parties—including distributors, suppliers, agents and partners—to comply with relevant aspects of the S&L and, as necessary, will educate those third parties about applicable policy requirements.

The S&L and its accompanying policies address the full spectrum of integrity and compliance issues across GE's global value chain. In 2021, GE published its latest version of the S&L. In response to an evolving workforce, we designed the latest S&L to be easy for different learners and workers to digest on any device. Accordingly, we made the S&L available both for downloading as well as for interactive, mobile-friendly browsing. The interactive version is directly accessible to employees through our GE Integrity Mobile App and includes embedded links to key policies, resources and videos for compliance help on-the-go.

Within the S&L framework, there are 19 core policies to help employees perform their jobs and navigate key regulatory areas under compliance. As these policies are intended for our entire employee population, we most recently updated all policies in 2021 to be simpler, principle-based, and easier to understand and follow. Our policies adopt a practical layout for efficient navigation. The information is organized as follows:

- **What to Know** states GE's commitments in the specific policy area and provides helpful context on why the policy matters.
- **How to Comply** covers the specific role and responsibilities employees need to follow to be compliant with GE's expectations.
- **Get Help** lists valuable, relevant resources for additional guidance on the policy topic and information on how to raise concerns.

Key terms in the policies are captured in a dedicated definitions section, and all policies contain information on where to go for additional assistance.

These policies are augmented by 22 Enterprise Standards, which set forth the core programmatic expectations for the businesses in all of our significant compliance risk areas. Each Enterprise Standard defines the specific risks businesses must document and address, outlines auditable controls, and requires, among other things, that the businesses have appropriate mechanisms in place to monitor those controls. We periodically refresh our policies and Enterprise Standards as necessary and appropriate, including to incorporate lessons learned and findings from investigations and internal audits.

The Spirit & The Letter core policies

- Acceptable Use
- Anti-Money Laundering
- Conflicts of Interest
- Cybersecurity
- EHS
- Fair Competition
- Human Rights
- Improper Payments Prevention
- Insider Trading and Stock Tipping
- Intellectual Property
- International Trade Compliance
- Open Reporting
- Privacy
- Quality
- Reporting and Recordkeeping
- Respectful Workplace
- Security
- Supplier Relationships
- Working with Governments

Our commitment to integrity and open reporting serves as the foundation for GE to deliver on its other commitments and to help build a world that works.

[Read The Spirit & The Letter ▶](#)

[Read Our EHS Policy ▶](#)

[Read Our Open Reporting Policy ▶](#)

[Read Our Respectful Workplace Policy ▶](#)

ALWAYS WITH UNYIELDING INTEGRITY

GE's Ethics & Compliance Program



Vicki Lungford
servicing a 7HA.03
gas turbine in
South Carolina.

GE's Ethics & Compliance program focuses on prevention, detection and response. It begins with GE leadership's personal engagement on integrity. GE leaders across the businesses personally drive a culture of integrity everywhere GE operates by leading by example, incentivizing compliance and promoting open reporting. This culture is supported by a robust Ethics & Compliance program. To ensure the program is evolving as new risks emerge, GE relies on a team of legal and functional experts to help us stay ahead of significant compliance risks and a changing regulatory landscape.

Compliance Training and Communications

Each GE business uses a focused training and communications plan to educate employees about the risks that are associated with their work. With a broad, global workforce across multiple business segments, plus changing workforce demographics and modes of communication, the GE program requires constant reinvention and customization by each GE business to stay relevant. Salaried new hires across all GE businesses receive a streamlined basic compliance training course.

Additional training on key risk areas is provided to targeted employee groups based on risk. Each GE business also reinforces these learnings through a variety of communications, including leadership messages, newsletters, integrity campaigns, videos, infographics and embedded messaging within various digital tools. We invest in refreshed content on an ongoing basis, and business training and communication plans are adjusted annually based on the output of our enterprise compliance risk assessment.

Voice of Integrity: Open Reporting

Open reporting is a cornerstone of GE's commitment to integrity. Every employee is responsible for integrity, and GE expects its leaders to foster an environment in which employees are encouraged to raise integrity concerns without fear of retaliation. Employees serve as the best line of defense for the early detection of potential issues, and open reporting activity is one of the best indicators of a culture of integrity and employee engagement on compliance priorities.

GE manages employee concern reporting through its Global Open Reporting & Ombuds program. Under the program, employees are required to submit concerns regarding potential violations of law, regulation or GE policy through one of the available open reporting channels, including managers, human resources, legal, compliance, internal audit, ombuds and anonymously through webform. The program serves as a safe forum for whistleblowers; GE understands it can be difficult for some employees to come forward with their concerns and the anonymous reporting channel is a critical pillar of the open reporting program. Each business has at least one full-time ombudsman and, in addition, a network of part-time employees across the globe to whom concerns can be raised. In 2022, 2,288 concerns were raised, 2,160 of which were closed, with the remaining cases pending due to ongoing investigations and further review.

GE fully examines every integrity concern raised and takes necessary remedial actions where appropriate. During the investigation process, GE:

- Forms an independent and objective investigation team.
- Obtains the facts through interviews and/or reviews of documents.
- Reaches conclusions, whenever possible, from the facts the team is able to obtain.
- Recommends corrective action, if necessary.
- Provides the person who raised the original concern (if that person is known) with feedback on the outcome, while maintaining the confidentiality and privacy of all involved to the extent possible.

Certain cases are treated with special care depending on the individuals or content involved. Concerns related to senior executives or company officers must be escalated, as must be any complaint that could materially impact financial reporting or controls, or that relate to federal securities law matters. Finally, the Significant Cases Committee (SCC) is responsible for performing monthly reviews of high-risk open reporting investigations across the company. The members of the SCC include the Chief Audit Executive and Vice President of Compliance and Global Investigations. The SCC reviews the significant case criteria annually to ensure both internal and external risks are considered.

GE measures the strength of its open reporting program using a number of metrics, which are reviewed at least monthly throughout the year. The program tracks the average number of days it takes to close each investigation raised through open reporting, targeting resolution within 60 days of being reported. Businesses are required to escalate to the SCC any cases open for longer than 90 days that come through open reporting channels. The program also measures cases per 1,000 employees, which enables year-over-year comparisons within and across businesses, and enables us to control for any headcount changes. In addition, we track confirmation and anonymity rates, which are important to understand the health of our program.

Retaliation for raising a concern or for participating in an integrity investigation is strictly prohibited, and violations are dealt with seriously and swiftly, up to and including termination.

Compliance Risk Mitigation

GE's Ethics & Compliance team runs an annual assessment that focuses on evaluating the inherent risks and the strength of our internal controls across all our businesses. The assessment process asks each business to benchmark its own compliance programs against *The Spirit & The Letter* policies, which the Ethics & Compliance team includes in an overall assessment as to how GE performs in each key policy area. Insights from this process are used in many aspects of the compliance program including identifying additional training needs, control improvements and other areas that may need remediation efforts. The compliance risk assessment also feeds into the GE Enterprise Risk Management process, as appropriate.



Aaron Ruth
and Aric Nutter
at Long Ridge
Energy in
Hannibal, Ohio.

Compliance Governance

GE has a rigorous compliance governance process, both at a corporate and business level. Each business holds a quarterly review board meeting, which is attended by the most senior business leaders, including the CEO, during which their risk assessment, mitigation efforts and other compliance issues are discussed. Additionally, each business meets with the company's Chief Compliance Officer twice per year to discuss its risk assessment, any program weaknesses or enhancements, and any compliance trends, and reports its most significant enterprise risks and compliance issues to the Audit Committee on an annual basis.

At a corporate level, the Chief Compliance Officer holds two to three meetings per year with the company's most senior officers to discuss significant program updates, open reporting trends, significant investigations and business updates on key risk areas. In addition, the Chief Compliance Officer and Vice President of Compliance and Global Investigations report on the same issues to the Audit Committee regularly.

Anti-corruption and bribery

GE has long taken a leading role in pushing for transparency and integrity in the global marketplace. Our stance against improper payments in business transactions is a key element of our compliance program and represents a core belief in how we do business. In short, GE prohibits bribery in all business dealings, in every country around the world, with both governments and private sector. This prohibition applies to GE employees, as well as external parties who work for or represent GE.

We maintain strong controls aimed at preventing and detecting bribery. GE's approach to compliance in this critical area is multifaceted. Among its key features are:

- Corporate policies and procedures that reflect the company's approach by prohibiting improper payments in every transaction, whether with a government or with a private party.
- Extensive controls, including thorough due diligence, careful screening and training on GE policies for third-party intermediaries such as distributors, service providers, and commercial agents and representatives.
- Heightened attention to key risk areas such as gifts and entertainment, travel and living expenses, donations and facilitating payments.
- Prompt investigation and remediation of any concerns.
- Extensive training of GE employees on improper payments.
- Robust internal controls and accounting processes designed to detect and prevent violations of company policy relating to improper payment risks and to ensure accurate books and records relating to transactions.
- Increased emphasis and enhanced due diligence concerning improper risk associated with mergers, acquisitions and joint ventures.

Specific expectations of suppliers regarding lawful business practices and anti-corruption can be found in the [GE Integrity Guide for Suppliers, Contractors and Consultants](#).

THE IMPORTANCE OF STRONG ANTI-CORRUPTION COMPLIANCE

Greater attention is being paid to the effectiveness of corporate compliance programs in preventing improper payments. The Justice Department and the U.S. Securities and Exchange Commission (SEC) have issued a resource guide on the U.S. Foreign Corrupt Practices Act (FCPA) that endorses a strong compliance program. The U.K. Bribery Act, the Clean Company Act in Brazil, the Sapin II Law in France, the 231 Decree in Italy and the U.S. Sentencing Guidelines similarly highlight the need for a strong program. As part of the compliance program at GE, operating with a strong anti-corruption program is a critical component in how we do business.

[Anti-Corruption Policy ▶](#)

Privacy and Cybersecurity

GE is committed to protecting information about our employees, customers, suppliers and company, as well as the technology resources GE provides to our employees and contractors. We have adopted a defense-in-depth approach, in which multiple layers of security controls are placed throughout our systems, and a security-by-design approach to build security into our products, both of which enable GE to proactively protect against and respond to a dynamic cyber threat landscape. As such, GE has implemented detailed cybersecurity and information protection policies.

GE's Cybersecurity Framework

At GE, ensuring the security of our information, systems, products, and network is, and always will be, a top priority. GE has adopted the National Institute of Standards and Technology Cybersecurity Framework and International Organization for Standardization 27001 Framework as the basis for our cybersecurity controls framework. Each cyber function—identify, protect, detect, respond and recover—is managed by defined governance, risk assessment, control implementation, and control effectiveness monitoring and metrics.

GE has implemented a layered defense approach to security, which combines multiple mitigating security controls to protect our resources and information and improve our cyber resiliency. Our central cybersecurity framework reaches our shared services operations and the businesses to optimize our protection based on industry specific requirements.

We devote substantial resources to maintaining an information technology infrastructure that implements physical, administrative and technical controls designed to protect information stored on GE's networks, including customer information, personal information, intellectual property and proprietary information. Information that could result in a significant harm to GE if lost, or intentionally or accidentally misused, is subject to enhanced security controls. GE's most sensitive information is identified and included within the scope of GE's crown jewel program through an annual review and analysis of GE's critical business information and programs.

In addition, we have committed resources and implemented processes to more effectively prevent, detect and respond to cyber threats. GE's central cyber crisis management team exercises, tests and continually improves our cyber crisis management plan through rigorous tabletops and simulations at the enterprise and business levels. Working with GE legal, communications, privacy and compliance teams, the central cyber crisis management team also addresses any security concerns or incidents that could present an enterprise risk to GE, which includes third-party supplier incidents. These measures reflect GE's long-term commitment to protecting our employees, serving our customers and preserving shareholder value. Despite these measures, GE may not be able to successfully prevent or defend against all cyber-related attacks.

GE's approach to product cybersecurity includes lifecycle management, vulnerability management, customer notifications, incident response, issuing security bulletins and advisories, and a dedicated channel for receiving and responding to vulnerability reports. We have also developed secure development lifecycle design practices to secure our software designs and connected products.

Protecting GE's Digital Ecosystem

The increasing degree of interconnectedness among companies and their affiliates, partners, suppliers and customers underscores the need for companies to evaluate cybersecurity threats not only to their own internal networks, but also to the larger ecosystem in which they operate. We understand that protecting the confidentiality, integrity and availability of information on GE's network necessarily extends to business partners who are afforded access to such information. GE contractually requires its suppliers to appropriately secure and maintain their information technology systems and protect GE's information on their systems. GE performs security assessments on certain suppliers based on a risk assessment and rating process performed by GE's cyber team. Higher risk suppliers are subject to more frequent reassessments and on-site assessments.

GE understands our employees serve an important role in helping to safeguard GE's information and systems. At the enterprise level, we provide comprehensive security awareness training to help our employees understand their information protection and cybersecurity responsibilities at GE, identify phishing and other cyber threats, exercise vigilance and secure methods when sharing sensitive information with third parties, and practice good cyber hygiene in their personal lives and when using social media. GE businesses provide additional training tailored to their customer requirements, regulatory obligations and industry risks.

We recognize technology and the nature of its threats and risks are changing, and GE will continue to evolve to meet those changes. GE believes collaboration is important for effective cybersecurity solutions—bringing together the best minds and the best ideas. Global interconnectedness means that no one company or country operates alone. We continuously seek to engage with regulators, customers, suppliers, employees and industry colleagues to improve cybersecurity collaboratively. In addition, we engage in public-private partnerships, such as information sharing and analysis centers, to share actionable cyber threat indicators. These activities have resulted in improved capabilities that are quicker and more effective in responding to dynamic threats.



Will Moore
working on
data systems in
South Carolina.

Cybersecurity Governance and Leadership at GE

GE's Global Chief Information Security Officer (CISO) is responsible for developing an information security program that enables business leaders to make risk decisions while protecting the business from security threats and risks. This program is designed to protect GE's products and information resources, and the information contained therein, including employee, customer and supplier information stored in GE's systems. The Global CISO works collaboratively with business unit CISOs to analyze cybersecurity and resiliency risks to GE; consider industry trends; implement controls, as appropriate, to mitigate these risks; and enable business leaders to make risk-based decisions. As part of its oversight role, the Audit Committee of GE's Board of Directors reviews GE's practices and programs related to cybersecurity periodically throughout the year. The Audit Committee is updated regularly on GE's cyber threats and risk management strategy. GE's Global CISO meets on a recurring basis with our CEO and other senior leadership to review and discuss GE's Cybersecurity program, including emerging cyber risks, threats and industry trends. The business CISOs conduct business level reviews and discuss cyber-related issues at regular meetings. In addition, GE periodically engages third-party cybersecurity companies to assess GE's Cybersecurity program for maturity, effectiveness and consistency with prevailing industry standards and GE's regulatory requirements, as well as test GE's security posture.

GE's Privacy Program

GE employs privacy practices based upon its Privacy Enterprise Standard, which is designed to support its compliance with GE's Privacy Commitment and applicable laws. The GE privacy program includes the appointment of a Global Chief Privacy Officer and a network of privacy leaders, education and awareness programs, incident response protocols, audit routines, and a privacy-by-design approach to process and system development that incorporates privacy impact assessments. The program also includes technical and organizational information security measures designed to protect personal information. Supplier engagements provide for the processing of personal information in a manner consistent with the commitment and applicable law.

GE's Privacy Commitment and APEC Certification

GE's Commitment to the Protection of Personal Information outlines standards applicable to its processing of personal information. The commitment requires GE to adhere to the following principles:

- Process personal information fairly and lawfully.
- Limit the processing of personal information to the fulfillment of GE's specific, legitimate purposes.
- Limit the processing of personal information to that which is adequate, relevant and not excessive.
- Take reasonable steps to ensure personal information is accurate and only retained for as long as necessary for the purposes for which it is collected.
- Make privacy practices clear to individuals.
- Provide for the exercise of individual rights in relation to personal information processed by GE.

The commitment establishes the basis for cross-border transfers within GE, including where operations adhere to relevant parts of the commitment as processors of personal information. GE also maintains Asia-Pacific Economic Cooperation (APEC) Cross Border Privacy Rules (CBPR) and Privacy Recognition for Processors (PRP) certifications as granted by accountability agent TRUSTe.

GE's Privacy Commitment

GE respects the privacy rights of individuals and is committed to handling personal information responsibly, in accordance with applicable law, and GE's Commitment to the Protection of Personal Information.

HUMAN CAPITAL

Investing in Our People



Advanced manufacturing at GE Aerospace's facility in Bromont, Canada.

GE's success starts with its people, and we are committed to making sure our employees fulfill their potential. GE's people reflect the strengths of GE—diversity, dedication and global perspectives, operating with the highest level of integrity and focus to fulfill GE's mission and deliver for our stakeholders. Our focus on building the best team requires regularly investing in the development of our people and ensuring the sustainability of talent and skills. We continue to evaluate our benefit offerings to support our employees and their families.

Performance Management Approach

In 2022, we continued to execute our new performance management system launched in 2021—People, Performance and Growth—which is designed to help employees understand their performance against their priorities, as well as their demonstration of GE's Leadership Behaviors. This performance management system is driving greater responsibility for performance at an individual level. Outcomes are directly linked to incentive compensation. Our executive teams conduct regular assessments, including through business reviews, talent and performance, particularly in the context of critical roles, succession and business goals. We also provide our employees with additional resources for training and strive to create a supportive work environment to help them manage professional and personal priorities.

GE's U.S. Family Benefits, Including Fertility, Parental Leave and Child Care

GE provides a variety of benefits to employees and their families, including several options of medical, dental, vision, life and disability insurance, and retirement savings. Specific to family planning and benefits, we also offer personalized guidance and resources through counselors and online services to help manage challenges, money and stress. These counselors are also able to help employees navigate adoption, pregnancy and preparing for parenthood, childcare, parenting, coping with disability, aging and preparing for retirement. Both full-time and part-time employees are offered an Adoption Assistance program that provides reimbursement for eligible adoption expenses.

Our parental leave includes up to eight weeks of disability for the delivery, plus additional paid leave of up to 10 weeks for maternity, paternity or adoption. Full-time salaried employees also receive permissive leave, which allows them to take time off when needed with no predefined limits. To support parents, we offer a number of other benefits including:

- **GE Babies.** On-demand maternity RNs provide personalized advice, tools and resources to guide moms through pregnancy planning, post-partum, infertility support, high-risk pregnancy and premature birth, and resolution of benefits and claims issues.
- **Maternity Care Select.** In certain markets, GE negotiated arrangements provide an enhanced maternity benefit for delivery, inpatient hospital stays and routine prenatal care.
- **Moms on the Move.** GE moms who are nursing and traveling for business within the U.S. ship milk back to their babies for free. Moms can request milk storage and shipping kits to be sent to their location for use with their pump. Milk is delivered back home and costs are covered by GE.



GE Vernova employee Michael Gray enjoying paternity leave with his son in Atlanta, Georgia.

Flexible Work Arrangements

GE encourages flexible work arrangements that enable employees to individualize their schedules to maximize productivity. Among the options GE offers are [flex-time](#) and part-time opportunities, [job sharing](#), reduced hours, telecommuting and remote work.



Betsy Bingham
hosting a class on
Lean Lessons.

Global Well-Being

While our employees are busy building a world that works, GE understands their personal well-being is essential to that success. HealthAhead has been GE's Global Well-being program since 2009. Its mission is to support a culture that inspires and encourages GE employees and their families to optimize their health and well-being and live a well-balanced life. We are constantly evolving and innovating to meet that mission on a global scale. We carefully measure engagement and use metrics to inform strategies for future campaigns and activities. We partner with GE businesses globally to deliver high value, sustainable resources and programs under the philosophy of "plan global, act local" to inspire engagement and reflect local cultures.

All employees have access to well-being benefits such as Employee Assistance Programs (EAP), digital tools and mobile apps such as meQuilibrium (resilience and stress management) and Grokker (video-based, holistic well-being and challenge tool). HealthAhead is currently operational in over 100 countries and has a network of more than 300 wellness champions that help us bring the program to life for our diverse workforce, whether they work at manufacturing sites, in the field, in an office building or are remote.

GE received the 2022 Best Employers: Excellence in Health & Well-being Award from the Business Group on Health, a leading non-profit organization representing large employers' perspectives on workforce strategy through innovative health, benefits and well-being solutions, recognizing GE's efforts to make the health and well-being of our employees and their families a top priority. Of the 44 Best Employer Award winners, GE was also one of four employers honored with the Excellence in Global Health & Well-being Award for demonstrating a commitment to equity with a set of standard benefits offered to their global workforces.

In addition, in 2022, we:

- Launched Healthy Bytes, an all-employee communication series, focused on wellness topics with short, engaging content tied to monthly themes reaching employees with supportive messaging.
- Provided emotional well-being materials and webinars for people leaders to assist them in creating a culture that encourages

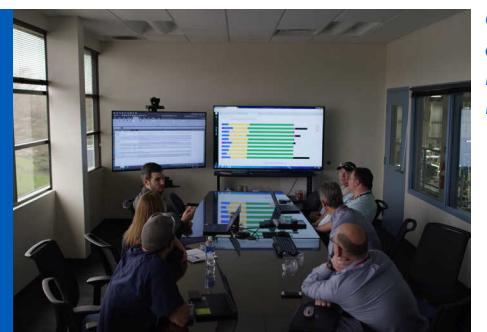
employees to seek help when needed and providing team members with support. Content includes GE resources for leaders and their teams, such as how to spot warning signs that a team member may be struggling, managing team burnout and becoming a resilient leader.

- Presented four global well-being campaigns focused on our well-being pillars: Kick off with Kindness (social), HealthAhead Day (physical), Financial Fitness (financial) and It's OK not to feel OK (emotional).
- Hosted over 30 webinars, received more than 85,000 visits to the HealthAhead website and logged more than 1 million well-being minutes during our Find 5 to Thrive challenge in May.
- Donated \$20,000 to charities earned by employees during well-being campaigns through HealthAhead.

Respectful Workplace

Providing a safe, fair and respectful work environment is embedded in our culture, operations, and policies and procedures. Aligned with our Human Rights Statement of Principles, GE prohibits discrimination or harassment against anyone based on race, color, religion, national or ethnic origin, ancestry, sex, gender, sexual orientation, marital status, genetic information, age, disability, military and veteran status, or any other characteristic protected by law. GE respects workers' rights to freedom of association, privacy, collective bargaining, immigration, working time, and wages and hours, as well as prohibits forced, compulsory and child labor and employment discrimination in our operations and business partnerships.

Our Respectful Workplace Policy in *The Spirit & The Letter* details every employee's responsibility and commitment in treating employees, applicants, customers, suppliers, contractors, and anyone we interact with or providing services to GE, with fairness and respect. The Respectful Workplace Enterprise Standard outlines guidance to ensure compliance and prohibition of discrimination, harassment or bullying against any employee or applicant based on any characteristic protected by law. Any employee with compliance concerns can raise that concern through open reporting and the Ombuds program.



GE Aerospace
employees
in Muskegon,
Michigan.

Developing Our People

GE is committed to the sustainable development of our people. A GE employee's learning journey is personalized and begins upon joining the organization. In 2022, we continued our on-the-job learning with targeted leadership development experiences to equip our leaders with the tools and practices to become lean practitioners.

On-the-job learning is supported by our online training platforms:

- BrilliantYOU houses our Lean Collection of custom assets—such as tools, templates and videos—designed to orient our employees to the Leadership Behaviors and lean capabilities required to drive our cultural transformation. In 2022, **35,488** hours of Lean Lessons were consumed by employees across all levels of the organization with **80,331 distinct** employees engaged with BrilliantYOU resources. The Lean Collection is now composed of 457 custom created lean assets and 18 structured learning pathways.
- GE Learning provides access to on-demand resources and registered more than **10 million online course completions** from across regulatory-required, GE-required and elective courses of interest spanning desktop application, soft skills, technical and product topics. On average, over 90,000 employees engage with our learning management platform monthly.



Michael
Stuter from
GE Aerospace
working on a
Leap-1A engine.

Learning through others is enabled in peer-to-peer exchanges, coaching interactions and in communities of practice. Having employees with different perspectives, knowledge levels and development aspirations creates a learning environment that is collaborative, creative and informal.

Formal leadership development offerings have been designed to strategically elevate our talents' readiness to deliver results while driving efficiencies, eliminating waste and generating value for our customers. These experiences are structured to challenge leaders as they explore complex concepts and the rigorous application of the topics being learned. This curriculum includes:

BRILLIANTYOU EMPLOYEE FEEDBACK:

Embracing a lean culture and practices is inherent to the learning organization. The BRILLIANTYOU team engaged in a number of kaizen's in 2022 to improve the employee learning experience. Here are a few of our employees' comments:

"No matter where you are in your lean journey, 'Beginning Your Lean Journey' is a really great summary of the key principles and behaviors, and further reinforces why lean is important in everything we do. Throw this learning in your backpack and enjoy the journey..."

"Definitely invest eight minutes of your time to watch and learn about kaizen preparation. Great video and presenting style."

Frontline Leadership Program 2022

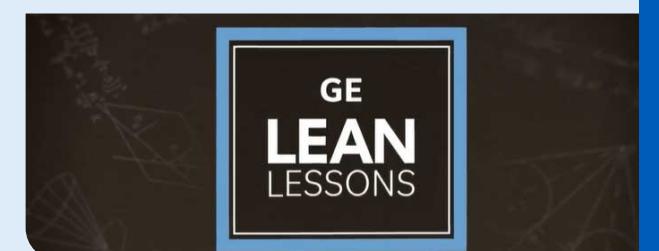
- Frontline leaders are oriented to GE's Leadership Behaviors while leveraging lean principles and core tools to execute and improve processes at the front line in support of our cultural transformation.
- Facilitated by GE and external experts knowledgeable in lean and business fundamentals, and supplemented with a Leadership Behaviors simulation and a business simulation, along with individual coaching.

Business Leadership Program 2022

- Transformational leaders practice and apply their conceptual understanding of our Leadership Behaviors and lean principles while working to build organizational capabilities and deliver results to create client value.
- Content topics include talent management, lean principles and tools, strategy and execution, and financial performance.
- Leaders are paired with an executive coach and participate in both a Leadership Behaviors simulation and a business simulation.

Leadership in Action 2022

- Operating leaders embrace and demonstrate their role of leader as culture shaper, leader as a lean practitioner, and leader as a coach to deliver winning business strategies and best-in-class results.
- Content topics include internal leader dialogues, industry thought leaders, transformation action planning, and a Leadership Behaviors simulation and a strategy simulation.



"I enjoyed going through this series. It showed, step by step, how to have a closed loop customer experience process."

"I enjoyed the content. It helped me to refresh, realign and keep improving my problem solving skills by using the correct tools and following the correct process."

Advancing Diversity, Equity and Inclusion

At GE, our diversity, equity and inclusion (DEI) focus is rooted in the belief that diverse teams and perspectives are essential to inventing the solutions that will shape the energy transition, advance precision health and develop the future of flight. By working together, we can foster an inclusive culture that ensures every employee feels accepted, respected and sense of belonging.



BRANDI THOMAS

Chief Diversity Officer &
VP, Chief Audit Executive

Achieving long-term, sustainable DEI progress takes work, and our work has focused on three strategic pillars—transparency, accountability and community.

TRANSPARENCY

We know data drives meaningful change in the DEI space—telling the story and laying the groundwork for improvement. GE openly shares its diversity data here within, including workforce representation data and equitable pay data. This data covers 2022, except as otherwise noted; since GE HealthCare completed its spin-off in early 2023, their data is included in this report.

With data, we leverage a lean mindset to better understand and solve for diversity challenges, such as recruitment and retention. For example, in this report, we cover how our employee resource groups (ERGs) at GE Digital are using lean to increase their outreach and effectiveness.

ACCOUNTABILITY

Having and tracking data enables accountability. Over the last few years, each of the GE businesses has developed key performance indicators (KPIs) for DEI. These KPIs are tracked and owned with the same level of importance and operational rigor as operating KPIs. Lean tools also help us measure progress, identify challenges, determine root cause and develop action plans for sustainable change.

During 2022, we saw growth at the leadership level for women globally (+2.3%). While U.S. race and ethnic minority representation at the leadership level remained the same during this timeframe, we saw improvement in some businesses and remain committed to driving progress as we move forward.

COMMUNITY

At GE, we are firm believers in the importance of fostering community, within our own company and with the local communities where our employees, customers and their families live and work. Internally, GE has a number of ERGs, which are vital to our DEI strategy. You can read more about our ERGs and their work in the following pages.

Externally, GE believes in creating more equitable access to STEM education. To that end, we sponsor and participate in many community activities, partner with organizations like the Society of Hispanic Professional Engineers and recruit top talent across the globe.

2023 is the year of transition for GE, including our successful separation of GE HealthCare and advancing our plans to launch GE Vernova and GE Aerospace. While change brings challenge, it also brings empowerment. That's the very basis of transformative change in the DEI space.

We embrace the evolution into three public companies, and we embrace the opportunity to build a strong foundation through continued efforts around representation, inclusion, and ensuring that our ERGs remain a vital and thriving support system for our employees. The individual businesses will be accountable for refining and tracking DEI KPIs and owning progress against those metrics. This focus on activity at the business level helps to more closely align to each company's mission, purpose and employee population.

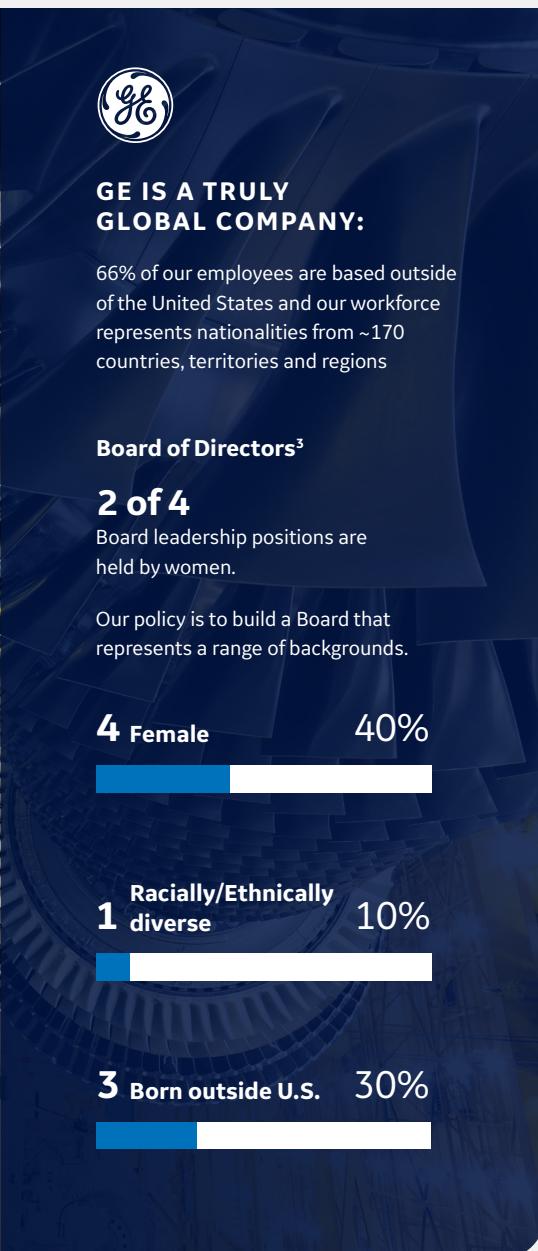
We also combined our 2022 Diversity Report this year with GE's 2022 Sustainability Report. This in no way diminishes our work in the DEI space, but rather better aligns with how top companies are sharing their progress. I am pleased to showcase GE's representation and pay equity data and highlight examples of empowerment and progress from across businesses.

I am proud of our progress and feel the unwavering support of GE's senior leaders, chief diversity officers, ERG leaders, and countless allies and advocates. Despite many challenges that threaten DEI around the world, GE perseveres.

GE's 2022 Workforce Representation Data



Employees Chris Day, Hai Phong, Liz McDonough, Brenda Ewing and Donovan Buckley at work.



³ Reflects Board composition as of May 3, 2023.

⁴ The data for U.S. veteran and U.S. disability reflect responses from employees who voluntarily updated these self-identification fields as of December 31, 2022. Data from our EEO-1 Component 1 Report (EEO-1 Report) is available [here](#). The EEO-1 Report mandates the use of specific job categories, which differ from how our workforce is structured. While we are making data from our EEO-1 Report available, we believe the diversity representation data as presented in our Sustainability Report and our website is the most meaningful measure of our diversity progress.

GE⁶



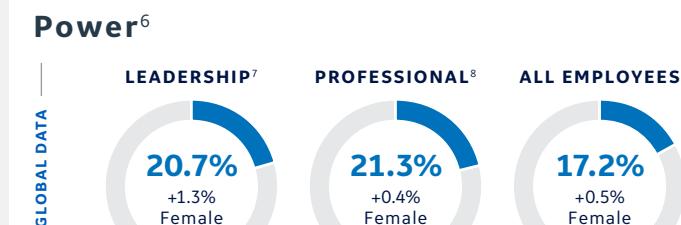
U.S. DATA

3.2%
-0.5%
Disability (U.S.)

10.2%
+0.1%
U.S. Veteran Status

	ASIAN	BLACK/AFRICAN AMERICAN	HISPANIC/LATINX	AMERICAN INDIAN/ALASKA NATIVE	NATIVE HAWAIIAN/PACIFIC ISLANDER	MULTIRACIAL	TOTAL RACE & ETHNIC MINORITY
Leadership ⁷	10.8% -0.2%	3.7% -0.4%	4.9% +0.9%	0.2% 0.0%	0.0% -0.1%	0.9% -0.1%	20.5% +0.0%
Professional ⁸	11.2% -0.3%	4.9% +0.4%	5.7% +0.3%	0.2% 0.0%	0.1% 0.0%	1.9% +0.2%	24.1% +0.6%
All Employees	8.5% -0.1%	7.1% +0.4%	7.3% +0.5%	0.3% 0.0%	0.2% 0.0%	1.9% +0.2%	25.2% +1.0%
2021 Δ							

GE Vernova⁶

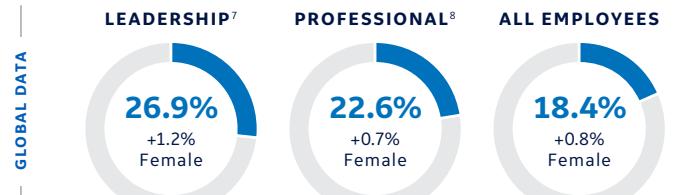


U.S. DATA

3.6%
-0.4%
Disability (U.S.)

11.2%
-0.3%
U.S. Veteran Status

GE Aerospace⁶

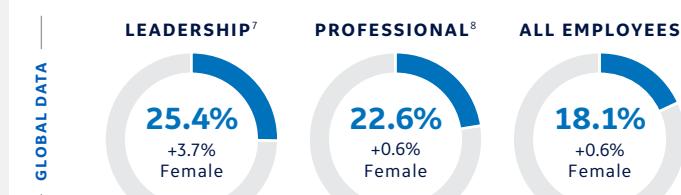


U.S. DATA

3.4%
-0.6%
Disability (U.S.)

11.1%
0.0%
U.S. Veteran Status

Renewable Energy⁶

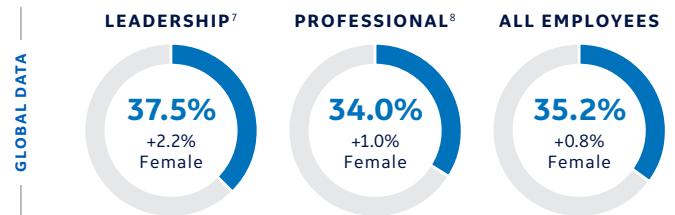


U.S. DATA

2.4%
-0.7%
Disability (U.S.)

10.8%
+0.3%
U.S. Veteran Status

Corporate⁶



U.S. DATA

4.2%
-0.3%
Disability (U.S.)

4.4%
+0.1%
U.S. Veteran Status

⁶ Data representative of GE's workforce as of December 31, 2022. System exports show percentages out to several decimal points. Due to this precision, totals may not sum due to rounding differences.

⁷ Leadership encompasses the most senior 1.5% of all active employees.

⁸ Professional accounts for all active non-production employees, excluding leadership.

Equal Pay for All

At GE, we are proud of our long-standing commitment to fair and competitive pay practices. Being transparent about our progress is a critical component to driving a more inclusive culture and helping us attract and retain top talent.

"We continue to make progress towards achieving our goal of 100% pay equity across each of our businesses and remain committed to fair pay and equal opportunities for all employees, regardless of gender, race or ethnicity."

Kevin Cox
Chief Human Resource Officer,
GE & Chief Administrative
Officer, GE Aerospace

MAINTAINING PAY EQUITY IS A PRIORITY FOR GE.

We will continue to monitor and communicate our pay equity results on an ongoing basis in order to hold ourselves accountable.

ACHIEVING 100% PAY EQUITY

Here are three key steps we're taking to achieve and drive pay equity across GE:



Our compensation philosophy reinforces GE's culture of respect and fairness.



We establish consistent pay ranges and structured bonus plans that promote employee engagement and high performance.



We review pay on a regular basis to ensure our pay practices are competitive and equitable.



Angie Foli works on a CFM LEAP turbine center in Terre Haute, Indiana.⁹

BASED ON 2022 SALARY DATA

Our pay equity results include gender and U.S. underrepresented minorities. For example, in our Aerospace business, women make on average 100% of what men make. Furthermore, U.S. underrepresented minorities make on average 101% of what non-underrepresented minorities make.

GE AEROSPACE

100%

CORPORATE¹⁰

2022 GLOBAL DATA
Gender Pay Equity

100%

GE VERNONA¹¹

99%

2022 U.S. DATA
U.S. Underrepresented Minorities Pay Equity¹²

101%

101%

101%

⁹ The LEAP engine is a product of CFM International, a 50-50 joint company between GE and Safran Aircraft Engines. LEAP is a registered trademark of CFM International.

¹⁰ Includes corporate functions, international markets, digital technology and global research.

¹¹ Includes the portfolio of energy businesses: Digital, Gas Power, Renewables, Steam, Nuclear, Power Conversion and Energy Financial Services.

¹² Underrepresented minorities (URM) are U.S. employees who identify as Asian, Black/African American, Hispanic/Latinx, Native American/Alaskan Native, Native Hawaiian/Pacific Islander or Multiracial.

Meet Our Employee Resource Groups

GE's employee resource groups (ERGs) bring together individuals with common backgrounds and experiences to connect, grow and advocate for their communities. They engage diverse talent and create spaces where ideas are welcome, individuality is celebrated and contributions are valued.

ERGs break down barriers and provide education on a clear and strong DEI strategy. They prompt meaningful, necessary and sometimes uncomfortable conversations about equity, opportunity, inclusive leadership and accountability among managers. These are the areas where DEI progress is made.

Moving forward, our ERG leaders and members are committed to ensuring a strong but separate DEI focus as part of GE Aerospace and GE Vernova.

ASIAN PACIFIC ALLIES & FRIENDS (APAF)

APAF was founded to support GE's Asian Pacific Islander (API) employees and offers global education, mentoring and networking opportunities to grow leadership abilities. The group promotes the value of the API community and works closely with API students interested in pursuing GE careers.

AFRICAN AMERICAN/AFFINITY FORUM (AAF)

The AAF has a deep-rooted history and culture within GE as the oldest ERG. Born out of activism, the AAF was founded on the principle of community, attracting, promoting and developing diverse talent in America and across GE's global operations. As the group evolves from awareness and allyship to advocacy, they remain committed to driving transformative growth.

GREEN TEAM NETWORK (GTN)

Through education, action and best practice sharing, the Green Team Network takes a grassroots approach to supporting and furthering GE's sustainability goals, including GE's commitment to achieve carbon neutrality in its operations and facilities by 2030. Members work across businesses, locally, regionally and nationally, to connect and align objectives aimed at lowering GE's carbon footprint.

DISABILITY ADVOCACY NETWORK (DAN)

The DAN's mission is to provide support and resources that enable people with disabilities, their families, and allies to connect and thrive. With nearly 2,000 members, DAN raises awareness and fosters a sense of inclusion in our communities through events, education and advocacy efforts.

HISPANIC FORUM (HF)

The HF is committed to creating an inclusive environment where Hispanics can thrive and become a culture catalyst for GE and our communities, through promoting Hispanic heritage, showcasing Hispanic talent, and enabling strong networks and alliances across ERGs. HF draws upon the talents and passions of its members to explore and share Hispanic culture, elevating important conversations on social and economic issues, as well as community support.

PRIDE ALLIANCE (PRIDE)

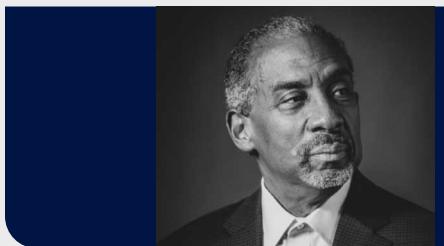
The Pride Alliance is welcoming of employees who identify as part of the lesbian, gay, bisexual, transgender, queer, asexual, and intersex (LGBTQAI+) community and their allies. The group raises awareness around LGBTQAI+ issues and provides support and advocacy for creating inclusive work environments. The Pride Alliance promotes GE's commitment to developing LGBTQAI+ talent and engages in meaningful conversations with senior leadership.

VETERANS NETWORK (VN)

Building on GE's strong commitment to military veteran recruitment and development, the Veterans Network was established in 2009 to make GE an employer of choice for veterans, reservists and guardsmen. The Veterans Network creates a GE community of veterans and veteran leaders to support and encourage the career development and growth of all members.

WOMEN'S NETWORK (WN)

The WN was created in 1997 to attract, develop, inspire and retain female professional talent. It is all about growth. It exists for the women working at GE to cultivate their leadership skills, business practices, personal contacts and career opportunities. By engaging and developing their membership in areas such as technology, operations and commercial roles, the Women's Network helps develop leaders who are better prepared for career success and to help the company grow.



COLIN PARRIS NAMED BLACK ENGINEER OF THE YEAR

Dr. Colin Parris leads strategy and approach development where GE's physical technologies intersect with digital capabilities. His cross-industry impact on GE's digital transformation has been impressive—seen, felt and celebrated by colleagues, cohorts and industry leaders alike.

Colin's contributions to science and engineering were recognized by US Black Engineer & Information Technology magazine when he was named the 2023 Black Engineer of the Year. Colin learned of the recognition during GE's 2022 Diversity, Equity & Inclusion Symposium; the official presentation occurred at the 37th annual Black Engineer of the Year Award (BEYA) STEM Conference, produced by Career Communications Group (CCG).

In addition to this honor, Colin was elected to the prestigious National Academy of Engineers in 2022 and received a BIG Innovation Award from the Business Intelligence Group.

[Learn more ▶](#)



DEI SYMPOSIUM EMPOWERS, INSPIRES AND REINFORCES OUR COMMITMENT

In 2022, GE hosted a Diversity, Equity & Inclusion (DEI) Symposium that brought together 180 GE employees representing 21 countries, every GE business and all eight ERGs. Initially created as a space for learning and candid conversation, the event became so much more.

Attendees were inspired by each other and GE senior leaders as they heard about the positive impact DEI is having at GE. They discussed successes, opportunities, priorities, and how to support a workplace culture where individual differences are embraced, everyone feels safe and empowered to contribute, and where the best ideas win.

Achieving sustainable improvements in diversity and equity requires a truly inclusive culture. The DEI Symposium explored this idea and sent attendees home with a lot to reflect on. They gained a better understanding of the role data transparency and accountability play in DEI, the importance of advocacy in the DEI space and the value ERGs have in activating DEI allies.



AN INTERNATIONAL, HANDS-ON GLOBAL LEAN CHALLENGE

GE teamed with Enactus, the largest experiential learning platform for university students worldwide, to host 191 future leaders from four countries—Brazil, China, Ghana and India—for a six-week Global Lean Challenge. Students learned about lean management concepts from GE lean experts, visited a local GE plant and worked through projects linked to GE's enterprise climate goals.

Students were guided by GE mentors as they mapped their sustainable lean solutions for their respective GE plants. Their work culminated in national competitions with winners from each country moving on to the virtual global competition. A four-student team from Brazil was crowned global champion. Their plan to make induction engines more sustainable addressed the challenge at a systemic level, an approach that impressed the judges.

This immersive and enriching experience was well received by all. One student from Enactus Brazil even joined GE for an internship at the site where her lean challenge project was based. [Learn more ▶](#)



BELONG 2022: INCLUSION, DIVERSITY & EQUITY CONCLAVE

More than 6,000 employees from 15 offices across India participated in BELONG 2022, a three-day DEI gathering, full of online events and presentations, in-person activities, awards, and more.

Daily videos raised excitement virtually with content about DEI objectives and strategies, insight from global leaders, and workshops on important topics like mental health and gender diversity at GE. These conversations continued during in-person events that celebrated site culture. GE India recognized individuals and initiatives driving impactful change in the DEI space. They also leaned into DEI ambassadors who took to social media to post about the importance of DEI at GE.

One exciting takeaway from the conclave was the launch of South Asia's I&D Playbook. This comprehensive document is intended to guide GE business leaders, HR managers, talent acquisition, and DEI practitioners in I&D framework development and program management.



CLIMATE ACTION CHALLENGE SPARKS GRASSROOTS PROJECTS

Small actions can have great impact; bring these actions together and we change the world. That was the idea behind our 2022 Climate Action Challenge, a collaboration between GE's Green Team Network and climate action advocate and author Joan Gregerson. Employees were challenged to work in teams and come up with projects that align with their personal passions and GE's sustainability goals. Teams worked on their projects weekly, reporting their impact at the end of 90 days.

Some 400 GE employees from offices in 20 countries participated, working on everything from reducing food waste and tree planning projects, to building community compost bins. Among the initiatives' impact—a projected reduction in landfill waste of 12.5 tons in a year. At the close of the challenge, the Green Team Network selected nine teams—three from each of GE's planned future companies—to receive \$1,000 to continue their efforts.

A Climate Action Challenge team from GE Vernova worked with a community organization called Rise High near Schenectady, New York. They presented material on renewable energy and climate change and had 10th and 11th grade students come up with creative solutions to proposed problems. The team was selected to receive \$1,000, which they used to purchase KidWid Kits for the organization. [Learn more ▶](#)



BUILDING THE FEMALE TALENT OF TOMORROW

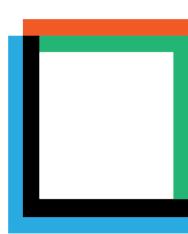
One way GE is tackling gender imbalance within the STEM community is through our partnership with the Society of Women Engineers (SWE), an organization focused on empowering women to achieve their full potential as engineers and leaders. Twenty years ago, GE was a founding member of SWE's Corporate Partnership Council; today, the relationship remains strong and impactful.

Many GE employees are involved in the 40,000-member organization, taking part in local networking, outreach and education events. At the senior leadership level, Dayna Johnson (GE Gas Power) currently serves as SWE President and Bianca McCart (GE Aerospace) serves as a Senator and are also part of the Women of Color in Engineering Collaborative (WCEC).

The SWE-GE partnership is mutually beneficial. GE employees lean into SWE for professional growth, building skillsets to become more equipped leaders. GE also supports and recruits talent through SWE, namely students and early career engineers.

The GE Women's Network funds SWE scholarships, which are awarded to female students who are studying, or will study, STEM at accredited U.S. universities. Scholars become part of GE's network; they are matched with a mentor within the company, invited to partake in professional development activities, and given line of sight to internship and employment opportunities.

Together, SWE and GE are building a strong pipeline of female talent and a future for innovation through diverse teams and perspectives.

 **Racial
Justice
Institute™**



A LEAN APPROACH TO BUILDING MORE IMPACTFUL ERGS

As GE's widely leveraged continuous improvement approach, lean is helping our DEI teams better understand and solve for diversity challenges. GE Digital, for example, is leveraging lean to boost the effectiveness of their ERGs by using data to drive more objective decision making. The transformation commenced with a meeting of the minds—strategic planning sessions to evolve the ERGs' monthly operating reviews into a place for group co-leads to collaborate with business diversity stakeholders to exchange ideas and facilitate best practices.

From these sessions, each of Digital's five active ERGs defined key performance indicators (KPIs) that align with areas they can impact, such as culture and retention. These KPIs include inbuilt flexibility to fit each group's stage of maturity. Moving forward, these KPIs will be tracked through bowler charts to map actual versus target performance and to identify areas where problem solving can be beneficial.

Standard work to deliver a more effective operational cadence for ERG events is also being developed, including a comprehensive plug-and-play calendar with planning guidance established through best practice sharing and collaboration. ERGs can customize this standard work to fit with their individual needs.

While still early in the rollout process, the GE Digital team is confident this lean approach will deliver more impactful ERGs across the business.



IMMERSIVE STEM EXPERIENCES FOR FUTURE GENERATIONS

Many of GE's community outreach initiatives aim to empower young people through curated experiences focused on science, technology, engineering and math (STEM). In 2022, two such events in the Middle East, North Africa and Turkey (MENAT) region gave students a first-hand look at GE's technology, people, potential careers, and how we're building a world that works.

GE Turkey and the GE Turkey Women's Network hosted nearly 100 college students at our site in Istanbul for Gelecek Yüzümüz (Our Future Face). Attendees heard about the energy transition and GE's sustainability strategies. They explored GE's support of early career engineers and were empowered by the idea that their own passions and projects could contribute to an improved society.

Student groups were then paired with GE mentors for an innovation competition. Groups had to think through and present an impactful sustainability project. [Learn more ▶](#)

In Saudi Arabia, GE partnered with Saudi nonprofit Mawhiba to host 150 high school students for STEM Future Generations at the GE Manufacturing & Technology Center (GEMTEC) in Dammam. Students tested their critical thinking and problem-solving skills as they worked to identify innovative solutions to help the Kingdom achieve net zero emissions by 2060. Members of the winning team were awarded mentorship and development opportunities with GE and Mawhiba.

By hosting this event at GEMTEC, students were able to see firsthand how STEM knowledge contributes to the reliable supply of electricity in Saudi Arabia and around the world. [Learn more ▶](#)



PART III | OUR COMMITMENTS

GE Respects Our People, Our Planet and Our Communities

As a global company that serves customers in ~170 countries, we are mindful of the impact our actions have on the world—whether it be the people who make up our global workforce or those of our suppliers, the communities where we live and work, or the planet itself. In line with our sustainability efforts toward continuous improvement for purposeful outcomes, we have prioritized the following commitments:

- Protect the safety of our people and those who do work on our behalf.
- Be responsible stewards of the environment.
- Maintain a strong EHS and environmental compliance program.
- Make progress toward our climate change emission goals and ambitions for Scope 1, 2 and 3 emissions.
- Reinforce our commitment to product quality and safety.
- Pursue environmental stewardship and circular economy in the design of our products.
- Invest in returning contaminated properties to protective reuse for communities with a priority on environmental justice communities.

Our commitments start on the shop floor and grow to encompass commitments that reach into our communities and across the planet. With every decision, we seek to lead with integrity in all that we do.

- Respect the human rights of our own workforce and all of those in our value chain.
- Hold suppliers accountable for an ethical supply chain.
- Respect employees' rights to freedom of association.
- Transform our communities through healthcare and humanitarian support and shape the diverse workforce of tomorrow by leveraging the power of GE through the GE Foundation.

Safety

LEADING WITH SAFETY

Our ultimate responsibility in every business, at every site, is to make sure that anyone who works for GE or does work on our behalf goes home safely at the end of the day.

In 2022, we made important strides in improving our safety performance and continued to drive a culture of safety. We experienced a collective 20% reduction in our injury and illness total recordable rate, further contributing to an overall downward trend over the past decade. In addition, the decrease in non-fatal serious incidents was significant for GE, going from 10 such cases to two. All of our key safety performance indicators compare favorably with U.S. Occupational Safety & Health Administration benchmarks.



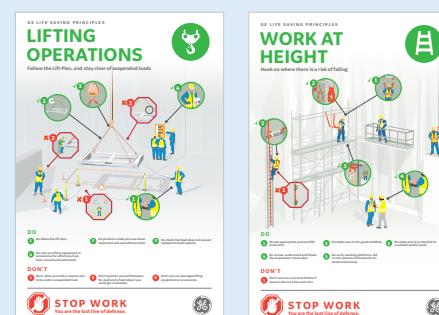
FRANCISCO BENAVIDES
Chief Safety Officer

Regrettably, however, three contractor lives were lost in 2022. The number of fatal events has decreased over the past two years and was the lowest it's been in five years. But because each fatality is a tragedy that impacts the lives of family members, friends and colleagues, there's more we need to do to ensure those who work for us or do work on our behalf make it home safely. Our focus on preventing fatalities and severe safety events, largely in projects and services in developing nations, remains a top priority.

Formed in 2021, the GE Safety Council—which is led by GE's Chief Safety Officer and includes business and corporate EHS leaders—coalesced around a shared set of priorities in 2022, which focused on improving our cross-business, read-across process when there is a serious safety incident or fatality; driving more rigor around how our life-saving principles are consistently followed and executed; and improving our safety audits. To help drive these priorities and further support the efforts of the businesses, we strengthened core capabilities in our Corporate Safety Office in 2022, particularly in the areas of contractor safety, critical risk, auditing, ergonomics, and data and analytics.

Driving safety improvements and creating a culture of safety requires both a top-down and bottom-up approach—with CEO level accountability for the safety program of each business and every worker feeling empowered to help create a safe and healthy work environment.

GE's Life Saving Principles (LSPs) illustrate critical steps to strengthen our defenses when performing high-risk work activities to prevent potentially severe events and injuries. These requirements are never to be circumvented. All employees and contractors are empowered and expected to stop work if they have any concerns about the task they are performing. These LSP documents, represented visually and in more than 20 languages, are widely available, posted throughout our operations, and are used to orient our contractors and partners to GE's most fundamental expectations.



Sample of GE's Life Saving Principles posters available in several languages.

Safety

	2020	2021	2022
Injury & Illness Total Recordable Rate¹	0.53	0.60	0.47
Days Away from Work Incident Rate²	0.29	0.32	0.21
Fatalities – Employees (count)³	3	0	0
Fatalities – Contractor Workers (count)⁴	4	4	3

¹ Number of injury and illness cases globally per risk population year to date, based on 100 employees working 200,000 hours annually, as measured against OSHA recordability criteria.

² Uses OSHA calculation for recordable days away from work cases (transfer or restricted cases are excluded), based on 100 employees working 200,000 hours annually.

³ GE employees, leased workers, wholly owned affiliate employees and majority-owned, joint-venture employees.

⁴ Workers under GE EHS coordination which may include GE-hired contract workers, consortium partner workers and sub-contractors.

Managing Health and Safety Risks Wherever We Work

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.

We have implemented a set of core requirements and technical standards as part of a system to manage the contractor safety process globally. Our process includes strict criteria to vet our contractors and sub-contractors focused on their EHS performance metrics, training and competency processes, and how well their internal EHS programs align with our own requirements and performance expectations. We closely scrutinize their programmatic elements for high-risk activities such as working at heights, electrical work, energy isolation, excavations and lifting operations. We have increased our focus on ancillary work and better partnering on safety with companies we hire to do work on our behalf.

Using this safety management system, we can assess contractor capabilities and help drive safe work execution. When we find defects in contractor programs or competency, we will collaborate with the contractor to develop risk mitigation plans that must be implemented prior to being qualified to proceed. Prior to the start of work, we develop detailed EHS plans based on the scope of work to identify risks and controls to safely execute each task. Throughout work execution, we monitor contractor performance and adherence to requirements, intervening and adjusting the plan as needed in cooperation with the contractor.

We have also reinvigorated our incident investigation process, including conducting detailed reviews of incidents with leaders in all of our businesses. Ensuring we are recording and learning from both employee and contractor events, as well as putting action plans in place at the business level to prevent them from recurring, are part of our overall commitment to a safe working environment for all.

We will continue working tirelessly to enhance our contractor management processes and work hand in hand with our contractor partners to drive performance improvements. The benefit is greatest when we share our learnings and elements of our program to prevent injuries or events for all—employees and contractors alike.

GE'S CONTINUED RESPONSE TO COVID-19

In 2022, our enterprise-wide, cross-functional internal COVID-19 Task Force, led by GE's Chief Safety Officer, continued to work to protect the health and safety of our employees globally, while maintaining business continuity.

A key focus area of our task force was closely following the changing landscape of COVID-19 regulations and monitoring evolving conditions across the globe. As the COVID-19 situation became more nuanced over the course of 2022, in close coordination with the businesses and regions, we evolved our GE Site Safety Roadmap—first introduced in 2020—to give many of our sites more discretion in managing COVID-19 aligned to local conditions, while ensuring compliance with all applicable regulatory requirements.



We continued our efforts to engage employees in educational dialogue on a range of topics through regular communication updates from our Chief Safety Officer and our Chief Medical Officer. Our communications helped keep employees informed and aware of the COVID-19 situation globally, including any changes to policies, while locally, our sites communicated frequently about safety practices and protocols, particularly as local regulations changed.

IMPROVING ERGONOMICS IN GE'S FACILITIES

Aligned to GE's goal of further reducing our overall injury rate, there was an increased focus on ergonomics in 2022, leveraging technology, innovation and lean to help mitigate ergonomic risk.

A pilot program was launched to deploy industry leading EHS software to help support ergonomic risk assessments. Used at nine locations globally, 148 evaluations were completed using this video computer vision and artificial intelligence software. As a result, 16 ergonomic improvement projects were implemented over the course of the year. For example, at the Power Conversion site in Nancy, France, the use of an overhead lift eliminated the heavy lifting tasks associated with manually lifting and turning a reel, reducing the overall ergonomic risk score by more than 50%.



At the GE Aerospace location in Rutland, Vermont, the team completed two wearable sensor technology projects. The wireless sensors are attached to an employee and continuously measure dynamic changes in motion, muscle efforts and fatigue. Wearable sensor data provides a more accurate representation of the risk of a job and illustrates subtle differences that cannot be detected by human eye or computer vision/AI systems. This data is helping to identify appropriate job rotation schedules and engineering improvements.

In addition, a new ergonomic kaizen playbook was developed to be used by teams to address ergonomic issues during process improvement lean events. The playbook includes eight tools and methods to identify ergonomic risk (including a revised GE risk evaluation method), pinpoint root causes, evaluate solutions and calculate ROI. The playbook was successfully launched at GE Aerospace in 2022.

EHS Program

HOW WE WORK FOR SAFETY AND THE ENVIRONMENT: OUR EHS PROGRAM

At GE, we are committed to EHS excellence to protect people, our communities and the environment. We manage our EHS performance and compliance by holding ourselves to the same high standards globally, often in places where the expectations we set and enforce exceed local regulations.

GE's EHS program is built on a spirit of transparency, data and continuous improvement. Our EHS principles include:

- Complying with EHS laws and GE standards.
- Managing and reducing risk.
- Reducing our environmental footprint.
- Monitoring and evaluating performance.
- Driving operational accountability.

We maintain a Global EHS Policy and an EHS Enterprise Standard, which set expectations for the GE businesses with responsibility for day-to-day environmental risk mitigation, compliance assurance and EHS culture. Layered on this foundation are core requirement and technical standard documents that cover specific safety risk areas, such as work at height, confined space, electrical safety, and environmental risk areas, including air emissions, spill and release management, prevention and response, and waste and water management.

GE's EHS Framework 2.0 is a risk-based key element of our EHS management system and measures individual operations against a series of self-assessment questions on environment, health and safety topics.

The implementation of these expectations is carried out by a robust network of EHS professionals supporting our sites, services and projects across the globe. Compliance is monitored by these teams of EHS professionals and through a robust reporting and metrics structure. GE drives an open reporting culture across compliance and controllership functions, including EHS, for issues to be elevated and addressed.

Our employees completed nearly 800,000 EHS courses covering regulatory and non-regulatory topics. The courses are translated into appropriate languages, and designed and maintained centrally by a team that ensures accuracy, accessibility and compliance with EHS regulations and GE's standards. Courses are assigned locally by EHS professionals who develop targeted, roles-based training for relevant employees.

We evaluate the EHS impacts of our businesses globally through several different mechanisms:

- **Risk Assessment.** We assess the EHS risks of any new activity—whether designing a new product, selling in a new market, building a new factory or buying a new business—and prepare our teams and sites accordingly.
- **EHS Performance.** We review EHS performance data using an enterprise-wide system of record for the majority of our EHS data, allowing for robust analysis and trending to learn and improve. Our EHS data is published internally at least quarterly and is available in real time through a system of dashboards maintained at the company and business levels. We track industry standard key performance indicators (KPIs), such as injuries, illnesses, significant environmental events, training completion, and regulatory findings and closures.
 - > Performance on key metrics such as spills and releases, air exceedances and wastewater exceedances are reported to our public stakeholders on our ESG website no less than annually. Our commitment to continuous improvement and risk reduction is underscored by our proactive use of KPIs and drives us to analyze EHS events to identify corrective actions and prevent recurrence.
 - > EHS performance is reviewed by senior leaders across the company, by our CEO in strategy sessions and by the Board of Directors through the Governance Committee. This layering of review ensures visibility and accountability, cornerstones of our EHS program.

AUDITING AND SELF-ASSESSMENTS

GE businesses are expected to plan and execute regulatory and risk-based audits and inspections, and to ensure auditor competence. Audits are conducted at a frequency that reflects the inherent risk and performance of the operation. Types of EHS audits performed include site level self-assessments using EHS Framework 2.0, and business level audits reviewing compliance and EHS Management systems.

Environment

Our Environmental Program

As with safety, our Environmental Compliance Assurance program includes multiple levels of assessment, including self-inspections, environmental program reviews and audits, and permit reviews, which are conducted jointly by operations and EHS professionals. Operations are expected to review all environmental permits annually and confirm compliance with all permit conditions. In addition to ongoing management of change, each operation is also expected to confirm permit coverage, applicability decisions and exemption criteria, if applicable, at least every three years. Environmental inspections or investigations by regulatory agencies are reported as "events" and findings are tracked to closure.

Reporting and escalation are required in the event of permit limit exceedances or other emission/discharge standards; failure to obtain, modify or renew existing permits; or discovery of a GE operation, process or source that should be, but is not, covered by a permit.

In the environmental defenses element of GE's EHS Framework 2.0, organizations are self-evaluated on air emission sources, air pollution control equipment, water sources and discharges, wastewater treatment equipment and operating conditions, hazardous and industrial waste collection, and management and shipping practices.

Environmental key performance indicators (KPIs) are reported and tracked at the site, business and company levels for the purpose of monitoring performance and ensuring compliance. KPIs include EHS framework scores, regulatory finding closure rate, regulatory training completion, severe environmental events, notices of non-compliance, penalties paid, and spills and releases.

Environment

	2020	2021	2022
ISO 14001 Sites	97	111	148
Global Penalties Paid (in \$ thousands)	25	63	13
Spills & Releases (count)	24	27	19
Air Exceedances (count)⁵	10	1	3
Wastewater Exceedances (count)	11	35	18

⁵ Increase from 2021 to 2022 due to minor, unrelated incidents across global operations.

Water

In 2020, GE met its goals to reduce freshwater use by 20% compared to 2011. GE has continued this trend in 2022. Water usage captured includes potable, process and sanitary water, as well as once-through cooling water from freshwater sources.

To track GE's water usage, GE facilities use a robust, global database to manage our reporting, including quantities of water withdrawn from each of the following source categories:

- Public/commercial.
- Fresh surface water.
- Rainwater.
- Brackish surface water or seawater.
- On-site groundwater well.

Water

To learn more about our water inventory methodology, please see Appendix III in our [2022 Sustainability Report Appendices](#).

	2020	2021	2022
Total Freshwater Use (billions of gallons)	5.12	4.93	4.29
Once-Through Cooling Freshwater (billions of gallons)	1.85	1.69	1.30

Climate Change



Hydro Wudongde
in China.

Climate change is an urgent global priority. As a company whose technology helps generate approximately 30% of the world's electricity, we are committed to decarbonizing the energy sector while increasing access to more sustainable, reliable and affordable electricity, including for the nearly 775 million people who lack access.

Carbon Neutrality for Scope 1 and Scope 2 Emissions by 2030

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. 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.



Ambition to be a Net Zero Company by 2050 for the Scope 3 Emissions from Use of Sold Products

In 2021, we set an ambition to be net zero by 2050 for 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. GE Vernova and GE Aerospace's efforts toward the Scope 3 ambition for their sold products are described in detail on pages 32-35 and 44-47, respectively.

Climate Change and Energy⁶

	BASELINE	2020	2021	2022
GE Operational GHG Emissions (million metric tons of CO₂ equivalent) (market based)⁷	2.27	1.90	1.81	1.63
Scope 1 Emissions (million metric tons of CO₂ equivalent)	0.73	0.74	0.67	
Scope 2 Emissions (million metric tons of CO₂ equivalent) (market based)	1.16	1.07	0.96	
Direct SF₆ Emissions (thousand metric tons CO₂ equivalent)	138	131	105	
Scope 3 Net Emissions from Sold Products (million metric tons of CO₂) (net, new units, absolute)				
GE Aerospace⁸		28	34	
GE Vernova⁹		477	320	
GE Operational Energy Use (MWh)⁶	7,360,000	5,870,000	5,990,000	5,670,000
Total Electricity (MWh)	3,040,000	3,030,000	2,950,000	
Renewable Energy Used (MWh)	53,000	63,100	141,000	

⁶ Per the WRI/WBCSD GHG Protocol, GE adjusts its 2019 base year GHG and energy data annually to reflect changes in structure or calculation methodology, improvements in accuracy of emission factors or activity data, and discovery of error. Interim years are not adjusted except upon discovery of significant error.

⁷ Scope 1 and 2 emissions may not sum to total due to rounding.

⁸ For more details on GE Aerospace's Scope 3 emissions for sold products and progress toward net zero ambition, see pages 44-47.

⁹ For more details on GE Vernova's Scope 3 emissions for sold products and progress toward net zero ambition, see pages 32-35.

GE Scope 1 & 2 Efforts by Business

GE VERNOWA

GE Vernova's portfolio of energy businesses is working toward GE's carbon neutral commitment described on previous pages.

Our Wind businesses have leveraged advanced business engagement over the past years and implemented dozens of impactful emission reduction projects in pursuit of their Scope 1 and 2 emission reductions goals. Supported by a central team and with energy managers in their most energy-intensive operations, the teams have deployed and maintained two key green lean workstreams:

- 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. For example, the Grid Solutions team in Villeurbanne, France, upgraded sensors that detect leakages of SF₆, a greenhouse gas with 23,500 times the comparative global warming potential of CO₂, and was able to deliver an impressive SF₆ reduction equivalent to more than 750 tons of CO₂.
- The green electricity drive that paces and pushes the pursuit of on-site renewable energy opportunities and signing of Power Purchase Agreements (PPAs) from new renewable energy assets. In 2022, we signed a European virtual PPA with its partner Forestalia, which contributes to the development of a 21 MW wind farm in Zaragoza, Spain, powered by our onshore wind turbines. In addition to the carbon savings, the PPA is expected to deliver significant positive financial impact, demonstrating how decarbonization and reducing the cost of electricity are part of strengthening industry competitiveness.

To strengthen the ability to drive sustainable progress across the value chain, our Wind businesses partnered with EcoVadis, a leading global company that facilitates individual sustainability performance



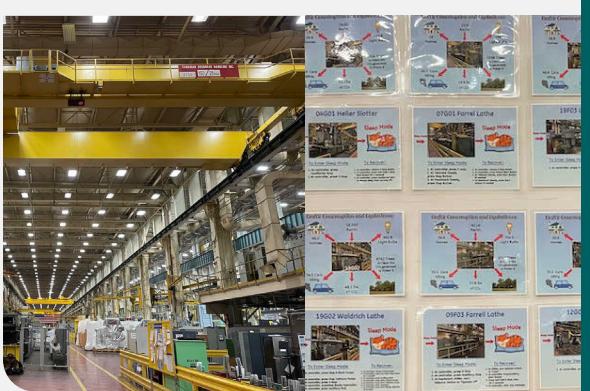
ENERGY EFFICIENCY INITIATIVES

LM Wind Power has implemented energy efficiency projects and controls in its plants to achieve an 8.3% reduction in energy consumption in kWh per cubic meter of operations. Some of the key projects included the replacement of old chiller pumps with IE4 pumps, adiabatic cooling systems for chillers and added variable frequency drives (VFD) to its old dust extraction systems. Based on the results, the company extended the replacement of conventional blower fans with belt drives to EC fans in a number of air handling units, resulting in 20% reduction and replacement of conventional induction lamps by LED which achieved a ~30% reduction in consumption. LM Wind Power also introduced automatic ventilation control system in Ponferrada, Spain, and is now planning to expand these features to other locations as well.

assessments of the largest suppliers. After the launch with our Onshore Wind business in 2021, our Offshore Wind business and LM Wind Power followed suit in 2022. Today, over 220 suppliers have been enrolled in the program, representing more than 72% of the businesses' strategic spend. Transparency and baselining are critical components that have allowed us to kick off corrective actions with our strategic low-scored suppliers. Only through collaboration on corrective actions can we drive sustainable improvements in the value chain, helping us to build resilience and supporting business development.

At our Gas Power business, approximately two-thirds of its operational emissions are Scope 2, arising from purchased electricity used in manufacturing. The remaining third is mainly related to natural gas used in the testing of gas turbines, gas for heating and liquid fuel use.

With a continued focus on reducing overall energy consumption, our Gas Power business is taking a lean approach. In 2022, teams across 24 sites focused on energy outputs from lighting, HVAC, compressed air, welding, large equipment, transport and recycling, as well as the culture of energy savings. At the end of the kaizen weeks, we achieved an average savings of 9% energy usage per site, with combined savings of 43 million KWH of energy, which equals \$4 million in energy costs saved per year. To put it in perspective, over the course of a week, our teams found energy savings equivalent to 30,000 metric tons of CO₂, which can power nearly 3,800 U.S. homes¹⁰.



KAIZEN IS HELPING GE VERNOWA'S GAS POWER BUSINESS WITH CARBON EMISSIONS AND ENERGY COSTS

From February 28 to March 4, 2022, a global kaizen event took place at our Gas Power factories around the world to find practical ways to cut energy costs and help with carbon emissions. GE's commitment to achieve carbon neutrality in its own operations by 2030, including Scope 1 and Scope 2 emissions, along with rising energy costs and natural gas supply issues in Europe, gave the work extra urgency. The exercise took place in 20 Gas Power facilities and the result could deliver a projected annual energy reduction of 35 million kWh—the equivalent of 25,000 metric tons of CO₂—and cost savings of an estimated \$3 million.

At our Gas Power headquarters in Schenectady, New York, the team turned its attention to steam generation and compressed air leaks, cooling and heating issues, all while changing long-held behaviors. Following the kaizen exercise, the site reported an annual energy reduction of 12,583 MWh, which equates to \$320,000 in cost savings, lowering the site's annual usage by 8%—well above the original 3-5% target.

[Learn more ▶](#)

¹⁰ According to U.S. Environmental Protection Agency Greenhouse Gas Equivalencies Calculator.

GE AEROSPACE

In 2022, GE Aerospace continued to measure, track and progress toward decarbonizing its facilities and operations to align with the 2030 carbon neutral pledge for Scope 1 and Scope 2 emissions.

GE Aerospace's long-term strategy to meet its 2030 carbon neutral commitment is focused on the following areas:

- Energy-efficient infrastructure investments and optimization.
- Using lean practices to identify and reduce waste energy.
- Exploring the use of Sustainable Aviation Fuel and other low carbon fuels at engine testing operations.

Also 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 its carbon neutral commitment.

EVANDALE'S NORTH UTILITY PLANT UPGRADES

As part of efforts to upgrade GE Aerospace's headquarters campus in Ohio, a new North Utility Plant (NUP) was opened in 2017 to centralize cooling, heating and water. New equipment installed at the utility plant was designed to decrease energy consumption and provide more efficient and reliable utility services.



Since then, work continues to be done in phases to replace water heating and cooling systems operated by the plant to buildings across the site.

Over the last five years, 16 chillers of various age and tonnage have been replaced with eight new 1,000-ton magnetic-bearing chillers and 10 high-efficiency hot water boilers (5 MMBTU) designed to replace steam heating to a significant portion of the plant. The chilled and hot water systems are paired with energy delivery stations throughout the campus for distribution and metering. The new chillers and boilers significantly reduce the amount of

energy required for heating and cooling applications as compared to the previous systems.

EMISSION REDUCTION ASSESSMENT

In 2022, GE Aerospace conducted an emission reduction assessment to identify opportunities for reducing 100,000 metric tons of CO₂ equivalent emissions across 18 of the business' highest emitting sites. The 18 sites selected for this study account for two-thirds of GE Aerospace's emissions. Reducing emissions at these locations is a top priority for GE Aerospace to reach its goal of carbon neutral operations by 2030.

The outcome of the study allowed us to create a decarbonization strategy based on four pillars:

- Energy efficiency.
- Electrification.
- Low carbon fuels and renewables.
- Carbon offsets/removals.



Peebles Test Operation, Ohio.

To support the energy efficiency program, in 2023, the plan is to deploy energy management best practices and key performance indicators (KPIs) for energy usage across all supply chain and engine maintenance sites globally, including the 18 top emitting sites.

LIGHTING UPGRADES IN RUTLAND CUT SITE CARBON LEVELS

Over the past 15 years, GE Aerospace's Rutland, Vermont, team has worked with Efficiency Vermont to implement energy and cost-saving measures throughout two manufacturing facilities in the Green Mountains.

The Rutland facilities team has overseen a project to switch lighting across the Rutland facilities to LEDs with controlling options. Lighting upgrades at the first Rutland site were completed in 2022 and the second, larger facility is 80% complete.

The new lights provide an estimated cost savings of more than \$175,000 at the Rutland facility. In addition, the mercury-free LEDs help reduce the amount of hazardous waste in the waste stream.



GE Aerospace's Rutland facilities manufacture compressor airfoils for multiple engine platforms.

Policy Engagement and Thought Leadership on Climate Action



GE Chairman and CEO and GE Aerospace CEO Larry Culp joins CTV News journalist Jeanne Meserve for a Washington Post Live discussion on the future of aviation. U.S. Transportation Secretary Pete Buttigieg and United Airlines CEO Scott Kirby also joined the event.

As described in this report, GE's focus on sustainability is to innovate technology to lift up the quality of life for people everywhere. While our focus is on technology and innovation, we know strong policy, engagement and partnership are critical to success of these shared goals.

CLIMATE POLICY ENGAGEMENT

GE's efforts on climate change and the energy transition start with GE's strong support for the Paris Climate Agreement commitments and other ambitious targets to reduce greenhouse gas emissions, including GE's climate change goals. Below we describe GE's direct and indirect policy engagement and lobbying on climate change, which we believe are in alignment with the Paris Climate Agreement goals. We have been proud to play a visible role in advancing policy and action for climate change, energy transition and sustainability solutions. 2022 was a landmark year for stronger emphasis on action and partnership; following on the heels of the successful COP27 in Egypt—referred to as the implementation summit—now is the time to accelerate progress in emerging markets and around the globe.

Doing so will require continued partnership across governments, business and civil society. As a company with a 130-year history of working with our customers and other stakeholders to lift the quality of life for people, we are deploying our global reach, expertise and depth of engineering capabilities to address this urgent challenge.

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. For example, GE sponsored events with the [Washington Post](#), [Atlantic LIVE](#), [Techonomy Climate](#), [Atlantic Council Global Energy Forum](#) and [Abu Dhabi Sustainability Week](#) focused on collaboration between the private and public sectors to succeed in the energy transition and decarbonization efforts. [Learn more ▶](#)

We also launched a public advocacy campaign urging the U.S. Congress and Biden administration to pass a comprehensive package of 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. Ultimately, the United States passed the Inflation Reduction Act—the nation's first comprehensive climate change law—aligned with GE's advocacy. [Learn more ▶](#)

Our heightened engagement is continuing throughout 2023 to help formulate and support policies that advance a just transition and sustainability goals globally. We will continue to offer constructive input to the leaders charged with translating ambitious climate targets into laws, regulations and policies. As part of these efforts, we're highlighting the ways the energy transition is making a difference in local communities. This is where change happens, and to reach the ambitious goals set, we must show the progress we're making—and the benefits that are accruing—across the globe.

REINVENTING THE FUTURE OF FLIGHT

In his role as CEO of GE Aerospace, Larry Culp joined Washington Post Live to discuss how the company is innovating technology to help meet historic demand while decreasing emissions today and in the future. [Watch here ▶](#)

BREAKING THROUGH TO A NEW ERA

Scott Strazik, CEO of GE Vernova, joined the [Atlantic LIVE's "The Next Scientific Revolution"](#) event to interview Starwood Energy Group CEO Himanshu Saxon about the hydrogen, carbon capture and other breakthrough technologies that will play a key role in this new energy era and how companies, governments and other stakeholders must work together to make it a reality. [Learn more ▶](#)

INNOVATING THE TECH THE WORLD NEEDS

At the Techonomy Climate 2022 conference, Roger Martella, GE's Chief Sustainability Officer and Vice President of GE Vernova Government Affairs and Sustainability, examined how established companies and startups present a "best of both worlds" opportunity to innovate the technology the world needs to succeed in the energy transition. [Watch here ▶](#)

REDEFINING OUR ENERGY FUTURE THROUGH BREAKTHROUGH TECHNOLOGIES

Larry Culp, Chairman and CEO, GE, and CEO, GE Aerospace, discussed how GE's breakthrough technologies are redefining the future of energy with CNBC's Brian Sullivan as part of The Milken Institute's Global Conference. Larry also joined a panel discussion with experts in energy production, investment, research and public policy. [Watch here ▶](#)

ACCELERATING ASIA'S ENERGY TRANSITION

During the Economist Impact's second annual Future of Energy Week, Shantanu Som, President, Engineering, Asia, GE Gas Power, joined the Decarbonizing the Energy Sector panel to discuss how GE is working with customers and stakeholders to help the region on its path towards decarbonization and net zero. [Learn more ▶](#)

BALANCING CLIMATE SUSTAINABILITY & GROWTH

Mahesh Palashikar, President, GE South Asia, joined the India Economic Conclave, which brings together policymakers, companies and key influencers to discuss critical challenges and opportunities. Mahesh highlighted the role of wind, solar, hydro and natural gas to help transition India to cleaner energy. [Watch here ▶](#)

COP27

At the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27) meeting in November 2022, global leaders in government, non-profits and industry gathered in Sharm El-Sheikh, Egypt. Taking to heart Egypt's focus on COP27 as the "implementation summit," GE prioritized action with a focus on three proof points—emphasizing the importance of emerging economies; demonstrating the feasibility of breakthrough technologies; and strengthening public-private partnerships. [Learn more ▶](#)



Launch of
Corporate Coalition
for Innovation
& Technology
toward Net Zero at
COP27 in Sharm
El-Sheikh, Egypt, in
November 2022.

A NEW COALITION TO HELP COUNTRIES MEET THEIR CLIMATE CHANGE GOALS

Announced at the COP27 opening ceremonies at the U.S. Center, the **Corporate Coalition for Innovation & Technology toward Net Zero (CCITNZ)** will help countries meet decarbonization and climate change goals through innovation and technology. Founding members of the cross-sector business alliance include Bechtel, GE, GM, Honeywell, Invenergy and Johnson Controls. [Watch here ▶](#)

SHOWING A PATH TO A LOW CARBON FUTURE

In a first for the African continent, during Energy Day at COP27, a GE LM6000 aeroderivative gas turbine at the **Sharm El-Sheikh power plant** was run on a hydrogen/natural gas fuel blend. This pilot project demonstrated the important role emerging economies play in demonstrating breakthrough technologies and our collective responsibility to ensure a just energy transition. [Learn more ▶](#)

ENSURING A JUST ENERGY TRANSITION

In an **Atlantic Council Global Energy Center** fireside chat with **Roger Martella**, GE's Chief Sustainability Officer and Vice President of GE Vernova Government Affairs and Sustainability, he detailed why a just energy transition requires both meeting our climate change goals and expanding access to the nearly 775 million people who don't have access to sustainable, reliable and affordable electricity today. [Watch here ▶](#)

READY TO SCALE CLIMATE SOLUTIONS

At the **U.S. State Department's Connecting Climate Entrepreneurs (CCE)** pitch competition, **Rania Rostom**, GE's Head of Communications and Marketing for International Markets, helped judge pitches from startups around the world with the winner receiving a range of prizes. [Watch here ▶](#)

PUBLIC ADVOCACY FOR CLIMATE CHANGE AND CLEAN ENERGY

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.

Throughout the summer of 2022, GE launched a grassroots public advocacy campaign, which delivered nearly 1,300 letters to members of Congress representing 34 states. The campaign urged Congress and the Biden administration to pass a comprehensive package of clean energy tax credits, including wind production tax credit (PTC) and 45Q tax credit for carbon sequestration, as well as tax credits to support diverse generation sources, such as wind, solar and nuclear.

During a four-month digital advertising campaign, GE also shared information with key stakeholders strongly supporting these issues, including members of Congress, Congressional staff, policymakers across Washington, D.C., and the general public. [Learn more ▶](#)



Launch of
Corporate Coalition
for Innovation
& Technology
toward Net Zero at
COP27 in Sharm
El-Sheikh, Egypt, in
November 2022.

ROAD TO COP28

The world is now three years into the "decade of action" on climate change, reinforcing the imperative for progress. With the shared goals of decarbonizing the energy sector, while at the same time growing resiliency to ensure everyone has access to more sustainable, reliable and affordable energy, we are transitioning from discussion to implementation. Taking action now will set us up for success when we meet again in the United Arab Emirates for COP28 in November.



Atlantic Council
Global Energy
Forum in Abu
Dhabi, United
Arab Emirates, in
January 2023.

COLLABORATION WILL ACCELERATE PROGRESS

Joining the **Abu Dhabi Sustainability Week Summit**, **Roger Martella**, GE's Chief Sustainability Officer and Vice President of GE Vernova Government Affairs and Sustainability, detailed the fundamental importance of public-private partnerships in accelerating the energy transition. [Watch here ▶](#)

INCLUSION IS THE KEY TO SUSTAINABILITY

During Abu Dhabi Sustainability Week, GE participated in the Youth 4 Sustainability (Y4S) and Women in Sustainability, Environment and Renewable Energy (WiSER) conferences. Speakers Noora Abdullatif Al Kheily, Belgin Ertam, Sandra Helayel and Nithin Murali addressed diverse audiences about the challenges and opportunities of the energy transition.

SETTING THIS YEAR'S GLOBAL ENERGY AGENDA

At the **Atlantic Council Global Energy Forum**, participants including **Roger Martella**, GE's Chief Sustainability Officer and Vice President of GE Vernova Government Affairs and Sustainability, examined the variety of immediate challenges to action, including the need to develop a full-fledged ecosystem to operationalize climate change commitments into action. [Watch here ▶](#)

NET ZERO PATHWAYS IN THE DEVELOPMENT WORLD

Otmane Benamar, Chief Technology Officer of GE Gas Power EMEA, joined an **Atlantic Council Global Energy Forum** panel to discuss the elevated importance in the developing world and global responsibility for all to solve the energy trilemma of economic development, reliability and sustainability. [Watch here ▶](#)

LOBBYING

Advocacy Through Organizations and Associations

We support associations that are leading on climate change solutions, policies and technologies, including nonprofit organizations and trade associations. We partner formally and informally with numerous associations and NGOs around the world that share the mission of addressing climate change, decarbonizing industrial sectors and promoting sustainable development. For example:

- **GE** is one of the founding strategic partners of the non-profit Center for Climate and Energy Solutions (C2ES), an original member of its Business Environmental Leadership Council and a member of its Board of Directors. GE participates in C2ES research and supports C2ES' mission to "advance strong policy and action to reduce GHGs, promote clean energy and strengthen resilience to climate impacts."
- **GE** is an active member of the American Clean Power Association (ACP) and sits on its Board of Directors. ACP is the leading federation of renewable energy companies expediting the advancement of clean energy in the United States.
- **GE** is a member of the Carbon Capture Coalition, a nonpartisan collaboration of more than 80 businesses and organizations building federal policy support to enable economy-wide, commercial-scale deployment of carbon capture technologies.

Examples of collaboration with diverse public and private stakeholders in 2022 and 2023 are summarized on pages 31 and 43.

Trade Associations

As one of the largest and most diverse companies in the world, GE belongs to many associations in which we work with our industry partners. These associations engage in advocacy at the state and federal levels in key jurisdictions around the world on a range of policy topics including energy and climate. Consistent with our direct lobbying, we believe our work with trade associations is in furtherance of, and consistent with, GE's climate change goals, including the goals of the Paris Climate Agreement.

As a general proposition, we are seeing our trade associations increasingly move in constructive directions toward rallying their members toward climate change and energy transition solutions. In many cases, GE's policy team works with our trade associations on a regular basis to influence constructive action toward these goals. Annually, we meet with our major U.S. trade associations to review our policy priorities, including stressing the importance of each to align with the Paris Climate Agreement goals and be a force for positive action toward decarbonization and sustainable development goals.

This is not to say that all trade associations are moving at the same pace, that we expect them to necessarily agree on all policy positions set forth, or that GE agrees fully on all views and positions. There is room for a reasonable divergence of views on various policies and approaches while still constructively advancing efforts toward decarbonization. GE's role in these circumstances is to be a force of positive direction and to express the views of a multinational industrial company in promoting constructive engagement by the trade associations on these issues. To be clear, GE does not and will not use trade associations as a cloak for climate change policies inconsistent with our own positions detailed above.

Where we see trade associations potentially advocate for a position different than ours with regard to climate policy, including if a position is misaligned with the goals of the Paris Climate Agreement, we begin by reaching out to the trade association to assert influence toward alignment. Our goal is to communicate in real time and express our positions toward positive change. On these occasions, we have typically found fair reception of our input by the relevant trade associations. We believe this is a better approach than withdrawing membership when disagreements arise as our continued membership in the trade association usually positions us to influence the trade association's policy positions in ways that better align with our objectives. We believe our continued work with trade associations will help advance other important policy objectives aligned with our

interests. At the same time, we would reserve the option of terminating our membership and/or withdrawing financial support if the misalignment with a particular position the trade association supports outweighs the overall benefits to GE of being a member.

GE's Position on Climate Disclosure Regulations

GE supports efforts to improve climate disclosure—including emerging regulations in the United States, European Union and other jurisdictions—that focus on material information, help align existing reporting frameworks, and recognize the evolving maturity of this type of information and reporting across companies broadly. GE aspires to be a constructive and positive voice toward advancing informative and pragmatic disclosure regimes that are effective and meaningful for our stakeholders while promoting consistency in various regimes to reduce confusion and undue burdens. GE has also expressed these views to several of our trade associations engaged in commenting and engaging on these rules with the goal of aligning on transparent and pragmatic disclosure requirements. We have encouraged our trade associations to be supportive of such disclosure generally while recognizing that some trade associations may express constructive points of views, feedback and concern on elements of these proposals.

Positions of GE Trade Associations with Key Roles on Climate

As part of this ongoing engagement, during the past year, GE undertook an effort to centrally compile a global inventory of trade associations and other relevant organizations that GE was a member of in 2022 and that engaged in policy advocacy related to climate change. For each of those, we conducted analysis of how much work GE does with the organization and the organization's level of policy engagement in this space.

From this broader list, we identified several trade associations with key roles on climate where we conducted a deeper analysis of each trade association's specific positions on climate change, and how well those positions aligned with GE's own policy positions and with the goals of the Paris Climate Agreement. We chose these trade associations, listed below, as the most relevant to consider for a more detailed climate position analysis based on factors such as the association's level of activity or influence on climate-related topics, the relevance of the association's work to particular GE businesses or markets, and our judgment about the association that would be of greatest interest to stakeholders regarding potential Paris Climate Agreement alignment or misalignment. The table below provides a summary of the alignment analysis, based on reviews of available policies and positions published by the trade associations.

The Aerospace Industries Association (AIA) is a leading voice in the aircraft, space and defense industries. The organization advocates for effective federal investments; accelerated deployment of innovative technologies; policies that enhance the aviation industry's global competitiveness; and recruitment and retention efforts that support a capable and diverse 21st century workforce.

CLIMATE CHANGE POSITION

AIA is committed to playing its part in reducing the climate, noise and air quality impacts of the aviation industry. In October 2021, AIA announced a net zero by 2050 target for the U.S. aviation sector's carbon. In support of this goal, AIA spearheaded a study with Accenture to analyze the state of sustainable aviation technologies and identify the types of public policies and investments necessary to achieve its net zero goals. Issued in April 2022, the report, "Horizon 2050: A Flight Plan for the Future of Sustainable Aviation," is a comprehensive guide to decarbonization solutions based on technology-specific data and analysis, including changes to airport operations and infrastructure, offsets and Sustainable Aviation Fuel (SAF), and cutting-edge aerospace technologies emissions.

Additionally, AIA aims to play a role in decarbonizing aviation by:

- Expanding investments in leading-edge technology like advanced and zero emission propulsion.
- Advocating for policies that facilitate the increased use of Sustainable Aviation Fuel across the globe.
- Partnering with the government to enable and accelerate advancements in technology.
- Collaborating with the government to develop the proper regulatory framework to enable commercialization of new technologies.
- Partnering with other stakeholders to realize efficiency improvements through the modernization of our airspace.
- Advancing climate action under the International Civil Aviation Organization (ICAO), which relies on a global approach to address aircraft emissions.
- Working with international partners toward our common goal by sharing information and resources, and coordinating with governments around the world.

AIA recognizes a coordinated federal response is crucial to meeting the industry's critical environmental goal of net zero emissions by 2050 and will continue to engage with policymakers in the FAA, NASA, DOE, USDA and DOT to coordinate federal investment in crucial programs like the Continuous Low Energy Emissions and Noise (CLEEN) program.

ALIGNMENT TO THE PARIS CLIMATE AGREEMENT AND GE'S CLIMATE POSITIONS

AIA has set a target to be net zero by 2050 and has committed to decarbonize through investing in technology, advocating for SAF, and promoting global standards and international agreements on aviation emissions. We believe these commitments are consistent with the goals of the Paris Climate Agreement.

AIA is also aligned with GE, as GE continues to develop technologies to reduce CO₂ emissions for the future of flight through current advancements in engine architecture, aerodynamics and materials, along with the next suite of engine technologies—including open fan architectures, hybrid electric and electric propulsion concepts, and advanced thermal management concepts. GE Aviation is also supporting industry initiatives to approve and adopt 100% SAF and investigating hydrogen as the zero carbon fuel of the future. GE's efforts to innovate toward a net zero 2050 ambition for aviation are further described on page 44.

Business Roundtable (BRT) is an association of chief executive officers of America's leading companies working to promote a thriving U.S. economy and expanded opportunity for all Americans through sound policy.

CLIMATE CHANGE POSITION

BRT believes addressing climate change and its impacts demands a robust, coordinated effort with a sound policy portfolio. To avoid the worst impacts of climate change, the world must work together to limit global temperature rise this century to well below 2 degrees Celsius above preindustrial levels, consistent with the Paris Climate Agreement, and the U.S. and the international community must aggressively reduce GHG emissions and create incentives for developing new technologies to achieve this goal.

BRT notes that in 2018 the Intergovernmental Panel on Climate Change reported that limiting warming to no more than 1.5 degrees Celsius compared to preindustrial levels will be necessary to avoid some of the most severe risks associated with climate change.

BRT supports a goal of reducing net U.S. greenhouse gas emissions by at least 80% from 2005 levels by 2050.

Building on its September 2020 publication of principle and policies for addressing climate change, in April 2022, BRT issued a Roadmap for U.S. Energy Policy, putting forward 10 policies to advance decarbonization, including expanding use of a diverse energy portfolio and clean energy technologies, enacting clean energy incentives, accelerating permitting of energy infrastructure, and establishing a price on carbon that provides a clear long-term signal and incentivizes the development and deployment of technologies to lower emissions.

BRT also recognizes for the U.S. to reach net zero carbon emissions by 2050, an unprecedented amount of new infrastructure must be planned, permitted and built within the next decade. With that in mind, BRT has advocated for bipartisan legislation reforming the permitting process for energy infrastructure projects to reduce emissions, uphold environmental protections and pave the way for the U.S. to become a clean energy powerhouse.

ALIGNMENT TO THE PARIS CLIMATE AGREEMENT AND GE'S CLIMATE POSITIONS

GE continues to work with BRT to ensure U.S. business leaders support ambitious policies in line with the U.S. commitment to the Paris Climate Agreement. BRT opposed the Inflation Reduction Act (IRA) for reasons that were unrelated to the clean energy tax incentives. The reasons were grounded in broadly applicable tax policies that affected many of its members. GE discussed the importance of the clean energy tax incentives with BRT and confirmed BRT staff understand these tax incentives will help keep the U.S. a leader in clean energy technology and innovation toward decarbonization goals. Since the enactment of the IRA, BRT has supported policies to enable the success of the IRA tax credits through being a constructive voice on permitting reform.

The Canadian Chamber of Commerce represents over 200,000 businesses with a mission to drive change, partner broadly, and be the undisputed champion and catalyst for the future of business success in Canada.

CLIMATE CHANGE POSITION

The Canadian Chamber of Commerce supports the need for Canada to adopt an efficient and cost-effective approach to climate change. The organization has stated the 2050 net zero target is a necessity.

In support of that position, in October 2022, the organization and its Net Zero Council released a report, "How We Get There Matters: Establishing a Path to Net-zero in Canada," which highlights how Canada's business community must play a key role in our sustainable future and responds to the Canadian government's major climate change initiatives, specifically Environment and Climate Change Canada's (ECCC) 2030 Emissions Reduction Plan. The Canadian Chamber used this report and its recommendations in testimony before the Senate Standing Committee on Energy, the Environment and Natural Resources in December 2022 to highlight

the importance of Canada's energy sector to meet both economic and environmental objectives.

ALIGNMENT TO THE PARIS CLIMATE AGREEMENT AND GE'S CLIMATE POSITIONS

In August 2021, the Canadian Chamber of Commerce created the Net Zero Council. GE Canada President and CEO Heather Chalmers is co-chair of the NZC. The NZC meets monthly to support research and advocacy to shape Canada's pathway to net zero. Membership on the council is for businesses, like GE, that have made public declarations to achieve net zero in their operations by 2050 or sooner. The NZC is dedicated to advancing business leadership on climate change and intends to release a report on effective cross-sectoral pathways to net zero in 2022.

EUTurbines is a gas and steam turbine industry association aimed at integrating all European manufacturers of the sector, covering all relevant applications. The organization promotes the role of turbine-based power generation in a sustainable, decarbonized European and global energy mix.

CLIMATE CHANGE POSITION

EUTurbines supports a sustainable transition of the energy system aimed at decarbonizing the energy sector and has expressed its support of the European Green Deal. EUTurbines advocates for solutions such as renewable-based turbines to help achieve a well-functioning energy system in a future climate neutral economy, and believes all economic sectors need to swiftly adapt and drastically reduce their greenhouse gas emissions, starting with the energy sector.

ALIGNMENT TO THE PARIS CLIMATE AGREEMENT AND GE'S CLIMATE POSITIONS

EUTurbines supports dramatically reducing greenhouse gas emissions and swiftly transitioning to sustainable energy. We believe these commitments are consistent with the goals of the Paris Climate Agreement.

EUTurbines is aligned with GE policy, as GE agrees that the world must act quickly to decarbonize every aspect of modern life and that lower carbon solutions, such as switching gas turbines from natural gas to hydrogen, can lead to low or near zero carbon emissions. GE offers the industry's most experienced gas turbine fleet in hydrogen and similar low-BTU fuel operations and continues to invest in research and development into hydrogen pathways towards zero CO₂ emissions. GE was involved in the development of EUTurbine's H₂-readiness definition, which provides a common understanding of hydrogen readiness for new gas power plants.

GE's efforts to innovate toward a net zero 2050 ambition for aviation are further described on page 44.

The Gas Turbine Association (GTA) is an association composed of large and small gas turbine manufacturers, associated equipment manufacturers and leading research universities. GTA's primary focus has been on technology programs designed to increase turbine efficiency. GTA advocates for public policies and regulations that support and promote the expanded use of gas turbine technology in all relevant sectors of the economy.

CLIMATE CHANGE POSITION

GTA supports developing and implementing a strategy for ensuring reasonable and responsible environmental practices for gas turbines, as well as environmental policy recommendations for communication to regulators and legislators. GTA conducts dialogue regarding the development of a regulatory climate that encourages the use of clean efficient gas turbine applications in new and retrofit installations.

GTA's advocacy focus is on federal research and development funding to drive carbon emissions out of gas turbines. GTA is currently taking a broader look at hydrogen and carbon capture funding opportunities that allow further decarbonization of gas turbine technology.

In addition, GTA supports enhanced investment in research and development at minority institutions and Historically Black Colleges and Universities (HBCUs) with programs advancing technology in clean energy, energy efficiency and climate programs geared to underserved communities.

ALIGNMENT TO THE PARIS CLIMATE AGREEMENT AND GE'S CLIMATE POSITIONS

GE believes when it comes to gas power, coal-to-gas switching can represent a fast and effective approach for emissions reduction in many regions around the world. In addition, switching turbines from natural gas to hydrogen, and introducing carbon capture solutions, can lead to low or near zero carbon emissions. GE Gas Power is currently the Committee Chair of GTA's Environmental Affairs Committee, a position we use to encourage GTA to advocate for policies that make continued progress on carbon capture and hydrogen, which will decarbonize gas turbines in the future.

GE's efforts to innovate toward a net zero 2050 ambition for power are further described on page 32.

The National Association of Manufacturers (NAM) represents 14,000 member companies, both large and small, across industry sectors to advocate around the four values of free enterprise, competitiveness, individual liberty and equal opportunity.

CLIMATE CHANGE POSITION

NAM believes an environment and climate change agenda for the future must recognize manufacturers as the solution to emerging environmental challenges and build on the strong steps manufacturers have already taken to become more sustainable and tackle climate change; apply sound science and evidence-based approaches in new proposals; and appropriately balance the United States' economic and environmental interests so that achieving one goal does not mean ignoring the other.

NAM recommends commencing negotiations to improve on the Paris Climate Agreement and achieve a binding global climate treaty that keeps postindustrial warming of the planet to well below 2 degrees, and approaching 1.5 degrees. This position is memorialized in NAM's 2021 comprehensive climate blueprint, *The Promise Ahead*, which also outlines a broad manufacturers' plan for action, supporting both "an international, rules-based system that is consistently applied to bind all emitters and ensure a level playing field, and a unified domestic framework that applies to all emitters and harmonizes GHG regulation."

ALIGNMENT TO THE PARIS CLIMATE AGREEMENT AND GE'S CLIMATE POSITIONS

NAM supports a binding climate treaty to keep postindustrial warming of the planet to well below 2 degrees, and approaching 1.5 degrees. We believe these ambitions are consistent with the goals of the Paris Climate Agreement.

GE plays an active role on NAM's Environment Committee and worked to update NAM's policy on climate in 2020, which brought it more closely aligned to GE's climate policy position and the Paris Climate Agreement. Roger Martella, GE's Chief Sustainability Officer and Vice President of GE Vernova Government Affairs and Sustainability, is NAM's Sustainability & Environmental Quality Committee Chair and Pat Byrne, Senior Vice President of Operational Transformation at GE, serves on NAM's Board of Directors.

NAM opposed the Inflation Reduction Act (IRA) for reasons that were unrelated to the clean energy tax incentives. The reasons were grounded in broadly applicable tax policies that affected many of their members. GE discussed the importance of the clean energy tax incentives with NAM and confirmed their leadership understands these tax incentives will help keep the U.S. a leader in clean energy technology and innovation toward decarbonization goals. Since the enactment of the IRA, the NAM has supported policies to enable the success of the IRA tax credits through being a constructive voice on permitting reform.

The U.S. Chamber of Commerce (Chamber) is the world's largest business organization representing all sizes of businesses to advocate, partner and network on a range of topics. The Chamber advocates for policies that help businesses create jobs and grow the United States economy.

CLIMATE CHANGE POSITION

The Chamber engages on climate change policy approaches that acknowledge the cost of inaction and the competitiveness of the U.S. economy and advocates for durable solutions that leverage innovation. The Chamber has stated it supports the Biden administration's decision to rejoin the Paris Climate Agreement.

The Chamber's climate policy principles are:

- Support a market-based approach to accelerate greenhouse gas emissions reductions across the U.S. economy.
- Leverage the power of business.
- Maintain U.S. leadership in climate science.
- Embrace technology and innovation.
- Aggressively pursue greater energy efficiency.
- Promote climate resilient infrastructure.
- Support trade in U.S. technologies and products.
- Encourage international cooperation.
- Inaction is not an action.

In furtherance of these principles, the Chamber was one of a coalition of organizations representing the business community that supported the successful ratification of the Kigali Amendment to the Montreal Protocol for the economic and environmental benefits associated with phasing down the production and use of hydrofluorocarbons in February 2022. More recently, the Chamber has called on Congress to enact a bipartisan permitting modernization bill to accommodate growing demand for, and investments in, solar and wind power to accelerate the clean energy transition.

ALIGNMENT TO THE PARIS CLIMATE AGREEMENT AND GE'S CLIMATE POSITIONS

We believe the Chamber has progressed on its climate change position. This includes putting forth a comprehensive climate position that includes supporting U.S. participation in the Paris Climate Agreement, as well as calling on policymakers to act on climate. Additionally, the Chamber has launched a task force open to its membership to inform the organization's climate policy. In 2019, GE joined the U.S. Chamber's Task Force on Climate Action. This group was focused on helping the Chamber understand the impact of existing and future policies on businesses and how to proactively address climate change.

The Chamber has made progress in recognizing the Paris Climate Agreement and being a convenor of companies and governments in pursuit of solutions to climate change at global venues such as COP27, where the Chamber facilitated engagement between American companies and the Egyptian government. Activities following COP27 have shown the Chamber's continued commitment to global climate efforts, including hosting a high-level roundtable discussion among U.S. and UAE officials and the private sector focused on the Partnership for Accelerating Clean Energy, an initiative announced in November 2022 that aims to catalyze \$100 billion in financing, investment and other support to deploy 100 new gigawatts of clean energy by 2035.

The Chamber opposed the Inflation Reduction Act (IRA) for reasons that were unrelated to the clean energy tax incentives. The reasons for this opposition were grounded in broadly applicable tax policies that affected many of their members. GE discussed the importance of the clean energy tax incentives with the Chamber and confirmed their leadership understands these tax incentives will help keep the U.S. a leader in clean energy technology and innovation toward decarbonization goals. Since the enactment of the IRA, the Chamber has supported policies to enable the success of the IRA tax credits through being a constructive voice on permitting reform.

In addition to the trade associations discussed above, the following trade associations and other relevant organizations were considered as part of our global inventory of groups engaged in policy advocacy related to climate change. As noted above, we conducted an analysis of each of these organizations related to their climate positions and GE's level of engagement with them.

ORGANIZATION

- Airlines for Europe (A4E)
- Clean Energy Council - Australia
- Gridwise Alliance
- Clean Hydrogen Future Coalition
- Hydrogen Europe
- CNI (National Industry Confederation) - Brazil
- Institute for Business Development of Argentina (IDEA)
- Aerospace Environmental Group (IAEG)
- Comex - Peru
- International Emissions Trading Association (IETA)
- American Clean Power
- Comité de prospective de la CRE (Prospective Committee of the Energy Regulation Commission) - France
- National Association of Manufacturers (NAM)
- Aerospace Industries Association (AIA)
- Confederation of Indian Industry (CII)
- Consumer Energy Alliance
- National Foreign Trade Council
- Australian Energy Council
- Council of American Enterprises (CEA) - Colombia
- Nuclear Energy Institute
- Australian Industry Group
- Energy Solutions
- Ohio Business Roundtable
- Business Council of Canada
- ETN (European Turbine Association)
- Roundtable for Europe's Energy Future
- Business Europe
- EurElectric
- Russian Union of Industries and Entrepreneurs
- Business Roundtable
- European Association for Storage of Energy (EASE)
- SER (Syndicate for Renewable Energies)
- Business Unity South Africa (BUSA)
- Singapore Business Federation
- Canadian Chamber of Commerce
- European Suppliers of Waste to Energy Technology (ESWET)
- T&D Europe
- Canadian Council for Sustainable Aviation Fuel
- EUTurbines
- Thai Wind Energy Association
- Canadian Manufacturers & Exporters
- The Federation of Industries of the State of São Paulo (FIESP)
- The National Hydropower Association
- Canadian Nuclear Association (CAN)
- Carbon Capture Coalition
- Gas Turbine Association
- Turkish Wind Energy Association
- Carbon Utilization Research Council
- General Aviation Manufacturers Association (GAMA)
- United States Council for International Business
- Consejo Coordinador Empresarial (CCE) - Mexico
- Global Wind Energy Council (GWEC)
- U.S. Chamber of Commerce
- Consejo Ejecutivo de Empresas Globales (CEEG) - Mexico
- Greater New Orleans, Inc
- WaterPower Canada
- WindEurope

* The Louisiana Oil & Gas Association opposed the Inflation Reduction Act (IRA) for reasons that were unrelated to the clean energy tax incentives. The reasons for this opposition were grounded in broadly applicable tax policies that affected many of their members. GE discussed the importance of the clean energy tax incentives with the organization and confirmed their leadership understands these tax incentives will help keep the U.S. a leader in clean energy technology and innovation toward decarbonization goals.

As with climate policy generally, we recognize there is room for a reasonable divergence of views on specific elements and approaches of various proposals that may warrant constructive comment and engagement to find the appropriate balance between disclosure, transparency, regulatory burdens and material information.

Product Stewardship

Product stewardship represents the responsibility borne by GE for the environmental and safety impacts of our products across their lifecycle.

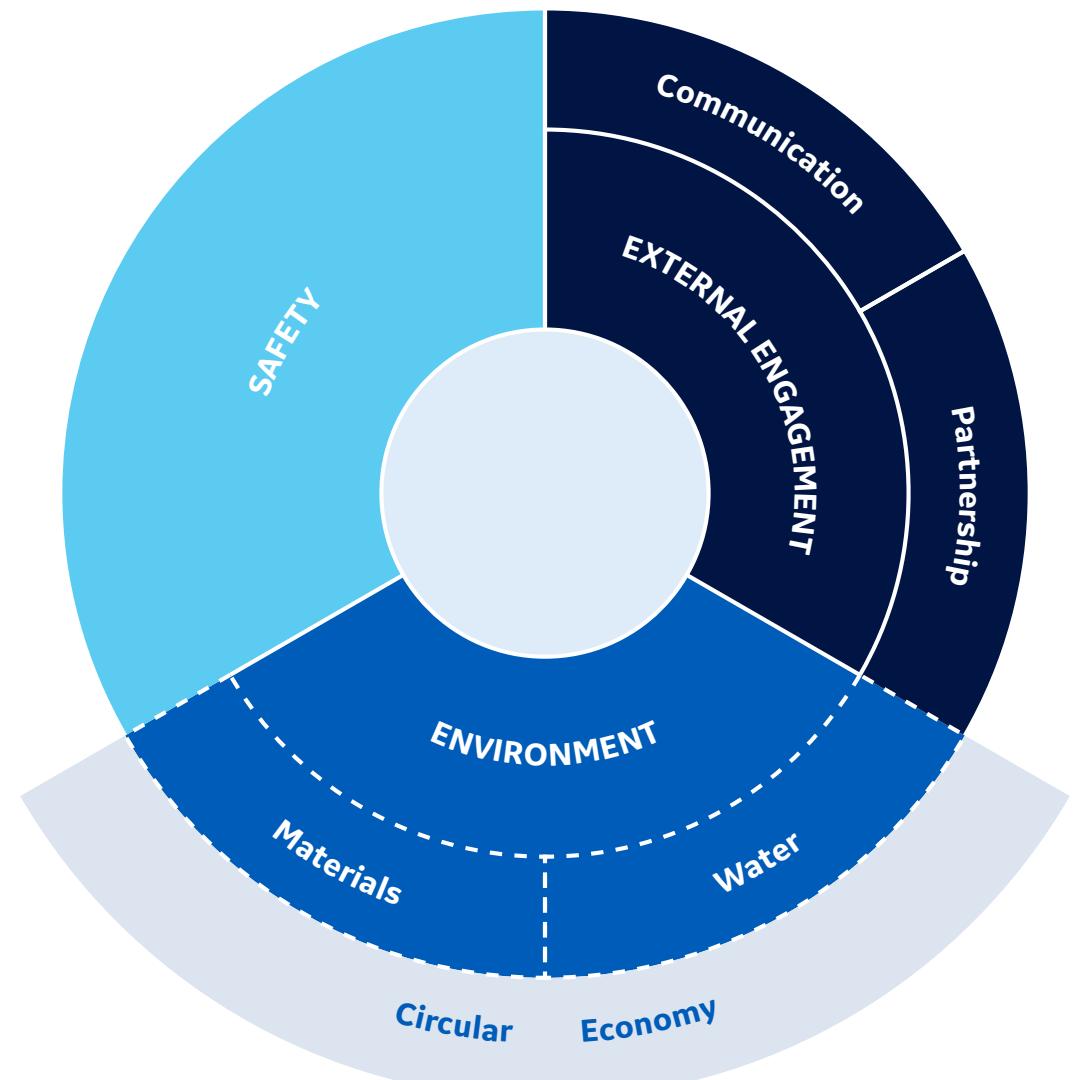
Product stewardship focuses on managing the energy, water and materials that are utilized in the production, use and disposal of a product, along with managing product safety, at all stages of the product lifecycle.

In relation to product stewardship, circular economy is the enabling methodology to manage resources efficiently in a regenerative and restorative way. Viewing waste streams as inputs across the product lifecycle reduces dependency on virgin materials by recapturing lost materials and redirecting them back into the economy.

GE'S PRODUCT STEWARDSHIP APPROACH

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 towards achieving those goals while continuing to assess how to strengthen our efforts going forward.

GE's businesses continue to pursue the safety, environment and external engagement goals identified on these pages. 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. This responsible approach to both our operations and products allows us to build upon the goals we've identified and continue to rise to the challenge of building a world that works.





Product Safety

Goal: Build on our existing safety culture to manage and mitigate product safety risks, meet or exceed compliance, and contribute to evolving more ambitious industry standards.

2022 PROGRESS

GE Vernova: Hydro

Inspection Robot

In 2022, GE Hydro introduced an Inspection Robot that can perform underwater maintenance inspections of the turbine runners, eliminating the need for maintenance operators to dewater, open and enter the turbine, which requires work at height and in confined areas. The robot will help identify failures before they happen, save on maintenance and repair cost, and reduce unit downtime at plant sites. This innovative solution to mitigate safety risk has been rolled out as a pilot program to select customers.

GE Aerospace:

Digitizing Safety Solutions

In 2022, our Digital business launched a solution to provide the aerospace industry with a new digital portal for safety analytics and flight data. This Aviation Insight Portal provides airlines and operators with a dedicated system that translates complex data into clear and navigable outputs. The insight is designed to help minimize the risk of human error by automating data digestion and reporting—allowing for quicker and more reliable responses to be made. This service is currently deployed with 37 customers, with a goal of 48 by end of 2023.



Environment: Water and materials

Water Goal: Establish a defined strategy to minimize the water footprint of our products and build on our approach towards water conservation throughout our operations.

2022 PROGRESS

GE Vernova: Hydro

Advanced Wastewater Treatment System

GE Hydro's Tianjin manufacturing facility in China uses an advanced water treatment system to clean water used in production. The waste treatment system uses 70% less energy compared to a standard installation and reduces 90% of hazardous liquid waste at the source. The system runs automatically without use of any chemicals or secondary pollution and reduces water consumption by 102 tons each year. The cost of handling hazardous liquid waste is also reduced significantly.

GE Aerospace:

Eliminating Waste Through Quality Enhancements

At our site in Lynn, Massachusetts, kaizen events have helped to improve the quality of production parts and reduced scrap. One example is the T700 engine B-sump part. The B-sump operation previously had a first-time yield (FTY) of 50%, some of which could be reworked, but still resulted in significant amounts of scrap. Following a kaizen event in October 2021, we were able to improve the FTY of this operation and thus reduce the amount of scrap created. Quality was increased by improving hole preparation and cleaning before the weld operation. This improved FTY from 50% to 80% as of April 2023. Further improvements are being made, with a long-term solution created to redesign the process to eliminate the need for the weld all together.



External Engagement: Partnerships and communication

Partnership Goal: Leverage our market position to build partnerships within and across industries to deliver innovative solutions.

Communication Goal: Continue to strengthen our communication and demonstrate clear progress towards meeting our goals.

2022 PROGRESS

GE Vernova: Gas Power

Caustic Waste Reclamation

Our Gas Power business partnered with Veola to identify third-party companies interested in purchasing waste caustic effluent to be used for acid neutralization. This initiative brings circularity to hazardous chemicals by providing an end-of-life solution for problematic chemicals and substances, which can mitigate impacts on human health.

GE Aerospace:

Open MRO Model

GE Aerospace and CFM International¹¹ support an open maintenance, repair and overhaul (MRO) network model, enabling airlines and third-party providers to offer maintenance, repair and overhaul on their engine models. For example, in 2022, Air France Industries KLM Engineering & Maintenance (AFI KLM E&M) signed a CFM Branded Service Agreement (CBSA) for LEAP-1A and LEAP-1B engines. Under the terms of the CBSA, AFI KLM E&M will provide the full scope of LEAP MRO services for operators worldwide. Demand for LEAP MRO services is expected to grow rapidly in the coming years. The open MRO model provides a way for third parties to offer engine services meeting original equipment manufacturer standards.

¹¹ CFM International is a 50-50 joint company between GE and Safran Aircraft Engines.



Circular Economy

Goal: Increase the circularity of our products through reclamation, refurbishment and recycling initiatives, and evaluate the design of our products to incorporate circular thinking.

2022 PROGRESS

GE Vernova: Gas Power

Extending Lifetime of Tobago's Penal Power Station

At the combined-cycle power plant, GE modernized components that were over 30 years old, with the first flange-to-flange parts replacement project in Latin America. GE integrated two new gas turbines that have the potential to improve the heat rate of the plant by 2.25%. The project led to an additional 236 MW of capacity, the addition of 26 MW of output and created a 25-30 year asset life extension.

GE Aerospace:

Used Serviceable Material Extends Part Life

When an aircraft engine arrives at a GE Aerospace shop for maintenance services, the engines are disassembled into modules and components to be repaired or replaced with a new or used serviceable part to enable the engine's continued operation. GE continually invests in the development of repair capability and capacity to allow those components to be repaired to serviceable condition during engine restoration. This repair capability allows used serviceable material (USM) to be used as an alternative to new material during that maintenance event.

GE Aerospace has been committed for more than 20 years to supporting the demand for USM. The supply of USM is sourced from supply material at GE overhaul service shops, as well as used engines externally purchased by GE from asset owners. Through GE's engineering organization, new repair processes are developed to repair components using advanced inspection technologies and techniques, improving component repair yields to support global GE and CFM International¹² MRO customers. Each year, GE has thousands of used components physically inspected to determine if USM can be repaired and used in an engine maintenance event or if the material needs to be scrapped and potentially recycled for reapplication into manufacturing of new parts.

¹² CFM International is a 50-50 joint company between GE and Safran Aircraft Engines.



Biodiversity

Biodiversity refers to the variety of plants, animals, habitats and ecosystems across the world. It is vital to ecosystem health and productivity. There is a growing recognition of the role and importance that biodiversity plays in allowing businesses to sustain their operations and their supply chains, as well as providing opportunities for employee engagement in site and business programs.

Recent policy developments, such as the Kunming-Montreal Global Biodiversity Framework adopted during the 15th Conference of the Parties for the Convention on Biological Diversity, are shining a spotlight on the importance of biodiversity conservation and why the global community, including businesses, should assess and strengthen how we interface with biodiversity.

GE understands the health and preservation of biodiversity are fundamental to ensuring a sustainable future for communities, nature and business alike. In 2023, GE is piloting business level biodiversity assessments within selected business segments. This work will help our businesses identify opportunities to protect and enhance biodiversity. 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 positive solutions.

While our businesses work to understand their biodiversity impacts and opportunities at a holistic level, GE's employees are actioning projects globally at the local and site levels through GE's Green Team Network (GTN). Through the 2022 GE Climate Action Challenge, the GTN supported over 85 employee-led environmental projects that will benefit the environment and communities where GE operates.



NATIVE SPECIES RESTORATION

Planting of native Ohio prairie species

The GE Aerospace Evendale Native Prairie team set out a 90-day challenge to convert one-third of an acre back to native prairie, primarily through the removal of invasive species and planting of 24 Ohio prairie species of grasses and wildflowers. Native prairies not only provide habitat for birds, butterflies, insects, reptiles and other small wildlife, but are also more drought resistant and less water intensive than many invasives, and help to stabilize soils. Over 200 hours of volunteer time from 40 employees was provided during six events resulting in a new prairie habitat and over 80 new members joining the local Green Team Network.

REMOVAL OF INVASIVE SPECIES

GE Aerospace, Aero Engine Operation division formed a team that educated over 100 employees about invasives and their impact on the environment. Partnering with Cincinnati Parks Department, Civic Garden Center of Greater Cincinnati and Cincinnati Recreational Commission, the team committed 50 volunteer hours to remove 55 invasive honeysuckle trees from approximately 1 linear mile of the Caldwell bike trail with the goal of allowing native species to repopulate. This effort improved the use of the recreational trail and employee engagement with climate change and nature, and demonstrated the importance of partnerships.



TREE CENSUS AND PLANTING

The Avio Energy site in Pomigliano d'Arco, Italy, formed a Tree Team which conducted a tree census to document trees on campus, define their characteristics and estimate CO₂ removal rates from existing plantings. This information informed new tree planting at the site. A second team used the Lean Digital Moonshine process to create a mobile phone app which allowed site employees to participate in the tree mapping exercise and to view the characteristics of tree species. It also enables employees to monitor site garden watering and vegetables on an ongoing basis; on average 40 employees use the app daily.

Also, with donations from the Gas Power plant in Veresegyház, Hungary, site employees collaborated with the local municipality in October 2022 to plant 40 trees and 90 bushes within the city center. A Green Team hub formed at the site location as a result of this event and has continued working to improve the local community. Between employee holiday donations and business hub funding, the team was able to purchase and donate an additional five trees and 25 bushes for planting in the city, as well as plant three trees at the GE Veresegyház property in February and March of 2023.

GE Aerospace and GE Gas Power employees at the GE Infrastructure Queretaro (GEIQ), Mexico, site collaborated to raise awareness of what a reforestation program entails. The team partnered with local environmental agency, Ecosistémica, and public park steward, Caja Gonzalo Vega (CGV), to plant 80 trees in a rural area (Amealco de Bonfil) of Querétaro, México, and developed a proposal to plant 50 native trees inside the GEIQ campus, which was approved and implemented.

Environmental Justice

REVITALIZING DISADVANTAGED COMMUNITIES

GE implements its commitment to environmental justice in several ways.

First, we are committed to ensuring all communities where we operate realize the strongest environmental protection from our activities. Thus, we work to achieve environmental protection standards for all communities to the same extent regardless of the scope of applicable local regulations, if any.

Second, we strongly believe access to more sustainable, reliable and affordable electricity is critical to reducing poverty and hunger and promoting access to education and healthcare for all people. As described on page 20, we are passionate about succeeding in the energy transition in a way that brings reliable electricity to everyone in a sustainable way. Our technology plays a key role in helping governments reach their Paris Climate Agreement goals, while also promoting the UN SDGs, which we believe are the blueprint to achieving a better and more sustainable future for all. See pages 7-10 to read about how our strategy and sustainability priorities align with the UN SDGs.

Third, we support policies to clean up and redevelop idle contaminated properties into new hubs of economic growth and job creation. As described below, we are implementing an initiative to invest in remediating brownfields—contaminated vacant properties that could serve better purposes once cleaned up—particularly for public benefit in impacted and underserved communities.

Brownfields

As with any long-standing industrial company, GE owns many former manufacturing properties that are no longer core GE assets. These properties can be found anywhere from thriving manufacturing hubs to small towns and rural areas. GE has committed to stewarding these unused properties responsibly back to productive reuse in a way that stimulates economic growth and community development, avoids blight and redirects GE's financial assets back to GE's operations. For certain parcels with lengthy operating histories, this commitment can prove costly and time consuming due to obsolete infrastructure and environmental impacts.

Beginning in 2012, GE founded its Brownfields program to focus on repurposing the company's former industrial assets. The team categorizes its sites for action into two groups—those properties with minimal impact that can be repurposed quickly, and those properties requiring demolition, remediation, regulatory engagement or other substantial work to promote meaningful reuse. Using these categories, the team takes strategic action and makes investments following a brownfields' pipeline to ensure that all sites move successfully through the process.

GE's Brownfields program has advanced GE's property stewardship while bringing value to GE and local communities. Since 2012, GE has sold more than 375 properly prepared former industrial sites, double GE's pre-program pace. More than 70% of these sites required substantial work to allow appropriate reuse, up from 52% pre-program. By coupling a data-driven approach to site preparation with an increased sales rate, GE Brownfields program has repurposed 2.2 times more challenging sites than GE's previous approach. Simultaneously, the team has increased average property sales values by more than 15%, allowing the team to recoup \$1.5 billion in sales proceeds. This is more than 2.7 times the sales value received over a comparable prior timeframe. Moreover, by repurposing these idle assets, GE has shifted approximately \$43 million that would have been paid annually to maintain these vacant properties back into core business operations, freeing up \$280 million over the life of the program.

GE'S ENVIRONMENTAL JUSTICE INITIATIVE

Beginning in 2019, GE enhanced its Brownfields program to prioritize cleanup and redevelopment of idle contaminated properties in environmental justice (EJ) communities. The White House and

the U.S. Environmental Protection Agency (EPA) have defined EJ neighborhoods as those with disadvantaged populations that are most heavily impacted by historic industrial activity and least able to bear this burden. In many EJ communities, financial investment falters and commercial opportunities lag despite property cleanup. This leaves neighborhoods with vacant buildings or empty parcels that create blight and reduce further investment.

GE is committed to remediating and repurposing its contaminated vacant properties in EJ communities to help establish new hubs of economic growth that create jobs and to assist EJ communities to remove barriers that hamper realization of community benefits. Using EJSCREEN (a software developed by the EPA) and the Climate and Economic Justice Screening Tool (released by the Council on Environmental Quality), GE reviewed its full inventory of more than 100 owned, underused properties in the U.S. to identify the 64 parcels that are located in EJ communities. In 2022, GE prioritized and repurposed 12 of these parcels, or approximately 20% of GE's total EJ portfolio. These sales accounted for 40% of GE's total property transfers last year. We have worked to define those barriers that discourage reinvestment and meaningful reuse, seeking community partners to help define local needs.

Local EJ community leaders have shared one of their most pressing needs—financial investment to remove obsolete buildings and infrastructure. GE has committed more than \$40 million to demolish its obsolete structures in EJ neighborhoods. As of 2022, GE demolished buildings at seven EJ sites. GE will complete three additional demolition projects in 2023.

EJ community leaders also identified site remediation and real estate repurposing as primary community needs. GE has undertaken environmental investigation and cleanup at more than 45 of its highest priority EJ properties. GE will work 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. Strategies under consideration include improved neighborhood drainage and flood relief, green energy/electric car infrastructure, industrial repurposing and community solar installations.



EUCLID, OHIO – CLEVELAND WIRE WORKS – COOPERATIVE SITE REPURPOSING Disadvantaged Community (EJScreen)

This 27-acre property with 354,000 square feet of manufacturing space supported GE's lighting business from 1931 until August 2017. The plant manufactured tungsten wire used in electric bulbs and electronic tubes, as well as tungsten and molybdenum powders, thoriated wire, tungsten ingots and pressed tungsten products. After shutdown, GE decommissioned the buildings following Ohio's EPA Cessation of Regulated Operations (CRO) protocols and received a notice of compliance in December 2018. Subsequent Phase I and Phase II environmental investigations identified areas of concern. In 2022, Ohio awarded a \$4.5 million Brownfields grant to Weston, Inc. to demolish the buildings and perform additional remediation—one of the largest private-party grants under Ohio's program. Weston purchased the GE property to create jobs by developing an industrial campus.



CLEVELAND, OHIO (E. 152ND STREET) – DECONSTRUCTION AND SITE PREPARATION Disadvantaged Community (EJScreen)

This parcel is one of GE's most significant EJ priorities. From 1913 through 2009, GE operated the 800,000-square-foot Lamp Plant on more than 22 acres in Cleveland's Collinwood Village neighborhood. As one of GE's original lighting facilities, the plant primarily manufactured incandescent lamps, while also developing manufacturing processes and equipment that GE used at other facilities. After plant shutdown in August 2008, GE decommissioned the buildings following Ohio's EPA Cessation of Regulated Operations (CRO) protocols. Phase I and Phase II environmental investigations identified areas of concern associated with the plant's long operating history. Beginning in 2019, GE undertook a real estate process to identify potential users for the existing buildings. Many developers and real estate professionals concluded the buildings did not meet modern reuse standards. In 2022, GE coordinated with the city and obtained a demolition permit to remove existing structures—a project that will finish in 2023. Meanwhile, GE seeks potential collaborators for property cleanup, development and long-term reuse.



FORT WAYNE, INDIANA – ELECTRIC WORKS – REDEVELOPMENT Disadvantaged Community (EJScreen)

From 1892 until January 2015, GE operated the 31-acre Fort Wayne Electric Works Plant to produce commercial refrigeration units, lighting and rotating machinery, and small electric motors. During WWII, the facility supplied superchargers for military aircraft. Beginning in May 2016, GE initiated an extensive marketing process in cooperation with real estate experts, various community focus groups, the state of Indiana, the city of Fort Wayne and the Fort Wayne economic development community to identify beneficial site reuses and capable purchasers with the capacity to realize them. This extensive effort culminated in the 2017 property sale to create the Electric Works campus. Five years later, with more than \$250 million in investments and tax credits, the owner has transformed 10 buildings on the campus' west side to support innovative uses including the Union Street Market Food Hall and the new corporate headquarters for Do It Best Corp. The transformation will continue across other portions of the Electric Works campus.

Remediating Legacy Sites

We are committed to managing sites that are, or may be, impacted with legacy contamination arising from current or former manufacturing operations with the utmost care, ensuring the health and safety of our workers, the communities in which these sites are located and the environment. Further, we manage our remedial actions at these sites in compliance with applicable environmental laws and regulations, as well as applicable federal financial reporting and reserve requirements. In most cases, we work in collaboration with the appropriate federal, state or global environmental regulatory authorities charged with management oversight of these sites, and also work with other key stakeholders (e.g., local municipalities, the public) to encourage dialogue and communications that can be factored into our remedial decision making.

We employ a matrixed resource approach to remedial site management, utilizing a wing-to-wing team of in-house and external environmental professionals and other subject matter experts (i.e., technical, legal, scientific, finance and communications personnel) to manage the full lifecycle of a remedial project, from investigation, to remedy implementation, to potential maintenance and monitoring obligations.



HOUSATONIC RIVER: REMEDY DESIGN EFFORTS UNDERWAY

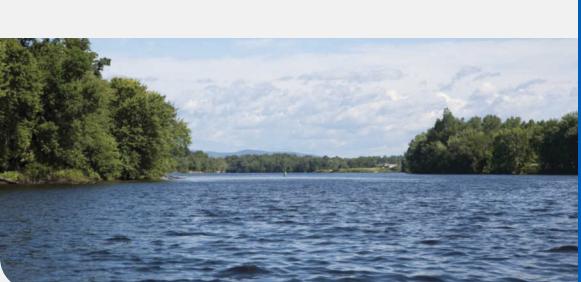
In addition to more than \$500 million of environmental projects that we've completed in the Pittsfield, Massachusetts, area over the years, GE is currently working to design the Housatonic River (Rest of River) in-river dredging and adjacent soils remedy. Remedy design activities include submitting various site-wide work plans, as well as implementing reach-specific sediment, riverbank and floodplain soil sampling efforts that will culminate in a conceptual design plan for the first five-mile reach that will likely be submitted to U.S. Environmental Protection Agency (EPA) in late 2023. As part of the site-wide work plans required for this project, we submitted a Sustainability and Climate Adaptation Plan to the EPA in September 2022, in which we committed to considering potential sustainability practices and methods as they pertain to reducing or minimizing GHG emissions to the extent applicable and practicable. In addition, we continue the design activities for the Upland Disposal Facility that will be utilized for the protective disposal of up to 1.3 million cubic yards of lower polychlorinated biphenyl (PCB) concentration material. GE is committed to moving forward with the work required to address the environmental condition of the river and the surrounding areas.

"It's a settlement that supports health and restoration and sustainability... (and) ensures the Housatonic River is enjoyed by future generations, not just through the history books."

— Sen. Edward Markey,
D-Massachusetts

We draw upon the experience and expertise of this team of experts to develop strategies that utilize state-of-the-art technologies and best management practices necessary to remediate and, in some cases, redevelop these sites and return them back to the local communities for productive reuse. From a program management perspective, we utilize lean principles to drive long-term solutions for the environment and company; help identify process and programmatic issues that present opportunities for improvement; and help drive more accountability across the team.

GE recognizes contaminated sites can be concerning and controversial issues for impacted communities. GE works to develop solutions in consensus with key regulators and the public, to the fullest extent possible. For a certain subset of GE-owned legacy contaminated sites (i.e., brownfields), GE is also focused on cleaning up those sites to facilitate redevelopment and repurposing in the communities where those sites are located. Once a remedy is decided, GE aims to exceed expectations on timing of implementation and efficacy of the outcome. Some of our most significant projects that were designed and implemented in close collaboration with government agencies and other stakeholders are reflected below.

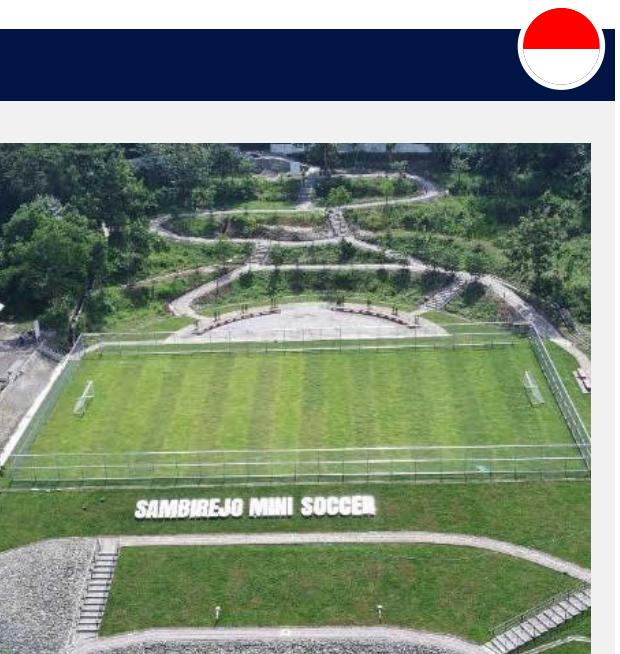


HUDSON RIVER

In 2022, following years of close coordination with the EPA in the cleanup of the Hudson River, GE and the EPA reached another voluntary agreement to collect environmental data in the Lower Hudson. The dredging of 40 miles of the river north of Albany, New York, removed most of the PCBs in that area and sharply reduced the flow of PCBs into the lower river. PCB levels in water have dropped at every monitoring station. The EPA concluded the dredging project was effective in reducing PCB levels and said these declines are expected to continue. The Upper Hudson has been extensively studied and monitored for years. Less is known about environmental conditions in the 150 miles of the Hudson between Albany, New York, and the Battery (New York City) and about the many sources of industrial and municipal contamination that has been released in that part of the river. As part of the 2022 agreement with the EPA, GE will collect data under the EPA's supervision to better inform the decision of whether additional investigation or other actions are appropriate and if additional parties should be included in any future response actions. GE continues to work with the state of New York on the remediation of our former manufacturing properties in Fort Edward and Hudson Falls. GE and the EPA are also assessing Upper Hudson shorelines to determine whether, where and what form of remediation may be appropriate to address the environmental condition of the floodplains.

"The Hudson River PCB Superfund dredging project has been a success... This project is the most extensive dredging project undertaken in the nation and its success is a historic achievement for the recovery of the Hudson River."

— U. S. Environmental Protection Agency



OUR GLOBAL IMPACT

YOGYAKARTA, INDONESIA

As part of GE's former Lighting manufacturing business, we leased a site near Yogyakarta, Indonesia, from the Sambirejo Village administration for solid waste storage (i.e., broken glass from lamp manufacturing). Following GE's exit from the site, the Village of Sambirejo initiated preparation activities at the site to facilitate redevelopment as a soccer pitch. As part of the redevelopment effort, the Ministry of Environment and Forestry (MoEF) requested that GE develop a remedial action plan to address site conditions. The approved plan included the installation of a protective multi-layered cap over the site. GE was able to work closely with regulators and the village to incorporate the construction of a soccer pitch into the final site restoration plans.

Work to provide a viewing plaza, spectator benches, access pathways and a parking lot was completed in February 2023. Final site handover to the Sambirejo Village occurred in 2023.

Human Rights

People are at the heart of GE's operations and strategy. We released our [2021 GE Human Rights Report](#) in 2022 to provide greater transparency into how we run our Human Rights program, from our suite of governance documents to our Due Diligence program. This report details our program with respect to our own workers, those of our suppliers and the communities affected by GE operations and business relationships. Read our 2021 GE Human Rights Report [here](#).

In 2006, GE was among the first American companies to issue a [Human Rights Statement of Principles reflecting our commitment, among other things, to respect fundamental labor rights including the prohibition of forced and child labor in GE operations and those of our suppliers.](#) It is the cornerstone of our global program, grounding our commitment to human rights in the United Nations Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises and the Ten Principles of the United Nations Global Compact. Driven by those standards, we strive to respect the fundamental dignity of everyone we might affect directly through our operations, products and services, and indirectly through our business relationships across the globe. Our ideals flow from the International Bill of Human Rights, the International Labor Organization Declaration on Fundamental Principles and Rights at Work, and the UN Sustainable Development Goals. We seek to treat everyone affected by our business and value chain—including employees (see page 70), workers, customers and communities—with fairness and dignity.



The screenshot shows the title "GE human rights statement of principles" at the top left. Below it is a large image of a diverse crowd of people. The main text reads: "At GE, we're focused on improving our impact on our people, communities and planet. Respecting human rights around the world has long been a part of our culture of unyielding integrity and is embedded in our environmental, social and governance priorities." At the bottom, it quotes Larry Culp, Chairman and CEO, GE, CEO, GE Aerospace.



The screenshot shows the title "2021 Human Rights Report" at the top left. Below it are three circular images showing people in industrial settings. The main text reads: "A strong sustainability and human rights program is critical to our mission. It is also professionally and personally important to our employees, communities, customers, investors and business partners. We strive for transparency with our stakeholders to hold ourselves accountable and to drive continuous improvement." At the bottom, it quotes Tran Che, Global Human Rights Counsel, GE.

GE HUMAN RIGHTS ENTERPRISE POLICIES AND STANDARDS

For our employees, directors and officers, GE's *The Spirit & The Letter* (S&L) details our human rights expectations within the GE Human Rights Policy along with other related policies and procedures such as our Environment, Health and Safety Policy and Respectful Workplace Policy. We use enterprise standards and policy documents to embed our human rights expectations and principles throughout GE's business operations and value chain.

GE has implemented operational requirements for businesses known as the Human Rights Enterprise Standard, which helps businesses identify and understand the salient human rights risks across the company and how they are expected to respond to those risks. The Enterprise Standard sets out minimum requirements that businesses must adhere to regarding risk assessment and identification, due diligence of third parties, and escalation and remediation of any concerns related to human rights. It provides practical guidance and best practices for business implementation to mitigate human rights risk within our operations.

The Human Rights Working Group, led by our Global Human Rights Counsel, meets regularly to discuss the implementation of the standard and the evolving landscape of human rights issues and risks in the communities we serve. To read more about our governance process, please see our [GE Human Rights Report](#).

SALIENT RISKS

A recent company-wide global human rights assessment conducted by a leading human rights advisory firm identified four priority issue areas for salience and impact—climate and energy; product stewardship; worker welfare; and community welfare.

Both worker welfare and community welfare capture the rights of stakeholders upstream and downstream throughout the value chain; they each also capture the potential to shape the world for good through the lens of the UN SDGs.

The analysis of worker and community welfare across our value chain resulted in seven salient rights:

- Modern Slavery.
- Child Labor.
- Freedom of Association.
- Just Working Conditions.
- Right to Health: Environment.
- Right to Security of the Person.
- Indigenous Rights.

We detail our salient risks in our [2021 GE Human Rights Report](#).



Rachel Stagnitti
working in
Schenectady,
New York.

STAKEHOLDER ENGAGEMENTS

GE engages with external stakeholders to identify human rights risks throughout our value chain and collaborates with peers, experts and civil society groups to seek practical solutions. As a founding member of the Global Business Initiative on Human Rights, GE works with multinational corporations through a cross-industry peer learning platform to embed respect for human rights into business operations, drive improvements with peer learning, bring focus to emerging challenges and identify solutions.

Based on our engagement with the Leadership Group for Responsible Recruitment (LGRR), GE adopted and implemented the Employer Pays Principle with respect to any recruitment fees and prohibits the types of actions associated with the most common forms of modern slavery, including the withholding of immigration documents and misleading recruitment tactics. As one of its initiatives, LGRR works with GE and member companies to create demand for responsible recruitment by raising awareness about the benefits of ethical practices and developing tools to help companies implement the Employer Pays Principle.

Since 2008, GE has been an active participant in the United Nations Global Compact (UNG) aligning with the Ten Principles of the UNGC around human rights, labor, environment and anti-corruption. Over the years, GE partnered with the UNGC on initiatives such as the Human Rights Dilemmas for Multinational Corporations in Emerging Markets and participated in its Young Sustainable Development Goals Innovators Program.

Our Human Rights program depends on the practical understanding of our people and business partners. Taking a multifaceted approach helps to address the human rights challenges GE faces in the various markets we serve and operate in. We provide employees with learning modules on human rights and forced labor; company-wide policies and programs; the causes and global footprint of forced labor; and, most important, how they can serve a role in identifying and reporting possible signs of human rights issues when they are at GE operations, supplier facilities or customer sites. GE strives to continuously improve our procedures to identify, prevent, mitigate and remedy our salient human rights impacts. To learn more about our program, see our [GE Human Rights Report](#).

Ethical Supply Chain and Responsible Mineral Sourcing

GE is committed to unyielding integrity and high standards of business conduct in our dealings with suppliers. Since 2002, GE has implemented an extensive Supplier Responsibility Governance (SRG) program to build and strengthen an ethical, sustainable and transparent global supply chain and establish clear social and environmental responsibility requirements for suppliers.

All suppliers must contractually commit to the [GE Integrity Guide for Suppliers, Contractors and Consultants](#), which requires suppliers to strictly comply with laws and lawful business practices, provide a safe and healthy work environment, and meet GE's standards of ethical conduct relating to human rights, the fair treatment of workers, environmental protection and resource conservation. The guide also provides a strict prohibition on bribery and any form of improper payment in connection with any GE procurement, transaction or business dealing. Other topics addressed by the guide include supplier responsibilities regarding responsible mineral sourcing, trade controls, privacy and security.

GE explicitly prohibits suppliers from using child, prison, forced or indentured labor and subjecting workers to any form of compulsion, coercion or human trafficking. We further require that our first-tier suppliers cascade the requirements of the GE Integrity Guide to their sub-tier suppliers. Under this multifaceted ethical supply chain program, suppliers are prioritized for detailed pre-engagement and periodic follow-up, on-site assessments based on country risks (including human trafficking risk), supplier past performance and other factors, such as media reports or supplier employee complaints.

The SRG program uses a systematic approach for assessing risks in our supply chain, monitoring and improving supplier performance. For more information on our SRG program, please see page 11 of [GE's Human Rights Report](#).

Our approach includes:

- A country risk assessment, updated every two years, incorporating manufacturing risk along with human rights risk assessments lifted from third-party data and risk indices. For more information on our Supplier Due Diligence program, please see pages 11-13 of [GE's Human Rights Report](#).
- Clear risk assessment criteria to prioritize suppliers for audits depending upon factors such as their location, if they are producing parts that will be incorporated into GE products and/or if they use labor brokers to recruit migrant workers.
- A rigorous auditing program using trained and certified SRG auditors, to assess conformance with our requirements prior to onboarding.
- Monitoring the continued compliance and improvement of existing suppliers using thorough on-site audits or remote audits at a typical frequency of one to five years based upon the supplier's risk profile.
- Recording, tracking and monitoring all SRG audit findings in our proprietary reporting tool. Suppliers must rectify issues in a timely manner. We track all issues to closure, with verification of the elimination or appropriate mitigation of such risks. GE will suspend or terminate a supplier relationship should the supplier fail to mitigate or eliminate issues as required by the corrective action plan.
- Continual evaluation of new methods to assess and manage risk in our supply chain and effectively address the evolving challenges and risks. For example, GE allows the option of desktop remote audits for suppliers so our auditing program could continue during the height of COVID-19 pandemic. Applying the same scope and questionnaire

used in the on-site audits, our remote audits rely on digital tools to allow suppliers to provide supporting documentation and to verify the closure of audit findings.

AUDITING GE'S GLOBAL SUPPLY CHAIN

Our goal is to work with suppliers to bring them into compliance and drive sustainable improvements in their operations and practices. However, in the event of a serious violation of law, human rights or GE's code of conduct, GE will act to immediately cease the business relationship.

The SRG program drives GE's ability to continuously assess, monitor and drive improvement in its supply chain. More important, through our regular communication and engagement with our suppliers, we can build their capability to improve their compliance, environment, health and safety practices, and respectful workplace practices, and reduce human rights and modern slavery risks.

RESPONSIBLE MINERAL SOURCING

Aligned with GE's SRG program, GE strives to assure our supply chains are ethical and sustainable when obtaining products containing tin, tantalum, tungsten, gold (known collectively as 3TG), which are common constituents of many of our products from aircraft engines to wind turbines. GE is committed to working to eliminate from our products all 3TG minerals that potentially finance armed groups in the Democratic Republic of Congo (DRC), or its adjoining "Covered Countries". GE's Responsible Mineral Sourcing Principles outline GE's commitment to respecting human rights through responsible sourcing practices when it comes to sourcing products containing these minerals.

GE prohibits use of forced or child labor in its operations and supply chain and proactively addresses these concerns through its Ethical Supply Chain program. We recognize conflict is just one of the risks related to mineral sourcing where critical issues such as poverty, environmental degradation, child labor and general inequality must be addressed as well.

Each year, we undertake reasonable due diligence to determine if any of our products containing 3TG originated in the DRC or other Covered Countries. We then file a report with the U.S. Securities and Exchange Commission on the use of 3TG in our products and the outcome of our 3TG sourcing due diligence. For additional information, see our most recent Conflict Minerals Report [here](#).

Auditing GE's Global Supply Chain



[Learn more ▶](#)

	2020 ¹³	2021	2022
Total Global Audits¹⁴	1,286	1,115	1,233
Total Suppliers Approved¹⁵ (new, existing and from acquisition)	1,039	966	1,014
Total Suppliers Rejected¹⁵ (new, existing and from acquisition)	71	26	44
Total Findings¹⁶	7,348	6,031	6,482

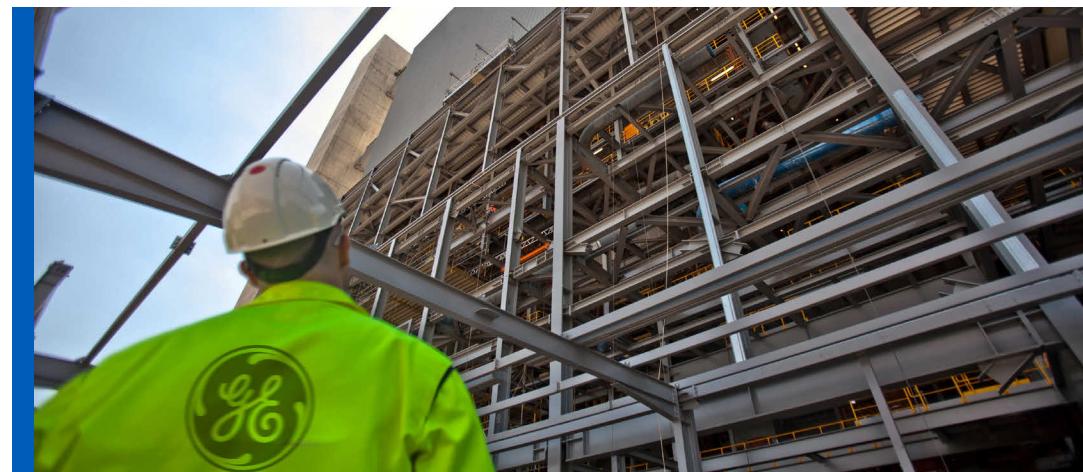
¹³ Beginning with the 2020 metric year, our supply chain metrics reflect changes and improvements in GE's Supplier Responsibility Governance (SRG) program.

¹⁴ The number of Total Global Audits is greater than total suppliers reviewed as some suppliers were audited twice (i.e., desktop audit due to COVID-19 restrictions followed by on-site visits) or there were return visits to confirm corrective actions were completed.

¹⁵ New metric reported in 2020 from SRG program and audits.

¹⁶ Findings identified vary from policy improvements to process changes. GE tracks all issues to closure with verification such issues were properly addressed. GE will suspend or terminate a relationship should the supplier fail to implement adequate measures as required by the corrective action plan.

Freedom of Association



Respect for freedom of association is one of GE's core commitments to all employees.

As of December 31, 2022, GE has approximately 5,745 union-represented manufacturing and service employees in the United States. Following the spin-off of GE HealthCare, GE has approximately 4,670 union-represented manufacturing and service employees in the United States. GE has a long history of industrial peace and comity with its unions, in part because freedom of association is a core value. Consequently, GE has enjoyed respectful and successful negotiations with its labor unions for many years. Here are some of the labor unions representing U.S. employees—the International Union of Electronic, Electrical, Salaried, Machine and Furniture Workers - Communications Workers of America; the International Association of Machinists and Aerospace Workers; the United Auto Workers; the International Brotherhood of Electrical Workers; and the International Federation of Professional and Technical Engineers.

The majority are covered by four-year collective bargaining agreements that were ratified in 2019 and are scheduled to terminate in 2023. GE is holding negotiations to enter into new agreements on or before their termination dates. As of the date of this publication, the IUE-CWA overwhelmingly ratified a two-year extension of their current national labor contract with GE. While the outcome of the remaining 2023 negotiations cannot be predicted, GE's past negotiations have resulted in agreements that provide employees with good wages and benefits while addressing the competitive realities facing GE.

GE's relationship with employee-representative organizations outside the U.S. takes many forms, especially in the European Union. We estimate our employees are represented by approximately 150 representative bodies throughout the EU. Social dialogue is a key component of doing business in Europe and a driver of sustainable business growth for GE in the region. GE values a positive and constructive relationship with its social partners. Information exchange and consultation occur through works councils, trade unions and employee-representative bodies at various levels of the business organizations in accordance with national laws.

For transnational matters, in 2018, we put in place a new GE European Works Council (EWC) structure; it comprises a Central Committee focused primarily on enterprise-wide issues, together with three business-specific committees reflective of our GE Renewable Energy, Power and Aerospace divisions. Those committees enable the exchange of information and input between senior leaders of the company and European employees' representatives. Together, GE EWC now covers approximately 99% of our European workforce, providing a voice to more than 40,000 employees.

In China, 14 of our 26 GE legal entities have unions representing nearly 5,000 employees, all affiliated with the All-China Federation of Trade Unions, including our corporate employees in China. In Latin America, many of our employees are represented by unions.

GE Vernova
employee in Birr,
Switzerland.

The GE Foundation

100 YEARS OF AN ENDURING IMPACT

The GE Foundation recently celebrated 100 years of an enduring impact globally. Since our founding in 1922 as the Charles A. Coffin Foundation, honoring the retirement of GE's first president, we have been committed to transforming our communities and shaping the diverse workforce of tomorrow by leveraging the power of GE.

This year, the foundation's signature program, Next Engineers, also celebrated one year of inspiring the next generation of engineers and innovators across four global cities—Cincinnati, Ohio, and Greenville, South Carolina, in the U.S., along with Johannesburg, South Africa, and Staffordshire, England. With a focus on increasing the diversity of young people in engineering, this global college and career readiness program successfully facilitated more than 12,000 student engagements since the program began, thanks to our program leaders, local partners and GE volunteers.



LINDA BOFF
President, GE Foundation and
Vice President, GE

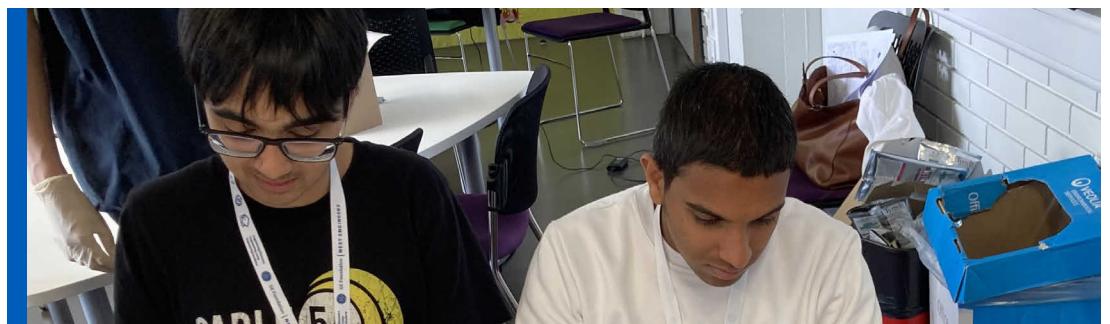
In our home state, we joined forces with the Massachusetts Maritime Academy to launch the GE Fellows Program and build a diverse pipeline of students pursuing clean energy careers. The endowed scholarship program will fund career exploration programming for middle and high school students, scholarships for undergraduate and graduate students, and offshore wind training and certification program for adult learners. What's more, the grant fulfills our \$50 million philanthropic commitment to the city of Boston and the Commonwealth of Massachusetts in STEM education, community health and workforce diversity.

Just as we're proudly looking back on the foundation's history in celebration of its 100 year anniversary, we are looking ahead to what's next. Given GE's plans to launch three independent, industry-leading companies focused on energy, flight and health, our team at the GE Foundation has been supporting leadership in each future company as they establish their own structures for giving and identifying key focus areas.

I'm excited to see what these incredible teams have planned to build the world of tomorrow by leveraging the power of three independent companies. Our team is grateful to our partners and GE employees who have made a century of an enduring global impact—and what's to come—possible.



Next Engineers'
Engineering Camp
in Cincinnati, Ohio.

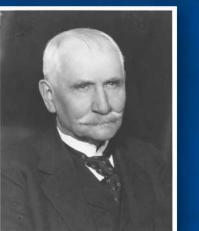


Next Engineers'
Engineering
Academy in
Staffordshire,
England
(photo credit:
Erica Spangler).

100 Years

For 100 years, the GE Foundation has been committed to transforming our communities and shaping the diverse workforce of tomorrow by leveraging the power of GE. Today, Next Engineers is increasing the diversity of young people in engineering. In our hometown of Boston, we are working to improve workforce diversity, attack the opioid crisis and drive STEM education in public schools. We are also inspiring others to act by connecting GE people with communities through our Disaster and Humanitarian Relief program. The GE STAR Awards provide financial support to eligible children of GE employees for their achievements. The following are just a handful of the many highlights from the past century.

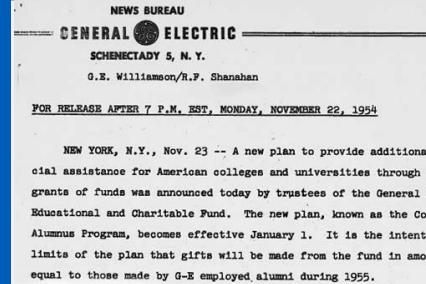
To experience the full interactive timeline, including photos spotlighting GE's impact over the past 100 years, visit the GE Innovation Timeline [here](#).



"As an expression of appreciation for Mr. Coffin's great work not only for the General Electric Company but also for the entire electrical industry and with a desire to make this appreciation enduring and constructive as Mr. Coffin has so well deserved, the board of directors of the General Electric Company created on his retirement and now desire to announce the 'Charles A. Coffin Foundation.'

— ANNOUNCEMENT IN SCIENCE, DEC. 8, 1922

GE Foundation



1922

Charles A. Coffin, GE's co-founder and first President, retires and the Charles A. Coffin Foundation is created. The foundation aims to encourage and reward service in the electrical field by giving prizes to its employees; recognition to lighting, power and railway companies for improvement in service to the public; fellowships to graduate students; and funds for research work at technical schools and colleges.



1952

The GE Education Fund is renamed the GE Foundation in 1952. In 1954, the foundation creates the concept of corporate gift-matching—still in practice today—to support employees in their personal philanthropy by providing a 1:1 match. This is the first corporate matching gift program for colleges and universities, which over time revolutionized corporate giving and empowered employees and corporations to team up and leverage their higher education donations.



2004

The GE Foundation launches Developing Health Globally (DHG) to increase access to quality healthcare in underserved communities around the world. DHG invests \$145 million to train more than 2,000 healthcare workers in many disciplines, including biomedical technicians across 16 countries. In 2015, the foundation launches Safe Surgery 2020, a \$25 million investment, to drive improved access to surgery in low-income countries. The program delivers leadership and team training, education for hundreds of nurses to provide anesthesia, and access to vital medical oxygen for over 30 million people in low-income countries.



2021

The GE Foundation launches Next Engineers, a college and career readiness program aiming to increase the diversity of young people in the engineering industry in four global cities—Cincinnati, Ohio; Greenville, South Carolina; Staffordshire, England; and Johannesburg, South Africa. The program provides students ages 13 to 18 with first-hand experiences in engineering concepts and careers, and ultimately awards partial scholarships to pursue higher education in engineering.

Investing in Boston and Massachusetts

When GE moved its headquarters to Boston in 2016, the GE Foundation set out to become a true partner in the community, committing \$50 million to charities in the city and across the Commonwealth of Massachusetts.

Here's a look at what we've been working towards alongside our neighbors, colleagues and partners.

A special thank you to our partners in Boston and across Massachusetts who have made this work possible. We're proud to support this incredible community.

STEM EDUCATION

Increase access to STEM education in Boston public schools.

- **Mobile STEM Labs:**

Providing access and exposure to digital fabrication tools

- > Reached over 6,100 students across 36 schools

- **Science Education:**

Building a foundation for STEM learning

- > Reached 54,000 students with access to digital learning platforms

- **COVID-19 Acceleration Academies:**

Helping to close learning gaps caused by the pandemic

- > Supported 8,000 students across 66 schools



WORKFORCE DIVERSITY

Promote workforce diversity and economic opportunity for underrepresented and underemployed populations.

- **Advanced Manufacturing Training Expansion Program (AMTEP):**

Helping to address the North Shore's skills gap in partnership with the Baker-Polito Administration

- > Goal: Reach more than 900 high school students and adult learners by 2025

- **GE Fellows Program with Massachusetts Maritime Academy Foundation:**

Supporting students and adult learners pursuing renewable energy careers

- > \$150,000 in scholarships awarded annually
- > Nearly 50 scholarships every year



COMMUNITY HEALTH

Support community health initiatives statewide, with a particular emphasis on the opioid crisis.

- **Project HERE:**

Providing substance use prevention education in Massachusetts middle schools

- > Reached over 350 schools across the Commonwealth

- **Massachusetts League of Community Health Centers & Boston Medical Center:**

Training more providers in addiction medicine to fight the opioid crisis

- > 105% increase in trained providers
- > 59% increase in patients seeking care for addiction

- **Primary Care Leadership Program (PCLP):**

Connecting diverse students to U.S. community health centers, including in Massachusetts

- > Supported 665 scholars
- > 93% are racially and ethnically diverse



Developing Engineering and Other Technical Skills



In October 2022, the GE Foundation's Next Engineers, a global college and career readiness program to increase the diversity of young people in engineering, celebrated its first anniversary. The program provides students ages 13 to 18 with first-hand experiences in engineering concepts and careers and ultimately awards partial scholarships to pursue higher education in engineering. The Next Engineers program is located across four cities—Cincinnati, Ohio, and Greenville, South Carolina, in the U.S., along with Johannesburg, South Africa, and Staffordshire, England.

Next Engineers offers three inspiring programs to engage students on their paths to engineering studies:

- Engineering Discovery is the first pillar of the Next Engineers program for students ages 13 to 14. The purpose of this program is to expose students to the basic fundamentals of engineering through multiple, one-hour exploratory experiences and hands-on activities. Students also have the unique opportunity to connect with real GE engineers who inspire young learners and highlight the array of engineering careers.
- Engineering Camp is for students ages 14 to 15 to help them develop engineering identities through a weeklong immersive camp experience. Students interact with experienced engineering faculty and staff, complete design challenges, work to solve real-world problems, and interact directly with professional engineers and business leaders. During our first year, we reached 630 students.
- Engineering Academy is a three-year program for students ages 15 to 18 to learn to think and act like engineers and prepare to advance to post-secondary education; it kicked off in all four locations during Next Engineers' second quarter, January-March 2022. Thanks to the recruitment efforts of our community partners University of Cincinnati, Clemson University, Connectr and PROTEC, a total of 382 15-year-olds from 119 schools applied to the academy, and 204 students began the program this year with approximately 50 students enrolled in each location.

Reflecting on the past year of Next Engineers, we have an opportunity to look at our progress and continue building on the momentum while simultaneously seeing where we can enhance the program for the betterment of our students long term across all four cities. One of our Engineering Academy students in Staffordshire, England, said it best: "I thought if I could enroll in the academy, I would be one step closer to my dream." Next Engineers wouldn't be what it is today without our employees, partners and communities. Thank you for helping us reach our goal of increasing the diversity of young people in engineering and, more important, building a world that works—for everyone. [Learn more ▶](#)

ENGINEERING DISCOVERY Greenville, South Carolina

In May 2022, GE volunteers and community partner Clemson University PEER & WISE hosted an Engineering Discovery event. In small teams, students took on the tall tower challenge and worked together to create the tallest tower possible using only straws, pipe cleaners and paper clips. The goal of this challenge was for the tower to support the weight of a golf ball for two minutes. This discovery challenge gave the students an engaging and fun hands-on project to learn more about civil engineering in a team-based learning environment.

ENGINEERING CAMP Johannesburg, South Africa

In July, 208 students from schools around Johannesburg participated in a five-day engineering camp session at Witwatersrand University. Students resided on the university campus while participating in an array of activities, challenges, and inspirational talks in a team-building and interactive environment. In one of the design challenges, learners were divided into teams of five, in which each member was responsible for one of the following—project management, financial management, civil engineering, design management and quality assurance. Throughout the week, learners spent time with university students experiencing campus life, getting them excited about their future opportunity to attend university to study engineering.

GE STAR AWARDS

The GE Foundation established the GE STAR Awards program in 1984 to provide competitive scholarships to children of eligible GE employees around the world. Since then, more than 15,000 awards have been given worldwide, totaling more than \$21 million. The winners are chosen based on their academic record, extracurricular activities and community service, and personal experiences and goals as described in personal essays.

ENGINEERING ACADEMY Cincinnati, Ohio

Mya, a sophomore high school student from outside of Cincinnati, Ohio, comes from an academically driven family and was encouraged by her favorite math teacher to apply for the Next Engineers' Engineering Academy program. For their first project, students worked on desalinating salt water to make it drinkable. She appreciates the program's design challenges, which are focused on solving real-world problems, saying, "I'm always learning something new. Engineering intersects with everything."

ENGINEERING ACADEMY Staffordshire, England

Engineering Academy students visited GE Grid Solutions where GE volunteers shared how they are an important part of the world's transition to clean, renewable energy. The GE volunteers presented what they do in their roles and provided examples of problems they tackle as part of their jobs. Following the presentation, students took tours learning about grid automation and transformers, and participated in a workshop covering employee expectations, soft skills, personal branding and the power of networking. The following day, they had the chance to take part in a hydropower design challenge at Staffordshire University.

PROGRAM HIGHLIGHTS

October 2021 to December 2022

12,000+

student engagements in
Engineering Discovery events

205

Engineering Academy students in
year one

65%

Engineering Academy applications
from diverse backgrounds

Workforce Diversity and Economic Inclusion

Education is a significant driver of economic inclusion. With a long history of education and workforce diversity programs, the GE Foundation made a \$2 million commitment between 2020 and 2021 to support organizations focused on training and education. Six of these organizations focus on diversity and equipping young people with the skills, knowledge and leadership abilities to enable them to become global leaders as they enter the engineering workforce.

National Society of Black Engineers (NSBE), Jackie Robinson Foundation (JRF), Advancing Minorities' Interest in Engineering (AMIE), National Action Council for Minorities in Engineering (NACME), Society of Hispanic Professional Engineers (SHPE) and Society of Women Engineers (SWE) were funded by the GE Foundation to provide scholarships, leadership development and mentoring programs to help diverse high school students pursue higher education in STEM fields, in most instances, in an engineering major. To date, these organizations awarded 51 scholarships to students studying engineering, ranging from \$5,000 to \$40,000.

"I am a female Latin American who desires to change the world one day. My overall goal is to make an eco-friendly car or aircraft that is affordable for everybody. Once I receive my degree as a mechanical engineer at Texas A&M, I intend to work in a renewable industry, such as automotive, aircraft or nuclear power plant industry. I also plan to attain my master's degree in mechanical engineering and business to expand my ideas and convert them into reality."

Dana Jaime
Mechanical Engineering

The GE Foundation is also supporting an innovative development program with the **National Minority Supplier Development Council (NMSDC)** called CyberReadyMBE™. The cyber program will help prepare minority business enterprises (MBEs) for contract opportunities with the U.S. government and with corporations across the U.S. The cyber program aims to improve MBEs' capabilities in a growing industry by helping companies get designated as cyber ready, provide them with cyber readiness pathways and connect designated MBEs to contract opportunities.

After a successful pilot program with 23 MBEs in 2021, the first cohort of the program was officially launched in 2022. Over 240 small businesses attended virtual and on-demand sessions with curated content designed to prepare MBEs to protect their corporations from cybercrimes by obtaining a cybersecurity pathway to close cyber gaps and build opportunities with federal and corporate stakeholders. To date, 81 MBEs or 16% have earned their certificate of completion and eight MBEs have earned their CyberReadyMBE® designation. The first cohort closed on February 21, 2023.

"As a technology provider to small and medium-sized businesses, many with limited cybersecurity knowledge, it's critical to highlight our cybersecurity competency. Completing the CyberReadyMBE® program helps to demonstrate our cybersecurity competency."

John Mendes
Vice President, Information Security, PamTen, Inc.

Developing Health

The GE Foundation, through its signature Developing Health Globally™ program, has a long history of increasing access to quality healthcare in underserved communities around the world. Through its collaboration with national ministries of health, public and private health facilities, non-governmental organization and academia, the GE Foundation continued to see its multi-sector effort improve surgical capacity and training with its Safe Surgery 2020 initiative. Access to safe, affordable surgical and anesthetic care is a pressing issue in global health. There are currently 5 billion people across the world who lack access to the safe surgical care they need. The \$25 million commitment has supported a five-year initiative that focuses on transforming the accessibility, quality and safety of surgical care in low and middle-income countries (LMICs), leading to reductions in maternal and trauma-related mortality and stronger health systems.

The GE Foundation's Safe Surgery 2020 and its partners continued increasing medical oxygen accessibility to patients around the globe, improved anesthesia training across East Africa, expanded medical tele-education and tele-mentoring for in-service training, and strengthened health facilities through biomedical technician training.



Safe Surgery 2020 in Cambodia (photo credit: Harvard Medical School).

OXYGEN ACCESS

The GE Foundation's investments in oxygen access led to:

- Direct provision of medical oxygen to approximately 167,000 patients with over 170,000 cylinders of oxygen (over 1 million cubic meters of oxygen).
- Development of a curriculum to install, maintain and repair pressure swing adsorption (PSA) oxygen plants, with the goal of strengthening local capacity to sustain medical oxygen production by preserving life-saving equipment.
- Publication of key learnings and cost analysis from oxygen programs across Kenya, Rwanda and Ethiopia in an academic journal so other practitioners can capitalize on lessons learned.
- Evaluation of 28 PSA plants across five countries—Burkina Faso, Burundi, Ethiopia, Ghana and Rwanda—to source parts, repair plants and restore oxygen production capacity.
- Provision of the first public-sector training on PSA oxygen system maintenance in Mongolia to 110 biomedical technicians, which will be crucial to sustaining access to medical oxygen in Mongolia.
- Creation of new tools for modeling medical oxygen production and demand, including oxygen accessory and consumable demand, at the national and regional levels.

HEALTH TECHNOLOGY MANAGEMENT PROGRAMS

Having reliable, functional medical equipment ready to treat patients is imperative to saving lives and providing high-quality patient care. However, the World Health Organization suggests that without trained biomedical technicians, up to 70% of medical equipment in low and middle-income countries is nonfunctional and not available to care for patients. The GE Foundation's investment in biomedical technician training strengthens the Tanzanian and Cambodian health systems by:

- Increasing the functionality of medical equipment across a network of hospitals by creating a biomedical service hub that trained biomedical technicians and provided them with tools, test equipment and spare parts.
- Investing in the first biomedical service hub model in Tanzania which serves a network of 10 hospitals and increased the percentage of functional equipment from 63% to 84%.

ANESTHESIA ACCESS THROUGH IMPACT AFRICA

Safe anesthesia is critical to filling the unmet global need of 143 million surgical procedures each year. However, across sub-Saharan Africa there are not enough anesthesiologists or nurse anesthetists to meet the surgical need. The GE Foundation's long-standing investments in global anesthesia led to the development of the ImPACT Africa Anesthesia Curriculum, written by Vanderbilt University Medical Center and AIC Kijabe. In 2022, the GE Foundation's investments directly led to:

- Strengthening Tanzania's anesthesia training capacity at three major medical education institutions by upskilling both nurse and physician anesthesia educators and installing state-of-the-art simulation labs where students can get hands-on experience in a low stakes environment.
- Providing in-service simulation training to more than 448 obstetric surgical team clinicians across 10 hospitals in surgical team techniques that improve responses in obstetric emergencies.
- Capitalizing on existing GE Foundation investments in educator training and simulation labs at two anesthesia training centers in Ethiopia to launch two new physician residency programs, even in the midst of civil conflict and a global pandemic. These residency programs are the second anesthesia residency programs outside of Addis Ababa, which will bring increased quality of anesthesia care to the Amhara and Tigray regions.

"[Through this program] we were kind of onboarded with new teaching methods that can be applied globally regardless of resource as long as there is internet! I was allowed to use the resources from the Learning Resource Center (LRC) freely. The participants are clamoring for refresher sessions and are practicing what they learned. We had practical sessions during the training. Their practice has changed! It's a great way to reach the underserved and the unserved for equity regardless of setting. It's a good adaptation to the 'new normal'."

Dr. Datti

Aminu Kano Teaching Hospital, Nigeria

TELE-MENTORING TO EXPAND HEALTHCARE ACCESS

When the COVID-19 pandemic began in March 2020, clinicians around the globe needed evidence-based strategies for treating very ill patients, keeping themselves safe and maximizing local resources in a world where scientific information was changing daily. In response to this need, the Oxygen Therapy and Critical Care Extension for Community Healthcare Outcomes Hubs were born, capitalizing on existing equipment and expertise funded through the GE Foundation's Safe Surgery 2020 Tele-Mentoring program. Even after the immediate needs of the pandemic, teams found that using a tele-mentoring, hub-and-spoke model quickly disseminated important clinical information, built a clinical peer support system and developed a network of clinical trainers across the globe. Since the spring of 2020, in partnership with Stanford Anesthesia's Division of Global Health Equity and Assist International, the following tele-mentoring milestones have been achieved:

- An open-access course platform, the Global Anesthesia and Critical Care Learning Resource Center has been created and accessed by more than 3,000 users.



Safe Surgery 2020 in Tanzania (photo credit: Harvard Medical School).

- A primary tele-mentoring hub, as well as 10 additional hubs across Sub-Saharan Africa and two in Latin America (Columbia and Mexico) were established; hubs in Latin America were directly funded by the GE Foundation.
- Over 4,400 unique live participants attended tele-mentoring sessions, 82% of whom plan to change their clinical practice based on learnings from this program, and 73% of whom describe this tele-mentoring model as equally or more useful than in-person mentoring.



Safe Surgery 2020 in Ethiopia (photo credit: Harvard Medical School).

CONTINUED IMPACT OF SAFE SURGERY 2020

Safe Surgery 2020 launched in Ethiopia and Tanzania in partnership with their Ministries of Health, global organizations as well as local partners from the surgical society, local teaching institutions and district hospitals. In 2018, the initiative expanded to Southeast Asia, with programs starting in Cambodia. Several outputs will carry forward sustainably for years to come. These outputs include:

- Advanced knowledge about how to improve surgical quality in low and middle-income countries (25 peer-reviewed papers, 48 conference presentations and nine policy documents, chapter and case studies).
- Training of over 2,900 healthcare workers in 58 healthcare facilities in three countries on safe surgery.
- Establishment of two oxygen plants to improve the availability of oxygen at 40 healthcare facilities.
- Introduction of registers to monitor the access and quality of surgical services and built capacity of surgical team members in how to collect, use and learn from data to improve surgical access and quality.
- Development of an extensive network of local trainers and mentors, including 67 anesthesia trainers in Ethiopia alone and a global network of resources through Project ECHO.
- Development of a validated Safe Surgery Organizational Readiness Tool (SSORT) to enable facilities to assess their readiness to deploy the changes required for implementation of safety and quality improvements.
- Support of Tanzanian policy makers in research capacity building efforts including a country-wide research capacity assessment.

- Development of an implementation manual to share information on the programs and how to deploy them effectively with country policy makers for scaling up within the country.
- Development of a detailed program to enable nations to create and implement their own National Surgical, Obstetric and Anesthesia Plans (NSOAP) to change policy, build surgical workforce capacity, test and implement new innovations, and contribute evidence to further improvements in surgical access and quality.

REDUCING HEALTH DISPARITIES

Access to specialty healthcare in rural and medically underserved areas around the world is limited. Project ECHO is an innovative model that builds the capacity of and reskills primary care providers to treat more patients with chronic, complex conditions, exponentially expanding access to care. Through a \$14 million, multiyear commitment made in 2015, the GE Foundation, as one of the largest funders of Project ECHO, has supported global replication and scale of this model. By leveraging technology, primary care providers are linked with multidisciplinary teams of specialists who share their expertise. As the primary care providers expand their knowledge and skills, they can begin to treat more patients. With the GE Foundation's support, Project ECHO has grown to over 5,800 programs operating in 194 countries.

CHANGING THE FACE OF MEDICINE

The GE Foundation completed its final funding in 2022 of an 11-year initiative committed to changing the face of medicine. Launched in 2012, the National Medical Fellowships Primary Care Leadership Program (PCLP) is an innovative service-learning program. PCLP provides health professional students from diverse backgrounds with an opportunity to learn first-hand about the challenges and rewards of primary care practice at community health centers (CHC) across the United States. PCLP was conceived as an opportunity to create a rich and immersive experience that would expose scholars to both clinical and non-clinical aspects of primary healthcare delivery. PCLP's mission is to develop a pipeline of future primary care professionals from diverse backgrounds who are committed to serving underrepresented communities and to building capacity at partner CHCs. Since its inception, the program has received over \$11 million in GE Foundation grant funding and supported almost 700 scholars, 93% of whom are racially and ethnically diverse, 76% female and 84% choosing to focus their careers in primary care. Thanks to the success of the PCLP program over the past decade, National Medical Fellowships has secured funding from other organizations to continue the legacy of building a diverse pipeline of leaders in primary care.

Disaster and Humanitarian Relief



GE's Disaster and Humanitarian Relief program responds to major global disasters and humanitarian crises, drawing on GE's people, technology and other resources to reduce suffering and hasten recovery.

In 2022, the GE Foundation's philanthropic contribution to disaster relief totaled \$1.475 million, which included support for the Ukrainian refugee crisis as well as relief work for other disasters and humanitarian crises around the world. For the crisis in Ukraine, the GE Foundation granted \$400,000 to the International Rescue Committee (IRC). In Ukraine, IRC partnered with local organizations and networks that provided emergency assistance to individuals and families internally displaced by the harrowing violence. In Poland, IRC procured medical supplies in order to provide basic medical care through local partner teams to deliver urgent medical assistance. They also provided beds, sleeping bags and blankets for reception centers for new arrivals, and they offered lifesaving information on rights for new arrivals in key border areas, in city centers and around key transit hubs. Additionally, for the Ukraine crisis, the GE Foundation granted Airlink \$100,000 to secure logistical support and airlift responders and relief shipments to the region. This support included passenger flights for skilled responders, charter flights for airlifting equipment and supplies needed for relief efforts, and on-the-ground logistical support.

Other GE Foundation disaster-related grants were primarily focused on climate-related crisis. Grants totaling \$600,000 were made for flooding in several areas around the world, specifically Brazil (Petropolis), South Africa (KwaZulu-Natal), Pakistan, Nigeria and the United States (Kentucky). Two grants totaling \$350,000 were given for hurricane relief in Puerto Rico and Florida. Additionally, the GE Foundation granted CARE \$25,000 to support relief for the devastating economic and food security crisis in Sri Lanka.

Fallen trees and other debris from Hurricane Ian in Florida impacted residents' access to emergency services (photo credit: Team Rubicon).

The GE Foundation Matching Gifts Program

The GE Foundation created the concept of a corporate matching gift program in 1954. The program supports employees in their personal philanthropy/charitable giving by providing a 1:1 match. Today, the GE Foundation Matching Gifts program continues to serve as an important element of the GE Foundation's portfolio, with gifts matched totaling over \$1.5 billion since inception.



WHERE YOU CAN FIND MORE INFORMATION



2022 Annual Report
<https://www.ge.com/investor-relations/annual-report>



2022 Sustainability Report
<https://www.ge.com/sustainability>



2023 Proxy Statement
<https://www.ge.com/proxy>

GE Giving

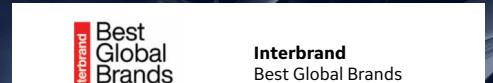
(Dollars in millions)

	2020	2021	2022
GE Company Contributions via GE Businesses and the GE Foundation	\$44.9	\$34.9	\$44.2
Employee and Retiree Contributions	\$16.8	\$9.4	\$9.1
Total GE "Family" Giving	\$61.7	\$44.3	\$53.3
Total Contributions as a Percentage of GE Revenue	0.08%	0.06%	0.07%

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